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Government
Ministry of Economic Development

STIKK
KOSOVO ASSOCIATION OF INFORMATION AND COMMUNICATION TECHNOLOGY

Kosovo IT Strategy

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Document Author: **IT Strategy Working Group**

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List of abbreviations

ADDT	Application deployment and development tools
BPO	Business process outsourcing
CAGR	Compound annual growth rate
CIO	Chief information officer
CMMI	Capability Maturity Model Integration
CRM	Customer relationship management
DACH	Germany, Austria and Switzerland
D&D	Development and deployment
EITO	European Information Technology Observatory
ERP	Enterprise resource planning
FDI	Foreign direct investment
FOSS	Free and open-source software
GIZ	German Agency for International Cooperation
HR	Human resources
ICK	Innovation Center Kosovo
IoT	Internet of things
ISIC	International Standard Industrial Classification of All Economic Activities
ISO	International Organization for Standardization
ITCM	IT Industry Capability Model
KITIB	Kosovo IT Industry Barometer
MbO	Management by objectives
M&E	Monitoring and evaluation
MNC	Multinational corporation
NMFA	Norwegian Ministry of Foreign Affairs
TK	Telekomi i Kosoves
R&D	Research and development
SDC	Swiss Development Cooperation
SMEs	Small and medium enterprises
SMFA	Swedish Ministry of Foreign Affairs
STIKK	Kosovo Association of Information and Communication Technology
UNSPSC	United Nations Standard Products and Services Code
VC	Venture capital
WP	Word packages

1. Introduction

1.1. Background

Across the globe, information technology (IT) is permeating and transforming the economy, the public sector as well as society at large. This trend towards digital transformation has put IT sector promotion as a top priority on the agendas of many governments. In addition to that, with a global market value of EUR 1,133,330 million[1] in 2013, the IT industry is not only one of the largest but also one of the most dynamic sectors, making IT a central driver for economic growth and innovation.

The Kosovo government has recognized the strategic importance of the IT industry for economic development and structural transformation towards a knowledge-based economy. Consequently, in 2013 the government of Kosovo officially declared the IT industry a high priority sector for its economy.

The IT industry is of strategic importance for Kosovo's economic and social development for several reasons:

- **Economic growth**: Several countries such as Bulgaria, Estonia, India and Costa Rica have impressively shown the significant potential of the IT industry as a trigger for economic development, job creation and income generation. Taking into account the structure and the competitive advantage of Kosovo's IT industry, the country has the potential to follow the example of these countries by using the IT industry as a catalyst for economic growth.
- **Employment creation**: The positive effect of the IT industry on job creation is amplified by the fact that IT is a labour-intensive and skill-intensive industry. In the IT industry (particularly in software development), scale is achieved by qualifying and hiring more people. In terms of employment, IT sector development has two positive effects: a quantitative one by increasing the number of jobs and a qualitative one by generating employment for higher skilled people. Thus, Kosovo's IT sector could play an important role in reducing unemployment, especially among the youth.
- **Export promotion**: In 2013, the global market for IT outsourcing accounted for EUR 223 billion,[2] and this figure is projected to grow rapidly in the next couple of years, thus providing significant export growth potential for countries like Kosovo. Particularly in Northern Europe, severe skill shortages in the IT industry will translate into additional demand for IT outsourcing, largely to nearshoring destinations such as Southeast Europe. Increasing exports is especially important for Kosovo, due to its negative trade balance and comparatively small, underdeveloped domestic market. Growth of IT exports will provide a number of long-term benefits for Kosovo, such as speeding up the transformation to a knowledge-based economy through technology transfer and creating better, higher-paid jobs.
- **Competitiveness**: A significant economic benefit of the IT industry is its positive impact on the efficiency and productivity of other industries through spill-over effects. Thus, even traditional sectors of Kosovo's economy such as manufacturing, agriculture or tourism could improve their international competitiveness by using modern software applications and IT services. By adopting latest technologies and providing modern software applications, Kosovo IT companies are able to support the integration of small and medium enterprises (SMEs) into international markets and supply chains. Hence, IT becomes an

[1] EITO 2014/2015.

[2] Gartner (2014): Forecast Analysis: IT Outsourcing, Worldwide, 1Q14 Update

enabler for other industries. Furthermore, the IT industry can induce growth effects in related industries through multiplier effects and provides opportunities for so-called hybrid business models, combining products with specialized services. Given the ongoing digital transformation of national economies and the emergence of the industry 4.0, IT will have a major impact on the international competitiveness of Kosovo's economy.

- **Innovation & Entrepreneurship**: As a cross-cutting technology, IT is a driver of product and process innovation. Furthermore, IT plays a key role within the knowledge based economy, where its strategic importance will substantially increase due to mega-trends such as the internet of things (IoT) and the so-called industry 4.0. Accordingly, IT could play a crucial role in increasing the capacity for innovation of Kosovo's economy. In addition to that the IT sector could also serve as a catalyst for entrepreneurship and the establishment of a vibrant start-up scene. A case in point is the Kosovo Innovation Center (ICK), which impressively demonstrates the potential of the IT industry for entrepreneurship and innovation.
- **Branding & positioning**: Promoting its national IT industry could help Kosovo further improve its international visibility and position itself as a center of digital excellence, IT entrepreneurship and innovation, following the example of small, yet highly innovative and competitive nations such as Estonia, Lithuania or Singapore. Kosovo would thereby be able to diversify its "industrial image" in terms of technology, capabilities and quality. In addition to that, the Kosovo IT industry would serve as a brand ambassador for the Kosovo economy.
- **Investment promotion**: Emerging countries with strong national IT industries usually do better at attracting foreign direct investment (FDI). Thus, promoting the Kosovo IT industry could help boost the country's appeal to foreign investors and attract more FDI, by improving its image, technical and skill base, and business climate.
- **Other strategic benefits**: Improving the international competitiveness of the Kosovo IT industry would also have a positive impact on Kosovo's economy and society at large in areas such as good governance (e-government, open government and open data), social development (information society), education and science (IT skills development, e-learning, IT R&D), health (e-health), as well as sustainable energy (e-energy).

Bearing in mind the importance of the IT industry as an engine for economic development, innovation and international competitiveness, the stakeholders of the Kosovo IT industry, including several national ministries and agencies, the Kosovo Association of Information and Communication Technology (STIKK), universities and donor organizations, have joined forces in order to develop a collaborative strategy for promoting the Kosovo IT industry.

The process of developing the Kosovo IT strategy has been supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Norwegian Ministry of Foreign Affairs (NMFA).

1.2. Document Purpose & Objectives

The purpose of this document is to elaborate a specific strategy for promoting the development of the Kosovo IT industry in order to achieve the following vision and overall goal:

Vision:
Promoting digital transformation and supporting Kosovo in becoming a knowledge-based economy.
Overall goal:
To become the main driver for economic growth, employment and innovation by 2020 through increasing the international competitiveness of the Kosovo IT industry based on digital excellence.

The main beneficiary and target group of the strategy is the Kosovo IT industry. Related topics such as IT infrastructure and e-government have been covered by other strategies.

The underlying idea of the Kosovo IT strategy is that fostering the Kosovo IT sector is a highly complex task and thus requires a collaborative approach involving all relevant stakeholders, such as IT companies, associations, ministries, universities and donors. Therefore, the Kosovo IT strategy was developed by a joint working group including representatives from all relevant stakeholders, based on the following motivation and rationale:

- To jointly elaborate a strategy document which defines concrete policies, measures and actions to increase the international competitiveness of the Kosovo IT industry on a systemic and sustainable basis.
- To develop the Kosovo IT strategy in order to provide a practical and target-oriented guideline and roadmap for results-oriented cooperation in the Kosovo IT industry.
- To use the strategy development process and the resulting document as a coordination device that brings together all relevant stakeholders and fosters joint learning and collaboration within the Kosovo IT industry.
- To collaboratively plan and implement tasks and activities which individual businesses could never tackle alone.
- To improve stakeholder alignment, resource allocation and efficiency within IT sector promotion in Kosovo.

In summary, one can state that this document has been developed *by* the Kosovo IT industry, *for* the Kosovo IT industry, based on a collaborative, multi-stakeholder approach.

The strategy and the corresponding operational plan were prepared in accordance with the following documents and strategies of the Republic of Kosovo:

- Administrative Instruction No. 02/2012 on the Procedures, Criteria and Methodology for the Preparation and Approval of Strategy Documents and Plans for Their Implementation.
- National Strategy for Information Society Development of Kosova, for period 2006–2012.
- Electronic Communications Sector Policy – Digital Agenda for Kosovo 2013-2020.
- Electronic Government Strategy 2009-2015.
- E-learning Strategy for Kosovo 2010 – 2015.

Since the IT industry is a highly dynamic sector, the purpose of this strategy is not to define a static system of support measures which are carved in stone, but rather to serve as a strategic guideline and roadmap which can be flexibly adapted to changing markets and technology trends.

Consequently, this document defines an integrated system of strategic policies and measures that need to be regularly evaluated and modified and improved to ensure its effectiveness.

1.3. Industry Focus & Classification

There are many different classifications and definitions for the IT industry (e.g. ISIC Rev. 4, UNSPSC, etc.). A widely used and accepted one is the classification system of the European Information Technology Observatory (EITO), which will also be used for the purposes of this strategy. The following table provides an overview of the IT industry classification according to EITO:[3]

IT market segments	Sub-segments
Software	System Infrastructure Software Application Development and Deployment (D&D) Applications
IT services	Projects Outsourcing (excl.BPO) Support & Deploy BPO Services (incl. business consulting)
IT equipment	Servers, Storage, Workstations, PCs , Portable PCs, Netbooks, Consumer Portable PCs, Business Portable PCs, Desktop PCs, Consumer Desktop PCs, Business Desktop PCs, Media Tablets, Multifunction printers, Other IT equipment

The focus of the Kosovo IT strategy is on software and IT services due to the following considerations:

- The majority of Kosovo IT companies are active in the area of software and IT services.
- At present, there are basically no Kosovo companies producing IT equipment/hardware.
- Software development and IT services are skill- and knowledge-intensive. The required capital investment, including hardware and software development tools, are comparatively low and do not constitute an entry barrier as in other areas of information technologies (notably hardware and telecommunications). Hence, software and IT services generate a high economic added value and enable economic growth, income generation and employment promotion and are therefore particularly relevant for the development of the Kosovo IT industry and overall economy.

With regards to the Kosovo IT Strategy, one should note the increasing difficulty of maintaining a clear differentiation between specific IT market segments and sub-segments, as software products are often closely integrated with IT services. As a matter of fact, many Kosovo IT companies provide software products and IT services. In addition to that technologies and market segments are converging, particularly in the areas of mobile computing, cloud computing and embedded software. Hence, boundaries between the different market segments and sub-segments are becoming increasingly blurred and are in a continuous flux. This convergence of different information and communication technologies as well as market segments is also reflected in the term “digital” which will be widely used in this document.

For the sake of clarity, the use of the term “IT industry” in this document will refer to both software as well as IT services.

[3] EITO 2013: http://www.eito.com/WebRoot/Store15/Shops/63182014/MediaGallery/Categories/Reports/EITO_2013_Definitions_and_Methodology.pdf

1.4. How to use this Document (Structure)

This document has been structured to allow for an effective development and implementation of the Kosovo IT Strategy within the framework of a collaborative approach.

According to this approach, the document has been subdivided into chapters which correspond to the different modules and phases of the collaborative strategy development and implementation process. These chapters or strategy modules will be briefly described in the following table:

1. Introduction	▪ Background, Document Purpose & Objectives, Industry Focus & Classification, How to use this document
2. Methodology	▪ Explaining the underlying principles of the Kosovo IT Strategy such as collaboration as well as agility & adaptability ("Agile Light") ▪ Describing the methodology, approach, organization, processes and tools for developing the strategy
3. Analysis	▪ Providing the analytical basis for the whole Kosovo IT Strategy ▪ Internal analysis of the Kosovo IT industry (challenges and capabilities) and domestic market potential ▪ External analysis of potential export target markets (customer requirements and key success factors) ▪ Basis for the "strategic fit" between Kosovo IT industry capabilities and requirements of potential target markets
4. Strategy Development	▪ Defining the vision and goal system ▪ Generic IT strategy ▪ Growth strategy ▪ Definition of a market entry strategy for strategic export markets ▪ Defining strategic pillars, tasks and activities (portfolio approach)
5. Strategy Implementation	▪ Operational plan: tasks are being operationalized in Work Packages (WPs) including activities, expected results, deliverables, indicators, budget, responsibilities, etc. ▪ Timetable showing timing and sequence of tasks and activities ▪ Organizational structure and processes for collaborative strategy implementation ▪ Tools ▪ Scenarios and risk management ▪ Information and knowledge management
6. Performance Monitoring & Evaluation	▪ Monitoring and evaluation system: monitoring and evaluating the effectiveness and efficiency of strategy implementation ▪ Tools for monitoring and evaluation

The specific design and structure of the strategy allows stakeholders of the Kosovo IT industry to use the document as a **manual for the collaborative development and implementation of the Kosovo IT industry**. This is being achieved through the following elements:

- Modular structure: easy to implement, update and adapt
- Lean documentation: short and concise
- Graphic elements and charts
- Easy document navigation
- Document management and version management supported by IT Strategy SharePoint
- Focus on the operational plan as the key management instrument for strategy implementation

In this context, chapter 2 is particularly relevant, as it describes the methodology for the collaborative development of the Kosovo IT strategy. Said methodology can be used as a roadmap or “cookbook” for adapting, updating and continuously improving the Kosovo IT Strategy.

2. Methodology

This chapter describes the methodology which was applied by the strategy working group in order to develop the Kosovo IT Strategy based on a collaborative approach.

The specific methodology for elaborating the IT strategy was derived from a thorough analysis of the key success factors and challenges for IT strategy development in Kosovo, which were identified by the members of the strategy working group during a joint project planning workshop:

Key success factors for IT strategy development in Kosovo	Key challenges for IT strategy development in Kosovo
▪ Including the private sector, government and academia ("Triple Helix") into the strategy development process ▪ Combining strategy development with parallel implementation within an agile approach ▪ Ensuring commitment from all stakeholders, with the private sector as the main "driver" ▪ Change management and process reengineering to support strategy development and implementation ▪ Ensuring sufficient financial resources for implementing the Kosovo IT Strategy ▪ Diversifying financial sources for strategy implementation (risk management and contingency planning) ▪ Special methodology and tools for IT strategy development and implementation	▪ Involving and aligning the different stakeholders of the Kosovo IT industry ▪ Low level of collaboration within local IT industry ▪ Complexity and dynamic of the IT industry ▪ Volatility and rate of change in IT markets ▪ Increasing competitive pressures due to the globalization of the IT industry ▪ Lack of consistent ICT policy and strategy ▪ Lack of resources for promoting the IT industry in Kosovo ▪ Absence of reliable statistical data and information on the Kosovo IT industry ▪ Lack of market intelligence on potential export markets ▪ Inadequate institutional capacities and support structures ▪ Lack of IT strategy know-how

The reasons for including the methodology into the strategy document is to provide a guideline and "manual" for the adaptation, further development and continuous improvement of the Kosovo IT Strategy in the future. This is all the more important since the highly dynamic and competitive IT industry requires innovative and future-oriented strategies which can be flexibly adjusted to changing market and technology trends.

Based on the integrated approach for IT sector promotion of GIZ[4] and the above-mentioned success factors and challenges, the strategy working group elaborated a specific methodology for the development (and implementation) of the Kosovo IT Strategy which takes into account the structural characteristics of the Kosovo IT industry. The following chart illustrates the methodology:

[4] See GIZ (2011): Manual for IT Sector Promotion in Developing and Emerging Countries.

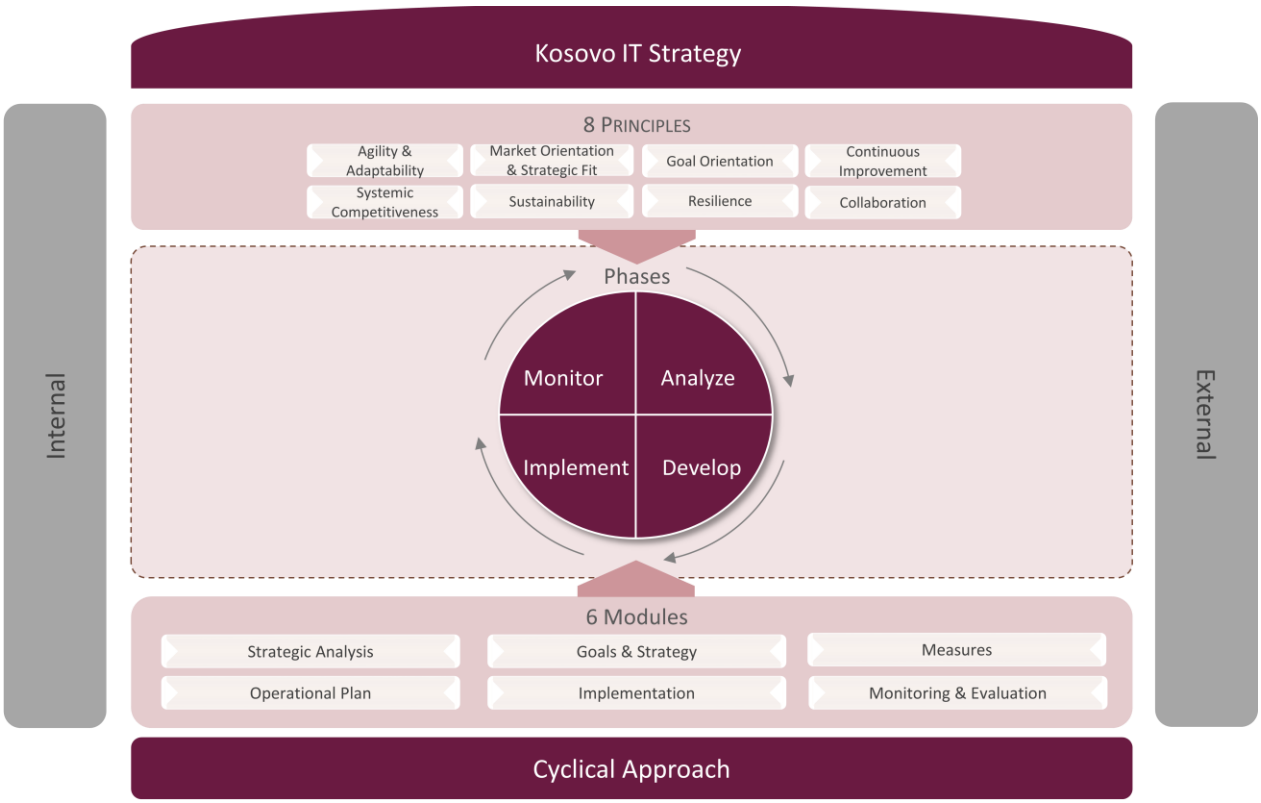


Figure 1: Overview: Methodology for collaborative development of the Kosovo IT *Strategy.*

The methodology consists of several key elements, including the 8 strategy principles, approach & phases as well as strategy modules, organizational structure, processes and tools. These key elements of the Kosovo IT Strategy will be described in more detail in the following sections of the chapter.

2.1. Principles of the Kosovo National IT Strategy

The 8 principles listed below play an important role within the overall methodology, because they serve as guidelines and framework for the development and implementation of the Kosovo IT strategy. These principles are particularly relevant in light of the collaborative and systemic approach of the IT strategy, as is demonstrated in more detail in the following table.

Principle	Explanation	Key benefit
Collaboration	▪ Collaborative approach engaging all relevant stakeholders of the Kosovo IT industry ▪ Balanced combination of top-down and bottom-up elements in strategy development ▪ Close interaction between actors ▪ Integrating internal and external know-how and ideas ▪ Open innovation approach	▪ Alignment and better coordination of measures and resources ▪ Possibility to address complex issues ▪ Ownership & motivation ▪ Advocacy & collaboration (PPP)
Agility & Adaptability	▪ Ability to flexibly adapt the strategy to changing market and technology trends ▪ Implementation of selected support measures parallel to strategy development process ▪ Applying agile methods based on SCRUM to IT strategy development	▪ Accelerated implementation and faster results (“time to market”) ▪ Increased agility and flexibility of the Kosovo IT industry ▪ Generating new sources of competitive advantages

Principle	Explanation	Key benefit
	▪ Establishment of dynamic capabilities ▪ Strategic patching	▪ Building dynamic competitive advantages ▪ Rapid reaction capabilities ▪ Organizational learning ensuring continuous improvement of the Kosovo IT Strategy
Systemic Competitiveness	▪ Defining well-coordinated measures by stakeholders on the different systemic levels (macro-, meso-, and micro-level) ▪ Multi-stakeholder working group ▪ Cluster approach	▪ Increased competitiveness of the IT industry on a sustainable basis ▪ Higher transparency ▪ Alignment and effective communication
Market Orientation & Strategic Fit	▪ Designing an IT strategy which bridges the capabilities of the Kosovo IT industry (internal view) with the requirements and key success factors of the target markets (external view) in order to generate sustainable competitive advantages and to successfully position the industry in international markets ("strategic fit") ▪ Reflecting the idea of strategy as a link between an organization or industry and its external environment ▪ Identifying specific demand structures and requirements in target markets ▪ Customer orientation ("user stories")	▪ Creating sustainable competitive advantages ▪ Customer orientation (internal & external) ▪ Generating customer value (internal & external) ▪ Tangible benefits for IT companies
Sustainability	▪ STIKK as strategy owner and system integrator ▪ Modular approach ▪ Realistic appraisal of existing capabilities & resources of the Kosovo IT industry ▪ Joint capacity building for collaborative strategy development	▪ Generating sustainable competitive advantages ▪ Long-term effectiveness ▪ Better resource allocation
Goal Orientation	▪ Designed to achieve specific goals ▪ Goals as roadmap for the development and implementation of the Kosovo IT strategy ▪ Integrated goal system ▪ Management by Objectives (MbO)	▪ Goals create a common foundation and direction for collaboration ▪ Effective collaboration ▪ Focus on implementation and results ▪ Basis for efficient strategy implementation, monitoring and evaluation
Resilience	▪ Scenario planning ▪ Risk management ▪ Contingency plan ▪ Multi-stakeholder budgeting	▪ Increased effectiveness ▪ Increased adaptability and flexibility ▪ Risk reduction
Continuous Improvement	▪ Cyclical approach ▪ Lessons learnt and good practices ▪ Knowledge & information management ▪ Organizational learning	▪ Sustainable competitiveness ▪ "Integrated quality management system" ▪ Better resource allocation

In this context, the concept of **systemic competitiveness**[5] needs some additional explanation as it is particularly relevant for the Kosovo IT Strategy. The central idea of this concept is that competitiveness results from the interaction of different competitive factors and stakeholders on the different systemic levels of an economic system. Thus, systemic competitiveness cannot be

[5] The concept of "Systemic Competitiveness" was originally developed by the German Development Institute (DIE).

achieved through isolated activities of companies or institutions but only through well-coordinated and targeted measures by all relevant stakeholders on the different systemic levels (macro-, meso-, and micro-level). This holds particularly true for the IT industry, which is highly knowledge-intensive and where different actors are closely interrelated. Therefore, increasing the systemic competitiveness of the Kosovo IT industry requires a collaborative approach and the integration of all relevant stakeholders.

Being the main driver of digital transformation, the IT industry is characterized by shortening innovation cycles, high competitive pressures and increasing globalization. In such an environment, dynamic capabilities and knowledge-based competitive advantages play a crucial role. Accordingly, the Kosovo IT industry needs to prioritize swift and effective capacity-building and learning as well as transformation management in close cooperation with all relevant stakeholders on the different systemic levels. The concept of systemic competitiveness is ideally suited to formulating policy recommendations and supporting measures to promote such learning and transformation processes.

2.2. Approach and Phases

The next key element of the methodology for the development of the Kosovo IT Strategy is the approach which has been directly derived from the strategy principles described above. Accordingly the approach combines collaboration, agile methods and the concept of strategic fit.

2.2.1. Collaboration

The highly challenging and complex task of promoting the IT industry in Kosovo can only be addressed by a collaborative approach involving all relevant stakeholders, ranging from ministries to the IT association STIKK, individual companies, universities and donors. This also implies a balanced combination of top-down and bottom-up elements in strategy development.

Pursuant to this collaborative approach, the representatives from all relevant stakeholder groups of the Kosovo IT industry formed a joint working group (“strategy group”) which assumed responsibility for developing the Kosovo IT Strategy .

The collaborative element of the approach resulted in a regular influx of new ideas and know-how from the members of the strategy group and ensured ownership of the strategy development and implementation process.

The following photos illustrate the collaborative approach of the Kosovo IT Strategy which was elaborated in 8 multi-stakeholder strategy workshops:

Figure 2: Photos from collaborative strategy workshops

2.2.2. Agile methods

Similarly to agile methods used in software development, the development of the Kosovo IT industry follows an agile approach which comprises four iteratively aligned strategy phases:

- Analysis
- Strategy development
- Implementation
- Monitoring & evaluation

To organize and manage the collaborative development of the Kosovo IT Strategy in an effective and agile manner, the four phases were subdivided into **6 individual strategy modules**. The following diagram shows the four phases and the corresponding strategy modules of the overall strategy development process:

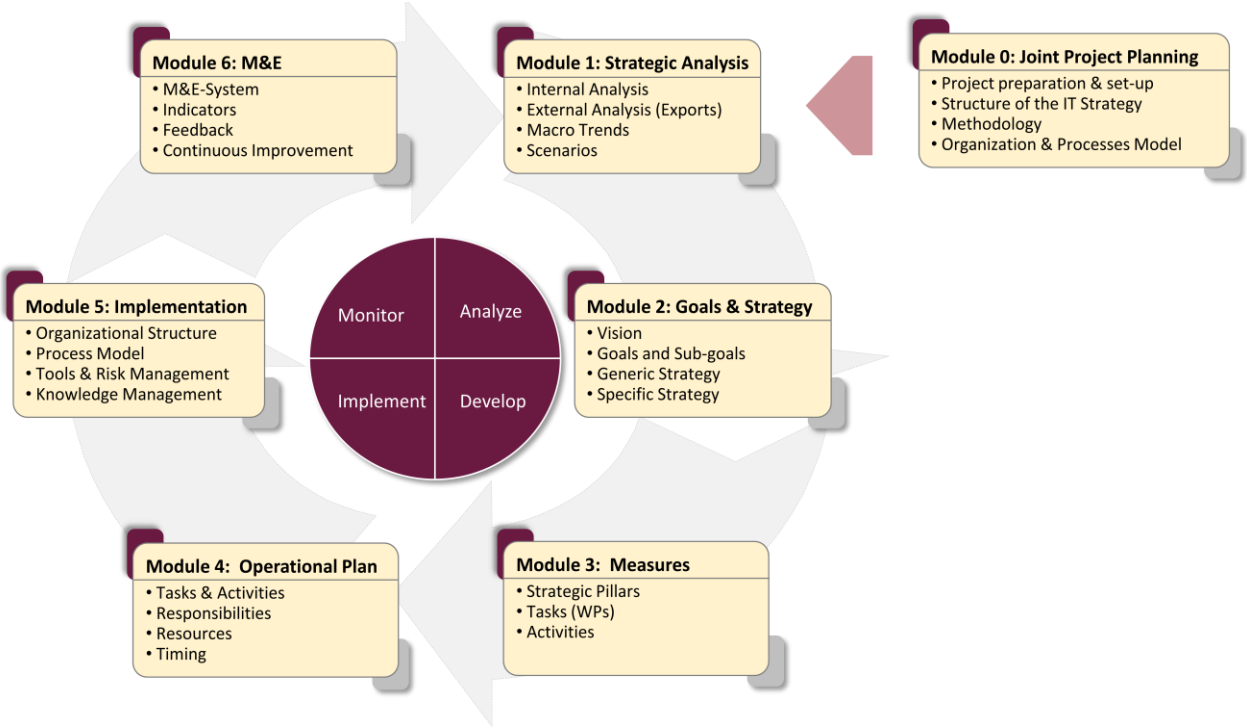


Figure 3: Phases and modules of the IT strategy development process

Each of these modules contained a specific set of IT strategy elements and topics elaborated by the working group within the framework of several strategy workshops. The sequence and content of the modules correspond directly to the structure of the strategy document.

In strategy **module 0** the joint project planning for the Kosovo IT Strategy was conducted including project set-up, methodology, establishing the strategy working group as well as the corresponding process model.

Strategy **module 1**, which corresponds to the analysis phase, encompasses the tasks to be conducted in the framework of the internal analysis of the Kosovo IT industry as well as the external analysis of the potential target markets.

Module 2 and 3 both belong to the strategy development phase. While module 2 was mostly concerned with the goal setting process and the formulation of the generic strategy and market

entry strategy, module 3 focused on the definition of concrete support measures and activities for the Kosovo IT industry according to the different sub-goals.

Module 4 and 5 were part of the implementation phase. They focused on the development of the overall organizational structure, processes and instruments for strategy implementation, including the elaboration of an operational plan.

Module 6 relates to the monitoring and evaluation (M&E) phase. The module included the development as well as the implementation of an M&E system, in order to evaluate the effectiveness of the measures, provide feedback and ensure continuous improvement of the Kosovo IT Strategy.

As it can be seen from figure 3, the strategy was not developed as a linear process, but rather as a **cycle of iterative, incremental strategy modules**, where the inputs and suggestions provided by the working group feed into defining and optimizing the content of each chapter. Complex elements of the strategy such as the goal system and the operational plan were elaborated in several so-called ”sprints” or iterations.

Once strategic measures have been implemented (Module 5), the whole cycle starts again based on the results from monitoring and evaluation (Module 6). This allows for **continuous improvement of the strategy** through constant interaction between strategy formulation and implementation.

The following chart provides a short overview of agile methods according to Scrum[6], as well as of the agile elements in the Kosovo IT Strategy:

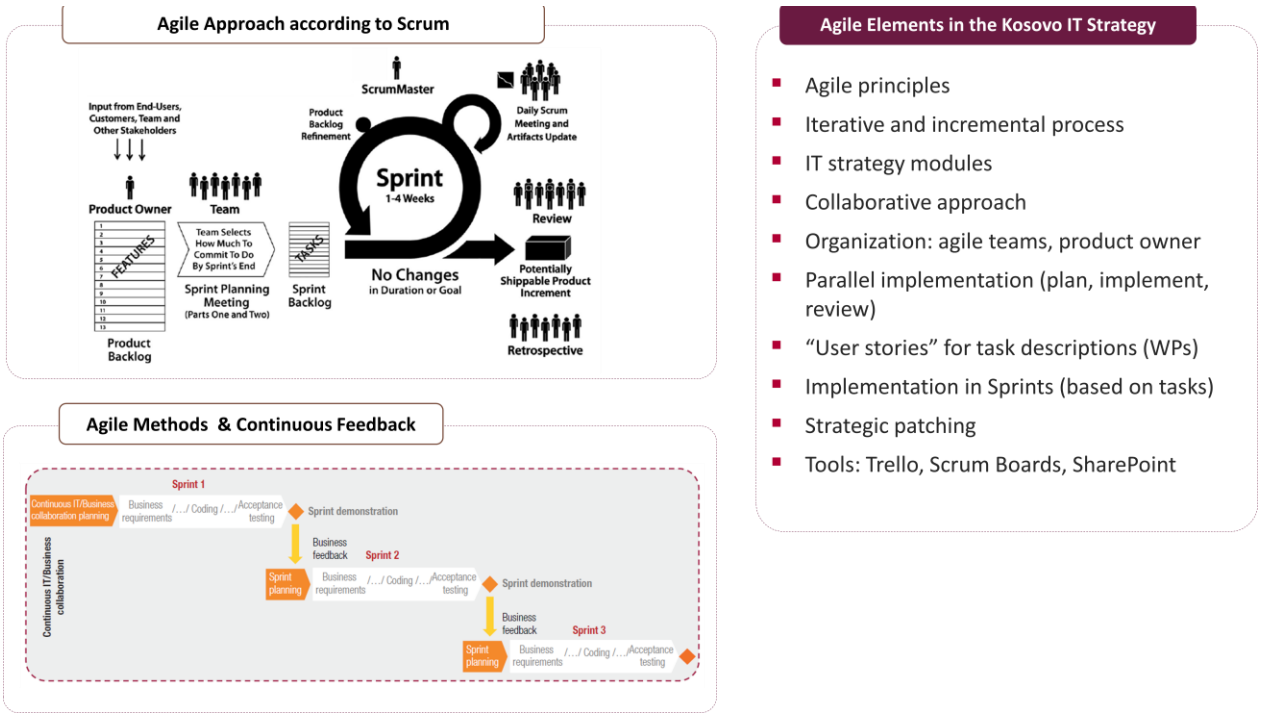


Figure 4: The agile approach of the Kosovo IT Strategy

[6] Scrum is a special agile software development framework. For further information on Scrum please refer to: https://www.scrum.org.

The **agile approach** provides the following benefits for the development and implementation of the Kosovo IT Strategy:

- Promoting adaptive planning and encouraging rapid and flexible response to changing market conditions and technology trends
- Continuous improvement of the Kosovo IT Strategy
- Accelerated implementation of support measures
- Promoting effective collaboration within the strategy working group and the stakeholders of the Kosovo IT industry
- Increasing transparency of the strategy development process

An important element of the agile approach is the **parallel implementation** of selected support measures for the Kosovo IT industry, such as the establishment of STIKK Education, the introduction of the B2B Export Promotion Service, as well as the organization of business delegations to strategic export markets. In that way, the effectiveness of specific strategy measures could be tested and the results and lessons learnt were directly included in the strategy development process.

2.2.3. Strategic Fit

Another important component of the methodological approach is the so-called strategic fit. It describes the idea of designing an IT strategy which bridges the capabilities of the Kosovo IT industry (internal view) with the requirements and key success factors of its target markets (external view) in order to generate sustainable competitive advantages and to successfully position Kosovo's IT industry in international markets.

According to the agile approach, the strategy development process starts with Module 1, comprising an internal and external analysis. The internal analysis is targeted at assessing the structures, resources and capabilities of the Kosovo IT industry, while the external analysis implies the analysis of potential export target markets in order to identify the relevant key success factors.

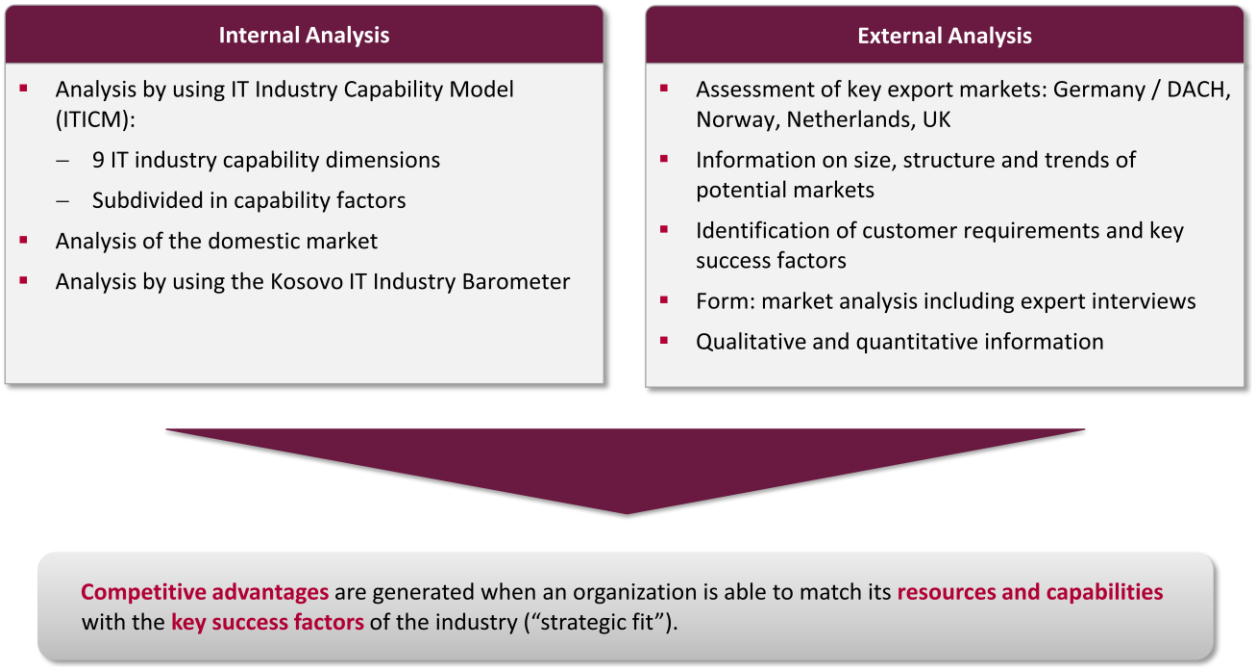


Figure 5: Generating sustainable competitive advantages by ensuring "strategic fit"

The analysis phase forms the basis for the subsequent strategy development process by providing all relevant information. Without basing the strategy development process upon a thorough analysis, the strategy development would be prone to failure due to a lack of consistency with either the internal or external environment.

With this approach it is possible to overcome the dichotomy often found in many IT industry development strategies between "resource-based strategy" and "market-focused strategy" by combining and integrating both approaches.

Through a combination of collaboration, agile methods and strategic fit, the methodological approach of the strategy aims at creating a "learning system" that ensures systemic competitiveness for the Kosovo IT industry as well as the generation of sustainable competitive advantages. Such a learning system, facilitating the continuous improvement and adaptation of the strategy, is of particular importance for the IT industry, which is characterized by short innovation cycles and intensifying competition.

2.3. Organization

In view of the collaborative and agile approach, the working group plays a key role in developing and implementing the Kosovo IT Strategy. Because of the complexity of elaborating such a strategy for the Kosovo IT industry, all relevant stakeholders were included in the working group, building on the paradigm of the so-called "Triple-Helix", as illustrated in the diagram below:

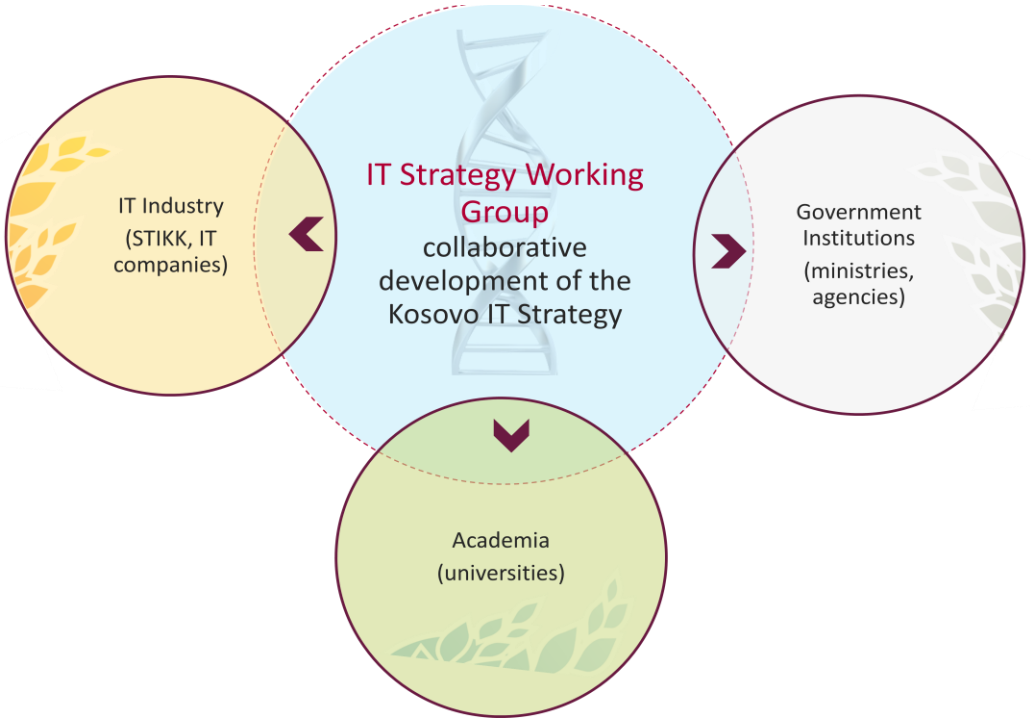


Figure 6: The IT Strategy Working Group and the "Triple Helix"

For the purpose of developing the Kosovo IT Strategy, a self-organizing and interdisciplinary working group was established, including the following stakeholders:

▪ Kosovo Association of Information and Communication Technology (STIKK) ▪ Innovation Center Kosovo (ICK)	▪ Ministry of Labour and Social Welfare ▪ University of Prishtina ▪ Kosovo Investment and Enterprise

▪ Ministry of Economic Development ▪ Ministry of Trade and Industry ▪ Ministry of Education, Science and Technology ▪ Ministry of Finance ▪ Ministry of Culture, Youth and Sports	Support Agency ▪ German Agency for International Cooperation (GIZ) ▪ Norwegian Ministry of Foreign Affairs ▪ Swiss Development Cooperation (SDC)

The main function of the working group was to serve as a platform for collaborative strategy development and exchange of ideas, experience and good practices. In line with the agile approach, the strategy was developed, constantly reviewed and improved by the members of the working group in a collaborative, open manner. This experience clearly showed that close cooperation, as well as exchange of knowledge and ideas are essential for enabling consensus and optimal commitment to the strategy and its support measures.

Figure 7 below provides a concise graphic depiction of how the development and implementation of the Kosovo IT Strategy were organized and structured:

Figure 7: Organizational structure for the development and implementation of the Kosovo IT Strategy

In accordance with the above mentioned methodology, an agile team framework was applied within the strategy working group, placing great emphasis on face-to-face communication and close interaction between team members (see figure 8):

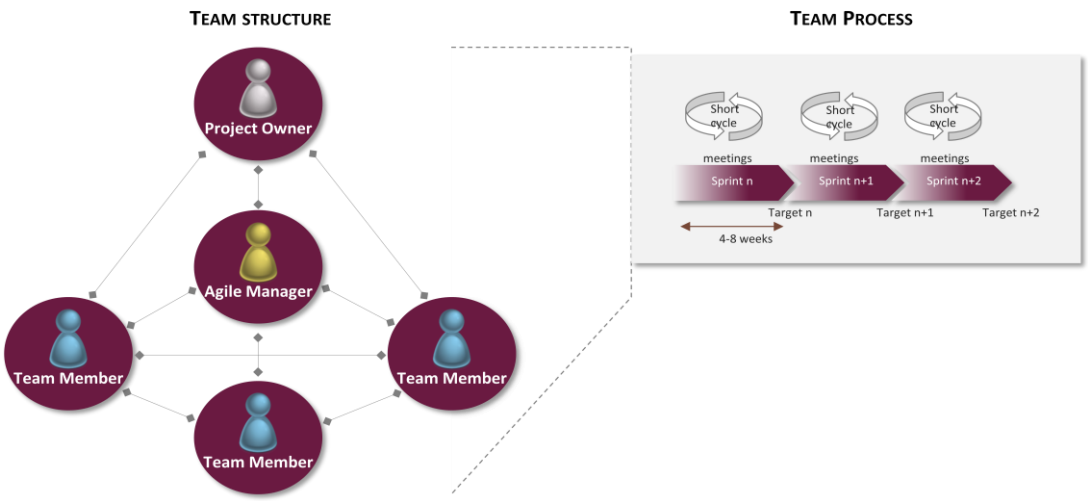


Figure 8: The agile team framework[7]

Through this agile team framework and the strategy workshops (modules), the awareness for collaboration and the systemic nature of competitiveness in the IT industry were established in the working group and the different expectations and views within the group were consolidated and channeled into a shared vision and goals for the Kosovo IT industry.

The allocation of roles and tasks within the agile team framework for strategy implementation will be explained in greater detail in chapter 5.3.

2.4. Processes

Collaborative development of an IT strategy within a multi-stakeholder setting is a highly challenging and complex task, as different stakeholders groups, partners and topics need to be coordinated and aligned. Therefore, the methodology for developing the Kosovo IT Strategy also included a comprehensive process model, comprising two key processes:

1. **The overall strategy development process:**

   This process is based on the cycle of the 6 iterative, incremental strategy modules described above, ranging from module 1 "Strategy Analysis" to module 6 "Monitoring & Evaluation".

2. **Process for individual strategy modules:**
   A specific sub-process was defined, with a view to conducting each of the individual modules of the strategy development process. According to this sub-process, each strategy module consists of pre-module activities, workshop activities and post-module activities. Pre-module activities include the dissemination of articles, studies and information material on the module subject to members of the working group, as well as workshop agenda-setting. Workshop activities, on the other hand, aimed at specifying the content and outputs for each of the strategy modules in several Sprints (iterations). Presentations, discussions, group works and brainstorming sessions are some examples of such activities. Furthermore, workshops are followed by post-module activities, comprising writing, revision and final approval of strategy elements and documents discussed in the working group. In accordance with the strategy's agile model and the corresponding process model, individual modules are also developed and continuously improved within several Sprints (iterations).

Figure 9 illustrates the sub-process for each strategy module, from module initiation to the approval of module results.

[7] Based on Scrum.

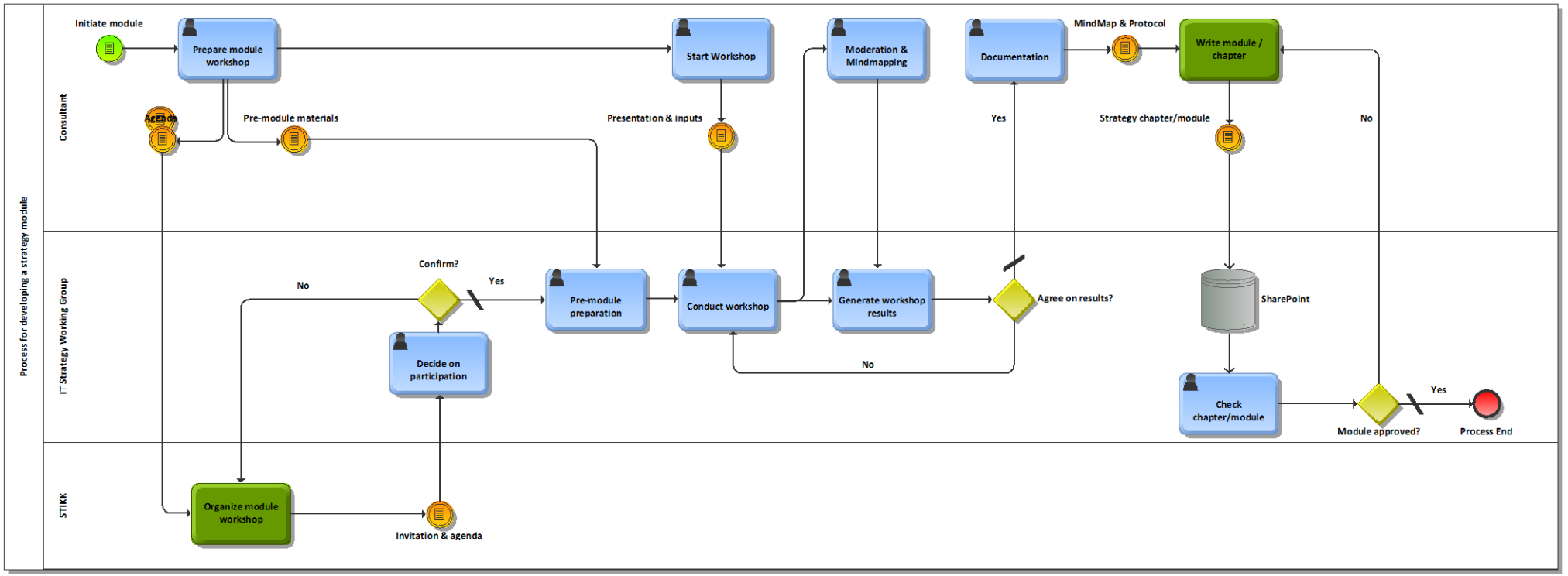


Figure 9: Process for developing the individual strategy modules

The specific allocation of roles and tasks within the strategy module process is described in the following table, illustrating the different process stages:

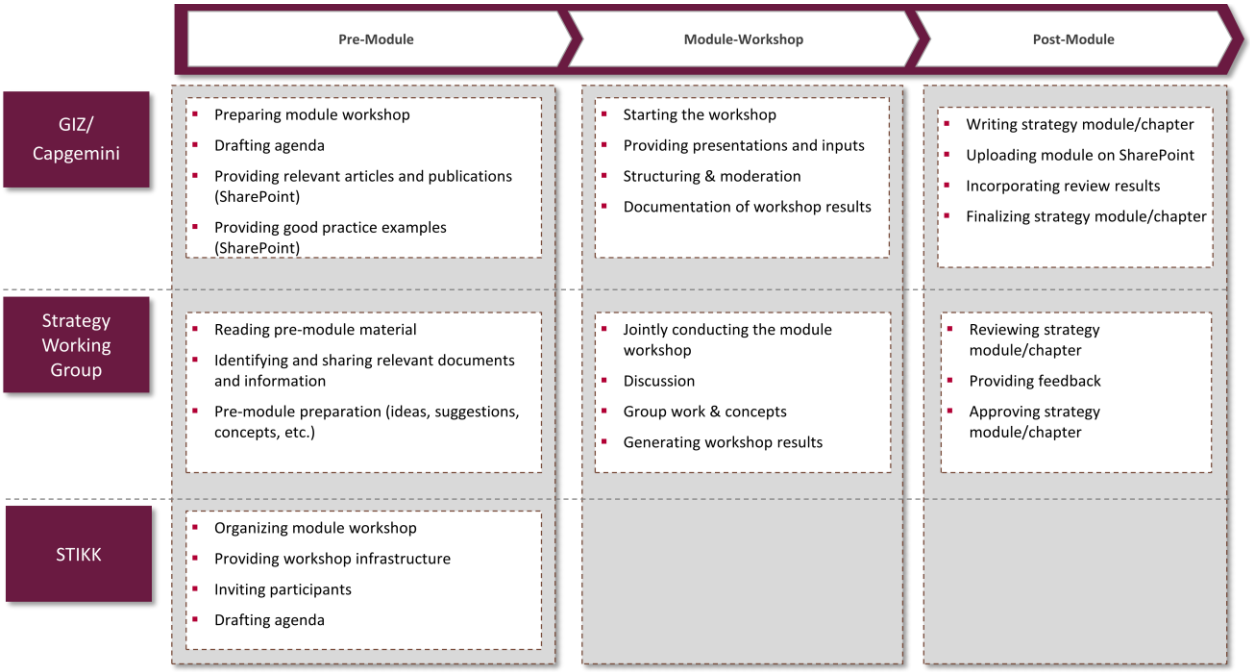


Figure 10: Roles and tasks in the strategy module process

As the above diagrams indicate, the activities of the working group were coordinated by STIKK, in close cooperation with GIZ and the Norwegian Embassy in Prishtina. STIKK also provided the organizational infrastructure for the strategy module workshops, such as location, project managers and support staff.

It is worth pointing out that the overall IT strategy development process also encompassed an open innovation approach, whereby working group members' ideas and inputs were complemented by those of external experts, academics, diaspora members and international strategic partners (e.g. IT clusters and associations from Germany and Norway).

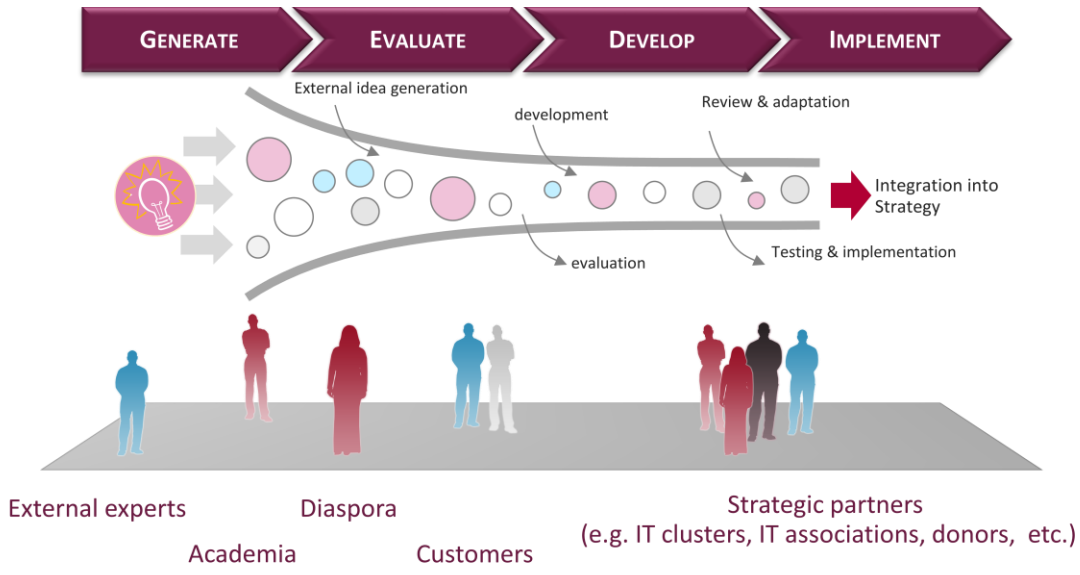


Figure 11: Open innovation

The Kosovo IT Strategy will be elaborated, implemented, monitored, continuously improved and further developed by the working group according to the collaborative-agile approach suggested above. Thus, the development of this strategy is an ongoing process which includes all relevant actors of the Kosovo IT industry.

2.5. Tools

In order to support the collaborative development of the Kosovo IT Strategy, a range of different tools and instruments have been applied. In view of the agile approach to strategy development, strategy workshops have represented the most important tool. These have included moderation techniques such as a meta-plan, group discussions, brainstorming sessions, MindMapping, group works, ASE methods, etc. The table below provides an overview on the different tools and instruments used to develop the Kosovo IT Strategy:

Moderation techniques	Other instruments and tools
▪ Strategy workshops ▪ MindMap ▪ Metaplan ▪ Group discussions ▪ Brainstorming ▪ ASE methods	▪ SWOT analysis ▪ IT industry capability model ▪ Transformation maps ▪ Scenario analysis ▪ Case studies ▪ Logic trees ▪ LogFrame ▪ IT industry barometer ▪ Ansoff-Matrix

From a technical point of view, a collaboration tool or so-called groupware application was introduced to support the strategy development and implementation process.

Collaboration tools are special software (mostly web-based) solutions, which support cooperation in a group over time and space. These tools are suitable for managing complex collaboration processes and joint projects. Although there are different solutions available, including open source software solutions, it was decided to use MS SharePoint, since this is a proven system providing all the necessary functionality to support collaborative strategy development. Besides, many of the strategy working group members are familiar with the SharePoint application and its functionality.

A special SharePoint was established for the Kosovo IT Strategy providing the following key functionality:

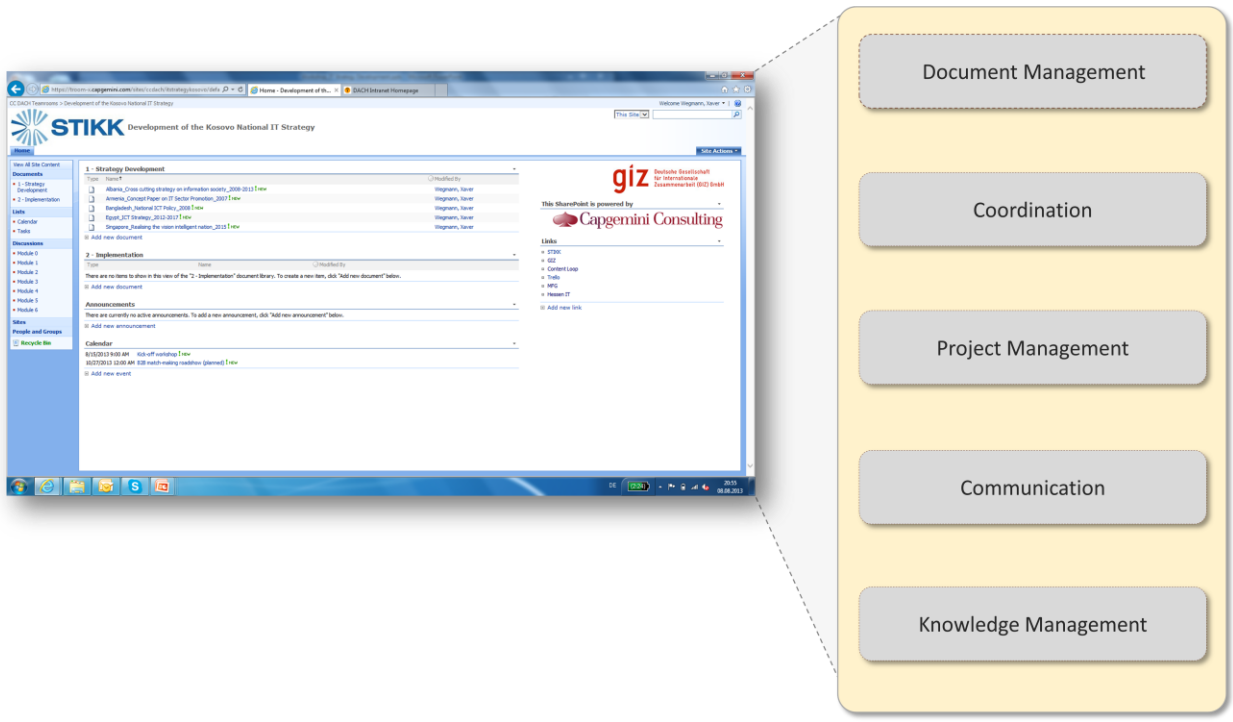


Figure 12: SharePoint for the Kosovo IT Strategy

Besides the above mentioned functionality, the SharePoint for the Kosovo IT Strategy provides many additional features, such as discussion boards, calendar, Wiki, workflows, task tracking, surveys, links, etc., as illustrated in figure 13:

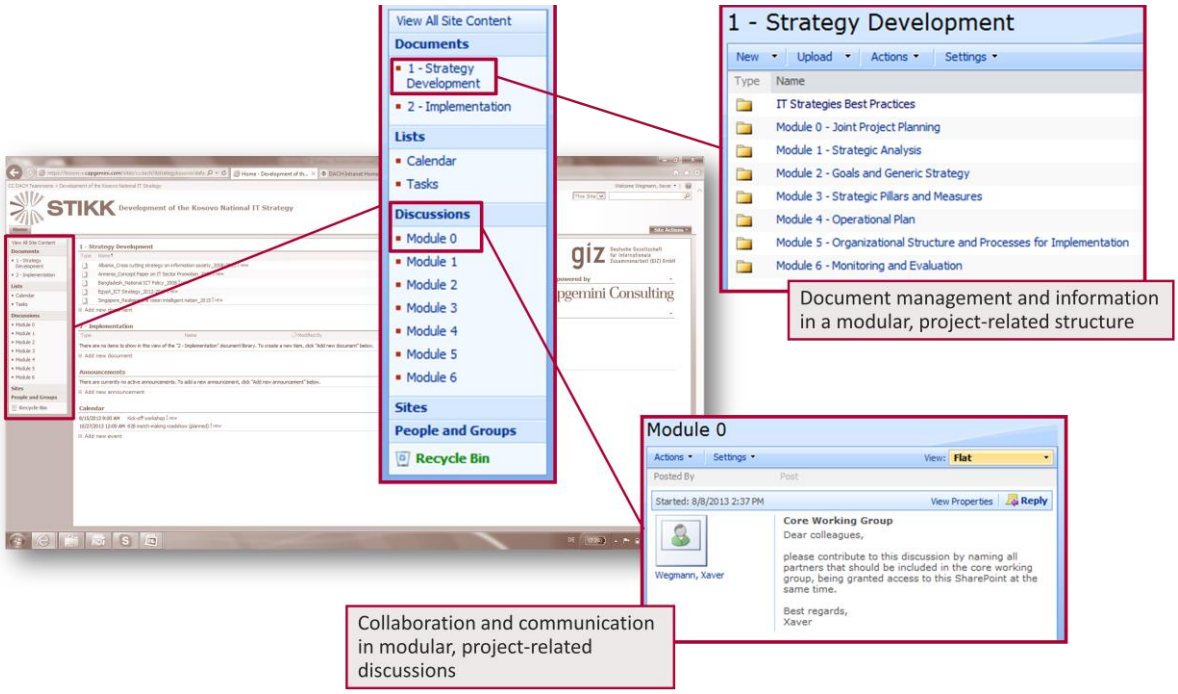


Figure 13: Functionality of the SharePoint for the Kosovo IT Strategy

By providing the above mentioned functionality, SharePoint has been a highly useful web-based platform for communication and cooperation, as well as for dissemination and management of relevant information and knowledge. For instance, SharePoint was used to disseminate information to working group members within the framework of pre-module activities, as well as

to enable joint work on the strategy document. The SharePoint system hence significantly facilitated collaboration within the working group and increased team productivity.

The application also helped establish predictable, repeatable and transparent patterns of collaboration within the strategy development process, thus reinforcing the effectiveness of the used methodology.

Despite being a valuable collaboration tool, allowing for efficient communication and information exchange, Sharepoint is nonetheless clearly not a substitute for direct face-to-face communication and interaction.

3. Strategic Analysis

According to the methodology for the development of the Kosovo IT Strategy which has been described previously, this chapter covers the strategic analysis (module 1).

The analysis encompasses the **internal analysis** of the Kosovo IT industry in order to identify capabilities, strengths, problems and challenges of the industry, as well as the **external analysis** of potential export target markets to identify customer requirements and key success factors.

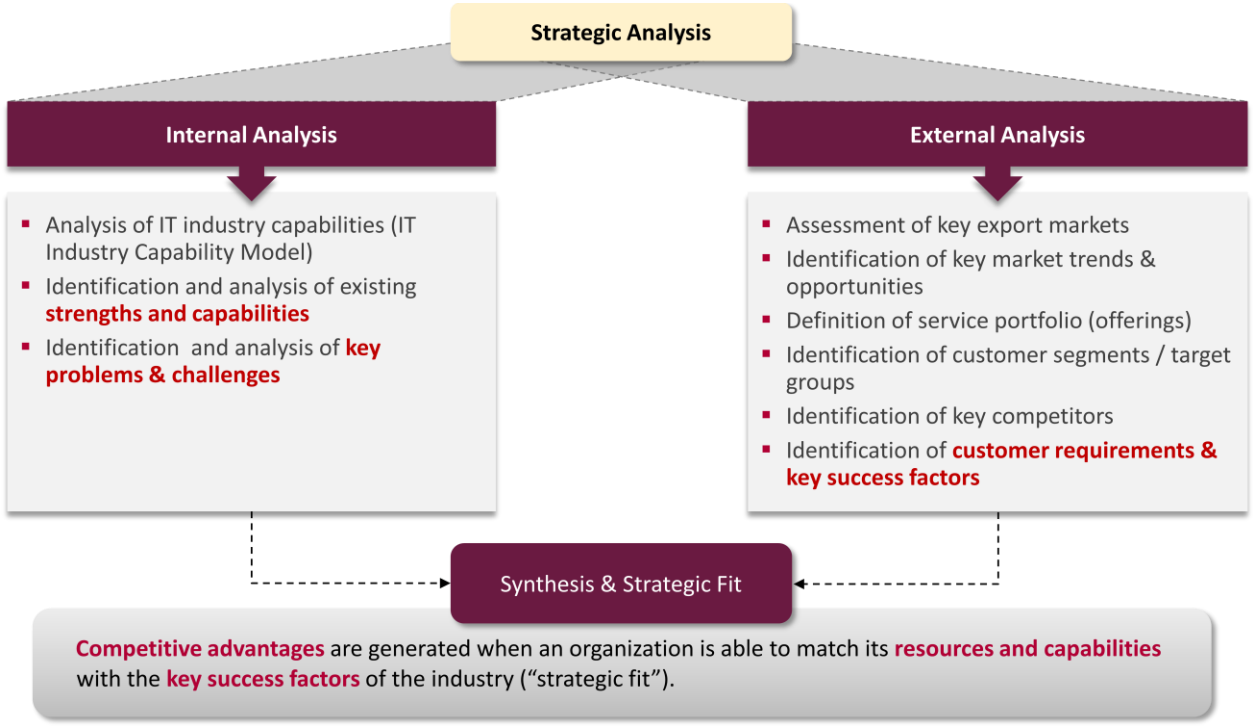


Figure 14: Strategic analysis

As illustrated in figure 14, the goal of this chapter is to provide the analytical basis for the development of a strategy which bridges the capabilities of the Kosovo IT industry with the requirements and key success factors of the target markets (principle of strategic fit). This is done with a view to generating sustainable competitive advantages and turning the national IT industry into a major driver of economic growth, employment and innovation.

3.1. Internal Analysis

3.1.1. IT Industry Capability Model

In management science, several authors have stressed the importance of resources and capabilities for generating competitive advantages and developing sustainable competitive strategies.[8]

Figure 15 below outlines the dynamic interaction of resources, capabilities and key capabilities / core competencies and illustrates how said interaction generates new competitive advantages.

[8] See Prahalad and Hamel (1990), Porter (1990), Grant (2008).

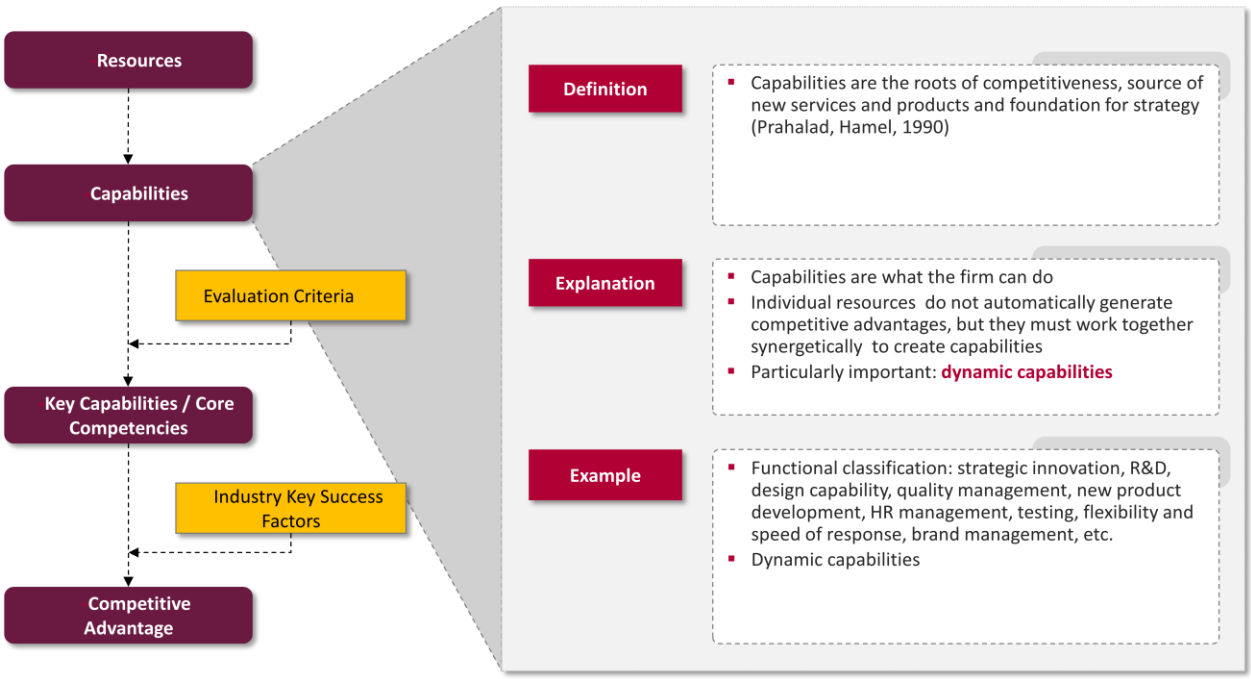


Figure 15: The dynamic interaction of resources, capabilities and competitive advantages

Competitive advantages are generated when an organization is able to match its resources and capabilities with the key success factors of the industry, as shown in the following illustration (figure 16). Unlike some traditional industries, the IT industry exhibits very specific key success factors, which can be mainly attributed to the digital nature of the IT sector, its globalized industry structure and the importance of technology and knowledge.

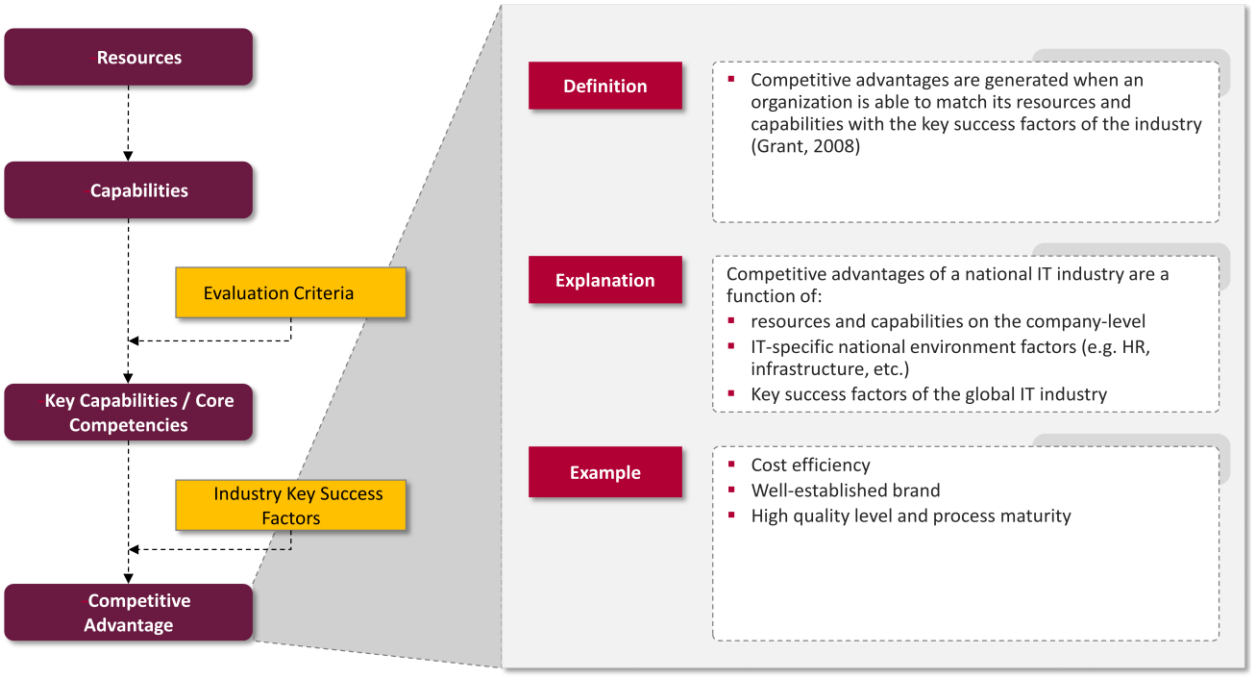


Figure 16: Competitive advantages

Accordingly, one could state that establishing competitive advantages for a national IT industry requires a strategy which takes into account the resources and capabilities on the company level

(micro-level), the IT-specific framework conditions on the national level (meso and macro level) as well as the key success factors of the global IT industry.

There are several analytical tools for identifying the specific capabilities of an organization, including functional analysis, Porter's generic value chain or SWOT analysis. However, all these tools are focused on the corporate level and do not take into account the structural particularities of the IT industry.

Therefore, the strategy working group has applied a special analytical tool for the internal analysis of the Kosovo IT industry, the **IT Industry Capability Model (ITCM),**[9] developed by the German Agency for International Cooperation (GIZ). This tool consists of 9 IT industry capability dimensions, subdivided into several capability factors. These capability factors have a direct impact on the global competitiveness of a national IT industry. The capability dimensions and factors can be attributed to the three systemic levels (macro, meso, and micro-level).

The model reflects the idea that sustainable IT industry competitiveness depends on a complex system of interconnected capabilities and factors and can only be achieved if all relevant stakeholders on the different systemic levels coordinate their activities and collaborate towards a common vision and goal. The model is closely related to the concept of systemic competitiveness (see previous chapter) and places great emphasis on knowledge-based and technology-based capabilities.

The following sources were used to conduct an **internal analysis of the Kosovo IT industry**:

- Face-to-face interviews with relevant stakeholders from the Kosovo IT industry, including ministries, agencies, STIKK, ICK, IT companies, universities, donor organizations, chambers of commerce, embassies and IT infrastructure providers (e.g. TK)
- Secondary sources, such as articles, documents and publications on the Kosovo IT industry and economy.
- Results of the Kosovo IT Industry Barometer (KITIB)[10], conducted by STIKK in cooperation with GIZ in 2014. The industry barometer was designed by GIZ as a special tool to gather and analyze quantitative and qualitative information on industrial performance and generate relevant statistical data. The barometer covers topics such as general company information, statistics (e.g. turnover), human resources (e.g. employment, salary structures), forecasts, and current subjects (feedback function for companies).[11]
- Results of the ICT Market Analysis and Skills Gap Analysis Kosovo, conducted in 2013.[12]
- Results of the Workshop on Strategy Module 1 "Strategic Analysis", conducted by the working group on October 2nd 2013.

The following table below summarizes the **results of the internal analysis of the Kosovo IT industry** based on the IT Industry Capability Model, taking into consideration the different capability dimensions and factors:

[9] GIZ (2011), Toolbox for IT Sector Promotion in Developing and Emerging Countries: 5 ff.
[10] STIKK / GIZ (2014): Kosovo IT Industry Barometer (KITIB).
[11] GIZ (2011), Toolbox for IT Sector Promotion in Developing and Emerging Countries: 71 ff.
[12] INDEXKOSOVA (2013): ICT Market Analysis and Skills Gap Analysis Kosovo.

Capability Dimension	Capability Factor	Qualitative Evaluation	Assessment Value[13]
State Institutions	Strategy	▪ Currently there is no strategy for promoting the IT industry in Kosovo. The absence of such a strategy severely hampers a coordinated and systematic effort to develop the country's IT sector. ▪ Kosovo does not have a comprehensive ICT industry policy. ▪ Lack of know-how among stakeholders of the Kosovo IT industry on systematic IT sector promotion.	3
	Institutions	▪ Unlike many other countries in the region, Kosovo does not have a special institution (e.g. IT Ministry / Ministry of Information Society) dedicated to promoting the IT industry and digital transformation of the Kosovo economy. ▪ Special advisory institutions on IT like a national CIO or national IT steering committees do not exist in Kosovo.	2
	Investment	▪ There are no special investment programs in place for the IT industry. ▪ In general government institutions are not investing systematically into the promotion of the Kosovo IT industry. ▪ Only indirect support of the IT industry through public tenders which regularly reveal irregularities in terms of transparency of tender procedures. ▪ There is no systematic approach for promoting foreign direct investment into the Kosovo IT industry.	3
	Support programmes	▪ There is a lack of awareness among public stakeholders on the strategic importance of the IT industry for the Kosovo economy. ▪ According to STIKK there are no support measures or incentives available for the IT industry. ▪ Special industrial zones or incentive schemes like for instance in Macedonia do not exist.	1
ICT infrastructure	Energy supply	▪ Energy supply for the Kosovo IT industry is stable and reliable. ▪ Due to subsidization, energy costs in Kosovo are among the lowest in the region.	7
	Telecommunica-tions	▪ Network coverage is 98%. ▪ Telecommunication costs are comparatively high in comparison to other countries in the region but are likely to decrease soon due to deregulation and privatization of the Kosovo telecommunications industry (see Law on Electronic Communication). ▪ The most important provider of telecommunication services is Telekomii Kosoves but the number of internet providers is	7

[13] Assessment value on a scale from 1 = poor to 10 = excellent. Assessment has been conducted by the members of the working group for developing the Kosovo IT Strategy.

Capability Dimension	Capability Factor	Qualitative Evaluation	Assessment Value[13]
		constantly growing. ▪ In general, telecommunication services are competitive on a regional level.	
	Internet connectivity	▪ Based on the quarterly report published by the Regulatory Authority of Electronic and Postal Communications, there are 51 licensed companies (an increase of 14 ISPs that have been licensed, based on Q3 2011) which provide internet services to end-users and 5 (one ISP less, from Q3 2011) companies have licenses for International Internet traffic exchange. The remaining 46 Internet Service Providers have access to the Internet through the main five licensed ISPs.[14] ▪ On average the internet connectivity is between 2 – 4 Mbps, but can be easily extended due to existing fiber optic network. ▪ In urban areas, internet infrastructure is based on fiber optics networks. ▪ Prices for internet are affordable for local IT companies and internationally competitive. ▪ In summary, internet penetration in Kosovo is at satisfactory levels and can be compared to developed countries. Internet penetration based on households is 84.8% while internet penetration based on users is 76.6%, and geographical Internet penetration shows that on regional roads there are, in average, 9 wireless networks per kilometre.[15]	8
	Legal framework	▪ The necessary legal framework and infrastructure is in place including laws on electronic communication, information society services (e-signature, e-payment, etc.), IPR, etc.	n.a.
Demand	Export market	▪ Exports are becoming increasingly important due to the very limited domestic demand. ▪ Market potential: increasing demand for outsourcing / nearshoring particularly in Western Europe. ▪ Main target markets: DACH, Scandinavia, Netherlands, UK, USA. ▪ Main target industries (verticals) of Kosovo IT exports: IT industry, telecommunications, media, NGOs, financial services, gaming & entertainment, retail, utilities. ▪ The results of the KITIB 2014 indicated that Kosovo IT export mostly consisted of software and IT services. ▪ Main products / services exported: mobile solutions, web design, IT consulting, e-commerce applications, custom software development / outsourcing, CRM, document management. ▪ The IT enterprises interviewed regard exports also as an important means to increase their international competitiveness through technology transfer and higher quality standards.	5

[14] Source: http://www.art-ks.org/repository/docs/Pasqyre%20e%20tregut%20te%20Komunikimeve%20Elektronike%20TM3%20dhe%20TM4_2012.pdf.
[15] STIKK (2013): Internet Penetration and Usage in Kosovo.

Capability Dimension	Capability Factor	Qualitative Evaluation	Assessment Value[13]
	Domestic market	▪ Kosovo has a small and underdeveloped domestic IT market due to lack of investment and a low level of digitalization and IT usage in the economy. ▪ The total value of the Kosovo IT market is expected to account for 126 million in 2014.[16] The compound annual growth rate for the Kosovo IT market in 2015 is projected to reach 4%.[17] ▪ The structure and size of the domestic market makes it very difficult for local IT companies to establish a sustainable business model and to develop special technical capabilities and profiles. ▪ Main target industries (verticals) of Kosovo IT firms: public sector, financial services, utilities, retail, health, tourism, telecommunications, education. ▪ Main products / services (horizontals): Web design, IT consulting, e-commerce applications, BI, CRM, document management, IT project management, mobile solutions, custom software development. ▪ The most important domestic market segment is the public sector. In the period January 2010 – June 2012, public institutions have procured through public procurement system a total of € 28,269,553 (ICT procurement).[18] ▪ In the public sector demand for IT applications for health and for education is likely to increase substantially. ▪ In the future, the energy sector could be a potential target market for Kosovo IT companies, especially with regards to innovative IT solutions (e-energy). ▪ To a large extent, domestic demand in the public sector is donor driven and therefore not fully sustainable. ▪ Telecommunications could become a very interesting target market because some of the providers are planning to outsource some of their inhouse IT activities (e.g. software development). ▪ Demand from SMEs for IT solutions (particularly ERP applications) is picking up slowly. ▪ On the medium to long term, the demographic structure of Kosovo could have a positive impact on domestic demand for IT (especially for mobile apps).	3
Structural characteristics of the industry	Number of companies	▪ According to STIKK, there are ca. 120 IT companies in Kosovo employing ca. 3,000 IT professionals. ▪ In addition to that there are another 10 IT start-up companies located in the Innovation Center Kosovo (ICK). ▪ The presence of international IT companies in Kosovo is very low.	3

[16] STIKK (2014).
[17] IDC (2012).
[18] STIKK (2012), Public Procurement for ICT in the Period June 2009 – June 2012.

Capability Dimension	Capability Factor	Qualitative Evaluation	Assessment Value[13]
	Average size of companies	▪ The Kosovo IT industry consists of SMEs with an average of 5 – 20 employees. ▪ There is a vibrant community of IT freelancers.	3
	Structure	▪ According to the results of the KITIB the majority of the Kosovo IT companies provide software and IT services ▪ Kosovo IT companies cover a broad range of IT products and services, but there seems to be a focus on software development and particularly on web design and web development. ▪ In general there is a low level of specialization and differentiation among the companies in terms of technologies, target industries (vertical specialization) and specific functional areas (horizontal specialization). ▪ IT firms follow essentially imitative strategies rather than strategies of innovation and differentiation. ▪ The large majority of IT companies in Kosovo are Kosovar owned while the presence of active foreign owned IT companies operating in Kosovo is very small. ▪ In comparison to the region, Kosovo IT companies are comparatively young with an average age of 7 years. ▪ The IT industry accounted for 2.3% of Kosovo's GDP in 2013[19]	4
	Wage structure	▪ Wages in the IT industry are competitive on a regional as well as international level. ▪ Average salaries in Kosovo IT companies according to STIKK: - Junior entry level developer: ca. € 250 - 400 - Junior software developer: ca. € 400 - 500 - 3+ years in software development: ca. € 500 - 900 - Business analyst/ project manager: ca. 900 – 1,200 - Senior software developer/ 5+ software developer: ca. 1,200 – 1,600 - Department manager: ca. € 1,600 ▪ The shortage in university graduates could adversely affect salary and price structures in the Kosovo IT industry.	6
	Organization level and associations	▪ Established in 2008, STIKK is the central ICT association of Kosovo with 65 member companies and 5 academic partner organizations. ▪ STIKK has a well organized and effective organizational structure with a stable membership base. The number of member companies is increasing.	8

[19] Kosovo Agency for Statistics (2013).

Capability Dimension	Capability Factor	Qualitative Evaluation	Assessment Value[13]
	Cluster	▪ At the current state STIKK is organized as an association but the provision of specialized cluster services for its members indicates that STIKK is gradually transforming into an IT cluster with a stronger market orientation. ▪ STIKK has also included universities and government institutions into its organizational structure thus indicating the "Triple Helix" structure which is typical for IT clusters.	2
Company capabilities	Management skills	▪ There are deficiencies in the area of management skills particularly in the middle management of the IT companies. This can be mainly attributed to insufficient management education at the university level. ▪ Deficits exist especially in the areas of HR management, marketing & sales, project management and product management. ▪ In general, managers as well as staff often lack the necessary soft skills. ▪ It is likely that the situation is going to improve as more and more MBA graduates are available on the Kosovo labour market. ▪ There is a comparatively high fluctuation between companies which can be mainly attributed to a lack of HR management skills. ▪ According to the ICT Market Analysis and Skills Gap Analysis Kosovo, the following management skills are needed the most by IT companies: marketing, sales, project management, contract management, business analysis. [20]	6
	Export skills	▪ In general the level of export skills is rather limited since only a small number of IT enterprises have international clients and experience in exporting. ▪ The small size of IT enterprises also correlates with a lack of resources needed for the successful penetration of export markets. ▪ The most important distribution channels for Kosovo IT exporters include direct exports, exporting via the internet as well as exports via distribution partners in the target markets. ▪ According to STIKK and the IT companies interviewed, Kosovo IT enterprises need detailed information on potential export markets (market intelligence) in order to better understand the needs and requirements of potential export client. ▪ Many companies rely on diaspora contacts for exporting. ▪ According to the KITIB, Kosovo IT companies have very good English language capabilities while two-thirds of the companies also have German language capabilities; 50% of the companies have staff with Turkish language capabilities.	2

[20] STIKK / INDEXKOSOVA (2013): ICT Market Analysis and Skills Gap Analysis Kosovo.

Capability Dimension	Capability Factor	Qualitative Evaluation	Assessment Value[13]
	Technology skills	▪ In terms of programming languages and development tools companies are mostly focused on Java, JavaScript, HTML, XML, PHP and .NET. ▪ According to the KITIB Kosovo IT companies work mostly with the following operating systems and platforms: Windows, Android, iOS and Linux. ▪ With regards to database technologies IT companies in Kosovo use mostly mySQL, MS SQL Server, Access, SQL, Oracle and less frequently ODBC. ▪ Technology skills of IT firms are mainly focused on proprietary technologies whereas there is a lack of capabilities and know-how in the area of FOSS. ▪ In general there is a lack of technical specialization and focus on the company level but also among employees. ▪ According to the ICT Market Analysis and Skills Gap Analysis Kosovo, the following technical skills are needed the most by IT companies: CCNP, Java, C++, MySQL, OraclePHP, ASP, Perl, Python, HTML, Linux.[21] ▪ Kosovo IT companies will have to improve their technical capabilities in the area of the following global IT key trends: Cloud computing, mobile computing, big data and analytics, social media applications, internet of things (IoT) / industry 4.0 and IT security.	6
	Quality management, processes and standards	▪ According to the KITIB the majority of the Kosovo IT companies (64%) have no quality certification ▪ There are several IT companies certified according to ISO 9001 and ITMark and one company which is ISO 27000 certified. ▪ In the area of software testing, several companies have ISTQB certified software testers. ▪ There is a general lack of know-how and certifications in process-oriented standards (e.g. BPMN 2.0) as well as in agile methods for software development such as Scrum.	4
Academia & support institutions	Education & human resources	▪ The education system reveals severe deficiencies in terms of IT education ranging from secondary education to tertiary education. Despite several attempts for ICT integration into pre-university education, most of these attempts were not successful. However, informatics is a compulsory subject in schools. The current ratio PC/students is 1/50. ▪ In total there are 6 universities in Kosovo teaching computer science and IT related subjects, producing ca. 350 IT graduates / year. ▪ The output of the universities is insufficient in terms of quality and quantity. ▪ IT companies have to invest substantially into university graduates because their skills profile does not match market requirements (some of the companies stated that they have to “retrain” graduates for up to one year). Obviously there is a mismatch between	4

[21] STIKK / INDEXKOSOVA (2013): ICT Market Analysis and Skills Gap Analysis Kosovo.

Capability Dimension	Capability Factor	Qualitative Evaluation	Assessment Value[13]
		curricula and the requirements of companies. In order to address this problem, an industry advisory board has been established within the University of Prishtina but it is not fully operational yet. STIKK is a member of the industry advisory board. ▪ Only 9% of IT firms agree that the educational program (curricula) addresses the required working skills in the IT sector.[22] ▪ The four most important universities in Kosovo providing study programs in computer science are: the University of Prishtina, American University in Kosovo, University for Business and Technology and AAB Riinvest University. ▪ The most important university for IT studies is the University of Prishtina, offering bachelor and master programs. For the academic year 2011/2012, 550 students started their studies in the subjects computer engineering, electrical engineering, automation, electronics and energetic, while only 139 students graduated. The study programs of the University of Prishtina include a compulsory internship of 3 months. There are cooperation and exchange programs with Norway, Sweden and Austria and the university participates in the Tempus Program. ▪ A key problem is the high drop-out rate, since many IT students start working without graduating. ▪ The deficiencies in the education system are severely affecting the competitiveness of the Kosovo IT industry. ▪ There is still a strict division of subjects within the IT education system. Hybrid study programs such as business informatics do not exist. ▪ Universities are severely underfunded. ▪ The academic infrastructure, particularly buildings and IT labs need substantial investments.	
	Continuous education & training	▪ Overall, the system for continuous education and training in Kosovo reveals substantial deficits. There is no institution providing specialized continuous educations programs or trainings for IT professionals. The universities neither have the mandate nor the capabilities for providing continuous education and training. ▪ There are ca. 16 companies providing standard trainings for CISCO, Microsoft, etc. ▪ Companies usually conduct inhouse trainings and some enterprises have even special training and development tracks for their employees. ▪ In the framework of the Kosovo IT Strategy, STIKK has established STIKK Education which is likely to significantly improve the situation by providing specialized technical as well as management trainings for IT companies.	5
	Research & development	▪ There are only very little R&D activities on the university and company level. The University of Prishtina has tried to conduct R&D activities in the framework of FP7 projects. Universities lack the necessary IT infrastructure (IT labs).	2

[22] STIKK / INDEXKOSOVA (2013): ICT market analysis and skills gap analysis Kosovo.

Capability Dimension	Capability Factor	Qualitative Evaluation	Assessment Value[13]
		▪ The necessary capabilities as well as resources are currently not available.	
	Capital & financing	▪ There are no special financial schemes available for the IT industry. ▪ Lack of financing is a serious obstacle for Kosovo's IT industry growth. It is very difficult for companies to get loans due to high interest rates and collateral. ▪ Particularly financing export activities is a challenge for IT SMEs since there are no export financing schemes available. ▪ At the current stage, venture capital (VC) is not available in Kosovo.	1
International linkage & branding	Image & branding	▪ Due to ethnic tensions in the aftermath of the war and a rather negative international press coverage, Kosovo has an image problem abroad which is also negatively affecting the export performance of the IT industry. ▪ There is an obvious lack of national branding to position Kosovo as an attractive IT industry location.	2
	Offshore / nearshore factors	▪ Kosovo is ideally suited as a nearshoring destination due to its geographic and cultural proximity as well as language capabilities. ▪ In terms of exporting and providing nearshoring services, visa restrictions are a severe obstacle for companies.	8
	Intellectual property (IP)	▪ The necessary laws are in place but not exhaustively enforced.	2
	Linkages and networks	▪ STIKK is member of the European PIN SME, WITSA and the SEEITA and SEE ICT Forum. ▪ STIKK has established cooperation with IKT Norge (Norway), the German Austrian Swiss Outsourcing Association (GOA), the IT cluster bwcon in Stuttgart and the Bavarian ICT Cluster BICCnet in Munich.	5
	Diaspora	▪ The Kosovo IT industry can draw on a very strong and well organized diaspora abroad, particularly in Germany (e.g. DIJA, IDEAL), UK and USA. ▪ Associations of Kosovo students abroad (e.g. Association of Albanian and Kosovo Students at the Technical University of Darmstadt, Germany) provide an interesting potential for cooperation.	6
Innovation & entrepreneurship	Institutional framework for innovation	▪ In general, the government sees innovation as having an important role in Kosovo's economic and social development ▪ Kosovo's innovation system as well as its entrepreneurial ecosystem is still at a very early stage. A major obstacle for innovative firms is the lack of access to finance.	1

Capability Dimension	Capability Factor	Qualitative Evaluation	Assessment Value[13]
		▪ Linkages to the diaspora could play an important role in channelling new know-how, ideas and financial resources to Kosovo's innovation system.	
	Public sector based research & innovation	▪ There is only very little public sector based research and innovation activity in the IT sector due to lack of resources and constraints in terms of R&D capabilities. This substantially limits the ability of universities and institutes to conduct more applied research in support of Kosovo's IT industry. ▪ R&D in Kosovo is characterized by weak cooperation between the private sector and universities. ▪ Research & innovation activities are mostly carried out in the framework of FP7 and Horizon2020 projects. ▪ Basic research or product innovation is basically not taking place in Kosovo's IT sector.	1
	Private sector led research & innovation	▪ STIKK and the ICK are playing a key role in Kosovo's innovation system by promoting entrepreneurship and innovation in the IT industry. ▪ ICK manages an incubator and supports innovative IT start-ups.	3
Dynamic capabilities	Detection (monitoring, scanning, scouting)	▪ Concerning the detection of relevant technology and market trends, STIKK as well as the universities are playing a key role. However, due to the very limited resources available, their ability for monitoring, scanning and scouting is rather restricted. ▪ STIKK is in the process of establishing specialized cluster services in order to monitor and scan IT market and technology trends on a regular basis.	4
	Strategic response development	▪ In view of the high complexity and dynamic of the global IT industry, the strategic response capability of the Kosovo IT industry and government institutions is insufficient. ▪ The collaborative development of the Kosovo IT Strategy is an important step to substantially improve the strategic response capabilities of Kosovo IT industry stakeholders.	4
	Joint learning & capacity building	▪ Joint learning & capacity building has been very limited within the Kosovo IT industry due to lack of effective cooperation between stakeholders and absence of suitable organizational structures and instruments. ▪ The establishment of the STIKK Education in the framework of the Kosovo IT Strategy has considerably improved the capability for joint learning and capacity building.	4

Capability Dimension	Capability Factor	Qualitative Evaluation	Assessment Value[13]
	Change management & Implementation	▪ There is a lack of know-how on suitable methods and instruments for change management and implementation with regards to IT sector promotion. ▪ Change management and implementation capabilities are also very limited because of the low level of cooperation between private and public actors in the Kosovo IT industry.	3

In addition to the results of the internal analysis presented above, the working group also conducted a quantitative assessment of the different capability dimensions and capability factors. Furthermore, the capability dimensions of the Kosovo IT industry were weighted and the capability value calculated. The results of this quantitative assessment are included in appendix 1.

3.1.2. Key Problems & Challenges

Based on the results of the internal analysis using the IT Industry Capability Model, the following key problems and challenges for the Kosovo IT industry were identified:

- At present, Kosovo does not have a specific strategy or policy to promote the IT industry systematically.
- There is a lack of awareness among public stakeholders on the strategic importance of the IT industry for the Kosovo economy.
- Stakeholders of the Kosovo IT industry lack the necessary know-how and resources for IT sector promotion.
- There is a lack of collaboration between the stakeholders of the Kosovo IT industry.
- There are deficiencies in the institutional framework for IT sector promotion. Unlike many of its neighboring countries, Kosovo neither has an IT ministry nor an IT promotion agency.
- Kosovo has a comparatively small and underdeveloped domestic market. Due to its size and structure, the domestic market is not able to generate a growth impulse for the Kosovo IT industry or to promote local innovation.
- Deficiencies in public IT procurement further reduce the growth potential of the domestic market.
- Overall, there is a low level of specialization and differentiation among IT companies in terms of technologies, target industries (vertical specialization) and specific functional areas (horizontal specialization).
- Lack of scale due to the SME-dominated structure of the Kosovo IT industry.
- On the corporate level, there are deficiencies in the area of management skills, particularly in the middle management of the IT companies. Deficits exist especially in the areas of HR management, marketing & sales, export management and project management
- There is a high fluctuation between companies, which can be mainly attributed to a lack of IT professionals and graduates as well as insufficient HR management.
- Kosovo IT companies exhibit a lack of specialized technical skills with regards to software engineering, software testing, FOSS, IT security, agile methods, cloud computing, big data & analytics, mobile computing and technologies related to industry 4.0 (embedded software, automation, etc.).
- In comparison to regional and international competitors, the maturity level of processes and quality management systems is too low. This is also reflected in the comparatively low percentage of Kosovo IT companies having a quality certification (e.g. ISO, CMMI, ITMark).
- There is a lack of information on IT market and technology trends, especially with regards to potential export markets.
- In the education system (tertiary education) there is a severe mismatch between curricula and the requirements of IT companies. The output of the universities is insufficient in terms of quality and quantity of graduates in IT subjects, which is negatively affecting the overall competitiveness of the Kosovo IT industry.
- There is a lack of qualified IT staff, which has a negative impact on the competitiveness of Kosovo IT enterprises.
- The system for continuous education and training in Kosovo exhibits substantial flaws. There is a lack of specialized trainings for IT professionals.
- Access to capital represents a serious obstacle for Kosovo's IT industry growth, as it is very difficult for companies to obtain loans due to high interest rates and collateral.

- There is a lack of branding and positioning of Kosovo as an attractive IT industry location. Moreover, Kosovo has an image problem abroad, which is negatively affecting the export performance of the IT industry.
- Visa requirements represent a serious obstacle to the export activities of Kosovo IT companies.
- Kosovo's innovation and R&D system is still at a very early development stage, which can be attributed to inadequate resources and R&D capabilities.
- In view of the high complexity and dynamic character of the global IT industry, the strategic response capabilities and the so-called dynamic capabilities of the Kosovo IT industry and government institutions are deemed insufficient.

3.1.3. Strengths & Capabilities

Taking into account the results of the internal analysis, the strategy working group identified the following strengths and capabilities of the Kosovo IT industry:

- Overall, the ICT infrastructure in Kosovo is comparatively good and competitive on a regional level. Internet connectivity and penetration are above the regional average.
- There is a substantial market potential for Kosovo IT exports (software and IT services) due to increasing demand for outsourcing / nearshoring, particularly in DACH, Scandinavia, Netherlands, the UK and the USA.
- In the domestic market, some Kosovo IT companies exhibit "vertical capabilities" in telecommunications, health and energy. This vertical specialization could become an important competitive advantage in view of the growth dynamics of these industries in the domestic as well as international markets.
- Kosovo IT companies reveal specific capabilities in the areas of custom software development, web development/web design, mobile applications and software testing.
- Wages and cost structures in the Kosovo IT industry are competitive on a regional, as well as international scale.
- With the IT association STIKK, the sector has a highly professional and effective organizational structure promoting the development of the IT industry in Kosovo.
- Kosovo IT companies have build up capabilities in the areas of software testing (ISTQB) and IT security (ISO 27000).
- Kosovo is ideally suited as a nearshoring destination due to its geographic and cultural proximity, as well as language capabilities.
- The availability of German language capabilities in many Kosovo IT companies represents an important competitive advantage with regards to the DACH market.
- The Kosovo IT industry can draw on a very strong and well organized diaspora abroad, particularly in Germany, Switzerland, the UK and the USA.
- The establishment of the STIKK Education within the framework of the Kosovo IT Strategy has considerably improved the capability for joint learning and capacity-building in the Kosovo IT industry.
- There is a pool of highly-qualified IT freelancers in Kosovo, whose skills can be used by national IT enterprises.
- The overall the demographic and education profile of young people in Kosovo ("young digerati"), in combination with rising interest in IT studies, represent an important competitive factor for Kosovo's IT industry.

3.2. External Analysis

3.2.1. Analysis of potential Export Target Markets

The second part of the strategic analysis comprises the assessment of potential export markets for the Kosovo IT industry. The aim of this external analysis is to provide information on the size, structure and key trends of potential export markets and to identify customer requirements and key success factors. This information is essential for achieving the strategic fit between capabilities and customer demand which is one of the cornerstones of this strategy and the basis for generating sustainable competitive advantages for the Kosovo IT industry.

The external market analysis will focus on Germany, Norway, the Netherlands and the UK. The working group selected these countries as strategic export target markets, based on the following selection criteria:

- Market size and market potential
- Demand structure ("skills shortage") and requirements
- Nearshoring aspects and geographical proximity
- Relevant customer segments (e.g. SMEs)
- Existing references and linkages
- Language capabilities
- Competitive pressure
- Strategic fit

During the selection process, the working group also took into consideration the results of the Kosovo IT Industry Barometer (KITIB) 2014, which revealed that in 2013 the most important export markets for the Kosovo IT industry were the DACH countries, accounting for 29% of Kosovo's IT exports, followed by Scandinavian countries with 22%, and Benelux.[23]

Also, in terms of export potential, participants in the KITIB placed DACH, the Scandinavian countries, UK and Benelux at the top of the ranking.

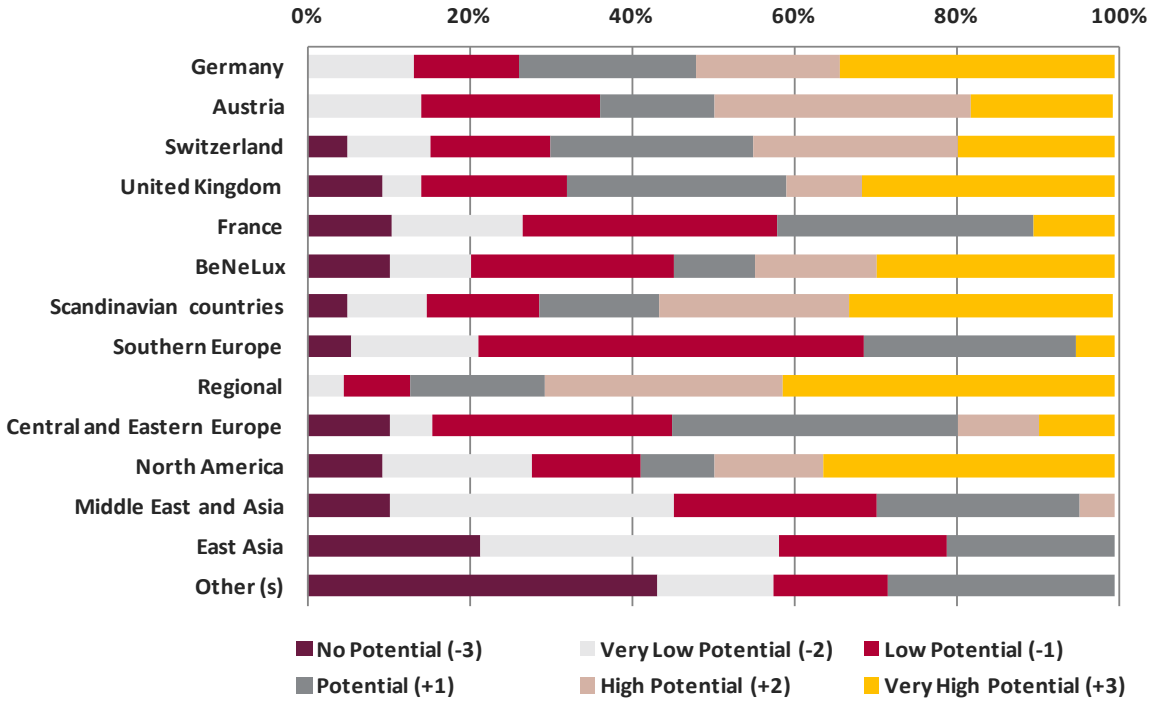


Figure 17: Potential of Export Markets
Source: STIKK & GIZ: Kosovo IT Industry Barometer 2014

[23] STIKK / GIZ (2014): Kosovo IT Industry Barometer.

On behalf of STIKK and the strategy working group, a thorough analysis of the IT markets in Germany, Norway, the Netherlands and the UK was conducted by Capgemini Consulting. In the following section, the results of the market analysis will be summarized by presenting the size, structure and key trends for each of the selected export target markets.

The focus of the presentation will be on the IT market segments having the highest relevance for Kosovo IT companies, i.e. software and IT services. The complete version of the market analysis can be obtained from STIKK or from the Kosovo IT Strategy SharePoint.[24]

3.2.1.1. IT Market Analysis Germany

Germany: ICT Market Overview

Table 1: ICT Market Overview Germany

	Total ICT market value by segment 2010-2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
IT Equipment	14.3	14.2	15.1	15.1	15.0
Software	15.5	16.2	17.1	17.8	18.7
IT Services	33.1	34.2	34.9	35.8	37.0
Telecommunications Equipment	9.9	10.8	12.1	13.7	14.3
Telecom Services	47.4	46.7	46.4	45.4	44.7
Total ICT	**120.2**	**122.1**	**125.6**	**127.8**	**129.7**

	Total ICT market growth rates by segment 2011-2014 (in %)			
Segment	**2011**	**2012**	**2013**	**2014***
IT Equipment	-1.2%	6.7%	-0.2%	-0.6%
Software	4.9%	5.1%	4.6%	5.0%
IT Services	3.4%	21.0%	2.5%	3.4%
Telecommunications Equipment	9.3%	11.7%	13.0%	4.7%
Telecom Services	-1.6%	-0.5%	-2.2%	-1.6%

[24] Kosovo IT Strategy SharePoint: https://troom-x.capgemini.com/sites/ccdach/itstrategykosovo/default.aspx?PageView=Shared.

	Total ICT market value by segment 2010-2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
Total ICT		**1.6%**	**2.9%**	**1.8%**	**1.5%**

*Estimated values
Source: EITO 2013

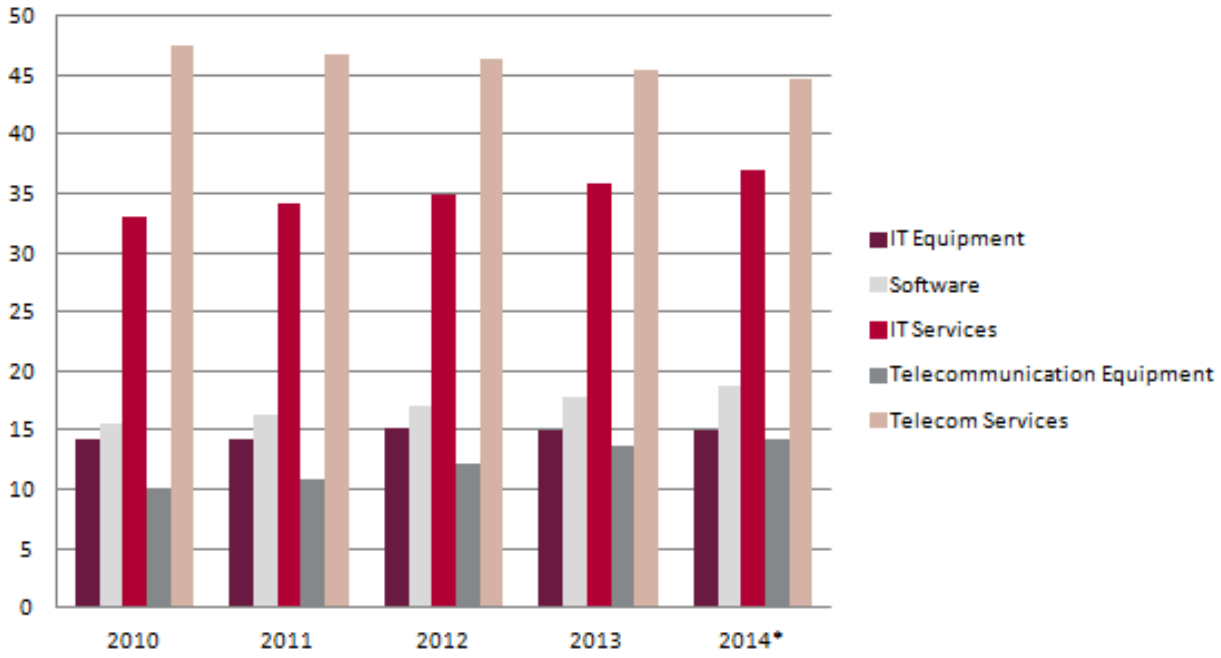


Figure 18: ICT market value by segment (in € billion)
Source: EITO 2013

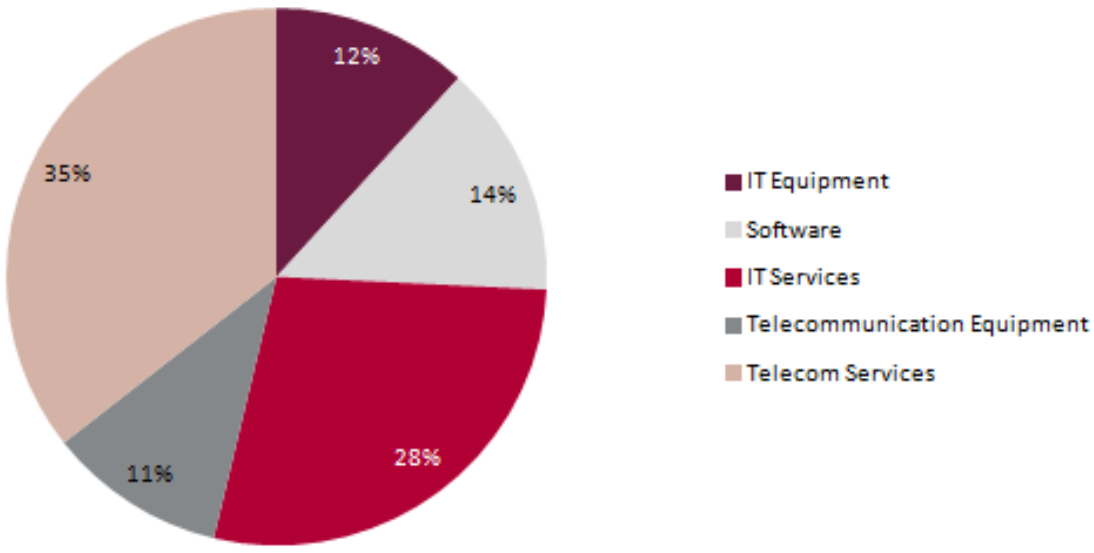


Figure 19: ICT market shares by segment (2013, in %)
Source: EITO 2013

Germany: Software Market

Table 2: Software Market Germany

	Total software market value by segment 2010-2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
System Infrastructure Software	3.8	3.9	4.0	4.1	4.3
Applications D&D	3.8	4.0	4.2	4.4	4.7
Applications	7.9	8.4	8.9	9.3	**9.7**
Total software	**15.5**	**16.2**	**17.1**	**17.8**	**18.7**

	Total software market growth rates by segment 2011-2014 (in %)			
Segment	**2011**	**2012**	**2013**	**2014***
System Infrastructure Software	2.1%	3.5%	3.2%	4.0%
Applications D&D	4.3%	6.0%	5.7%	6.0%
Applications	6.5%	5.5%	4.7%	5.0%
Total software	**4.9%**	**5.1%**	**4.6%**	**5.0%**

*Estimated values
Source: EITO 2013

Germany: IT Services Market

Table 3: IT Services Market Germany

	Total IT services market value by segment 2010-2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
Projects	8.0	8.3	8.5	8.7	9.0
Outsourcing (excl. BPO)	12.5	13.0	13.3	13.8	14.3
Support & Deploy	6.4	6.5	6.5	6.5	6.6
BPO Services	6.1	6.4	6.5	6.8	7.1
Total IT services	**33.1**	**34.2**	**34.9**	**35.8**	**37.0**

	Total IT services market growth rates by segment 2011-2014 (in %)

Segment	2011	2012	2013	2014*
Projects	3.6%	2.5%	2.2%	3.0%
Outsourcing (excl. BPO)	3.7%	2.7%	3.2%	4.0%
Support & Deploy	1.4%	0.6%	0.2%	1.0%
BPO Services	4.5%	1.6%	3.9%	4.8%
Total IT services	**3.4%**	**2.1%**	**2.5%**	**3.4%**

*Estimated values

Source: EITO 2013

Germany: Key IT Market Trends

Based on the results of the analysis of the German IT market, the following key market trends were identified for the relevant market segments of software and IT services:[25]

- Software is the main growth driver in the German ICT market: 4.6% (2013).
- There are approximately 33,000 companies in Germany active in the area of software development.
- Perennial hot topic IT security: increasing spending on security applications, in order to cope with security challenges such as malware, identity theft, data loss, and cyber crime.
- Usage of OSS is clearly on the increase and is playing an important role within the German IT market.
- Mobile computing/mobile applications play an increasingly important role in the German software market; Use of enterprise mobile apps will expand, and HTML5 is likely to have a substantial impact on the market.
- Social media have become a hot topic within the German software market: integration, social media analytics, social CRM applications, etc.
- Vertical drivers of the German software market: automotive, financial services, machinery, health.
- Distinctive market feature: importance of SMEs (demand & supply side).
- The German IT services market is the EU's second largest, with 36 EUR billion market volume in 2013 and projected growth of 3.4% for 2014.
- German companies continue to invest in projects and third-party services to implement virtualization, automation and cloud technologies.
- Outsourcing continues to be the major growth driver of the IT services market.
- Standardization of technologies & processes will lead to stronger specialization and modularization within the IT services value chain. Consequence: Big IT service providers "outsource outsourcing" creating market opportunities for Kosovo IT companies by positioning themselves as specialist partners.
- Introduction of more offshore and nearshore resources into the IT services value chain in order to reduce costs.

[25] Sources: EITO 2013, Gartner, CIO.de, Ovum, Silicon.de, PAC, IDC, Computerwoche.de, IT Sourcing Europe, BITKOM, Capgemini.

- Vertical drivers of the IT services market: manufacturing industry, banks, insurances, retail, public sector.
- New requirement: agility: faster development of new applications and faster customization and modification of existing applications.
- Total market value of the outsourcing segment accounted for € 15.6 billion (2013) representing 44.8% of the overall IT services market.
- Outsourcing likely to remain the most dynamic and fastest growing market segment within IT services.
- Overall: interest in outsourcing is increasing among German companies and the market segment is becoming more mature.
- Heavy users of outsourcing services: financial services, telecommunication, insurance, retail, manufacturing.
- Drivers of the outsourcing market: cost reduction, standardization, and increasing flexibility; changes in the motivation for outsourcing from pure cost-cutting to increasing flexibility (resources) and focus on core business.
- In general, German companies show a preference for nearshoring to nearby countries (Eastern Europe), while language, cultural issues, distance and rising wages limit offshoring to India.
- Cloud computing will have a substantial impact on the outsourcing market: technology, delivery, governance, contracts, pricing, controlling.
- Managed testing services: German outsourcing customers are increasingly interested in testing services from Eastern Europe, especially energy & utilities and financial services industry.
- In general: greater emphasis on formal IT education (university degree) and certification.
- Growing demand for big data management, analytics, BI: competences in data-mining, statistical methods and data structures.
- Most sought-after skills in terms of programming languages: Java, C/C++, C#, .Net, PHP, ABAP4; demand for Java will further increase due to Android.
- Overall: demand for offshoring/nearshoring will further increase due to the digital transformation of the German economy and skills shortages.

3.2.1.2. IT Market Analysis Norway

Norway: ICT Market Overview

Table 4: ICT Market Overview Norway

	Total ICT market value by segment 2010-2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
IT Equipment	1.4	1.5	1.6	1.6	1.6
Software	1.6	1.7	1.8	1.9	2.0
IT Services	4.3	4.5	4.5	4.7	4.9
Telecommunications Equipment	1.0	1.1	1.2	1.3	1.3

	Total ICT market value by segment 2010-2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
Telecom Services	3.6	3.6	3.6	3.7	3.7
Total ICT	**11.9**	**12.3**	**12.8**	**13.2**	**13.4**

	Total ICT market growth rates by segment 2011-2014 (in %)			
Segment	**2011**	**2012**	**2013**	**2014***
IT Equipment	7.7%	4.6%	0.1%	-1.3%
Software	4.9%	5.6%	5.7%	5.8%
IT Services	2.6%	1.6%	3.8%	4.2%
Telecommunications Equipment	13.7%	12.3%	4.2%	0.8%
Telecom Services	1.0%	1.6%	2.5%	-1.3%
Total ICT	**3.9%**	**3.5%**	**3.3%**	**1.9%**

*Estimated values

Source: EITO 2013

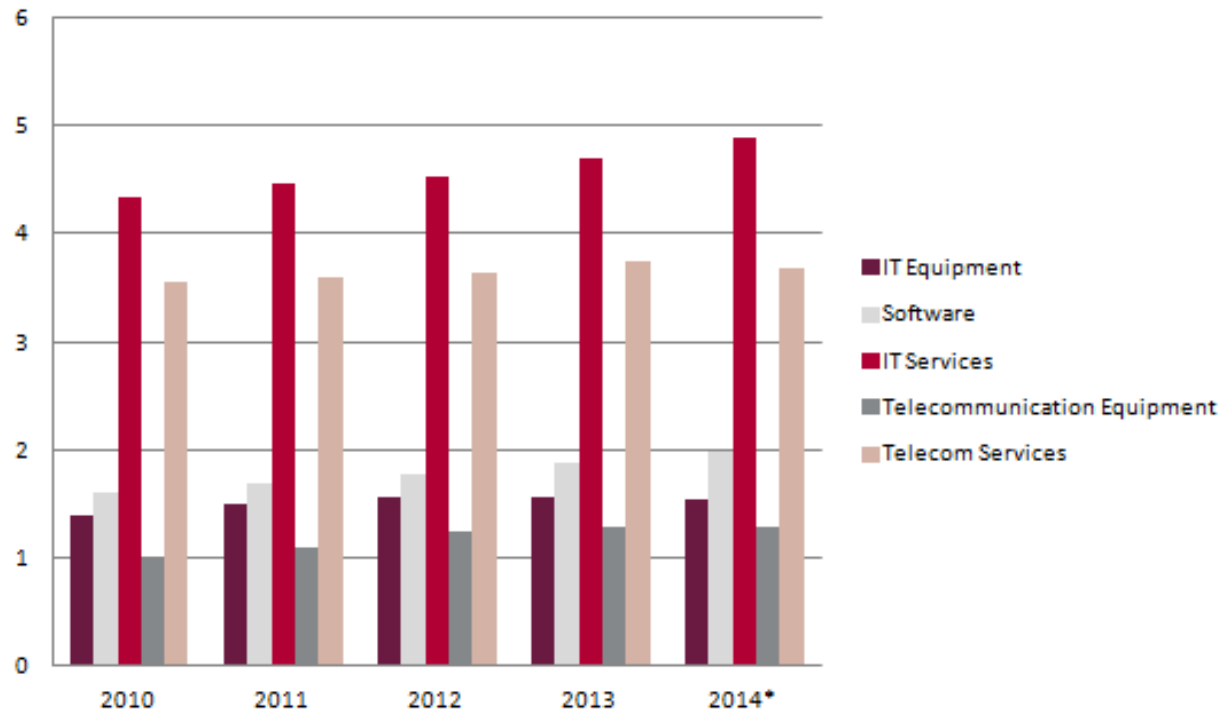


Figure 20: ICT market value by segment (in € billion)

Source: EITO 2013

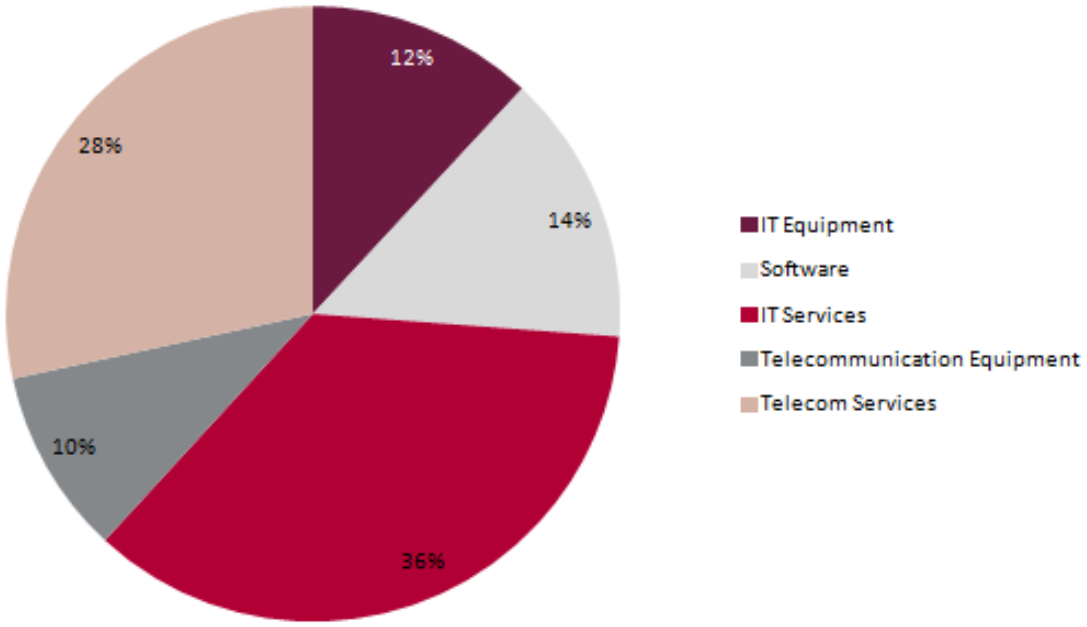


Figure 21: ICT market shares by segment (2013, in %)

Source: EITO 2013

Norway: Software Market

Table 5: Software Market Norway

	Total software market value by segment 2010-2014 (in € billion)						
Segment	**2011**	**2012**	**2013**	**2014***	**2015***	**2016***	**2017***
Infrastructure software & platforms	0.4	0.4	0.4	0.4	0.4	0.5	0.5
Application software products	0.8	0.9	0.9	0.9	1.0	1.0	1.0
SaaS	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Total software	**1.3**	**1.3**	**1.4**	**1.4**	**1.5**	**1.6**	**1.6**
	Total software market growth rates by segment 2011-2014 (in %)						
Segment	**2012/11**	**2013/12**	**2014/13***	**2015/16***	**2016/17***	**2017/16***	**CAGR**
Infrastructure software & platforms	3.8%	4.0%	3.7%	2.9%	2.2%	1.6%	2.6%
Application software products	4.2%	4.3%	4.0%	3.7%	3.4%	3.1%	3.6%
SaaS	24.6%	24.9%	24.0%	22.8%	21.8%	20.7%	22.3%

	Total software market value by segment 2010-2014 (in € billion)						
Segment	**2011**	**2012**	**2013**	**2014***	**2015***	**2016***	**2017***
Total software	**4.5%**	**4.7%**	**4.5%**	**4.2%**	**3.9%**	**3.6%**	**4.0%**

*Estimated values
Source: PAC 2013

Norway: IT Services Market

Table 6: IT Services Market Norway

	Total IT services market value by segment 2010-2014 (in € billion)						
Segment	**2011**	**2012**	**2013**	**2014***	**2015***	**2016***	**2017***
Infrastructure-related services	1.9	1.9	2.0	2.1	2.1	2.1	2.2
Application-related services	1.4	1.4	1.5	1.6	1.6	1.7	1.7
BPO	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Total IT services	**3.5**	**3.6**	**3.7**	**3.9**	**4.0**	**4.1**	**4.2**
	Total IT services market growth rates by segment 2011-2014 (in %)						
Segment	**2012/11**	**2013/12**	**2014/13***	**2015/16***	**2016/17***	**2017/16***	**CAGR**
Infrastructure-related services	2.3%	2.7%	2.7%	2.4%	2.0%	1.6%	2.2%
Application-related services	4.3%	4.8%	4.4%	4.3%	3.8%	3.3%	4.0%
BPO	6.6%	7.5%	7.9%	8.6%	8.7%	8.6%	8.5%
Total IT services	**3.3%**	**3.8%**	**3.7%**	**3.6%**	**3.2%**	**2.8%**	**3.3%**

*Estimated values
Source: PAC 2013

Norway: Key IT Market Trends

Taking into account the results of the analysis of the Norwegian IT market, the strategy working group identified the following key trends:[26]

- The Norwegian software market grew by 4.7% in 2012, reaching a value of EUR 1.3 billion; in 2013, the software market reached a market value of EUR 1.4 billion.
- The performance of the market is forecasted to accelerate, with an anticipated CAGR of 4% for the five-year period 2012-2017.
- Efforts to better manage costs, improve IT infrastructure efficiencies and provide more intelligence for business operations drove new spending on application deployment and development tools (ADDT).
- In the IT services market segment, a considerable share of large outsourcing (IT and BPO) deals will come from both the public and the private sectors, where the energy and oil and gas industries in particular are performing very well.
- The overall IT Outsourcing market is expected to grow steadily between 3-4% per year until 2016.
- The software industry is a heavy user of outsourcing services.
- Top 3 drivers of outsourcing: shortage of domestic IT skills and resources, reducing operation costs, focus on core competences.
- The Norwegian IT industry is facing a severe skills shortage, particularly with regards to software developers.

3.2.1.3. IT Market Analysis Netherlands

Netherlands: ICT Market Overview

Table 7: ICT Market Overview Netherlands

	Total ICT market value by segment 2010-2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
IT Equipment	3.4	3.4	3.6	3.6	3.7
Software	4.2	4.4	4.6	4.8	5.1
IT Services	12.2	12.1	12.2	12.5	12.9
Telecommunications Equipment	2.6	2.7	3.0	3.1	3.2
Telecom Services	9.9	9.7	9.6	9.6	9.6
Total ICT	**32.3**	**32.4**	**33.0**	**33.5**	**34.3**
		Total ICT market growth rates by segment 2011-2014 (in %)			

[26] Sources: EITO 2013, PAC, Software in Norway, Marketline, Gartner, Pan-European IT Outsourcing Report, IT Sourcing Europe, Capgemini.

Segment	2011	2012	2013	2014*
IT Equipment	-2.0%	5.9%	0.3%	2.5%
Software	4.8%	4.0%	4.4%	4.9%
IT Services	-0.1%	0.3%	2.3%	3.3%
Telecommunications Equipment	4.1%	12.5%	0.3%	3.3%
Telecom Services	-1.7%	-1.5%	0.4%	-0.6%
Total ICT	**0.2%**	**1.9%**	**1.6%**	**2.3%**

*Estimated values
Source: EITO 2013

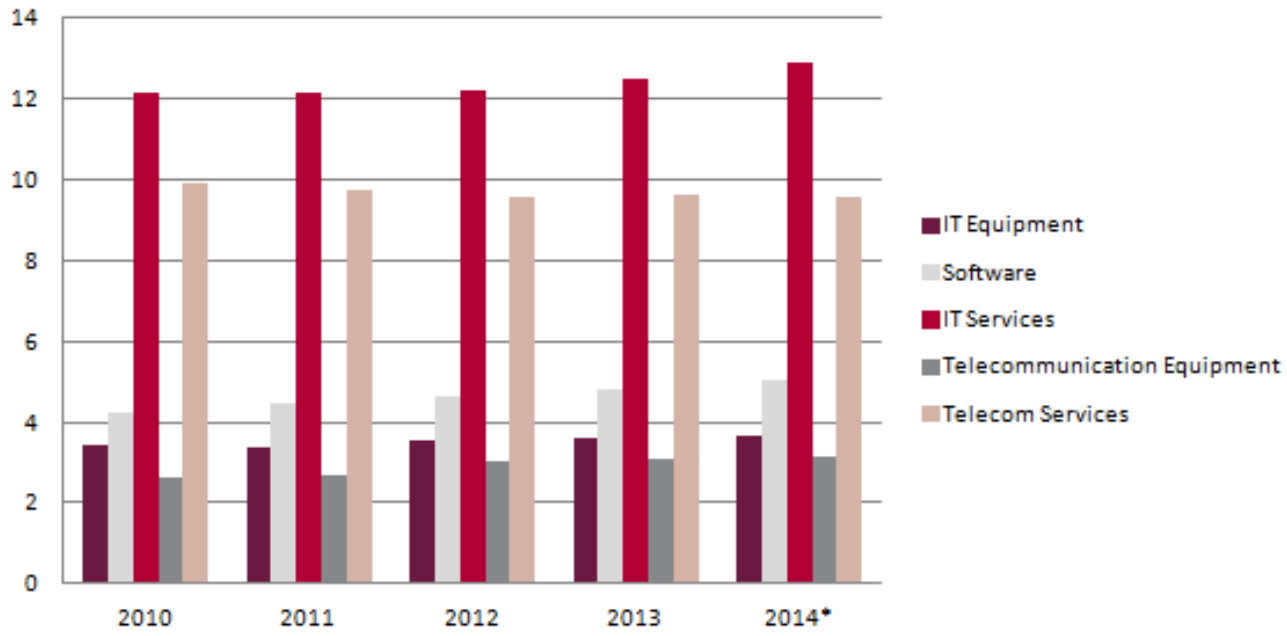


Figure 22: ICT market value by segment (in € billion)

Source: EITO 2013

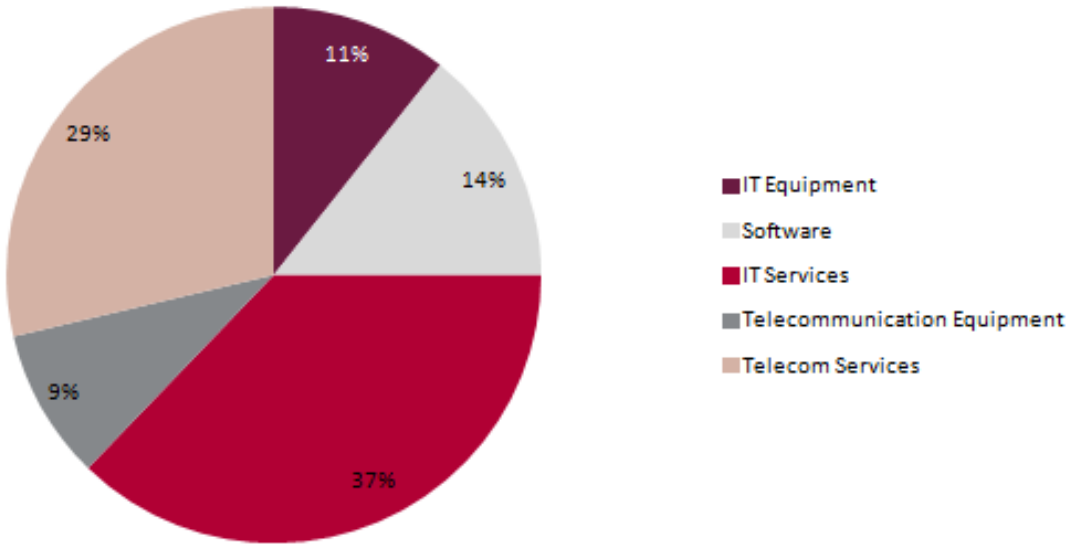


Figure 23: ICT market shares by segment (2013, in %)

Source: EITO 2013

Netherlands: Software Market

Table 8: Software Market Netherlands

	Total software market value by segment 2010-2014 (in € billion)						
Segment	**2011**	**2012**	**2013**	**2014***	**2015***	**2016***	**2017***
Infrastructure software & platforms	1.0	1.0	1.0	1.0	1.0	1.1	1.1
Application software products	2.0	2.0	2.0	2.1	2.2	2.2	2.3
SaaS	0.1	0.1	0.1	0.2	0.2	0.2	0.3
Total software	**3.1**	**3.1**	**3.1**	**3.2**	**3.4**	**3.5**	**3.6**
	Total software market growth rates by segment 2011-2014 (in %)						
Segment	**2012/11**	**2013/12**	**2014/13***	**2015/16***	**2016/17***	**2017/16***	**CAGR**
Infrastructure software & platforms	-1.8%	0.4%	2.9%	2.6%	2.1%	1.5%	2.3%
Application software products	-0.7%	1.4%	3.7%	3.7%	3.1%	2.4%	3.3%
SaaS	25.2%	27.5%	25.6%	23.7%	21.9%	20.0%	22.8%
Total software	**-0.4%**	**1.9%**	**4.3%**	**4.4%**	**3.9%**	**3.3%**	**4.0%**

*Estimated values

Source: PAC 2013

Netherlands: IT Services Market

Table 9: IT Services Market Netherlands

	Total IT services market value by segment 2010-2014 (in € billion)						
Segment	**2011**	**2012**	**2013**	**2014***	**2015***	**2016***	**2017***
Infrastructure-related services	4.7	4.5	4.4	4.5	4.6	4.6	4.7
Application-related services	3.3	3.2	3.1	3.2	3.3	3.5	3.5
BPO	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Total IT services	**8.6**	**8.2**	**8.2**	**8.3**	**8.6**	**8.8**	**9.0**
	Total IT services market growth rates by segment 2011-2014 (in %)						
Segment	**2012/11**	**2013/12**	**2014/13***	**2015/16***	**2016/17***	**2017/16***	**CAGR**
Infrastructure-related services	-5.0%	-1.1%	1.2%	1.8%	1.7%	1.6%	1.6%
Application-related services	-5.4%	-0.2%	2.5%	3.5%	3.3%	2.8%	3.0%
BPO	0.1%	1.9%	4.5%	5.3%	5.5%	5.1%	5.1%
Total IT services	**-4.8%**	**-0.5%**	**2.0%**	**2.7%**	**2.6%**	**2.3%**	**2.4%**

*Estimated values

Source: PAC 2013

Netherlands: Key IT Market Trends

The following key trends for the Netherlands IT market have been identified by the members of the strategy working group within the framework of the external analysis:[27]

- Overall, the Netherlands ICT market stagnated in 2013 with the exception of the software and IT services market segments, which in comparison to 2012 grew by 4.4% and 2.3%, respectively.
- The Netherlands is the 3rd largest software market in Europe.
- Total spending in the software market has seen a stable growth, with a CAGR of 4% for the 2013-2017 time frame.
- Software as a Service (SaaS) has proved a major driver of the software market, with a CAGR of 22.8% for the 2013-2017 period.
- Enterprise Social Collaboration will continue to be a highly dynamic software market segment.
- There is a large market potential for software testing.

[27] Sources: EITO 2013, ICT Market Monitor 2013, IDC, PAC, Gartner, Pan-European IT Outsourcing Intelligence Report, KPMG, IT Sourcing Europe.

- The IT Services market declined overall by 4.8% in 2012 and by 0.5% in 2013, but it started to slowly recover in 2014 and is projected to reach a CAGR of 2.4% for 2014-2017.
- There is increasing demand for private cloud solutions.
- After a decline in growth rates (2011-2012), Infrastructure and Applications Outsourcing return to moderate growth rates.
- The software industry is the most active market segment in terms of outsourcing.
- Application Management/Development are the two areas where outsourcing is most prevalent.
- Companies in the Netherlands plan to increase offshore, near-shore and onshore outsourcing contracting; at the same time, they also intend to return some aspects of service delivery in-house.
- The decision to outsource is in turn motivated by the following strategic goals: reducing operating costs, tackling the shortage of domestic IT skills and resources, focusing on core competences, accelerating time to market, and improving the overall business development strategy.
- There is a forecasted deficit of almost 10,000 ICT professionals for 2014 and 6,800 for 2017, due to a mismatch in demand and supply.

3.2.1.4. IT Market Analysis United Kingdom

UK: ICT Market Overview

Table 10: ICT Market Overview UK

	Total ICT market value by segment 2010-2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
IT Equipment	12.0	11.5	11.7	11.6	11.8
Software	13.6	14.1	14.8	15.7	16.6
IT Services	46.0	46.5	45.9	46.6	48.1
Telecommunications Equipment	12.9	13.7	15.9	16.5	17.1
Telecom Services	36.0	36.5	36.8	37.2	37.5
Total ICT	**120.5**	**122.2**	**125.1**	**127.5**	**131.1**

	Total ICT market growth rates by segment 2011-2014 (in %)			
Segment	**2011**	**2012**	**2013**	**2014***
IT Equipment	-4.6%	2.1%	-1.1%	2.0%
Software	3.3%	5.2%	5.8%	**5.6%**

	Total ICT market value by segment 2010-2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
IT Services		1.1%	-1.4%	1.6%	**3.3%**
Telecommunications Equipment		6.4%	16.0%	4.1%	3.3%
Telecom Services		1.4%	1.0%	0.9%	1.0%
Total ICT		**1.4%**	**2.4%**	**2.0%**	**2.8%**

*Estimated values
Source: EITO 2013

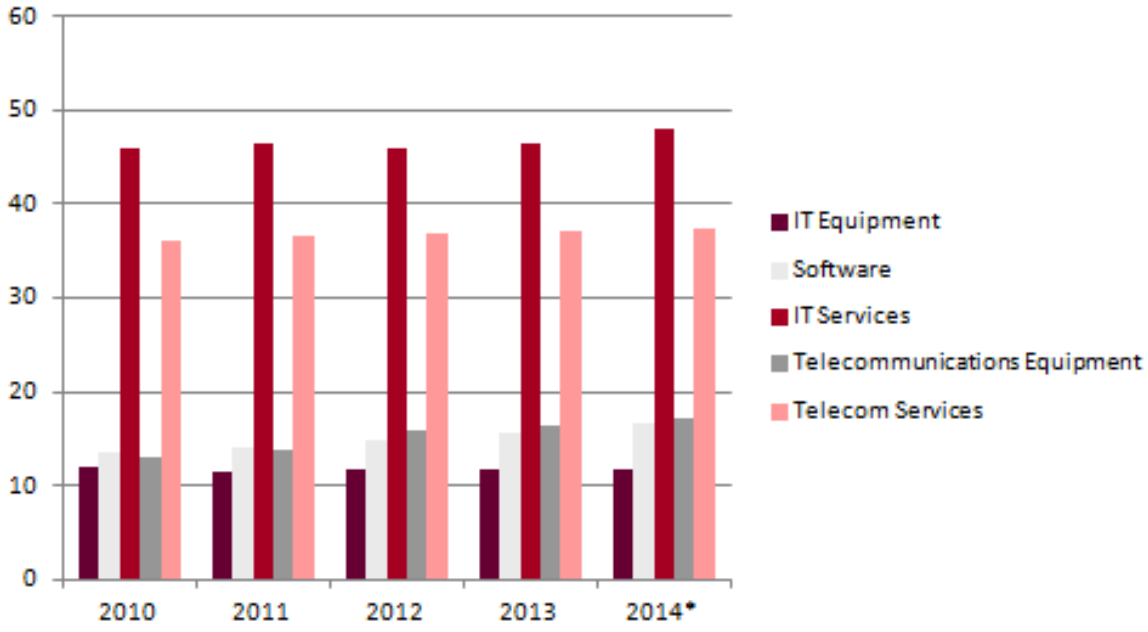


Figure 24: ICT market value by segment (in € billion)
Source: EITO 2013

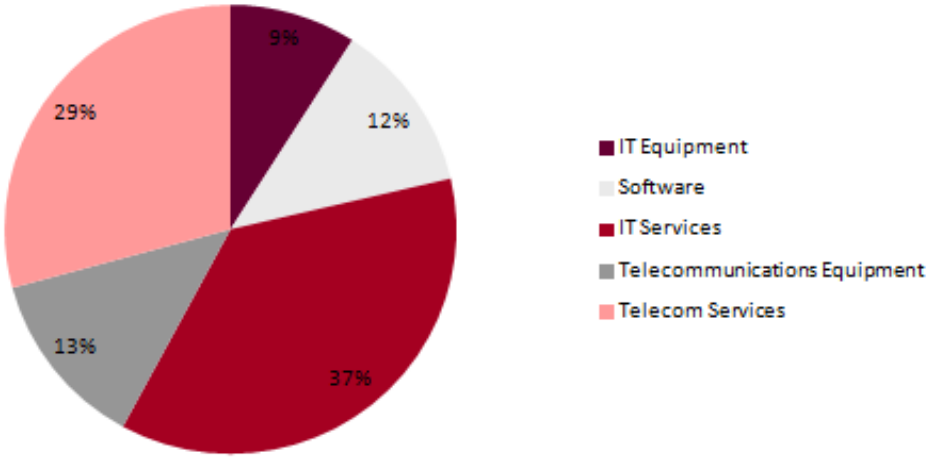


Figure 25: ICT market shares by segment (2013, in %)
Source: EITO 2013

UK: Software Market

Table 11: Software Market UK

	Total software market value by segment 2010-2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
System Infrastructure Software	3.6	3.6	3.7	3.9	4.2
Applications D&D	3.2	3.4	3.6	3.8	4.1
Applications	6.8	7.1	7.5	7.9	8.3
Total software	**13.6**	**14.1**	**14.8**	**15.7**	**16.6**

	Total software market growth rates by segment 2011-2014 (in %)			
Segment	**2011**	**2012**	**2013**	**2014***
System Infrastructure Software	-0.2%	4.6%	5.6%	5.3%
Applications D&D	4.5%	5.2%	6.6%	7.0%
Applications	4.7%	5.5%	5.5%	5.0%
Total software	**3.3%**	**5.2%**	**5.8%**	**5.6%**

*Estimated values
Source: EITO 2013

UK: IT Services Market

Table 12: IT Services Market UK

	Total IT services market value by segment 2010-2014 (in € billion)				
Segment	**2010**	**2011**	**2012**	**2013**	**2014***
Projects	12.6	12.4	12.1	12.2	12.6
Outsourcing (excl. BPO)	17.7	18.0	17.8	18.0	18.6
Support & Deploy	6.3	6.2	6.1	6.1	6.2
BPO Services	9.5	9.9	9.9	10.3	10.7
Total IT services	**46.0**	**46.5**	**45.9**	**46.6**	**48.1**

	Total IT services market growth rates by segment 2011-2014 (in %)			
Segment	**2011**	**2012**	**2013**	**2014***
Projects	-0.9%	-3.0%	1.3%	3.2%
Outsourcing (excl. BPO)	1.9%	-1.2%	1.0%	3.4%
Support & Deploy	-2.0%	-2.0%	1.4%	1.2%
BPO Services	4.2%	0.8%	**3.2%**	4.4%
Total IT services	**1.1%**	**-1.4%**	**1.6%**	**3.3%**

*Estimated values

Source: EITO 2013

UK: Key IT Market Trends

Based on the results of the analysis of the UK IT market, the following key market trends were identified by the strategy working group:

- The UK software market achieved a total market value of EUR 15.7 billion in 2013 and is projected to grow by 5.6% in 2014.
- The British software market is among the largest in Europe, exhibiting dynamic development in the areas of cloud solutions, mobility and digital business transformation.
- Application development and deployment are the fastest growing software market sub-segments in the UK.
- Software solutions aimed at enhancing productivity or operational cost-effectiveness are in high demand.
- Growing recognition of the strategic importance of data will lead CIOs to continue to invest in big data applications, although on a comparatively small scale.

- The UK continues to lead Europe in terms of running core applications in the cloud, particularly in CRM.
- IT security and security software is a number-one priority for CIOs.
- The software industry is a heavy user of outsourcing/offshoring services.
- In 2013, the IT services market in the UK amounted to EUR 46.6 billion, making it the largest IT services market in Europe.
- After the IT services market recovered in 2013, spending on IT services is expected to see even stronger growth in 2014, reaching a projected total growth rate of 3.3%.
- The UK outsourcing market is highly competitive, which is putting pressure on vendor's margins.
- Global delivery has become a standard component of the majority of large IT Services projects in the UK private sector, and it is also increasingly being used in the public sector.
- In the outsourcing market segment there is a trend from dedicated development center and project-based models to more innovative business/engagement models, which are able to maximize managerial control over outsourced projects and enable more transparent pricing.
- The UK is among the most mature markets in Europe in terms of offshoring/nearshoring.

3.2.2. Competitive Analysis

The above mentioned figures and trends show that the selected target markets represent highly attractive export destinations, with substantial market and growth potential. Therefore, it does not come as a surprise that competitors from other regions and countries are also trying to penetrate these markets.

In order to better understand the competitive situation and strategically position the Kosovo IT industry, the working group also conducted a short analysis of existing and potential competitors.

For the purpose of the competitive analysis, the strategy working group elaborated a positioning map based on the primary differentiation characteristics price and quality (figure 26):

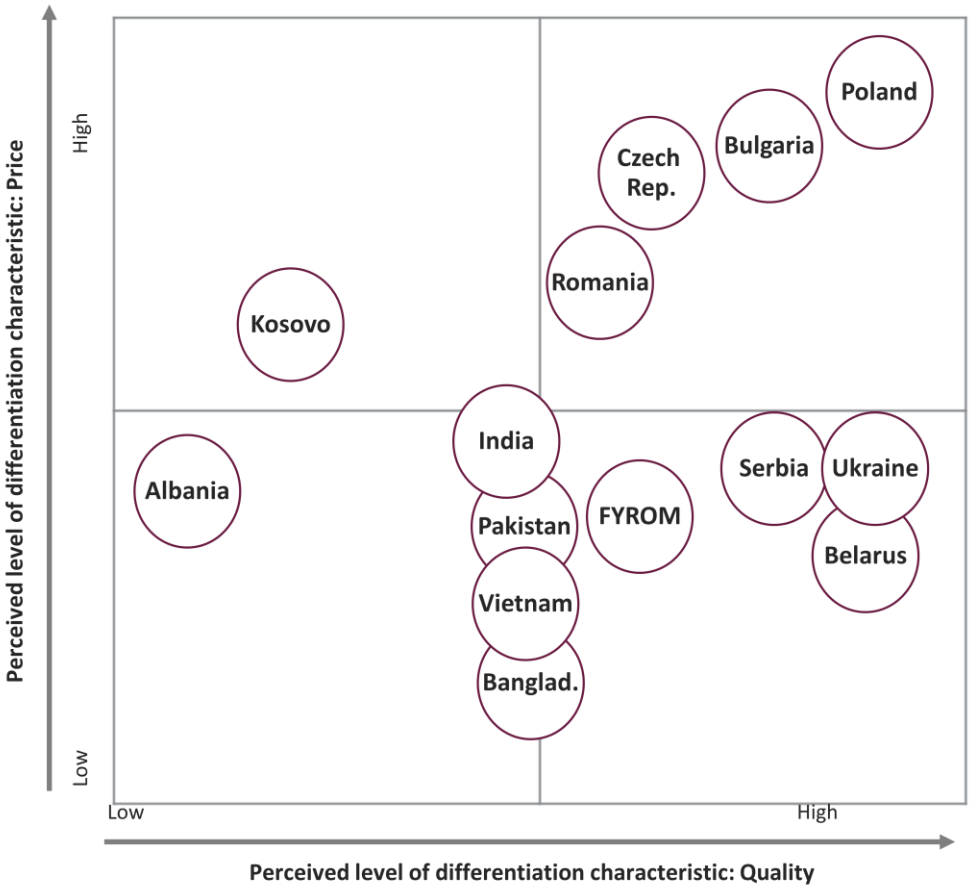


Figure 26: Positioning map with main competitors

The strategy working group also identified the specific strengths and weaknesses of the main competitors shown on the above positioning map:

Competitors's strengths	Competitor's weaknesses
▪ Highly competitive prices and cost structures ▪ Economies of scale ▪ Political stability ▪ Good education system ▪ FDI ▪ Access to capital / financing ▪ Standardization ▪ Government incentives ▪ No travel restrictions (visa)	▪ Lack of specific European language capabilities (e.g. German) ▪ Rising wages and prices ▪ Demographic factors ▪ Brain drain ▪ Geographic location (lack of Nearshoring factors)

3.2.3. Customer Requirements & Key Success Factors

With regards to the selected target export markets, members of the strategy working group identified six main target groups and potential customer segments, described in the following chart:

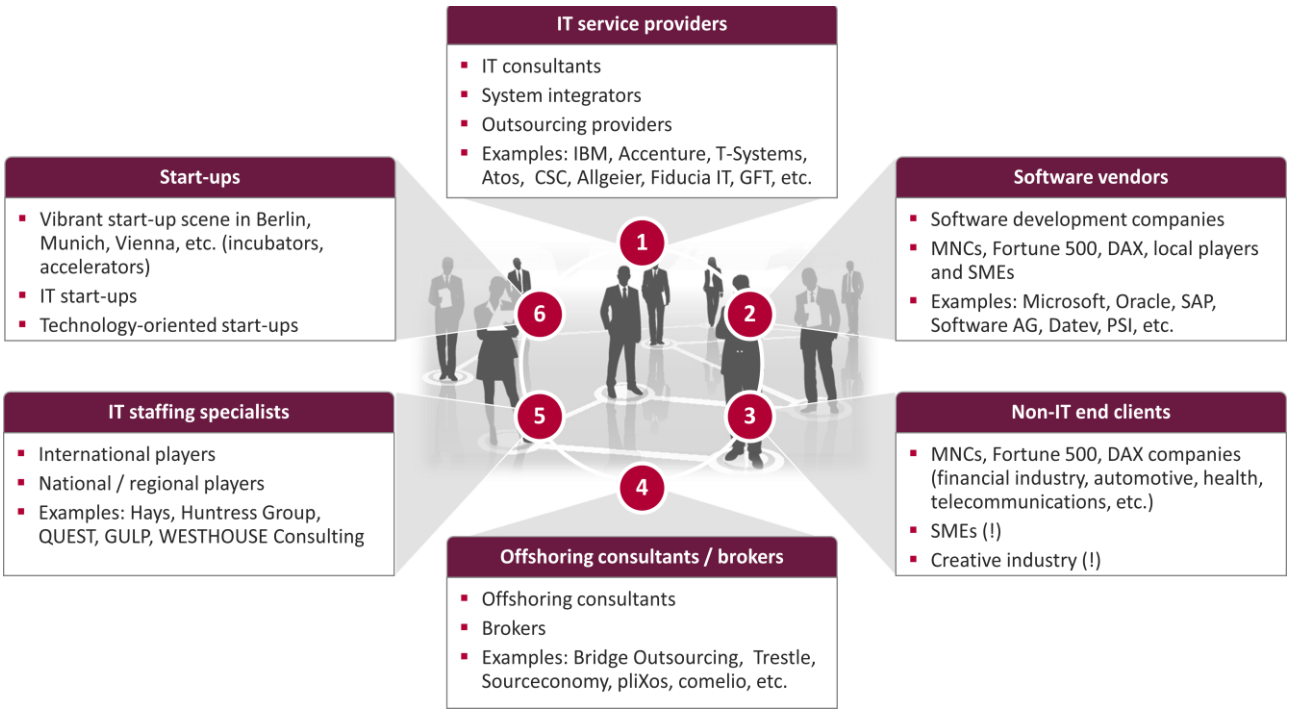


Figure 27: Target groups and potential customer segments

In addition to the above mentioned target groups, IT associations and clusters were identified as strategic cooperation partners and multipliers. In fact, STIKK has already established strategic cooperation with several IT associations and clusters, mostly in Germany, Austria and Norway.

In terms of offshoring/nearshoring, the main objectives of said target groups and potential customers include cost reduction, better access to resources and technical skills, greater flexibility, quality improvement, process optimization, innovation acceleration, and concentration on core competences. Another important driver for offshoring by German, Dutch, UK and Norwegian companies is the sharply increasing IT skills shortage in those countries.

Identifying specific customer requirements and key success factors is essential for achieving the strategic fit between the capabilities of the Kosovo IT industry and the demand structure of the target export markets. Based on the results of the export market analysis, the strategy working group has derived a number of these requirements and factors, which will be presented in the following table according to three competitive dimensions: marketing & positioning, quality & processes, and technology & capabilities:

Customer Requirements and Key Success Factors
Dimension 1: Marketing & Positioning
▪ Creating a “national brand” (cluster of excellence) ▪ Having a comprehensive export marketing strategy ▪ International references ▪ Competitive and transparent pricing based on customer value ▪ Ability to communicate customer value and ROI (Return on investment) of nearshoring / offshoring effectively ▪ Using “project pilot” as door-opener ▪ Professional marketing and web presence

- Key account and customer relationship management
- Market segmentation and specialization by: company size (SMEs), technology, verticals, functional areas, business processes
- Integrating market and technology trends (e.g. digital transformation, cloud computing, IT security) effectively in the service portfolio
- Focus on specific offshoring services (e.g. software testing)
- Strategic partnerships, networks and alliances in the export target market (indirect market penetration)
- Communicating the nearshoring advantage effectively (combination of low-risk destination with cost advantages)

Dimension 2: Quality & Processes

- Project management skills: continuous work tracking and reporting
- Knowledge of evaluation, selection and purchasing procedures
- Compliance with quality, deadlines and budget requirements
- Professional HR management (motivation, skills management) in order to minimize fluctuation
- University alliances and cooperation with academia: skill alignment and sustainable recruitment
- Comprehensive quality policy and customer orientation
- Quality management standards, methodologies and process models: CMMI, ISO, RUP, Agile Methods, SCRUM, Six Sigma, ITIL
- Agile methods (Scrum) for nearshoring (particularly relevant for smaller projects and for SME clients)
- Certification: QM, project management, process management, technologies
- Customer education (SMEs): how to use offshoring effectively by applying suitable models and processes; expectation handling concerning onsite delivery
- Compliance with international IT security management systems and standards (e.g. ISO/IEC 27001, ISO/IEC 15408)

Dimension 3: Technology & Capabilities

- Ensuring continuing education and training
- Ability to support clients with evaluation, project preparation and requirement specification (e.g. with UML); technical documentation
- Building relevant technical capabilities, in particular Java, C/C++, C#, .Net, Python, ABAP4, HTML, PHP, TYPO3, SAP, Oracle, iOS.
- Measures to ensure security and data protection
- Combination of technology and business know-how (“hybrid capabilities”)
- Vertical specialization and expertise
- Technical responsiveness and adaptability (e.g. OSS, mobile applications)
- Language skills and cross-cultural trainings (e.g. German language capabilities as an USP)
- Onsite delivery capabilities
- Integrated outsourcing services for SMEs: combination of IT consulting and outsourcing services with trainings and success-based fees and a local key account
- Ability to cover the whole software development cycle and to provide “turnkey solutions” (integrated service portfolio)

3.2.4. IT Macro Trends

Within the framework of the external analysis, the strategy working group identified several IT macro trends which will have a major impact on the future development of global IT industries and markets and are particularly relevant for the Kosovo IT industry. These IT macro trends include:

- Cloud computing
- Big data & analytics
- Mobile computing
- Social media
- Industry 4.0 (cyber-physical-systems, Internet of Things, embedded systems)
- IT security
- E-health
- E-energy

Due to their strategic importance for Kosovo's IT industry and economy, these IT macro trends have been addressed and reflected accordingly in the Kosovo IT Strategy (please refer to the operational plan).

4. IT Strategy Development

Following the collaborative methodology outlined in chapter 2, we will now turn to the actual development of the Kosovo IT Strategy. Based on the results of the internal and external analysis, the vision and goals of the strategy will be defined in a structured way, in sub-sections covering the generic, growth-related and market entry aspects of the strategy, respectively. Furthermore, this chapter outlines a set of concrete support measures aimed at promoting the Kosovo IT industry and tackling industry-specific problems and challenges, as identified by the preceding strategic analysis.

4.1. Vision

Defining a common vision is an important task within strategy development, especially within the context of joint cooperation on sector promotion strategies, where multiple stakeholders are involved.

A collaboratively developed stakeholder vision ensures ownership and identification with the strategy and its overall direction. In addition, it also plays an important role in creating a common understanding on the importance of the strategy and in motivating people to actively participate in strategy development and implementation. Lastly, such vision serves as a constructive basis for the formulation of goals and strategies.

The following diagram (figure 28) summarizes the function of a vision as well as the connection between vision and goals in the context of this strategy document:

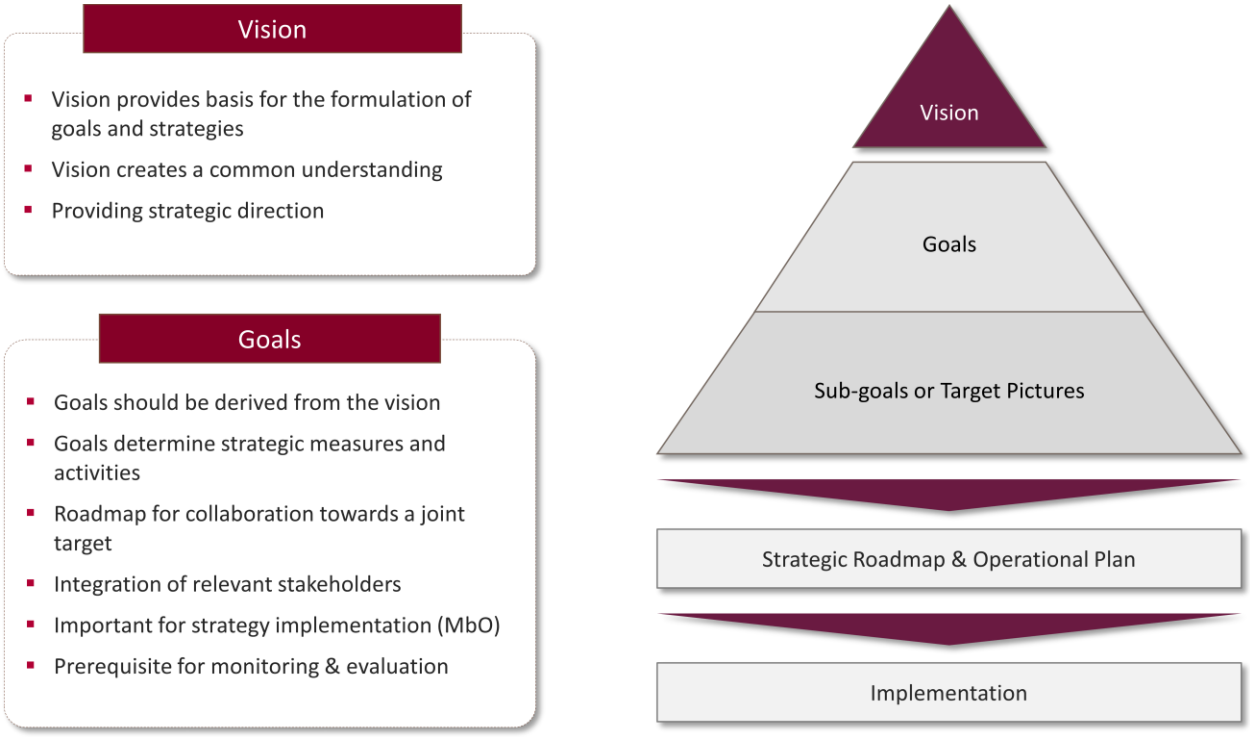


Figure 28: Vision and goal system

The success stories of India, Estonia and Singapore impressively illustrate the importance of a national vision for effectively promoting the IT industry and digital transformation, whereby bundling initiatives and mobilizing institutional support have both proved instrumental.

With regards to the Kosovo IT Strategy, the working group has defined the following common vision:

> Promoting digital transformation and supporting Kosovo in becoming a knowledge-based economy.

This vision is supposed to serve as an overall strategic guideline and roadmap for the promotion of the Kosovo IT industry. For this purpose, the vision has been operationalized into specific goals, strategies and measures, which will be presented in the following chapters.

4.2. Goal System

Defining a set of common goals is crucial for the success of IT strategy development, as these determine the general direction the industry will take. Furthermore, a goal system also defines the corresponding strategic measures and activities to support the IT industry. The goal-setting process is essential for integrating all relevant stakeholders and creating a common basis for collaboration. Hence, goals become the unifying element and compass for cooperation among different stakeholders on the macro-, meso-, and micro-level towards a joint objective.

Clearly defined goals are an imperative for the effective development and implementation of the Kosovo IT Strategy (Management by Objectives). They also constitute an important prerequisite for successful monitoring and evaluating of the strategy.

Based on the above mentioned vision, the methodology for collaborative strategy development and the results of the internal and external analysis, the working group has defined a goal system consisting of an overall goal and several operational sub-goals. The sub-goals were formulated according to different strategic topics or pillars.

According to the agile approach of the strategy, the working group elaborated a goal system for the Kosovo IT Strategy in several Sprints (iterations), which is presented in the following chart (figure 29):

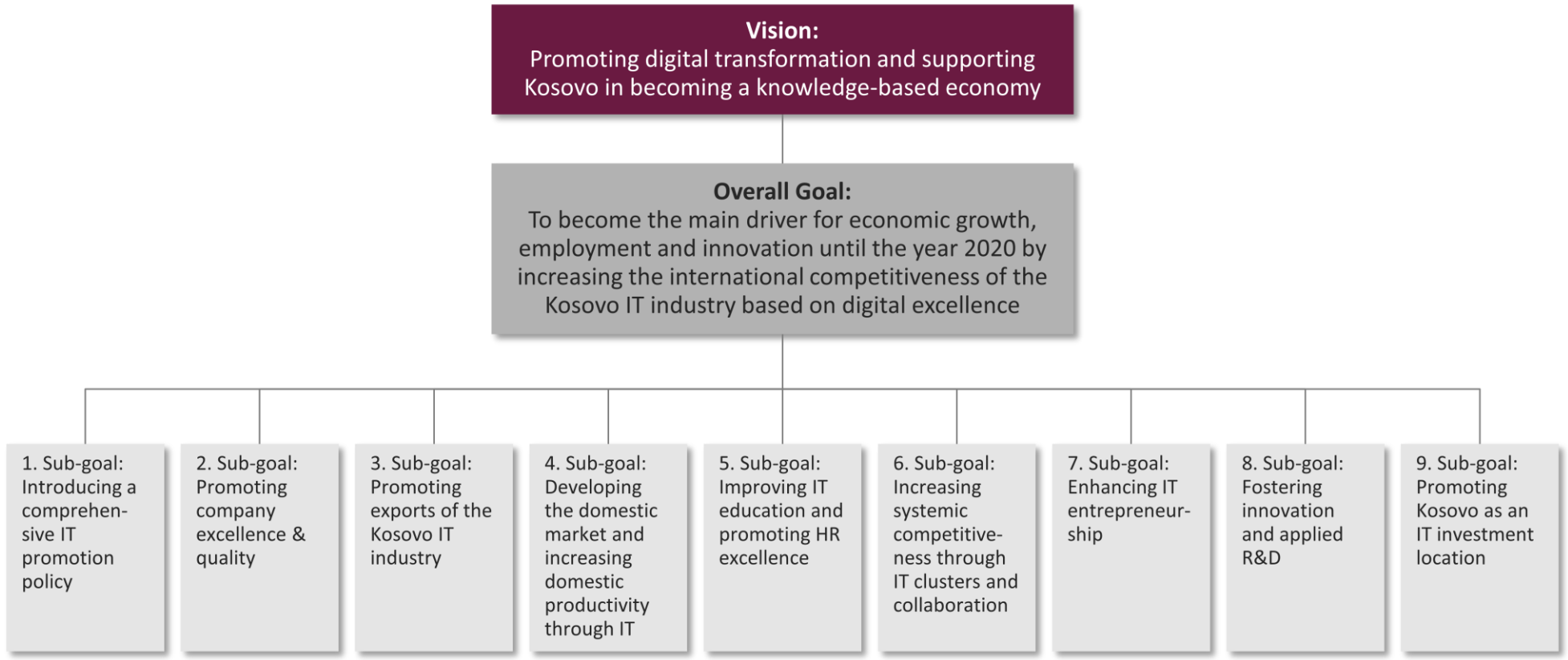


Figure 29: Goal system of the Kosovo IT strategy

The above goal system in turn determines the generic strategy, the growth and portfolio strategy, the market entry strategy, as well as well the corresponding strategic pillars and support measures. For performance monitoring and evaluation of the Kosovo IT Strategy, indicators were defined with respect to each of the goals, which will be presented in chapter 6.

4.3. Generic Strategy

In the following section we will define a generic strategy for the Kosovo IT industry, which constitutes a key element of the overall Kosovo IT Strategy.

Based on the two main sources of competitive advantage (cost advantage, differentiation advantage) and the market scope (broad versus narrow market scope), Porter defined three generic strategies which are cost leadership, differentiation and focus.[28] Taking into account sharply intensifying competitive pressures in the global IT industry, the speed of digital transformation and the structural challenges of transformation countries like Kosovo, defining an appropriate generic strategy becomes a fundamental issue. The generic strategy is especially important for the branding and positioning of the Kosovo IT industry in target export markets but it is also relevant for the domestic market.

Before defining the generic strategy for the Kosovo IT industry, we will first describe and discuss the three generic strategy options shown in the following chart:

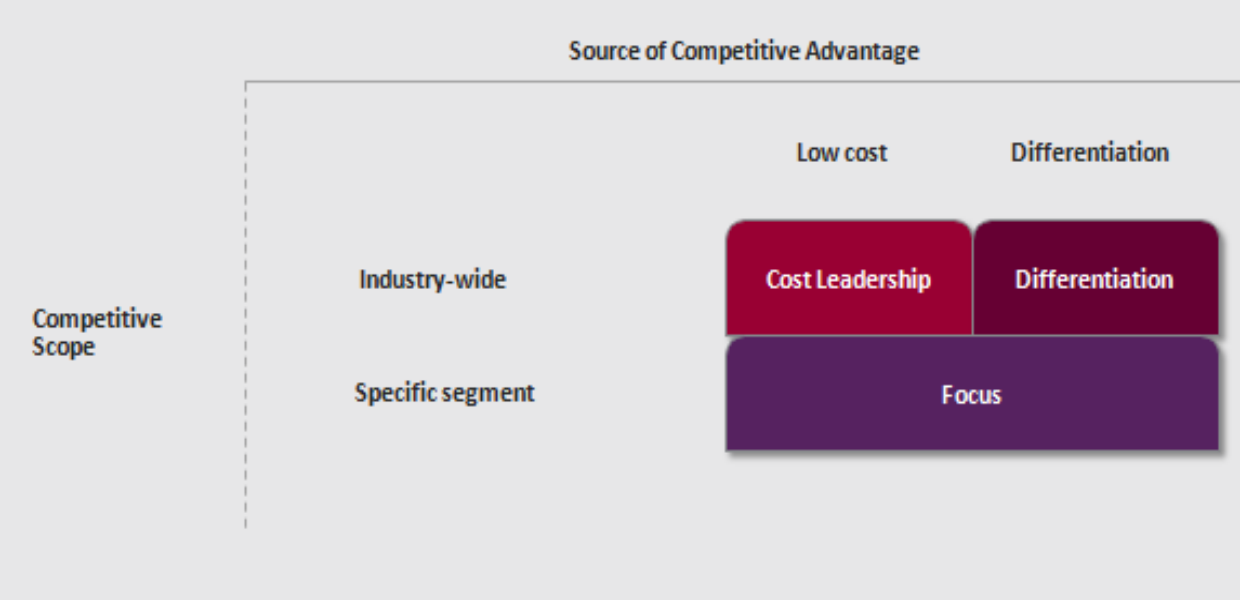


Figure 30: Porter's generic strategies

Source: Diagram based on Grant (2008): 219

[28] Porter (1980).

Generic strategy option 1: Cost leadership

Cost Leadership	
▪ Provision of a product or service which is comparable to that of a competitor at a lower cost ▪ Based on: economies of scale, experience curve effects, cost minimization ▪ Companies from India, Vietnam and Russia have at least partly adopted cost leadership strategies ▪ Mostly applied in offshoring services ▪ The key to analyzing the possible sources of cost leadership is to identify the main cost drivers: economies of scale, economies of learning, production techniques, product design, input costs, capacity utilisation, residual efficiency ▪ Major cost driver in the software industry: labor costs	
Benefits (+)	**Concerns (-)**
▪ Simple, straightforward option ▪ Supports rapid market penetration ▪ Compatible with customer expectations/ perceptions	▪ Problems with sustainability and long-term effectiveness ▪ Costs are important, but there are several other offshoring selection factors ▪ Cost advantages can quickly erode due to increasing labour costs and exchange rates ▪ Decreasing profit margin & low-quality image

As a summary evaluation of the generic strategy option “cost leadership” one can state that due to the high volatility of global IT markets, national IT industries which pursue a pure cost leadership strategy and do not add value beyond simply being a low-cost offshoring destination, are likely to lose their clients and market shares to lower-cost destinations.

The long-term consequence of such a strategy for IT industries from transformation countries is the race to the bottom of the wage scale, with decreasing profit margins and the risks of a low-quality image.

Generic strategy option 2: Differentiation

Differentiation	
▪ The differentiation strategy is aimed at the broader market and involves the creation of a product or a service that customers perceive as unique ▪ Goal of differentiation strategy: building customer loyalty and creating entry barriers to potential competitors ▪ Due to brand loyalty, demand is less price-elastic, leading to higher profit margins ▪ Technically complex products and services (like software) offer much greater scope for differentiation ▪ Differentiation is about understanding the interactions between an organisation and its customers and how these interactions can be designed to deliver additional customer value ▪ Due to rising labour costs, the Indian software industry started to introduce elements of a differentiation strategy (process quality, customer service)	
Benefits (+)	**Concerns (-)**
▪ Important strategy due to increasing competition and commoditisation in the global IT industry ▪ Allows for higher profit margins ▪ Creates sustainable competitive advantages ▪ More difficult to copy	▪ Often not viable for small IT industries and SMEs due to substantial investments required by a differentiation strategy on a broad market scope

For the IT industry possible sources of differentiation include product and service features, complementary services (e.g. system analysis and testing), technology (e.g. OSS), employee skills, quality and maturity of software development processes, methodologies (e.g. agile methods), vertical (industry-specific) and horizontal (functional) expertise, marketing, branding and location. Moreover, innovation represents another important source of differentiation within the IT industry, creating customer value from novel technologies, product and process innovation or from bundling and software value chain integration.

Another important aspect of differentiation is the so-called intangible differentiation through unobservable and subjective characteristics relating to image, reputation, trust, reliability. This is particularly relevant in the area of software development and offshoring/nearshoring, where factors such as trust and reliability play a vital role in promoting business development and creating customer value.

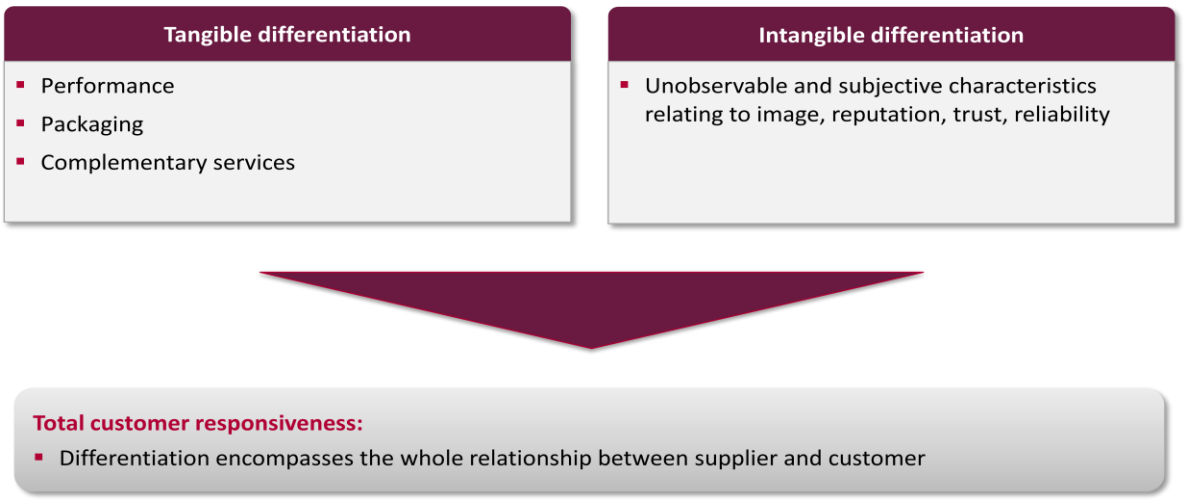


Figure 31: Tangible vs. Intangible differentiation

Given intensifying competition from new market entrants in Asia, Latin America and Eastern Europe, differentiation is becoming all the more important. Without differentiation software and IT services will become a commodity and prices will erode.

However, it deserves mentioning that differentiation on a broad market scope – for instance through massive marketing campaigns or onsite representative structures – seems to be a challenging strategy for small transformation countries such as Kosovo. Unlike their large-scale Indian competitors, Kosovo IT companies do not have the critical mass and resources to invest in expensive marketing campaigns or set up representative offices in target markets.

Generic strategy option 3: Focus

Focus	
▪ Concentration on a few selected target markets/niches ▪ Due to concentration: organisation knows the target customer group so well that it meets their needs better than their competitors ▪ Organisation can charge a substantial markup over costs because of the value added ▪ Several software exporting countries have adopted a focus strategy, concentrating on areas in which competition is less intense and in which they have a comparative advantage ▪ Examples: Philippines (data entry services), Ireland (specialized IT services), Israel (niche products) ▪ First mover as well as late entrant strategy ▪ To succeed in export markets, companies need to specialize in the same specific niches	
Benefits (+)	**Concerns (-)**
▪ Cluster effects through specialisation: facilitates national branding ▪ First mover advantages ▪ Higher profitability & less competition ▪ Suitable for small-scale industries ▪ Important in view of increasing competition, industrialization and differentiation	▪ In-depth market and customer knowledge required ▪ Flexibility and adaptability required ▪ Professional marketing skills ▪ High level of coordination between IT sector stakeholders required ▪ Narrow scope (risk)

In the IT industry, companies can specialize and focus according to the following dimensions or niches:

- Vertical specialization according to specific industries (e.g. financial services, telecommunications, health)
- Functional niches such as accounting, logistics or marketing
- Technologies
- Target groups/segments (e.g. SMEs)
- Cultural and linguistic niches for languages such as French or German and specific regions (nearshoring).

In order to achieve synergy effects and reach a critical mass, IT companies need to specialize in the same specific niches. Through specialization the cluster effects of information diffusion can be enhanced and national branding efforts can be facilitated. Two good examples of this approach are Bulgaria and Israel. While Bulgaria specializes in providing high-quality software development services, Israel focuses on specific software products, particularly in the area of data communication and security.

Since the global IT industry is getting increasingly industrialized, fragmented and competitive, concentration and specialization becomes even more critical. Those national IT industries that have not specialized are less likely to succeed, since they cannot compete simultaneously on a broad market scope. This goes particularly for smaller transformation countries like Kosovo, which do not have a large domestic market at their disposal and possess only small-scale resources.

According to Porter cost leadership and differentiation strategies are mutually exclusive. Thus, an organization that attempts to pursue both is "stuck in the middle", resulting in low profitability and a conflicting set of organizational arrangements.[29]

In contrast, other researchers view the simultaneous pursuit of low costs and differentiation as a source of new market opportunities and a new value proposition.[30] Such scholars believe that pursuing both cost leadership and differentiation can under certain conditions lead to superior performance. In fact, several Japanese companies like Toyota have successfully combined cost leadership with high quality and innovation by applying new management techniques such as total quality management.

With regards to the IT industry, one could argue that the combination of cost leadership and differentiation (the so-called "outpacing strategy") could serve as a source for new competitive strategies and value propositions.

Based on the goal system, the results of the strategic analysis and the above considerations, the working group developed a specific generic strategy for the Kosovo IT industry, which could be described as **"agile focus strategy"**.[31]

While focussing on specific target markets and niches, this strategy combines differentiation with cost-efficiency within an agile framework. Thus, the generic strategy for the Kosovo IT industry is a so-called hybrid strategy, designed to successfully position Kosovo IT companies within their target markets, creating superior customer value and to outpace competitors.

[29] Porter (1980), p. 42.
[30] Chan and Mauborgne (2005).
[31] The results of the Kosovo IT Industry Barometer 2014 have also been included in the formulation of the generic strategy.

The agile focus strategy directly reflects the strategic principles of market orientation & strategic fit, sustainability and agility outlined in chapter 2.1. In the following section, we will describe the key elements of the agile focus strategy for the Kosovo IT industry:

Agility:

The global IT industry is highly complex, competitive and dynamic, making agility and adaptability a critical success factor on the market. Consequently, agility and flexibility provide the Kosovo IT industry with first-mover advantages and serve as the basis for time-based competition. In fact, the ability of Kosovo IT SMEs to quickly adapt their capabilities and offerings to changing market conditions will help to at least partly offset the scale advantage of larger competitors such as India and Russia in target export markets.

By integrating the concept of agility into its generic strategy, the Kosovo IT industry will be able to translate some of it structural characteristics such as small company size and scale into competitive advantages. Being small and agile allows Kosovo IT companies to adapt faster to disruptive technology trends and to translate digital technologies into innovative business models.

Furthermore, the agile element of the generic strategy allows for accelerated implementation of the Kosovo IT Strategy and for generating dynamic competitive advantages. Moreover, agility is essential for effective management of innovation cycles and product life cycles.

Therefore, Kosovo's IT industry should pursue an agile focus strategy, which flexibly responds to the latest market and technology trends. This requires the establishment of dynamic capabilities among industry stakeholders and the ability to effectively screen and analyze markets and technologies (market intelligence). Furthermore, appropriate organizational structures (e.g. clusters) and processes need to be introduced in order to promote organizational learning and innovation.

Focus:

Given the comparatively small size and scale of the Kosovo IT industry, concentration on specific target markets and niches is a key element of the generic strategy. According to the results of the strategy workshops, the Kosovo IT industry will specialize and focus on five dimensions or niches.

Firstly, Kosovo IT exports will primarily be directed at specific target markets ("regional niche") including Germany, Norway, the Netherlands and the UK, where Kosovo can leverage its nearshoring advantages and its foreign language capabilities.

Secondly, concerning export target markets, strategic focus will be placed on the small and medium-sized market segment (SMEs), as this niche market is characterized by substantial backlog demand and a comparatively low level of international competitive pressures. In addition, the Kosovo IT industry will specifically address the start-up segment due to its market potential for nearshoring and software development. The choice of these target segments closely corresponds to the capabilities of Kosovo IT companies in terms of scale and resources.

Thirdly, Kosovo IT companies will specialize in specific industries (verticals). For export markets, these verticals include: IT/software, telecommunications, media, financial services, gaming & entertainment, retail and utilities. Vertical specialization on the domestic market encompasses the public sector, financial services, utilities, retail, health, tourism, telecommunications and education.

Fourthly, functional specialization (horizontals) needs to be increased. The strategy working group identified the following functional areas: custom software development, web development/web design, mobile applications and software testing. In the medium term, additional capabilities and functional areas need to be developed depending on market and technology trends (please also refer to chapter 4.4 Growth & Portfolio Strategy).

Lastly, Kosovo IT enterprises need to focus on specific technologies, reflecting the corresponding demand in target markets. According to the results of the strategic analysis (chapter 3), such technologies include Java, C/C++, C#, .Net, Python, ABAP4, JavaScript, HTML, XML, PHP, TYPO3, SQL, iOS, among others.

The working group identified several niches in order to balance the risk of focus strategies that a market niche may dry up or be attacked. By focusing on several niches the Kosovo IT industry will be able to effectively manage the risk while maximizing its business opportunities.

Differentiation:

In view of increasing competition and commoditization in the IT industry and the lack of international visibility and branding of the Kosovo IT industry, differentiation is an important element of the generic strategy. However, due to its very limited resource base, generic differentiation on a broad market scope is not a viable option for the Kosovo IT industry. Instead, the generic strategy will pursue an approach where differentiation is conducted within the target markets and niches defined above, with a view to establishing brand reputation and customer loyalty for Kosovo IT enterprises. Differentiation of the Kosovo IT industry on its target markets will be based on the following **differentiation factors**:

- Highly skilled IT experts
- Company excellence and quality
- Nearshoring aspects including language capabilities (e.g. German)
- Integrated services portfolio with complementary services such as software testing ("turn-key solution")
- Marketing & branding
- Innovation

Particularly relevant with regards to the differentiation factors are **quality and maturity** of software development processes. For IT industries from emerging countries like Kosovo, quality management is of paramount importance in terms of building trust among potential clients. As a matter of fact, trust plays a vital role in the IT business due to the complexity, intangibility and digital nature of IT. This is particularly the case in the area of offshoring / nearshoring software development to emerging countries, which is associated with an elevated level of uncertainty. Clients from Western Europe often express uncertainty and doubts about the reliability of IT companies from the Balkan region. This can be traced back mostly to the negative image of the region in terms of business environment, managerial competencies and reliability.

To mitigate these perceived risks, quality management and adherence to standards such as ISO or CMMI will send a clear message to potential international clients that Kosovo IT enterprises possess the capability to work according to clearly defined norms and procedures and submit themselves to global standards. Thus, quality management and certification become not only an important element of trust-building, but also a key differentiation factor, especially considering intangible differentiation through psychological factors relating to image, reputation, trust and reliability. In addition to that, company excellence and quality will also play an important role for the international branding and positioning of the Kosovo IT industry.

In order to create superior customer value and successfully differentiate the Kosovo IT industry from its competitors, the strategy will envisage a broad range of special support measures, including development of an innovative, integrated service portfolio, as well as fostering company excellence, training and quality certification. Besides, fostering holistic quality management systems will play an important role in strengthening the USP of the Kosovo IT industry.

For effective differentiation it is essential to understand the customer, its needs and requirements. Therefore, supporting market intelligence and customer analysis will form another important element within the measures envisaged in the Kosovo IT Strategy.

Cost-efficiency:

For the Kosovo IT industry a cost-leadership strategy is neither suitable nor sustainable. The wage level is already comparatively higher than in most East Asian offshoring destinations and is likely to further increase due to the limited pool of IT experts and the anticipated EU accession.

Furthermore, the dynamics of the software market make low cost strategies a highly risky approach.

As a matter of fact, low cost offers a much less secure basis for competitive advantage than differentiation. Besides, a cost-leadership strategy would have a detrimental effect on Kosovo's intended image and branding as a destination for specialized, high-quality software development services.

Considering increasing global competition in the sphere of outsourcing, especially given the market entrance of new competitors from East Asia and Latin America, the generic strategy needs to ensure that the Kosovo IT industry is associated with an excellent price-performance ratio and cost efficiency. This will be supported by investing in education and training, quality management and software process improvement. Creating economies of scale and scope through clusters will be another important measure.

For the purpose of penetrating specific target markets or market segments faster and more effectively, the Kosovo IT industry will apply penetration strategies or sequential hybrid strategies in selected markets. This could be done by providing IT services temporarily at comparatively lower prices than competitors. This, however, would require a thorough analysis of the respective target markets, price elasticity and competitors.

It deserves mentioning that the agile focus strategy for the Kosovo IT industry should not remain carved in stone but needs to be flexibly adapted to changing technology trends and market conditions over the course of time.

4.4. Growth & Portfolio Strategy

Based on the generic strategy of "Agile Focus", the working group elaborated the growth and portfolio strategy for the Kosovo IT industry in several iterations or Sprints.

As a starting point, members of the working group defined the product and service portfolio of the Kosovo IT industry by taking into account the results of the strategic analysis (internal and external analysis) and using special analytical frameworks and tools. These tools included the Digital Transformation Framework, Gartner's Hype Cycle and the Key Capability Matrix.

The following diagram (figure 32) illustrates the digital transformation framework for the Kosovo economy, supporting the development of innovative IT products and services, reflecting digital trends such as cloud computing or big data and analytics.

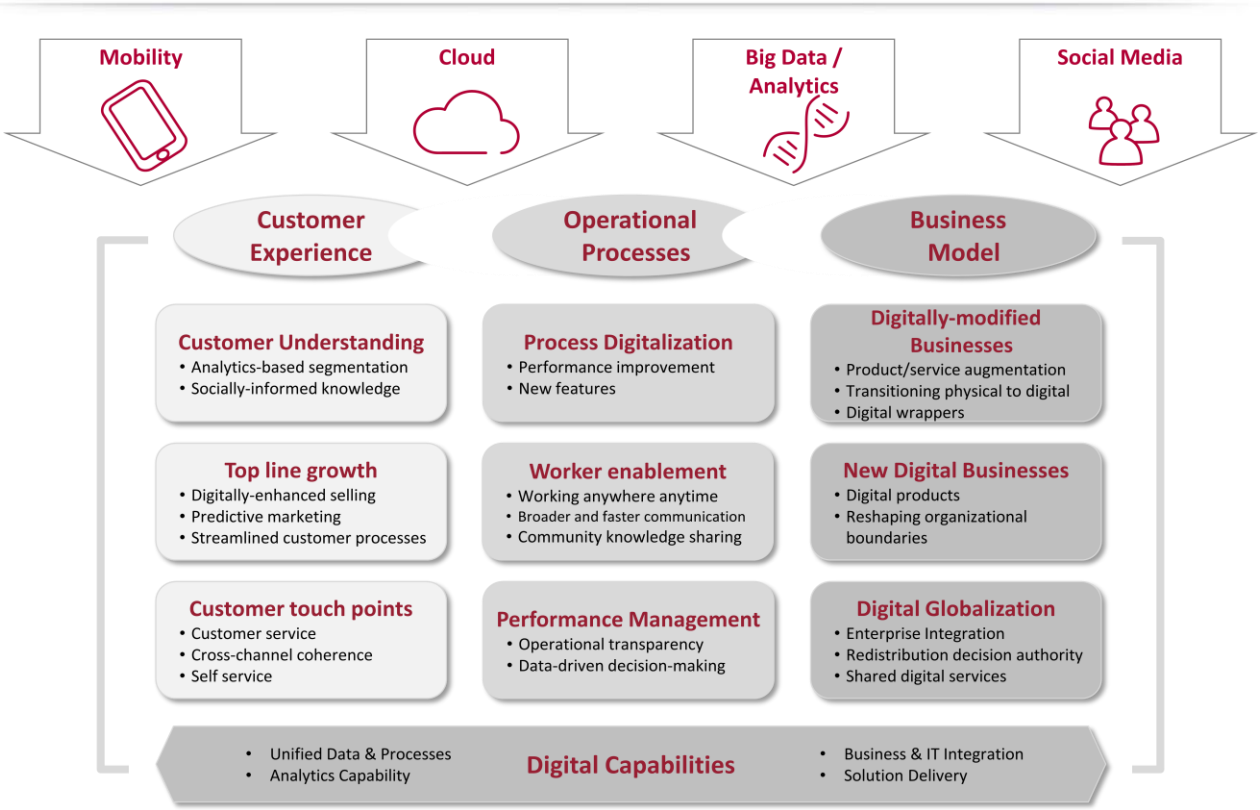


Figure 32: Digital transformation framework for the growth & portfolio strategy

Source: Capgemini

In the framework of several joint strategy workshops, the working group developed the following overall **core product and service portfolio** of the Kosovo IT industry:

Figure 33: Core product and service portfolio of the Kosovo IT industry

The above product and service portfolio directly reflects the key capabilities and core competences of the Kosovo IT industry, identified through the strategic analysis.

As a next step in defining its growth and portfolio strategy, the working group elaborated a Product-Market-Growth Matrix (also known as an "Ansoff-Matrix"), describing four alternative strategies for Kosovo IT enterprises to tap into new market opportunities:

- Market Penetration: Penetrating existing markets with existing products
- Market Development: Developing new markets for existing products
- Product Development: Developing new products for existing markets
- Diversification: Developing new products for new markets (horizontal, vertical, lateral)

The following Ansoff-Matrix summarizes the main results, as elaborated by the strategy working group, showing the different strategic growth options for the Kosovo IT industry in terms of markets and corresponding product/service portfolios:

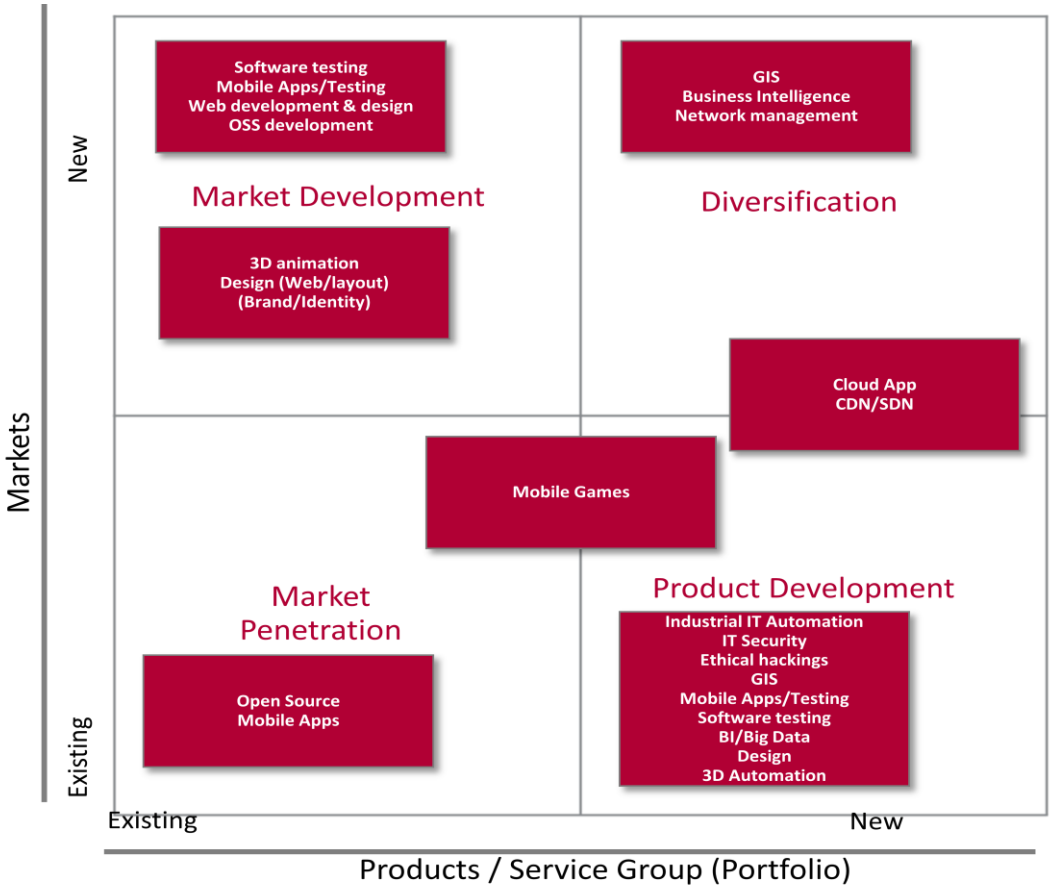


Figure 34: Ansoff-Matrix

Following the principle of strategic fit and the aforementioned agile focus strategy, the working group defined a growth strategy for the Kosovo IT industry, which could be described as organic growth based on existing core business models and core competences.

The underlying idea is to begin by penetrating and developing strategic target markets and then progressively expand into new market and product segments, along existing core competences and business models. The key features of this growth strategy are illustrated in the growth strategy mind map below:

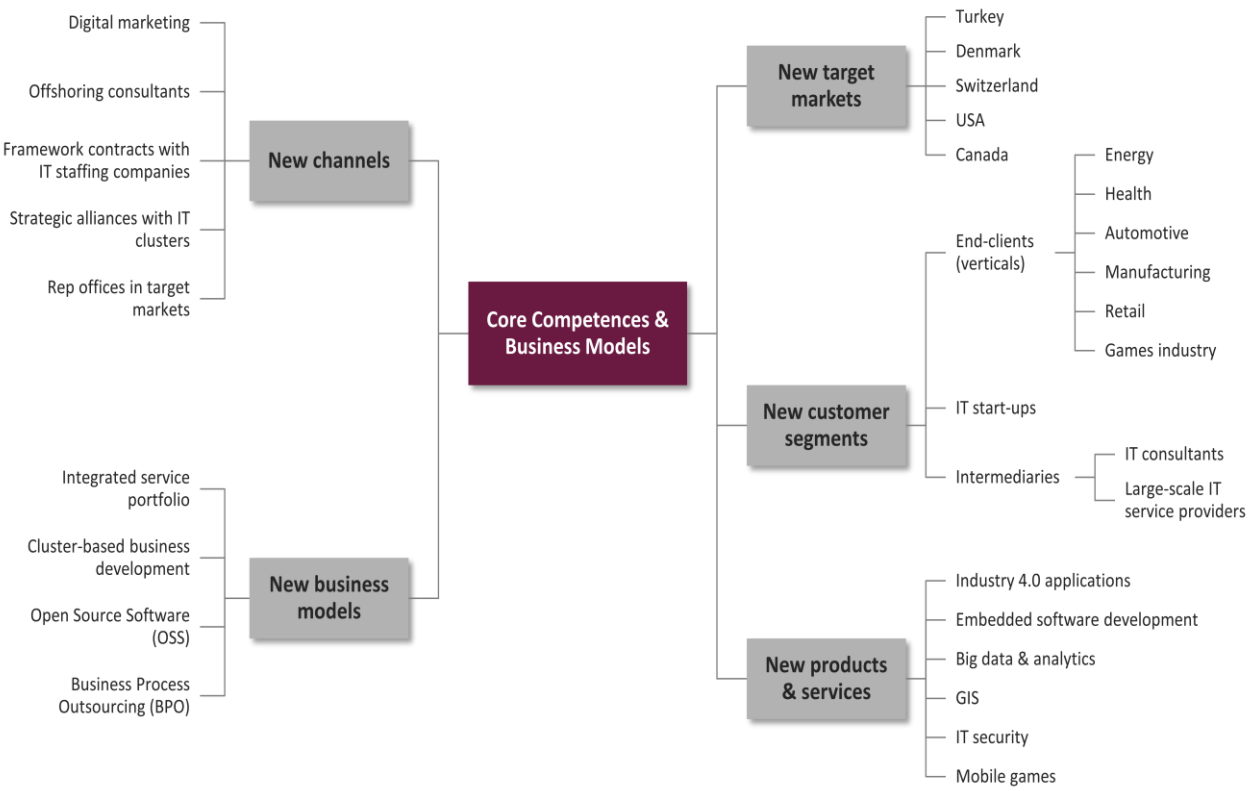


Figure 35: Growth strategy framework

As can be seen from the above chart, in the long run, additional growth in the Kosovo IT industry will be generated by developing new target markets, customer segments, products & services, business models and channels. The different branches of the growth strategy mind map represent the future growth paths for the Kosovo IT industry.

The basic idea behind this growth and portfolio strategy is to tap into additional business opportunities on a sustainable basis, without overstretching the capabilities and resources of the Kosovo IT industry. This will be achieved by focusing on existing core competences and business models, whilst gradually developing additional skills and capabilities. According to the agile approach, the growth strategy also needs to be regularly evaluated and, if necessary, repositioned.

4.5. Market Entry Strategy

Taking into account the key elements of the generic strategy of agile focus, the following section will now present the market entry strategy for the Kosovo IT industry. This market entry strategy is intended to serve as a strategic roadmap for entering the selected target export markets, analyzed in chapter 3.2.

With reference to the market entry strategy for the Kosovo IT industry, there are two central questions which need to be addressed. Firstly, whether Kosovo IT enterprises should enter target markets with IT products or services? Secondly, what are the different strategic market entry options?

Concerning the first question, it is important to carefully analyze the pros and cons of a product strategy versus a service strategy with regards to potential IT export markets:

Product Strategy	
Benefits (+)	**Concerns (-)**
▪ Higher value added in the exporting country ▪ Greater potential for profitability ▪ Innovation: software products are still the major drivers of innovation ▪ Changing market patterns and delivery models due to cloud computing and SaaS concepts ▪ Potential for bundling with services	▪ Highly complex and challenging ▪ Costs for product development ▪ Requires substantial investment in marketing and after-sales services ▪ High level of management and marketing skills required (in comparison to exporting IT services) ▪ Intense competition in software product markets ▪ Existing standards and legal aspects (IP) ▪ Higher risk due to investments involved ▪ Slower market penetration
Practical Examples	
▪ Israel has successfully pursued a product strategy, focusing on exporting specialized niche products such as communication applications and information security software ▪ But: the success of this strategy has been enabled to a large extent by the availability of VC from the US and Israel's strong diaspora in key export markets	

Service Strategy	
Benefits (+)	**Concerns (-)**
▪ Easier market entry ▪ Less capital investment required ▪ Risk involved is considerably lower ▪ Less competitive pressure (for specialized IT services) ▪ Entry barriers are lower ▪ Usually suppliers do not have to establish a distribution network	▪ Lower value added ▪ Less potential for innovation and R&D
Practical Examples	
▪ Most prominent example: India has successfully positioned itself in several export markets by providing IT services (outsourcing/offshoring) ▪ Indian companies originally started with short-term, low-level programming activities (body shopping) ▪ Later on, they gradually moved up the value chain by upgrading technical and managerial skills, as well as process maturity and quality	

For highly developed target markets such as Germany, Norway, the Netherlands and the UK, a product-based entry strategy requires in-depth understanding of markets and clients, a complex skill set and, above all, significant investment in product development, marketing and sales.

The results of the internal analysis have shown that the majority of Kosovo IT firms have little export experience and possess rather limited endowments of physical and human capital. Moreover, important support elements for a product strategy, such as venture capital, established distribution networks or strong R&D and innovation capabilities currently do not exist in Kosovo.

Based on these considerations, the strategy working group drew the conclusion that a product strategy is currently beyond the capabilities of most Kosovo IT companies and would therefore be unrealistic. Hence, the Kosovo it industry will focus its market entry strategy primarily on the provision of IT services.

Accordingly, the Kosovo IT industry will enter the selected target markets with the service portfolio defined in the previous chapter (see chapter 4.4). Special emphasis will be placed on the provision of high-end and high-quality software development services and related IT services that require excellent technical expertise as well as project management skills. In this context, the specific key capabilities of Kosovo IT companies in the areas of web design and mobile applications should be leveraged. Hence, IT firms will have to develop deep domain expertise and further develop their software engineering and IT project management capabilities. In addition, they could complement software development and testing with design and IT consulting services in order to provide integrated service portfolios to their clients. That way, Kosovo IT companies will be able to execute complex IT projects for their clients along the entire software project cycle – from system analysis to software development, testing and deployment.

Specializing in high-end software development and IT services will help reduce exposure to market volatility, as demand for such services s is less price-elastic and competitive pressure is lower compared to other IT service segments.

Notwithstanding, in the medium and long term, the Kosovo IT industry should not pursue a pure service strategy but should also try to develop and market specialized niche software products in target export markets. In this context, ICK and Kosovo start-ups could play a decisive role in developing innovative software products, especially in the mobile sphere.

While keeping the focus on services, promoting exports of software products could help increase the value added and create a basis for product-related services (e.g. IT consulting support services). As a matter of fact, bundling IT services with innovative products might be an attractive future option for Kosovo's IT industry.

Concerning the second question, the working group identified five different strategic market entry options for the Kosovo IT industry, taking into consideration the results of the internal analysis, as well as the structural characteristics of the selected target export markets:

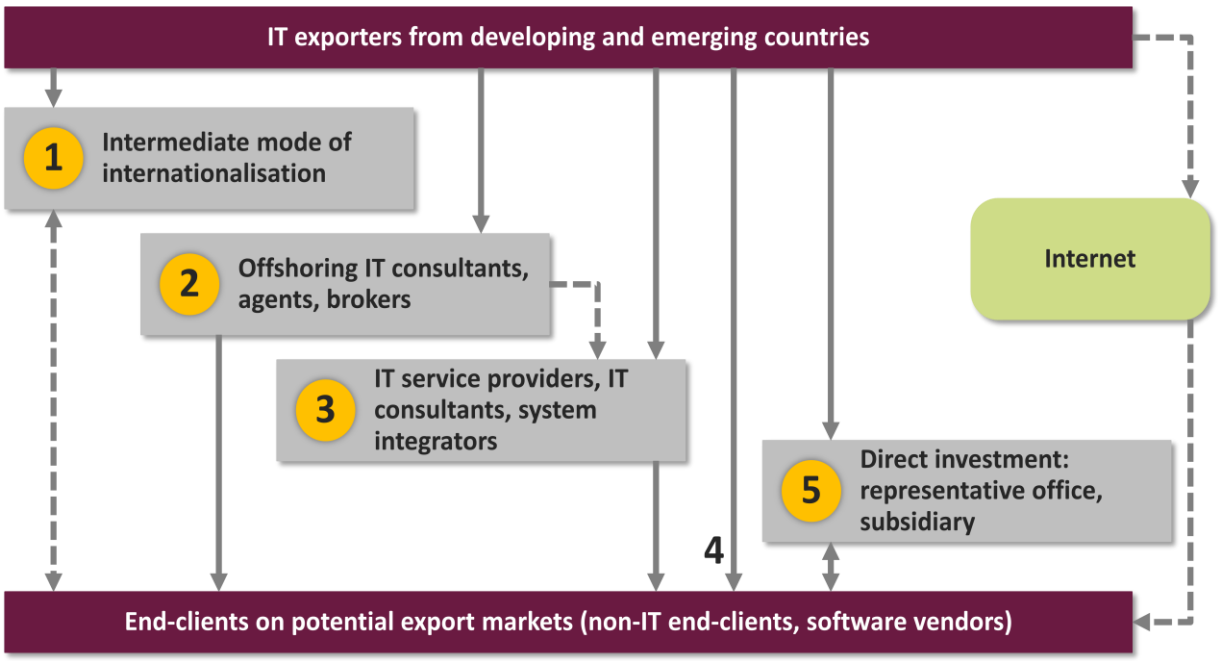


Figure 36: The five different export market entry options for the Kosovo IT industry

The above shown entry options are closely related to the target groups identified in the market analysis (chapter 3.2.3).

In order to formulate a suitable market entry strategy for the Kosovo IT industry, different options will be presented and discussed in the following section, including the corresponding benefits and concerns.

Option 1: Intermediate mode of internationalization[32]	
▪ Channelling a company's services or products through an existing multinational client in the home market ▪ Examples: for many SMEs in Ireland and India, doing business with MNCs in the domestic market was the first step in entering international markets ▪ Also several examples from Macedonia (e.g. Ein-Sof) and Bulgaria ▪ Through referrals by international clients in the domestic market, companies get access to new clients in export markets ▪ Strategic linkages with MNCs also provide local companies with access to the latest technologies ▪ Increasing FDI could create business opportunities for Kosovo software companies in terms of indirect internationalization (intermediate mode of internationalization)	
Benefits (+)	**Concerns (-)**
▪ Indirect access to foreign markets without overstretching resources ▪ Gaining international reference clients ▪ Access to latest technologies and management methods ▪ Leveraging MNCs' assets, scale and networks to enter export markets	▪ High transaction costs ▪ Lack of information on markets and end-clients (information asymmetries) ▪ Dependency on MNCs ▪ Discourages development of own export capabilities

[32] In the academic literature this option is also often referred to as "client followership".

Option 2 and 3: Indirect market entry	
▪ Companies use an intermediary/distributor to enter the marketThe intermediaries could be: specialized offshoring consultants (brokers, agents), IT service providers, IT staffing companies and IT consultants ▪ Trend towards integrating offshoring elements into IT services, coupled with increasing specialization within the IT service value chain, provide additional opportunities for cooperation between IT service companies and offshoring providers from Kosovo	
Benefits (+)	**Concerns (-)**
▪ Less investment required ▪ Less risk since intermediaries provide in-depth customer and market know-how ▪ Using business contacts and networks of intermediary for business development ▪ Forming strategic alliances ▪ Intermediaries can be used as multipliers ▪ Mitigates lack of branding	▪ Limited control over export activities and customer contacts ▪ Reduced profit margin due to intermediation and commission schemes ▪ Hampers development of export and market know-how

Option 4: Direct export	
▪ Direct exports from Kosovo software companies to end-clients in the export market (non-IT end-clients, software companies) ▪ Direct sales without involvement of intermediaries ▪ Focus on SME segment since access to large-scale end-clients is rather unlikely ▪ There are several examples of companies from Kosovo and the region conducting direct exports	
Benefits (+)	**Concerns (-)**
▪ Higher profitability ▪ Learning effect from direct interaction with clients ▪ Direct and efficient communication with end-clients ▪ Full control of export activities	▪ High degree of technical and managerial skills required ▪ Substantial investments into marketing and sales ▪ High degree of specialization required ▪ Clients often expect local presence

Option 5: Direct investment / local presence	
▪ Establishing a local presence in the target market through direct investment ▪ Forms: joint venture, local partner, setting up a wholly owned subsidiary (representative office, fully integrated unit) ▪ Results of the external analysis: customer preference for local presence and onsite delivery capabilities. Therefore setting up a representative structure in the target market could be a useful step for a sustainable market entry	
Benefits (+)	**Concerns (-)**
▪ Competitive advantage ▪ Creating additional customer value ▪ Better understanding of target markets and clients ▪ Higher customer focus and closer customer relations ▪ Better control over marketing activities and channels ▪ Sustainable market penetration ▪ Important for branding and positioning on target markets	▪ Involves significant capital investment and resource allocation ▪ Comparatively high operational costs of local presence (office, local staff, etc.) ▪ Slower market penetration

Even though the internet is shown on the above chart with the market entry options, it should be noted that it does not provide a market entry option as such. As software development is highly complex and numerous factors affect decision-making on nearshoring/offshoring (e.g. skills, quality, price, etc.), a purely "digital" market entry is highly unlikely.

However, it deserves mentioning that digital marketing is becoming increasingly important in the software and nearshoring market with regards to branding and business development. Therefore, the Kosovo IT Strategy also envisages special measures in the area of web-marketing, social media marketing, social CRM as well as IT job exchanges and special outsourcing portals.

Since the selection of the most appropriate market entry option will finally have to be made on the micro-level by the individual companies, it is relatively difficult to define a common market entry strategy for the whole Kosovo IT industry. Kosovo IT companies will not have to stick to a single entry mode, but can combine several entry options, depending on their objectives, business model, product/service portfolio, export experience, resources and of course the structural characteristics and requirements of the target market.

Although the decision for the most appropriate market entry option on the micro-level will have to be taken by the individual enterprises, the working group developed a general market entry strategy for the Kosovo IT industry, which is supposed to serve as an overall guideline for entering strategic target markets on the industry level. Reflecting the generic strategy of agile focus and the above considerations, this market entry strategy for the Kosovo IT industry comprises four key elements, outlined in the following table:

Key element 1: Focused market entry	Key element 2: Cluster-based market entry
▪ Entering selected target markets with specific service portfolio (see chapter 4.4) focusing on the provision of high-quality software development services and related IT services ▪ Leveraging specific key capabilities of Kosovo IT companies in the areas of web design and mobile applications ▪ Specialization and customization of IT services ▪ Entering the target markets by focusing on specific industries (e.g. financial services, retail, health, energy, automotive, telecommunications, IT) and target segments (SMEs, IT start-ups) ▪ Promoting international branding and positioning of the Kosovo IT industry	▪ Clustering companies according to capabilities and service portfolios in order to facilitate targeted market entry ▪ Developing and marketing an integrated service portfolio consisting of complementary services to provide customers with a "turnkey solution" covering the complete software project cycle from system analysis to software development, testing and deployment ▪ Generating synergy effects, economies of scale and scope ▪ Providing cluster-based export promotion services for Kosovo IT companies through STIKK ▪ Establishment of joint representative structures in strategic target markets ▪ Using IT clusters and associations in target markets as strategic partners and multiplier
Key element 2: Sequential market entry	**Key element 4: Penetration strategy**
▪ Sequential hybrid strategy combining elements of cost-leadership with differentiation (outpacing) over the course of time ▪ Due to high costs and complexity of market entry: initial market entry through specialized offshoring consultants, IT service providers, IT staffing companies and IT consultants ▪ In parallel: generating international references on the domestic market through intermediate mode of internationalization ▪ After initial stage: gradually establishing direct export activities ▪ Ultimate step: local presence in the market (e.g. sales office)	▪ Penetrating export target markets with comparatively low prices in order to accelerate market penetration and gaining market share ▪ Penetration prices: no cost-leadership strategy but highly competitive prices in relation to perceived customer value ▪ When Kosovo nearshoring services have gained sufficient market share and customer recognition, prices can be gradually raised in relation to customer value and productivity gains

In the context of the market entry strategy, the Kosovo IT industry will also have to elaborate a branding concept. The importance of branding for the Kosovo IT industry can be attributed to the following facts:

- Lack of branding has been identified as a primary obstacle to Kosovo IT export
- Positioning in domestic as well as international markets
- Selection of potential business partners (outsourcing/offshoring) is often based on image and reputation of a country and its IT industry ("country branding")
- Successful brand enables IT companies to build stable, long-term customer relationship and demand
- Increasing the visibility on international markets
- Branding is an important source for differentiation
- Generating competitive advantages and increasing margins and profitability

- Basis for expansion into product/service improvements, new lines and categories

Taking into account the importance of branding for the Kosovo IT industry, the strategy working group has envisaged corresponding support measures in the operational plan (see chapter 5).

The branding concept for the Kosovo IT industry will have to be based on clearly defined core brand values. These values need to reflect the overall goal as well as the generic and market entry strategy. Thus, the branding goal will be based on quality, company excellence, agility and cost-efficiency.

The goal of the market entry strategy outlined above is to enable the Kosovo IT industry to access selected target markets based on a sustainable organic growth, without overstretching the capabilities and resources of Kosovo IT enterprises.

In general, the market entry strategy should be a dynamic process, staying abreast of changes in global IT markets.

4.6. Strategic Measures and Pillars

To achieve the overall goal of transforming the IT industry into the main driver of economic growth, employment and innovation in Kosovo, the working group defined a broad range of strategic measures.

These measures reflect the generic strategy for the Kosovo IT industry, as well as the growth and market entry strategy outlined in the previous chapters. They are based on the principle of systemic competitiveness, encompassing specific tasks and activities on the macro-, meso-, and micro-levels. It is important to stress that many of these strategic measures are interrelated and need to be coordinated and implemented in close collaboration with all relevant stakeholders.

For the purpose of effective coordination and implementation, the different measures have been organized in **9 strategic pillars** according to sub-goals (see chapter 4.2) and strategic topics. These pillars form an integrated portfolio of support measures for the Kosovo IT industry, which can be quickly adapted to changing market conditions and needs.

The following **strategy map** provides an overview of the strategic pillars and the corresponding measures respectively tasks:

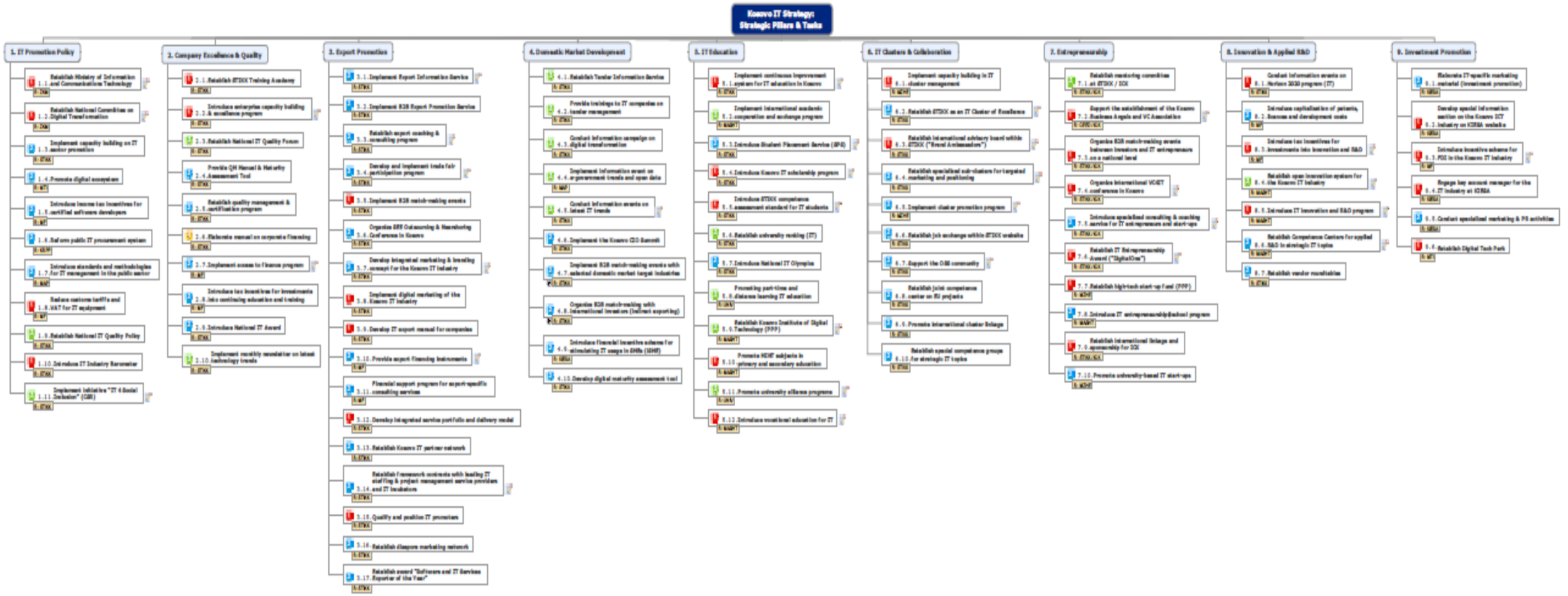


Figure 37: Strategy map with strategic pillars and tasks of the Kosovo IT Strategy

In this chapter, we will briefly present the 9 strategic pillars, as well as the corresponding goals, rationale and strategic measures or tasks. A more detailed description and operationalization of the individual strategic measures/tasks will be conducted in chapter 5 within the operational plan.

4.6.1. Strategic Pillar 1: IT Promotion Policy

Strategic Pillar 1: IT Promotion Policy	
Goal:	Introducing a comprehensive IT promotion policy
Rationale:	In order to promote the IT industry and digital transformation in Kosovo, the necessary framework conditions need to be established. Therefore, this strategic pillar is directed at creating a digital ecosystem conducive to IT sector growth and entrepreneurship. Policy measures need to take into account that the Kosovo IT industry consists almost exclusively of small and medium-sized enterprises. Contrary to the traditional, reactive top-down policy-setting process, government institutions need to engage in proactive policy formulation, in close collaboration and interaction with the IT industry.
Description:	▪ Establishing the necessary framework conditions for effective IT sector promotion in Kosovo ▪ Introducing a comprehensive IT policy ▪ Establishing an environment conducive to entrepreneurship and IT sector growth ▪ Increasing awareness about the strategic importance of the Kosovo IT industry ▪ Enhancing the visibility of the Kosovo IT industry in economic policy ▪ Building the necessary organizational structures and capabilities for IT sector promotion ▪ Introducing a quality policy
Tasks	1.1 Establish Ministry of Information and Communication Technology 1.2 Establish National Committee on Digital Transformation 1.3 Implement capacity building on IT sector promotion 1.4 Promote digital ecosystem 1.5 Introduce income tax incentives for certified software developers 1.6 Reform public IT procurement system 1.7 Introduce standards and methodologies for IT management in the public sector 1.8 Reduce customs tariffs and VAT for IT equipment 1.9 Establish national IT Quality Policy 1.10 Introduce IT Idustry Barometer 1.11 Implement initiative “IT 4 Social Inclusion” (CSR)

4.6.2. Strategic Pillar 2: Company Excellence & Quality

Strategic Pillar 2: Company Excellence & Quality	
Goal:	Promoting company excellence & quality
Rationale:	Quality and company excellence are key differentiation factors for the Kosovo IT industry and have a major impact on its international competitiveness. For IT industries from emerging countries like Kosovo, quality management is of paramount importance in terms of promoting client trust. Quality certifications like ISO and CMMI send a strong message to potential foreign customers that IT companies will work according to clearly defined norms and procedures and will adhere to global standards. Considering the fact that the current wage level within the Kosovo IT industry is comparatively higher than those in many Asian offshoring destinations and is likely to further increase during Kosovo's accession process to the EU, the future international competitiveness of the Kosovo IT industry will very much depend on quality and efficiency. Hence, for Kosovo, quality becomes an important source of differentiation, as reflected in the goal system of this strategy. In addition, company excellence and quality will also play an important role in the international branding and positioning of the Kosovo IT industry. Promoting company excellence and quality requires massive investments in qualification, training and certification according to international standards and methodologies.
Description:	▪ Increasing the international competitiveness of Kosovo IT companies ▪ Introducing a mindset and infrastructure conducive to continuous learning and qualification ▪ Promoting technical expertise and skills development ▪ Introducing the latest management methods and know-how ▪ Promoting quality and company excellence ▪ Establishing a "quality culture" ▪ Improving access to finance
Tasks	2.1 Establish STIKK Education 2.2 Introduce Enterprise Capacity Building & Excellence program 2.3 Establish National IT Quality Forum 2.4 Provide QM Manual & Maturity Assessment Tool 2.5 Establish Quality Management & Certification program 2.6 Elaborate manual on corporate financing 2.7 Implement access to finance program 2.8 Introduce tax incentives for investments into continuing education and training 2.9 Introduce National IT Award 2.10 Compile monthly newsletter on latest technology trends

4.6.3. Strategic Pillar 3: Export Promotion

Strategic Pillar 3: Export Promotion	
Goal:	Promoting exports of the Kosovo IT industry
Rationale:	Due to Kosovo's very limited and underdeveloped domestic market, export promotion is of paramount importance for the development and growth of the country's IT industry. Activities need to be focused on selected target export markets. Lack of branding and international visibility has been identified by companies and public stakeholders as one of the primary obstacles to Kosovo IT exports. Therefore, a comprehensive marketing & branding concept for the Kosovo IT industry is needed, reflecting specific client requirements and key success factors in the strategic export markets. Furthermore, the specific needs of IT SMEs in terms of export promotion need to be taken into consideration, whilst strengthening their export capabilities.
Description:	▪ Opening up new markets and business opportunities for the Kosovo IT industry ▪ Increasing export revenues ▪ Establishing a national IT brand ▪ Positioning Kosovo on international markets ▪ Increasing the international visibility of the Kosovo IT industry ▪ Providing export-oriented support services for Kosovo IT companies ▪ Developing new product and service portfolios ▪ Developing innovative nearshoring marketing and delivery models
Tasks	3.1 Implement Export Information Service 3.2 Implement B2B Export Promotion Service 3.3 Set up export coaching & consulting program 3.4 Develop and implement trade fair participation program 3.5 Organize B2B match-making events 3.6 Organize SEE IT Outsourcing and Nearshoring Conference in Kosovo 3.7 Develop integrated marketing & branding concept for the Kosovo IT industry 3.8 Implement digital marketing of the Kosovo IT industry 3.9 Develop IT export manual for companies 3.10 Provide export financing instruments 3.11 Financial support program for export-specific consulting services 3.12 Develop integrated service portfolio and delivery model 3.13 Establish Kosovo IT partner framework 3.14 Establish framework contracts with leading IT staffing & project management service providers and IT incubators 3.15 Quality and position IT promoters 3.16 Establish diaspora marketing network 3.17 Establish award "Software and IT Services Exporter of the Year"

4.6.4. Strategic Pillar 4: Domestic Market Development

Strategic Pillar 4: Domestic Market Development	
Goal:	Developing the domestic market and increasing productivity through IT.
Rationale:	The rationale behind this strategic pillar is to opening up the growth potential of the domestic market (in selected target industries) to Kosovo IT companies, thus creating an additional source of income and revenue streams. At the same time, this pillar intends to provide companies from other industries with innovative IT products and services, in order to improve their efficiency and productivity. Another important aspect of domestic market development is to create additional business opportunities for the Kosovo IT industry by establishing linkages between local IT enterprises and international investors/multinational corporations (MNCs) in Kosovo.
Description:	▪ Opening up additional business opportunities for Kosovo IT companies in the domestic market ▪ Maximizing revenue streams from the domestic market ▪ Conducting customer development and education (pull strategy) ▪ Aggressively marketing the capabilities and the service portfolio of Kosovo IT companies in the domestic market (push strategy) ▪ Establishing strategic industry accounts ▪ Opening up the market potential of foreign investors (FDI) and their subsidiaries in Kosovo (intermediate mode of internationalization)
Tasks	4.1 Establish Tender Information Service 4.2 Provide trainings to IT companies on tender management 4.3 Conduct information campaign on digital transformation 4.4 Implement information event on e-government trends and open data 4.5 Conduct information events on latest IT trends 4.6 Implement the Kosovo CIO Summit 4.7 Implement B2B match-making events with selected domestic market target industries 4.8 Organize B2B match-making with international investors (indirect exporting) 4.9 Introduce financial incentive scheme for stimulating IT usage in SMEs (iSME) 4.10 Develop digital maturity assessment tool

4.6.5. Strategic Pillar 5: IT Education

Strategic Pillar 5: IT Education	
Goal:	Improving IT education and promoting HR excellence in Kosovo
Rationale:	Education and human resource excellence are the key determinants of Kosovo's IT industry competitiveness. Consequently, this pillar is directed at promoting education and human resources excellence by continuously improving IT education in Kosovo on the primary, secondary and particularly on the tertiary level. Special emphasis needs to be placed on aligning IT curricula with the specific needs of the private sector and with fostering close cooperation between the universities and the IT industry. With regards to shortening innovation cycles in the IT industry, the concept of life-long learning and qualification is of particular relevance.
Description:	▪ Improving IT education in Kosovo ▪ Improving the qualitative and quantitative output of universities in Kosovo ▪ Aligning IT curricula with the specific needs of the private sector ▪ Fostering international academic cooperation and exchange programs ▪ Improving cooperation between the universities and the IT industry ▪ Increasing the job attractiveness of the IT industry ▪ Promoting HR excellence in the Kosovo IT industry
Tasks	5.1 Implement continuous improvement system for IT education in Kosovo 5.2 Implement international academic cooperation and exchange program 5.3 Introduce Student Placement Service (SPC) 5.4 Introduce Kosovo IT Scholarship program 5.5 Introduce STIKK Competence Assessment Standard for IT students 5.6 Create university ranking (IT) 5.7 Introduce national IT Olympiads 5.8 Promote part-time and distance learning in IT education 5.9 Establish Kosovo Institute of Digital Technology (PPP) 5.10 Promote MINT subjects in primary and secondary education 5.11 Promote university alliance programs 5.12 Introduce vocational education for IT

4.6.6. Strategic Pillar 6: IT Clusters & Collaboration

Strategic Pillar 6: IT Clusters & Collaboration	
Goal:	Increasing systemic competitiveness through IT clusters and collaboration
Rationale:	Clusters are an important tool for promoting the Kosovo IT industry, particularly with regards to export promotion, industry collaboration and innovation/R&D. Furthermore, clusters allow Kosovo IT companies to overcome resource constraints and jointly target new markets. Clusters are also a valuable instrument for international branding and positioning, because they increase visibility and allow for more efficient and targeted marketing and communication. By stressing the specific capabilities and competitive advantages of the Kosovo IT industry, clustering could become an important means of branding and differentiating the industry from competitors. Clusters allow companies to specialize in specific capabilities and technologies, whilst providing the collaborative linkage and exchange necessary to integrate these different capabilities into innovative products and services. By reconfiguring and recombining the different technical and managerial capabilities of the member companies, the cluster can quickly adapt to changing market conditions and technology trends, thus increasing the international competitiveness of the Kosovo IT industry.
Description:	▪ Improving systemic competitiveness through clusters and collaboration ▪ Achieving economies of scale through cooperation ▪ Achieving synergy effects through collaboration of companies with different technical capabilities ▪ Joint marketing and export promotion ▪ Increasing the international visibility of the Kosovo IT industry ▪ Developing and implementing specialized support services (cluster services) for Kosovo IT companies ▪ Cost optimization through demand bundling (collective bargaining power) and resource sharing ▪ Increasing innovative strengths by bundling of competences and resources ▪ Raised marketplace profile ▪ Effective lobbying
Tasks	6.1 Implement capacity building in IT cluster management 6.2 Establish STIKK as an IT Cluster of Excellence 6.3 Establish international advisory board within STIKK (“Brand Ambassadors”) 6.4 Establish specialized sub-clusters for targeted marketing and positioning 6.5 Implement cluster promotion program 6.6 Establish job exchange within STIKK website 6.7 Support the OSS community 6.8 Establish joint competence centre on EU projects 6.9 Promote international cluster linkage 6.10 Establish special competence groups for strategic IT topics

4.6.7. Strategic Pillar 7: Entrepreneurship

Strategic Pillar 7: Entrepreneurship	
Goal:	Enhancing IT entrepreneurship in Kosovo
Rationale:	The rationale behind this strategic pillar is to establish an entrepreneurial ecosystem conducive to IT entrepreneurship and innovation. This is particularly relevant with regards to the scalability of the Kosovo IT industry and its long-term competitiveness. Special emphasis needs to be placed on providing customized support services for IT start-ups, as well as on fostering cooperation between mature IT enterprises and start-ups.
Description:	▪ Promoting an ecosystem and framework conditions conducive to IT entrepreneurship ▪ Improving access to VC ▪ Providing specialized support services for IT entrepreneurs and start-ups ▪ Raising awareness about the importance of IT entrepreneurship ▪ Promoting cooperation and exchange of experiences between established IT companies and start-ups
Tasks	7.1 Establish mentoring committee at STIKK/ICK 7.2 Support the establishment of the Kosovo Business Angels and VC Association 7.3 Organize B2B match-making events between investors and IT entrepreneurs on a national level 7.4 Organize international VC4IT conference in Kosovo 7.5 Introduce specialized consulting & coaching service for IT entrepreneurs and start-ups 7.6 Establish IT Entrepreneurship Award (“DigitalOne”) 7.7 Establish high tech start-up fund (PPP) 7.8 Introduce IT Entrepreneurship @ School program 7.9 Establish international linkage and sponsorship for ICK 7.10 Promote university-based IT start-ups

4.6.8. Strategic Pillar 8: Innovation & Applied R&D

Strategic Pillar 8: Innovation & Applied R&D	
Goal:	Fostering innovation and applied R&D
Rationale:	Innovation and applied R&D is of strategic importance for the Kosovo IT industry, particularly in the medium and long run. Applied R&D and innovative IT solutions will help the IT sector differentiate itself from competitors and increase its added value. Consequently, innovation will play an important role in strengthening the international competitiveness of the Kosovo IT industry and ensuring sustainable organic growth. This requires establishing the necessary framework conditions, as well as R&D and innovation capabilities.
Description:	▪ Promoting an environment and framework conditions conducive to innovation and applied R&D ▪ Providing advisory services on relevant support programs (e.g. Horizon 2020) ▪ Promoting cluster-based cooperation between companies and the academia ▪ Capacity building in open innovation methods and tools ▪ Awareness raising on the importance of innovation and applied R&D for the future of the Kosovo IT industry
Tasks	8.1 Conduct information events on Horizon 2020 program (IT) 8.2 Introduce capitalization of patents licences and development costs 8.3 Introduce tax incentives for investments into innovation and R&D 8.4 Establish open innovation system for the Kosovo IT industry 8.5 Introduce IT Innovation and R&D program 8.6 Establish Competence Centers for applied R&D in strategic IT topics 8.7 Establish vendor roundtables

4.6.9. Strategic Pillar 9: Investment Promotion

Strategic Pillar 9: Investment Promotion	
Goal:	Promoting Kosovo as an IT investment location
Rationale:	In order to promote the international competitiveness of its IT industry, Kosovo will need foreign direct investment to introduce new management techniques, foster technology transfer, and to encourage the development of innovative IT products and services. Besides, FDI could have an important multiplier effect on the local IT industry. In addition, FDI by MNCs in Kosovo and the establishment of subsidiaries will also provide local IT enterprises with the opportunity to access foreign markets indirectly by becoming suppliers of MNCs. This intermediate mode of internationalization is of particular importance since Kosovo's domestic IT market is very limited. Investment promotion also plays an important role with regards to international branding of the Kosovo IT industry.
Description:	▪ Increasing the attractiveness of Kosovo as a destination for IT investments (FDI) ▪ Strengthening the collaboration between KIESA and STIKK ("One Stop Shop") ▪ Developing and implementing the instruments for effective investment promotion in the IT industry ▪ Promoting linkages between foreign investors and the Kosovo IT industry (intermediate mode of internationalization); integration into international value chains ▪ Promoting technology transfer from international investors to the Kosovo IT industy
Tasks	9.1 Elaborate IT-specific marketing material (investment promotion) 9.2 Develop special information section on the Kosovo ICT Industry on KIESA website 9.3 Introduce Incentive scheme for FDI in the Kosovo IT Industry 9.4 Engage key account manager for the IT industry at KIESA 9.5 Conduct specialized marketing & PR activities 9.6 Establish Digital Tech Park

5. Strategy Implementation

According to the methodology for the collaborative development of the Kosovo IT Strategy, we will now turn to the next module of the strategy development cycle, which is strategy implementation.

Strategy implementation poses a number of important challenges, and this is particularly evident in the case of IT strategies. Sector promotion strategies of transformation countries like Kosovo are often hampered in the implementation stage by limitations in terms of financial resources and organizational capabilities. Frequently, such strategies exist only on paper, but not in action.

With regards to the implementation of the Kosovo IT Strategy, the working group identified the following key challenges:

- Limited financial resources
- Limited staff
- Multi-stakeholder setting
- Absence of sectoral support institutions (e.g. ICT Ministry or IT Promotion Agency)
- No central unit or hierarchy
- Lack of best practice examples and experiences
- Complexity and dynamics of the IT industry
- Finding an appropriate organizational structure for collaborative IT strategy implementation in Kosovo

In order to address these challenges and ensure effective implementation of the Kosovo IT Strategy, we will define the appropriate management instruments (e.g. operational plan), organizational structures and processes in the following chapter. In addition, we will address the issues of risk management, change management and knowledge management.

5.1. Operational Plan

Effectively managing the implementation of the Kosovo IT Strategy requires an instrument which takes into account the specific challenges of collaborative strategy implementation (see above). Since a diverse range of stakeholders is involved with limited experience and capacities in strategy implementation, a comprehensive, robust and simple management instrument should be applied. At the same time, this tool needs to reflect the agile approach of the strategy and to allow for flexible adaptation of the strategy implementation process to changing market conditions, budgets and technology trends.

Operational plans have proven to be an effective tool for managing the implementation of complex strategies. Consequently, the working group decided to elaborate a detailed operational plan which will serve as the key management instrument for implementing the Kosovo IT Strategy.

The operational plan plays a key role in strategy implementation for the following reasons:

- Defining tasks, activities, responsibilities, resources and timing
- Providing a key instrument for stakeholder coordination and collaboration
- Facilitating collaborative strategy implementation in order to achieve joint goals (“roadmap”)
- Facilitating Project management and controlling
- Allowing for effective budget and resource management
- Providing the basis for monitoring and evaluation

In this context, it deserves mentioning that the operational plan for the Kosovo IT Strategy has been designed as a “living document”, which needs to be regularly reviewed, updated and adapted (agile approach), in order to facilitate organizational learning and continuous improvement.

The operational plan for the Kosovo IT Strategy has been structured according to the 9 strategic pillars and the corresponding tasks outlined in chapter 4. As indicated in the following chart, each task has been operationalized into individual work packages (WPs), consisting of several activities that need to be implemented.

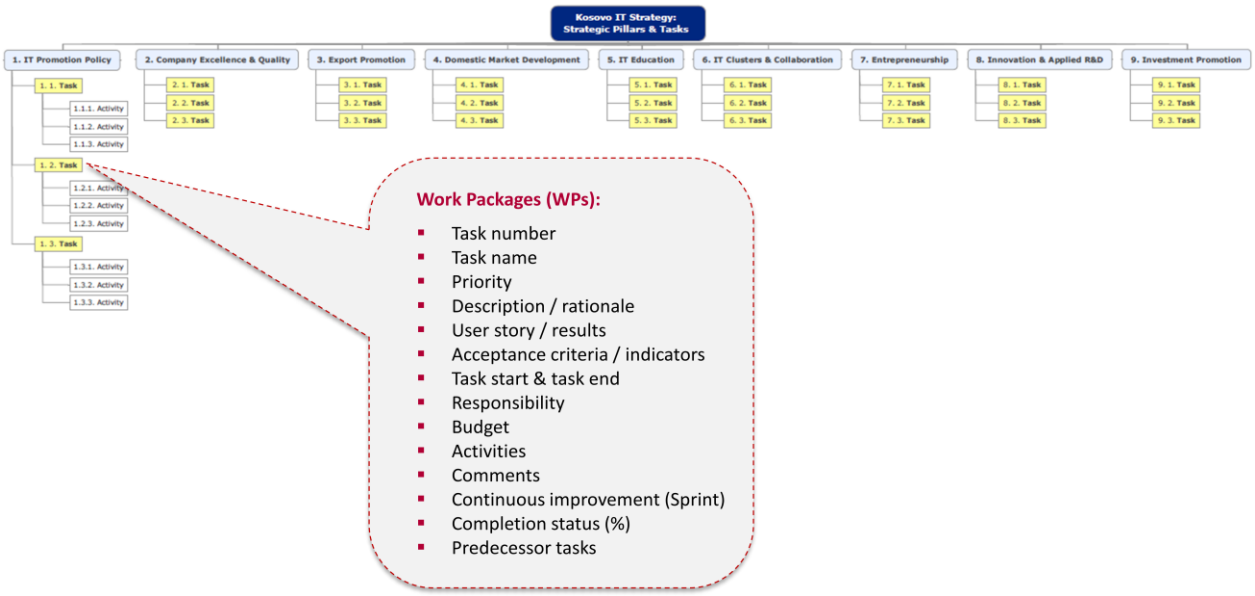
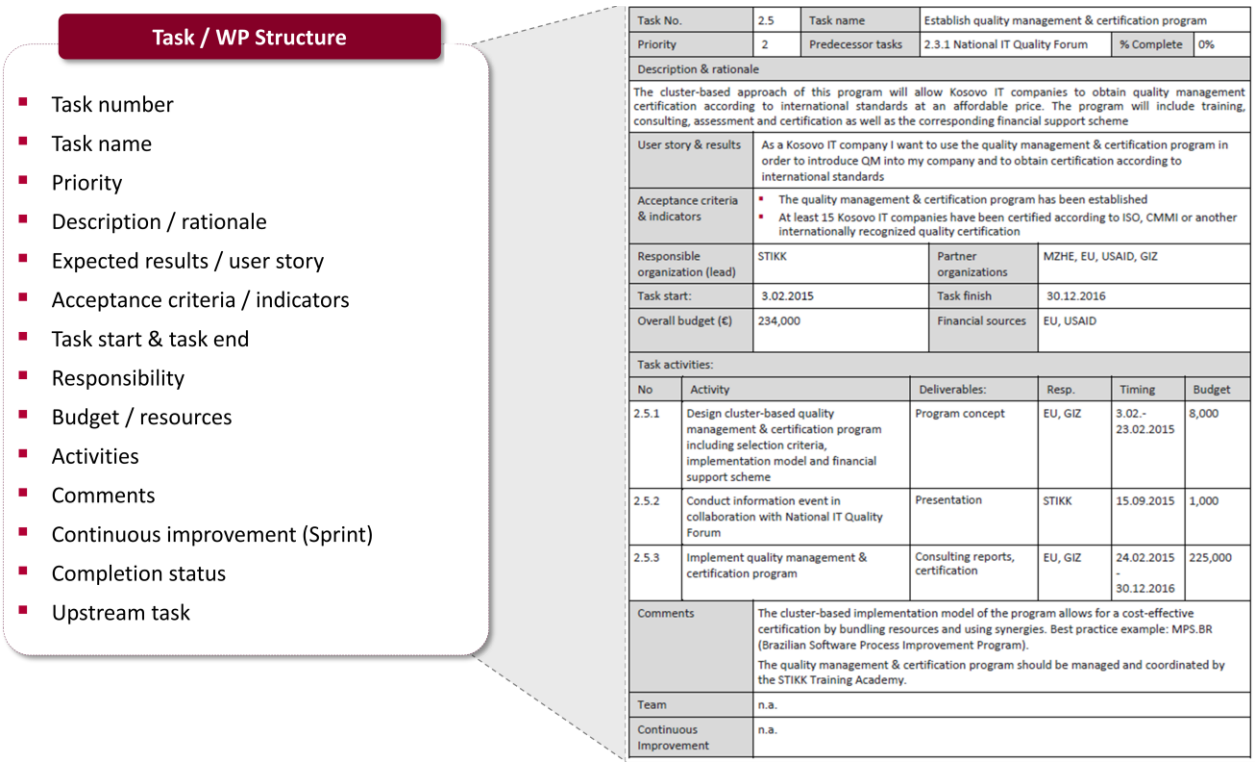


Figure 38: Structure of operational plan

For each of the tasks or work packages (WPs), results, acceptance criteria, responsibilities, budgets and activities have been defined in the form of a so-called WP description. Taking into account the agile approach of the Kosovo IT Strategy, the working group also defined user stories for each task to ensure customer/target group orientation and to specify the intended impacts. Similar to agile software development, the user story captures the “who”, “what” and “why” for each task in a simple and concise way.

The following chart provides an example of such a WP description and its structural elements:



Task No.	2.5	Task name	Establish quality management & certification program		
Priority	2	Predecessor tasks	2.3.1 National IT Quality Forum	% Complete	0%

Description & rationale

The cluster-based approach of this program will allow Kosovo IT companies to obtain quality management certification according to international standards at an affordable price. The program will include training, consulting, assessment and certification as well as the corresponding financial support scheme

User story & results	As a Kosovo IT company I want to use the quality management & certification program in order to introduce QM into my company and to obtain certification according to international standards
Acceptance criteria & indicators	▪ The quality management & certification program has been established ▪ At least 15 Kosovo IT companies have been certified according to ISO, CMMI or another internationally recognized quality certification

Responsible organization (lead)	STIKK	Partner organizations	MZHE, EU, USAID, GIZ
Task start:	3.02.2015	Task finish	30.12.2016
Overall budget (€)	234,000	Financial sources	EU, USAID

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
2.5.1	Design cluster-based quality management & certification program including selection criteria, implementation model and financial support scheme	Program concept	EU, GIZ	3.02.-23.02.2015	8,000
2.5.2	Conduct information event in collaboration with National IT Quality Forum	Presentation	STIKK	15.09.2015	1,000
2.5.3	Implement quality management & certification program	Consulting reports, certification	EU, GIZ	24.02.2015 - 30.12.2016	225,000

Comments	The cluster-based implementation model of the program allows for a cost-effective certification by bundling resources and using synergies. Best practice example: MPS.BR (Brazilian Software Process Improvement Program). The quality management & certification program should be managed and coordinated by the STIKK Training Academy.
Team	n.a.
Continuous Improvement	n.a.

Figure 39: Description and structure of work packages

The operational plan and its integrated portfolio structure, consisting of strategic pillars and corresponding tasks or work packages, provide the following advantages:

- Breaking down the scope of the IT strategy implementation into manageable WPs and activities
- Making the whole strategy implementation process manageable and measurable
- Using tasks/WPs as planning, management and controlling units
- Allowing for a structured planning and implementation on a collaborative basis
- Enabling agility and flexible adaptation of support measures/tasks to changing market conditions and priorities without having to change the whole strategy
- Enabling parallel implementation of tasks
- Promoting continuous improvement of the strategy implementation process (plan, do, check, act)
- Facilitating effective communication and coordination

The operational plan has been further complemented with a detailed timetable and project schedule in MS Project (see chapter 5.2). The following chart illustrated these two key elements of the operational plan for the Kosovo IT Strategy:

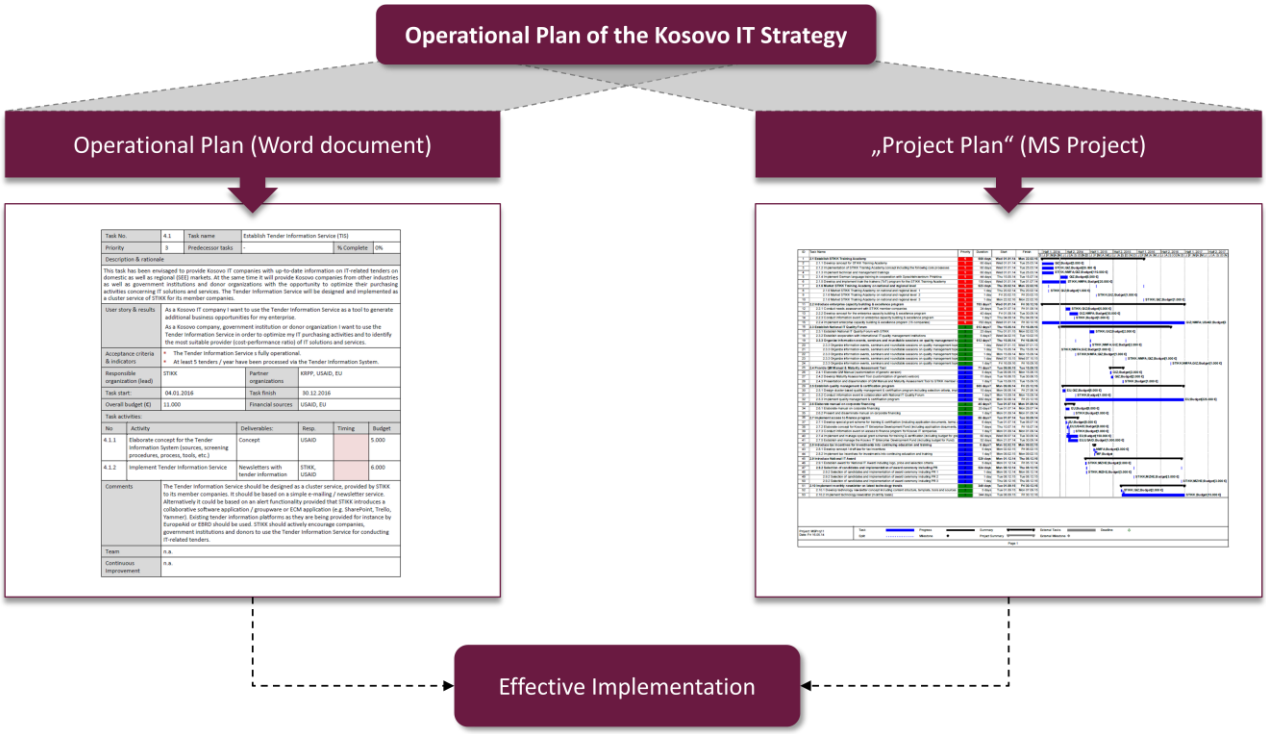


Figure 40: Key elements of the operational plan of the Kosovo IT Strategy

Furthermore, the structure of the operational plan has also been integrated into the SharePoint of the Kosovo IT Strategy (see chapter 5.8) in order to support a smooth and effective implementation.

In summary, one could state that the operational plan is the core instrument and roadmap for the implementation of the Kosovo IT Strategy.

In the following section we will present the operational plan for the implementation of the Kosovo IT Strategy according to the strategic pillars and the above-mentioned structure.

5.1.1. Strategic Pillar 1: IT Promotion Policy

5.1.1.1. Establish Ministry of Information and Communications Technology

Task No.	1.1	Task name	Establish Ministry of Information and Communications Technology		
Priority	3	Predecessor tasks	-	% Complete	0%
Description & rationale					
The mission of the Ministry of Information and Communications Technology (ICT Ministry) is to promote digital transformation in Kosovo and supporting Kosovo in becoming a knowledge-based economy. The primary objectives of the ICT Ministry are to develop a vibrant digital ecosystem in Kosovo and to foster the IT industry in becoming the main driver for economic growth, employment and innovation. The ICT Ministry of Kosovo will cover inter alia the following key functions and topics: ▪ Digital transformation					

Task No.	1.1	Task name	Establish Ministry of Information and Communications Technology

- ICT strategy
- ICT policy
- ICT infrastructure
- ICT sector promotion
- Digital citizenship & e-government
- Digital skills development & HR excellence
- Cyber security
- National CIO & ICT advisory for the government
- ICT innovation
- International cooperation (ICT)

In close cooperation with the other key stakeholders, the ICT Ministry of Kosovo will be responsible for the implementation of the Kosovo IT Strategy and will therefore actively participate in the corresponding organizational structures (e.g. Steering Committee).

In order to strengthen the operational capabilities of the Kosovo ICT Ministry, this task also includes introduction of a National CIO within the Ministry as well as the establishment of a National IT Promotion Agency. While the National CIO will focus on topics related to public IT management and e-government the main function of the National IT Promotion Agency will be to promote the development of the Kosovo IT industry through concrete support programs and measures (IT sector promotion).

User story & results	As a Kosovo IT industry stakeholder I want to cooperate with the Ministry of Information and Communications Technology in order to promote digital transformation and the development of the Kosovo IT industry.
Acceptance criteria & indicators	▪ The ICT Ministry of Kosovo is fully operational.

Responsible organization (lead)	ZKM	Partner organizations	STIKK, MTI, MZHE, MAP, MF, EU, USAID, NMFA, GIZ
Task start:	n.a.	Task finish	n.a.
Overall budget (€)	n.a.	Financial sources	GoK

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
1.1.1	Develop implementation concept for the ICT Ministry of Kosovo (feasibility study, analysis of international best practices, organizational structure, functions, budget, etc.)	Implementation concept	MZHE	n.a.	n.a.
1.1.2	Elaborate legislative proposal for the establishment of the ICT Ministry of Kosovo	Legislative proposal	MZHE	n.a.	n.a.
1.1.3	Adopt decree / law on the establishment of the ICT Ministry of Kosovo	Decree / law	ZKM	n.a.	n.a.
1.1.4	Establish ICT Ministry of Kosovo	Organization chart	ZKM	n.a.	n.a.
1.1.5	Introduce position of National CIO within the ICT Ministry of Kosovo	Job description	ZKM	n.a.	n.a.
1.1.6	Establish National IT Promotion Agency	Organization chart	ZKM	n.a.	n.a.

Comments	For budgetary reasons it might be advisable to establish the National IT Promotion Agency at a later stage when the ICT Ministry of Kosovo is fully operational. In order to increase operational efficiency and customer orientation of the National IT Promotion Agency it is recommendable to organize it in the form of a public enterprise or a public private partnership (PPP). Best practice examples:

Task No.	1.1	Task name	Establish Ministry of Information and Communications Technology
	Ministry of ICT of Colombia: http://www.mintic.gov.co/portal/604/w3-channel.html Ministry of Communications and Information Technology of Egypt: http://www.mcit.gov.eg Germany: National CIO: http://www.cio.bund.de USA: CIO.GOV: https://cio.gov/ Innovation Agency for ICT and Media of Baden-Wuerttemberg: http://innovation.mfg.de/en ITIDA Egypt: http://www.itida.gov.eg National IT Industry Promotion Agency: https://www.nipa.kr/eng/main.it Infocomm Development Authority of Singapore: http://www.ida.gov.sg		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.1.2. Establish National Committee on Digital Transformation

Task No.	1.2	Task name	Establish National Committee on Digital Transformation		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
Digital transformation and the corresponding technologies such as mobile apps, social media, big data and cloud computing have a major impact on Kosovo's economy and society. Digital technologies are changing the way how organizations and people work, communicate and cooperate. On the corporate level digital tools have a pervasive influence on all areas of an enterprise, from impact on customer experience to enhanced productivity in operations and improvement in the way people collaborate within an organization. For Kosovo, digital transformation provides a broad range of opportunities in terms of economic development and innovation. At the same time it represents a major challenge because it impacts not only industry structures but also government institutions, the academia and the society at large. In order to use the opportunities provided by digital transformation and manage its challenges, a National Committee on Digital Transformation will be established, including all relevant stakeholders. This Committee will serve as the central platform for cooperation and coordination with regards to promoting digital transformation in Kosovo.					
User story & results	As a Kosovo IT industry stakeholder I want to use the National Committee on Digital Transformation to promote digital transformation in Kosovo.				
Acceptance criteria & indicators	▪ The National Committee on Digital Transformation has been established.				
Responsible organization (lead)	ZKM	Partner organizations	STIKK, MTI, UNIV, MASHT, ASHI, KIPA, , MF, EU, USAID, SDC, NMFA, GIZ		
Task start:	03.11.2016	Task finish	30.12.2018		
Overall budget (€)	16,000	Financial sources	MZHE		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
1.1.1	Identify committee members	List of committee members	MZHE	3.11.2016	1,000
1.1.2	Establish National Committee on Digital Transformation and identify focus topics (e.g. industry 4.0, e-health, e-energy, etc.)	Statute; list of committee members	MZHE	4.11.-6.11.2016	3,000
1.2.3	Organize meetings / workshops of National Committee on Digital	Program; protocols	STIKK, MZHE	8.11.2017-8.11.2018	2,000

Task No.	1.2	Task name	Establish National Committee on Digital Transformation			
	Transformation on an annual basis					
1.2.4	Implement awareness raising campaign on digital transformation and the strategic importance of the Kosovo IT industry		Program; presentations	STIKK	3.11.-14.11.2016	10,000
1.2.5	Place the IT industry on national priority list		National priority list	ZKM	7.11.2016-30.12.2018	-
Comments	This task needs to be closely coordinated with Task 8.6 Competence Centers for appied R&D in strategic IT topics. It might be advisable to organize a National IT Conference or Digital Transformation Conference on an annual basis to ensure public interest and support. Best practice examples: Germany: National IT Summit: http://www.it-gipfel.de Colombia Digital: http://en.colombiadigital.net					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.1.3. Implement capacity building on IT sector promotion

Task No.	1.3	Task name	Implement capacity building on IT sector promotion		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
The main goal of this task is to create awareness on the strategic importance of the IT industry for Kosovo and to provide relevant stakeholders with the necessary know-how, methodologies and tools for effective IT sector promotion and for introducing a comprehensive IT policy. In addition to that training and capacity building on IT sector promotion will also facilitate the implementation of the Kosovo IT strategy as well as change management within the IT sector. The target group for the capacity building includes primarily public actors, STIKK and the academia.					
User story & results	As a Kosovo IT industry stakeholder I want to use the capacity building and training so that I can promote the IT sector in Kosovo more effectively.				
Acceptance criteria & indicators	▪ Training material and case studies on IT sector promotion have been developed and approved by STIKK. ▪ At least 15 key stakeholders (persons) have successfully completed the capacity building on IT sector promotion.				
Responsible organization (lead)	STIKK	Partner organizations	ZKM, MTI, KIESA, MZHE, KIPA, KRPP, ASHI, MASHT, UNIV, MF, MKRS, MPMS, NMFA, EU, USAID, SDC, GIZ, Development Banks		
Task start:	01.12.2016	Task finish	11.12.2016		
Overall budget (€)	8,000	Financial sources	GIZ		
Task activities:					

No	Activity	Deliverables:	Resp.	Timing	Budget
1.3.1	Develop training concept and material for capacity building in IT sector promotion	Training concept; training material	GIZ	1.12.-4.12.2016	4,000
1.3.2	Conduct training workshop (3 days) on IT	Program; results of	GIZ	8.12.-	4,000

Task No.	1.3	Task name	Implement capacity building on IT sector promotion			
	sector promotion		group works / assignments; list of participants		11.12.2016	
1.3.3	Provide manual and toolbox on IT sector promotion		Manual and toolbox	GIZ	1.12.2016	-
Comments	The capacity building and training on IT sector promotion should cover the following topics: IT industry classification and structural characteristics, importance of the IT industry for economic development, methodologies, IT strategy, clusters and networks, IT education & training, export promotion, domestic market development, public procurement, entrepreneurship & innovation, industry collaboration, international best practice examples and case studies. The training should include presentations, practical examples, group discussions, group work and assignments.					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.1.4. Promote digital ecosystem

Task No.	1.4	Task name	Promote digital ecosystem		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task implies a set of specialized measures to enhance the digital (IT industry) ecosystem and to establish the necessary framework conditions for entrepreneurship, innovation and IT sector growth.					
User story & results	As a Kosovo IT company I want to work in an efficient and dynamic digital (IT industry) ecosystem so that I can further develop and expand my enterprise.				
Acceptance criteria & indicators	▪ The measures to promote the digital ecosystem have been implemented. ▪ At least 75% of the IT companies interviewed, rate the digital ecosystem with “good”.				
Responsible organization (lead)	MTI	Partner organizations	MASHT, MTI, KIESA, MZHE, MF, MPMS, ASHI, ZKM, EU, USAID		
Task start:	01.01.2017	Task finish	30.12.2018		
Overall budget (€)	54,000	Financial sources			

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
1.4.1	Design and implement measures to protect Intellectual Property Rights (IPR) (particularly IPR enforcement)	Decrees / laws; evaluation reports, international rankings	MZHE	1.01.-11.02.2017	30,000
1.4.2	Design and implement measures to stimulate the supply of venture capital (e.g. tax incentives)	Decree	MF	1.01.-30.01.2017	9,000
1.4.3	Implement at least 3 information events on open source software (OSS) for IT companies, universities and public institutions	Program; presentations; list of participants	STIKK	14.01.2017 - 14.01.2018	9,000
1.4.4	Introduce educational leave (3 days / year) to promote continuing education	Decree / law	MASHT	14.01.-13.02.2017	2,000

Task No.	1.4	Task name	Promote digital ecosystem			
	and professional training					
1.4.5	Promote the availability of public company data		Decree / law	ASHI	14.01.2017 - 30.12.2018	3,000
Comments	Best practice example: Open Source Advisory Center for SMEs: http://www.opensource-bw.de Educational leave: http://www.saarland.de/dokumente/thema_bildung/BU_BF_Laenderuebersicht_2011.pdf					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.1.5. Introduce income tax incentives for certified software developers

Task No.	1.5	Task name	Introduce income tax incentives for certified software developers		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
The rationale behind this task is to increase the attractiveness of the software industry for highly qualified IT experts and to avoid brain drain.					
User story & results	As a Kosovo IT company I want to use income tax incentives so that I can attract and retain highly qualified IT experts.				
Acceptance criteria & indicators	▪ The decree on income tax incentives for certified software developers has been adopted.				
Responsible organization (lead)	MF	Partner organizations	STIKK, MZHE		
Task start:	01.01.2017	Task finish	05.03.2017		
Overall budget (€)	3,000	Financial sources	MF		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
1.5.1	Elaborate draft decree on income tax incentives for certified software developers	Draft decree	MF	1.01.-8.01.2017	3,000
1.5.2	Adopt decree on income tax incentives for certified software developers	Decree	MF	9.01.-5.03.2017	-
Comments	Best practice example: In 2001 the Romanian government suspended income taxes on salaries for software companies which employ certified programmers. This has proven to be an effective tool to attract qualified staff to local software companies and to tackle the problem of brain drain.				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.1.6. Reform public IT procurement system

Task No.	1.6	Task name	Reform public IT procurement system		
Priority	2	Predecessor tasks	-	% Complete	0%

Description & rationale
The public sector is the principal customer of the IT industry on the domestic market and accordingly Kosovo IT companies are heavily dependent on public sector demand. The intention of this task is to reform the public IT procurement system in order to increase transparency and efficiency and thereby increasing business opportunities and market share of local IT companies.

User story & results	As a Kosovo IT industry stakeholder I want to use the reform to make the public IT procurement system more transparent and effective		
Acceptance criteria & indicators	▪ The reform of the public IT procurement system has been implemented. ▪ 75% of the IT companies interviewed rate the reformed procurement system with "good".		
Responsible organization (lead)	KRPP	Partner organizations	STIKK, MF, KIPA, ASHI, EU, USAID, World Bank
Task start:	15.01.2017	Task finish	24.04.2017
Overall budget (€)	30,000	Financial sources	EU, USAID

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
1.6.1	Revise tender procedures for public IT procurement	Revised tender procedures	World Bank	15.01.-5.02.2017	15,000
1.6.2	Provide capacity building on IT procurement for public servants	Program; training material; list of participants	EU	6.02.-24.04.2017	15,000

Comments	Concerning the revision of tender procedures for public IT procurement, the following aspects need to be taken into consideration: ▪ Interoperability ▪ Open Source Software (OSS) ▪ Inclusion of local IT companies (local content / local sourcing) / preferential treatment for local companies ▪ Quality standards Best practice example: Promoting Local IT Sector Development Through Public Procurement: http://unctad.org/en/PublicationsLibrary/dtlstict2012d5_en.pdf
Team	n.a.
Continuous Improvement	n.a.

5.1.1.7. Introduce standards and methodologies for IT management in the public sector

Task No.	1.7	Task name	Introduce standards and methodologies for IT management in the public sector		
Priority	2	Predecessor tasks	-	% Complete	0%

Task No.	1.7	Task name	Introduce standards and methodologies for IT management in the public sector

Description & rationale

The main goal of this task is to improve efficiency, interoperability and transparency in public sector IT management by introducing internationally recognized standards and methodologies. These IT standards and methodologies should include inter alia:

- PRINCE2
- PMI / PMP
- ITIL
- COBIT
- V-Model
- TOGAF
- BPMN 2.0

User story & results	As a Kosovo IT industry stakeholder I want to use standards and methodologies so that I can improve efficiency, interoperability and transparency in public sector IT management
Acceptance criteria & indicators	▪ At least 30 civil servants have been trained in internationally recognized IT standards and methodologies until the end of 2018. ▪ At least 30 employees of Kosovo IT companies have been trained in internationally recognized IT standards and methodologies until the end of 2018. ▪ At least 60% of all public IT projects have been implemented according to internationally recognized IT standards and methodologies during the period 2016 – 2018.

Responsible organization (lead)	ASHI	Partner organizations	KRPP, KIPA, MZHE, STIKK, EU, USAID, NMFA, GIZ
Task start:	01.10.2016	Task finish	30.12.2018
Overall budget (€)	47,000	Financial sources	EU, USAID

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
1.7.1	Identify relevant IT standards and methodologies (description of standard, scope, evaluation, etc.)	Report	ASHI	1.10.-7.10.2016	5,000
1.7.2	Elaborate proposal for capacity building and training in standards and methodologies for public sector IT management	Proposal	ASHI	8.10.-23.10.2016	12,000
1.7.3	Conduct capacity building and training in IT standards and methodologies for civil servants (at least 30 persons)	Training material; list of participants	STIKK (STIKK Education) / ASHI	27.10.2016 - 30.12.2018	15,000
1.7.4	Conduct capacity building and training in IT standards and methodologies for Kosovo IT companies (at least 30 people)	Training material; list of participants	STIKK (STIKK Education)	24.10.2016 - 29.12.2018	15,000

Comments	Best practice example: National CIO: IT Standards and methodologies: http://www.cio.bund.de/Web/DE/Architekturen-und-Standards/architekturen_standards_node.html
Team	n.a.
Continuous Improvement	n.a.

5.1.1.8. Reduce customs tariffs and VAT for IT equipment

Task No.	1.8	Task name	Reduce customs tariffs and VAT for IT equipment		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
At the current stage, customs tariffs and VAT for IT equipment in Kosovo are disproportionately high. Consequently this task is directed at reducing customs tariffs and VAT for IT equipment in order to strengthen the competitive position of the Kosovo IT industry. In addition to that this task will also promote ICT usage in Kosovo, making the purchase of IT equipment more affordable.					
User story & results	As a Kosovo IT industry stakeholder I want to use the reduction of customs tariffs and VAT for IT equipment to reduce costs and to strengthen the competitive position of my company.				
Acceptance criteria & indicators	▪ The decree / law on reducing customs tariffs and VAT for IT equipment has been adopted.				
Responsible organization (lead)	MF	Partner organizations	STIKK, MTI, KIESA, MZHE, EU		
Task start:	01.01.2015	Task finish	28.04.2015		
Overall budget (€)	n.a.	Financial sources	n.a.		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
1.8.1	Elaborate legislative proposal for the reduction of customs tariffs and VAT for IT equipment	Legislative proposal	MF	1.01.-31.03.2015	3,000
1.8.2	Adopt decree / law on the reduction of customs tariffs and VAT for IT equipment	Decree / law	MF	1.04.-28.04.2015	-

Comments	-
Team	n.a.
Continuous Improvement	n.a.

5.1.1.9. Establish National IT Quality Policy

Task No.	1.9	Task name	Establish National IT Quality Policy		
Priority	3	Predecessor tasks	-	% Complete	0%
Description & rationale					
In the framework of the Kosovo IT Strategy, quality and company excellence have been identified as the key differentiators and core brand values of the Kosovo IT industry. Quality will have a major impact on the competitiveness of the Kosovo IT industry as well as on its international branding and positioning. Therefore a National IT Quality Policy will be implemented which will serve as the central element for planning, implementing and coordinating all measures related to the promotion of quality and company excellence in the Kosovo IT industry.					
User story & results	As a Kosovo IT industry stakeholder I want to use the National IT Quality Policy in order to promote quality and company excellence in the Kosovo IT industry.				
Acceptance criteria & indicators	▪ The National IT Quality Policy has been developed and approved by STIKK.				

Task No.	1.9	Task name	Establish National IT Quality Policy		
Responsible organization (lead)	STIKK		Partner organizations	KIESA, MTI, MZHE, MASHT, EU, USAID, NMFA, GIZ	
Task start:	02.03.2017		Task finish	30.12.2018	
Overall budget (€)	113,000		Financial sources	EU, USAID	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
1.9.1	Establishment of a joint working group or forum including all relevant stakeholders of the IT industry in order to elaborate National IT Quality Policy	Working group member list	STIKK	2.03.-4.03.2017	1,000
1.9.2	Elaborate National IT Quality Policy (analysis, objectives, measures, implementation, monitoring & evaluation)	National IT Quality Policy	STIKK	5.03.2017-30.12.2018	12,000
1.9.3	Implement National IT Quality Policy	Evaluation reports	STIKK	1.10.2017-30.12.2018	100,000
Comments	The National IT Quality Policy should cover the following key topics ▪ Quality infrastructure (standards, certification, accreditation) ▪ Legal framework ▪ International integration ▪ Education and training ▪ Information and communication ▪ Quality funding ▪ Quality culture				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.1.10. Introduce IT Industry Barometer

Task No.	1.10	Task name	Introduce IT Industry Barometer		
Priority	1	Predecessor tasks	-	% Complete	30%
Description & rationale					
The introduction of the Kosovo IT Industry Barometer pursues the following goals: ▪ Providing an effective and easy to use tool for monitoring and evaluating the performance of the Kosovo IT industry ▪ Obtaining accurate statistical information on the IT industry which can be used for economic planning, benchmarking and policy advocacy ▪ Obtain information on human resources (HR) and export activities in the Kosovo IT industry ▪ Identifying relevant trends in the IT industry (“early warning system”) ▪ Gathering data to assess the strategic importance and economic impact of the IT industry ▪ Better understanding the specific problems and needs of Kosovo IT companies ▪ Obtaining data for IT policy design and targeted sector promotion.					
User story & results	As a Kosovo IT industry stakeholder I want to use the IT Industry Barometer so that I can monitor and evaluate the performance of the sector and to better understand the specific problems and needs of Kosovo IT companies.				

Task No.	1.10	Task name	Introduce IT Industry Barometer
Acceptance criteria & indicators	▪ The Kosovo IT Industry Barometer is being implemented on an annual basis.		
Responsible organization (lead)	STIKK	Partner organizations	KIESA, MTI, MZHE, NMFA, GIZ
Task start:	01.01.2016	Task finish	17.05.2018
Overall budget (€)	20,000	Financial sources	GIZ

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
1.10.1	Customize the IT Industry Barometer methodology and tool provided by GIZ to the specific needs of the Kosovo IT industry	Questionnaire	GIZ	01.01.-13.06.2016	2,000
1.10.2	Implement the Kosovo IT Industry Barometer on an annual basis	Kosovo IT Industry Barometer report and presentation	STIKK	21.04.2016 - 17.05.2018	15,000
1.10.3	Conduct press conference to present the results of the Kosovo IT Industry Barometer on an annual basis	Presentation	STIKK	15.04-16.04.2016	3.000

Comments	The IT Industry Barometer will also serve as an important tool for monitoring and evaluating the implementation of the Kosovo IT Strategy. Best practice example: Bulgarian IT Industry Barometer: http://www.basscom.org/RapidASPEditor/MyUploadDocs/BASSCOM_BITIB__2012.pdf
Team	n.a.
Continuous Improvement	n.a.

5.1.1.11. Implement initiative “IT 4 Social Inclusion” (CSR)

Task No.	1.11	Task name	Implement initiative “IT 4 Social Inclusion” (CSR)		
Priority	3	Predecessor tasks	-	% Complete	0%
Description & rationale					
The main objective of this task is to support social inclusion in Kosovo through IT. This implies the implementation of CSR activities by the Kosovo IT industry and the provision of job opportunities for disabled persons and disadvantaged groups of society. The initiative “IT 4 Social Inclusion” demonstrates the commitment of the Kosovo IT industry to social responsibility and civil society.					
User story & results	As a Kosovo IT company I want to participate in the initiative “IT 4 Social Inclusion” so that I can contribute to social inclusion and civil society in Kosovo.				
Acceptance criteria & indicators	▪ The initiative “IT 4 Social Inclusion” has been successfully implemented.				
Responsible organization (lead)	STIKK	Partner organizations	IT companies, MPMS, EU, USAID, NMFA, SDC, GIZ		
Task start:	01.05.2017	Task finish	19.06.2017		
Overall budget (€)	33,000	Financial sources	IT companies, MPMS, EU, USAID, NMFA, SDC, GIZ		

Task No.	1.11	Task name	Implement initiative “IT 4 Social Inclusion” (CSR)		
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
1.11.1	Define and implement joint CSR activities on STIKK level (donations, trainings for disabled persons, etc.)	Press release	STIKK	1.05.-5.05.2017	-
1.11.2	Elaborate proposal on how IT solutions could empower the elderly and people with disabilities (e.g. ambient assisted living) and serve marginalized and remote communities	Proposal	STIKK	6.05.-8.05.2017	3,000
1.11.3	Design and implement special job integration program for persons with autism, including training and employment	Report	STIKK	11.05.-19.06.2017	30,000
Comments	The Kosovo IT industry recognizes the large potential of people with autism with regards to pattern recognition, precision, logical and analytical thinking and an affinity to identify errors. Therefore STIKK and its member companies will seek to create job opportunities for autistic people, particularly in the area of software testing and will assist them with special trainings and coaching. For this purpose, STIKK will closely cooperate with the National Association of Autism in Kosovo. Best practice examples: Auticon: http://auticon.de/en				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.2. Strategic Pillar 2: Company Excellence & Quality

5.1.2.1. Establish STIKK Education

Task No.	2.1	Task name	Establish STIKK Education		
Priority	1	Predecessor tasks	-	% Complete	30%
Description & rationale					

The IT industry is a knowledge- and skill-intensive industry thus making skills-development and training a key topic for Kosovo IT companies.

The main objectives of the STIKK Education are as follows:

- Identifying the specific training needs of STIKK member companies
- Developing a specialized training program which is customized to the specific needs and requirements of STIKK member companies
- Ensuring the sustainability and affordability of the training program
- Providing specialized technical trainings for member companies
- Providing specialized management trainings for member companies
- Serving as a One-Stop-Shop for learning and qualification
- Promoting skills-development, organizational learning and company excellence in the Kosovo IT industry (“Cluster of Excellence”)

Task No.	2.1	Task name	Establish STIKK Education
User story & results	As a Kosovo IT company I want to use the services of the STIKK Education in order to improve the technical and managerial capabilities of my company.		
Acceptance criteria & indicators	▪ The STIKK Education has been established and is fully operational ▪ At least 6 trainings / year are being implemented with at least 15 participants / training ▪ At least 75% of training participants evaluate the trainings with "good" or "excellent" ▪ At least 3 trainers qualified for selected training topics (train the trainers program)		
Responsible organization (lead)	STIKK	Partner organizations	Universities, NMFA, GIZ, USAID, SDC, EU, Dutch Development Cooperation (DDC)
Task start:	01.01.2016	Task finish	22.02.2018
Overall budget (€)	161,000	Financial sources	NMFA, GIZ, USAID, SDC, EU, DDC

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
2.1.1	Develop concept for STIKK Education	Concept for STIKK Education	GIZ	1.01.-25.03.2016	3,000
2.1.2	Implementation of STIKK Education concept including the following core processes: ▪ Definition of IT qualification profiles ▪ Training needs assessment ▪ Development of training program	IT qualification profiles, training needs assessment, training program	STIKK, GIZ	26.03.-30.12.2016	20,000
2.1.3	Implement technical and management trainings	Training program, training material, evaluation forms	STIKK, NMFA, GIZ	26.03.-30.12.2016	110.000
2.1.4	Implement German language training in cooperation with Sprachlehrzentrum Prishtina	Training program, evaluation reports	GIZ	3.11.2016-30.10.2017	5.000
2.1.5	Develop and implement train the trainers (ToT) program for the STIKK Education	3 trainers qualified / certified	STIKK, NMFA	1.01.-30.12.2017	20.000
2.1.6	Market STIKK Education on national and regional level	Marketing material	STIKK, GIZ	20.02.2016 /20.02.2017/22.02.2018	3.000

Comments	The STIKK Education should also provide online training / virtual training sessions via LiveMeeting, WebEx, adobe connect or other tools; strategic alliances should be established with universities in Kosovo as well as with providers of Massive Open Online Courses (MOOC) such as Coursera, edX or Open HPI; training courses should be also open to external IT companies as well as to the academia; technology and market trends identified in the framework of task 3.1 "Implement Export Information Service" need to be reflected in the training program. Please note: The concept of the STIKK Education is based on the principles of subsidiarity and sustainability in order to avoid duplication of training activities or crowding out effects.
Team	n.a.
Continuous Improvement	n.a.

5.1.2.2. Introduce enterprise capacity building & excellence program

Task No.	2.2	Task name	Introduce enterprise capacity building & excellence program		
Priority	1	Predecessor tasks	-	% Complete	0%

Description & rationale
Company excellence is a key element of the Kosovo National IT Strategy. Therefore, this task will support Kosovo IT companies to further develop their capacities and to increase their international competitiveness. The enterprise capacity building & excellence program will provide a combination of specialized training, coaching and consulting services in focus areas such as operations, finance, quality, marketing & sales, etc. The program will focus on the management staff of selected IT enterprises

User story & results	As a Kosovo IT company I want to use the enterprise capacity building & excellence program so that I can improve my international competitiveness		
Acceptance criteria & indicators	▪ The enterprise capacity building & excellence program is fully operational ▪ At least 10 Kosovo IT companies have successfully completed the enterprise capacity building & excellence program		
Responsible organization (lead)	STIKK	Partner organizations	MZHE, MTI, GIZ, NMFA, SDC, USAID, EU
Task start:	1.12.2016	Task finish	30.12.2018
Overall budget (€)	336,000	Financial sources	GIZ, NMFA, SDC, USAID, EU

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
2.2.1	Conduct needs assessment with STIKK member companies	Needs assessment	STIKK, GIZ	1.12.2016-27.02.2017	5,000
2.2.2	Develop concept for the enterprise capacity building & excellence program including selection criteria, focus areas, methods and tools and delivery model. Focus areas should include: ▪ Corporate strategy ▪ Managing people (HR management) ▪ Finance & accounting ▪ Operations (organization, project management, process management) ▪ Quality management ▪ IT management ▪ Entrepreneurship & innovation ▪ Marketing & sales	Needs assessment, list with IT enterprises enrolled in the program	GIZ, NMFA	2.03.-28.04.2017	30,000
2.2.3	Conduct information event on enterprise capacity building & excellence program	presentation	STIKK	15.05.2017	1,000
2.2.4	Implement enterprise capacity building & excellence program (15 companies)	Consulting reports, evaluation reports	GIZ, NMFA, USAID	1.06.2017-30.12.2018	300,000

Comments	The enterprise capacity building & excellence program will provide a combination of specialized training, coaching and consulting services which will be delivered cluster-based as well as individually. The program should be managed by STIKK in order to ensure close coordination with the activities of the STIKK Education. Completing the program would take companies approximately 1 year. Calculations are based on a first cohort of 15 selected companies (pilot project). Once the enterprise capacity building & excellence

	program has been implemented it can be extended to other Kosovo IT companies in order to increase leverage and impact of the program
Team	n.a.
Continuous Improvement	n.a.

5.1.2.3. Establish National IT Quality Forum

Task No.	2.3	Task name	Establish National IT Quality Forum		
Priority	3	Predecessor tasks	-	% Complete	0%

Description & rationale

Quality is a key element and differentiator within the Kosovo National IT Strategy. The National IT Quality Forum within STIKK will:

- Provide the platform for developing a National IT Quality Policy
- Raising the awareness on the importance of quality management in the IT industry
- Helping Kosovo IT industry stakeholders understand global best practices by collaborating with international quality institutions
- Providing guidance to Kosovo IT companies on how to introduce quality management
- Exchanging experiences and lessons learnt on quality management
- Keeping STIKK member companies abreast of the latest global trends in quality management
- Providing information on quality-related topics such as methodologies, tools, assessment, certification, trainings, IT governance and software architectures through joint workshops, events and roundtables

User story & results	As a Kosovo IT industry stakeholder I want to use the IT Quality Forum to obtain information on quality management and to promote company excellence and quality in the Kosovo IT industry
Acceptance criteria & indicators	▪ The National IT Quality Forum has been established within STIKK ▪ MoUs with at least 3 international IT quality management institutions signed ▪ At least 3 information events, seminars or roundtable sessions on quality management topics conducted / year

Responsible organization (lead)	STIKK	Partner organizations	Universities, Ministry of Economic Development, IPAK, Donors
Task start:	1.01.2017	Task finish	16.09.2018
Overall budget (€)	12,000	Financial sources	EU, USAID, NMFA, GIZ, SDC

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
2.3.1	Establish National IT Quality Forum with STIKK	Organizational concept (members, responsibilities, program)	STIKK, GIZ	01.01.2017 - 02.02.2017	2,000
2.3.2	Establish cooperation with international IT quality management institutions	MoUs	STIKK, GIZ	04.02-10.02.2017	3,000
2.3.3	Organize information events, seminars and roundtable sessions on quality management topics in close cooperation with the STIKK Education	Programs and presentations	STIKK, NMFA, GIZ	7.01.2017 /15.05.2017 /15.09.2017 /	7,000

Task No.	2.3	Task name	Establish National IT Quality Forum		
				7.01.2018 / 16.05.2018 / 16.09.2018	
Comments	Possible international cooperation partners: Software Engineering Institute (SEI) of Carnegie Mellon University, ISTQB, ISO/IEC JTC1 Joint Technical Committee. Best practice example: Quality Forum of NASSCOM: http://www.nasscom.in/overview-4.				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.2.4. Provide QM Manual & Maturity Assessment Tool

Task No.	2.4	Task name	Provide QM Manual & Maturity Assessment Tool		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task will equip Kosovo IT companies with a tool for assessing their maturity in terms of quality management, while the manual will provide them with an overview on relevant certification schemes and methodologies in the IT industry as well as with a guideline on how to introduce and maintain quality management in their enterprises					
User story & results	As a Kosovo IT company I want to use the QM Manual and the Maturity Assessment Tool in order to introduce quality management in my company				
Acceptance criteria & indicators	▪ The QM Manual has been elaborated ▪ The Maturity Assessment Tool has been developed ▪ The QM Manual and the Maturity Assessment Tool have been disseminated to STIKK member companies				
Responsible organization (lead)	STIKK	Partner organizations	Universities, MZHE, KIESA, Donors		
Task start:	09.06.2017	Task finish	15.09.2017		
Overall budget (€)	5,000	Financial sources	GIZ		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
2.4.1	Elaborate QM Manual (customization of generic version)	QM Manual	GIZ	09.06.-15.06.2017	2,000
2.4.2	Develop Maturity Assessment Tool (customization of generic version)	Maturity Assessment Tool	GIZ	16.06.-30.06.2017	2,000
2.4.3	Presentation and dissemination of QM Manual and Maturity Assessment Tool to STIKK member companies	Presentation	STIKK	15.09.2017	1,000

Comments	The QM Manual should also take into consideration agile methodologies as well as software testing
Team	n.a.

Task No.	2.4	Task name	Provide QM Manual & Maturity Assessment Tool
Continuous Improvement	n.a.		

5.1.2.5. Establish quality management & certification program

Task No.	2.5	Task name	Establish quality management & certification program		
Priority	2	Predecessor tasks	2.3.1 National IT Quality Forum	% Complete	0%

Description & rationale
The cluster-based approach of this program will allow Kosovo IT companies to obtain quality management certification according to international standards at an affordable price. The program will include training, consulting, assessment and certification as well as the corresponding financial support scheme

User story & results	As a Kosovo IT company I want to use the quality management & certification program in order to introduce QM into my company and to obtain certification according to international standards
Acceptance criteria & indicators	▪ The quality management & certification program has been established ▪ At least 15 Kosovo IT companies have been certified according to ISO, CMMI or another internationally recognized quality certification

Responsible organization (lead)	STIKK	Partner organizations	MZHE, EU, USAID, GIZ
Task start:	3.02.2017	Task finish	30.12.2018
Overall budget (€)	234,000	Financial sources	EU, USAID

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
2.5.1	Design cluster-based quality management & certification program including selection criteria, implementation model and financial support scheme	Program concept	EU, GIZ	3.02.-23.02.2017	8,000
2.5.2	Conduct information event in collaboration with National IT Quality Forum	Presentation	STIKK	15.09.2017	1,000
2.5.3	Implement quality management & certification program	Consulting reports, certification	EU, GIZ	24.02.2017 - 30.12.2018	225,000

Comments	The cluster-based implementation model of the program allows for a cost-effective certification by bundling resources and using synergies. Best practice example: MPS.BR (Brazilian Software Process Improvement Program). The quality management & certification program should be managed and coordinated by the STIKK Education.
Team	n.a.
Continuous Improvement	n.a.

5.1.2.6. Elaborate manual on corporate financing

Task No.	2.6	Task name	Elaborate manual on corporate financing		
Priority	3	Predecessor tasks	-	% Complete	0%
Description & rationale					
The manual on corporate financing will provide Kosovo IT companies with a guideline on corporate financing including a list of financial support facilities and relevant institutions					
User story & results	As a Kosovo IT company I want to use the manual on corporate financing in order to find relevant information on how to obtain financing for my enterprise				
Acceptance criteria & indicators	▪ The manual on corporate financing has been elaborated ▪ The manual on corporate financing has been disseminated to STIKK member companies				
Responsible organization (lead)	STIKK	Partner organizations	Ministry of Finance, EU		
Task start:	1.10.2016	Task finish	20.01.2017		
Overall budget (€)	9,000	Financial sources	EU		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
2.6.1	Elaborate manual on corporate financing	Manual on corporate financing	EU	1.10.-30.12.2016	8,000
2.6.2	Present and disseminate manual on corporate financing	Presentation	STIKK	20.01.2017	1,000

Comments	Close cooperation with development banks (EBRD, World Bank, KFW) is advisable
Team	n.a.
Continuous Improvement	n.a.

5.1.2.7. Implement access to finance program

Task No.	2.7	Task name	Implement access to finance program		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task will provide Kosovo IT companies with access to finance based on several key elements including: ▪ Special grants for training & certification ▪ Kosovo IT Enterprise Development Fund with special, low-interest loan schemes					
User story & results	As a Kosovo IT company I want to use the access to finance program in order to finance training and certification activities as well as business operations of my enterprise				
Acceptance criteria & indicators	▪ Special grants for training and certification are available ▪ At least 3 companies have successfully applied for special grants for training & certification ▪ The Kosovo IT Enterprise Development Fund is fully operational ▪ At least 3 companies have successfully applied for special loan schemes				
Responsible	Ministry of Finance (MF)	Partner	MTI, EU, USAID		

Task No.	2.7	Task name	Implement access to finance program		
organization (lead)			organizations		
Task start:	12.01.2017		Task finish	30.12.2018	
Overall budget (€)	1,167,000		Financial sources	EU, USAID	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
2.7.1	Develop special grant scheme for training & certification (including application documents, terms and conditions)	Product description	EU, MTI	12.01.-19.01.2017	8,000
2.7.2	Elaborate concept for Kosovo IT Enterprise Development Fund (including application documents, terms and conditions)	Concept for Kosovo IT Enterprise Development Fund	EU, USAID	20.01.-28.01.2017	8,000
2.7.3	Conduct information event on access to finance program for Kosovo IT companies	Presentation material	STIKK	29.01.2017	1,000
2.7.4	Implement and manage special grant schemes for training & certification (including budget for grants)	Application documents	EU, MTI	30.01.2017 - 30.12.2018	150,000
2.7.5	Establish and manage the Kosovo IT Enterprise Development Fund (including budget for Fund)	Application documents	EU, USAID	24.04.2017 - 30.12.2018	1,000,000
Comments	Close cooperation with development banks (EBRD, World Bank, KFW) is advisable				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.2.8. Introduce tax incentives for investments into continuing education and training

Task No.	2.8	Task name	Introduce tax incentives for investments into continuing education and training		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task will provide Kosovo IT companies with incentives to invest into continuing education and training					
User story & results	As a Kosovo IT company I want to use tax incentives so I can invest more into continuing education and training				
Acceptance criteria & indicators	▪ Tax incentives for investments into continuing education and training have been implemented				
Responsible organization (lead)	MF		Partner organizations	STIKK, NMFA, GIZ	
Task start:	02.02.2017		Task finish	29.05.2017	
Overall budget (€)	3,000		Financial sources	MF, NMFA	

Task No.	2.8	Task name	Introduce tax incentives for investments into continuing education and training

Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
2.8.1	Develop concept / draft law for tax incentives	Concept / draft	NMFA	02.02.-06.02.2017	3,000
2.8.2	Implement tax incentives for investments into continuing education and training	law / decree	Ministry of Finance	9.02.-29.05.2017	-

Comments	-
Team	n.a.
Continuous Improvement	n.a.

5.1.2.9. Introduce National IT Award

Task No.	2.9	Task name	Introduce National IT Award		
Priority	2	Predecessor tasks		% Complete	0%

Description & rationale
The National IT Award will raise the awareness of IT industry stakeholders and the public on the importance of company excellence and quality. In addition to that, the award strengthens the branding and positioning of the Kosovo IT industry

User story & results	As a Kosovo IT industry stakeholder I want to use the National IT Award to raise the awareness of the IT community and the public on the importance of company excellence and quality
Acceptance criteria & indicators	▪ At least one article or news coverage in one of Kosovo's leading media (newspaper, magazine, TV) / year.

Responsible organization (lead)	STIKK	Partner organizations	MZHE, ASHI
Task start:	01.12.2016	Task finish	08.12.2018
Overall budget (€)	11,000	Financial sources	Ministry of Economic Development

Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
2.9.1	Establish award for National IT Award including logo, price and selection criteria	Concept	STIKK, MZHE	1.12.-5.12.2016	2,000
2.9.2	Selection of candidates and implementation of award ceremony including PR	Article / news coverage	STIKK, MZHE	08.12.2016 / 08.12.2017 / 08.12.2018	9,000

Comments	The focus concerning the selection criteria for the National IT Award should be on company excellence (particularly HR management) and quality. The National IT Award should be awarded in the framework of an official event with high governmental as well as media presence. The winner should be entitled to use the National IT Award logo for marketing and promotion purposes.

Task No.	2.9	Task name	Introduce National IT Award
Team	n.a.		
Continuous Improvement	n.a.		

5.1.2.10. Implement monthly newsletter on latest technology trends

Task No.	2.10	Task name	Implement monthly newsletter on latest technology trends		
Priority	3	Predecessor tasks	-	% Complete	0%

Description & rationale
Through a monthly newsletter, Kosovo IT firms will be provided with accurate information on latest technology trends in the IT industry so that they can take informed decisions on their technology focus and corresponding business activities.

User story & results	As a Kosovo IT company I want to get access to information on latest technology trends in order to take informed decisions concerning technologies and corresponding business activities of my company
Acceptance criteria & indicators	▪ The monthly newsletter on latest technology trends has been successfully implemented

Responsible organization (lead)	STIKK	Partner organizations	Universities, NMFA, GIZ, SDC
Task start:	01.09.2017	Task finish	30.12.2018
Overall budget (€)	17,000	Financial sources	NMFA, GIZ, SDC

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
2.10.1	Develop technology newsletter concept including content structure, template, tools and sources	Technology newsletter concept	STIKK, GIZ	01.09.-07.09.2017	2,000
2.10.2	Implement technology newsletter (monthly basis)	Monthly newsletters	STIKK	08.09.2017 - 30.12.2018	15,000

Comments	A professional newsletter editing and management tool (e.g. MailChimp) should be applied and the newsletter should be designed as a STIKK service; at a later stage, the technology newsletter should be also included in the CRM system
Team	n.a.
Continuous Improvement	n.a.

5.1.3. Strategic Pillar 3: Export Promotion

5.1.3.1. Implement Export Information Service

Task No.	3.1	Task name	Implement Export Information Service		
Priority	2	Predecessor tasks	-	% Complete	40%

Description & rationale

Particularly for small and medium-sized IT/software companies from Kosovo it is difficult to obtain accurate and up to date information on potential export markets. Often they neither have the resources nor the capabilities to conduct professional market research on international markets. However, IT firms need this information for planning and implementing their export activities.

The Export Information Service (EIS) of STIKK will address this issue. The main objectives of this cluster service are:

- Providing Kosovo IT companies (particularly STIKK member companies) with detailed, accurate and up to date information on potential export markets
- Serving as a market intelligence tool for IT firms
- Keeping companies informed on latest technology as well as business trends on international markets ("early warning system")
- Providing market information for strategic planning and joint export marketing activities of STIKK (cluster marketing)

User story & results	As a Kosovo IT company I want to have access to accurate and up to date information on potential export markets (market intelligence) so that I have the necessary information for planning and implementing my company's export activities.		
Acceptance criteria & indicators	▪ The Export Information Service has been successfully implemented by STIKK ▪ At least 20 IT companies / year make use of the Export Information Service (participation in workshops, downloads of market analysis from STIKK Website / SharePoint, information requests submitted to STIKK)		
Responsible organization (lead)	STIKK	Partner organizations	IPAK, GIZ, NMFA
Task start:	01.01.2016	Task finish	30.12.2018
Overall budget (€)	30,000	Financial sources	GIZ, NMFA

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
3.1.1.	Develop concept for the EIS	EIS concept	GIZ	01.01.-28.01.2016	3,000
3.1.2.	Implement the EIS	IT market analysis for DACH, NO, UK, NL	GIZ, NMFA	01.01.14-30.12.2018	20,000
3.1.3	Develop and implement Export Customer Survey (primary research)	Questionnaire, expert database	GIZ	2.06.-31.12.2016	7,000

Comments	Primary export target markets: DACH, Norway, UK, Netherlands. IPAK and ministries should also have access to market intelligence / market analysis generated by the EIS in order to use it for export promotion activities; The B2B Export Promotion Service is closely interrelated with the Export Information Service.
Team	n.a.

Task No.	3.1	Task name	Implement Export Information Service
Continuous Improvement	n.a.		

5.1.3.2. Implement B2B Export Promotion Service

Task No.	3.2	Task name	Implement B2B Export Promotion Service		
Priority	2	Predecessor tasks	-	% Complete	40%

Description & rationale

The B2B Export Promotion Service (EPS) will be designed as a cluster service for STIKK in order to support member companies in exporting and international business development. The main objectives of the service are:

- Generate additional business opportunities and business leads for STIKK member companies
- Promote cooperation between STIKK member companies and international business partners
- Marketing and positioning of STIKK and its member firms on international target markets through direct B2B export promotion activities
- Providing market intelligence on demand structures, technical requirements and trends in target markets through the requirement profiles stated in the business leads
- Supporting potential international clients in identifying suitable cooperation partners in Kosovo and reducing search and transaction costs (One-Stop-Shop for B2B match-making)

User story & results	As a Kosovo IT company I want to use the B2B Export Promotion Service for international business development so that I can establish international business partnerships for my company and increase export sales.
Acceptance criteria & indicators	▪ The B2B Export Information Service has been successfully implemented by STIKK ▪ At least 6 international business leads / year are being generated and followed-up by STIKK member companies ▪ At least 2 contracts / year are signed by STIKK member companies based on the EPS

Responsible organization (lead)	STIKK	Partner organizations	KIESA, GIZ, NMFA, SDC, USAID, WKO, Chambers of Commerce
Task start:	01.05.2016	Task finish	30.12.2018
Overall budget (€)	45, 000	Financial sources	GIZ, NMFA

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
3.2.1	Develop concept for the EPS	EPS concept	GIZ	1.05.-9.05.2016	4,000
3.2.2	Capacity building for STIKK (service manager)	Training documents, tools	GIZ, NMFA	1.10.-28.11.2016	2,000
3.2.3	Establish a CRM system for generating and managing business leads	CRM system	GIZ, NMFA	15.10.-28.11.2016	4,000
3.2.4	Establish STIKK Cluster Promotion Fund (CPF) for financing the EPS	CPF framework agreement signed	STIKK, GIZ	1.10.-3.10.2016	1,000
3.2.5	Marketing and positioning the EPS	Marketing material	STIKK, GIZ	12.05.-31.12.2016	4,000
3.2.6	Implementing the EPS	At least 5 business leads / year	STIKK, GIZ, NMFA	12.05.2016-30.12.2018	30,000

Task No.	3.2	Task name	Implement B2B Export Promotion Service
Comments	Possible service extension for domestic market development (see pillar 4); CRM system should be based on FOSS solution / freeware to minimize costs.		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.3.3. Establish export coaching & consulting program

Task No.	3.3	Task name	Establish export coaching & consulting program		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
The export coaching & consulting program (ECCP) will provide Kosovo IT companies with capacity building and advisory services on how to increase their exports. Contrary to the Export Information Service and the B2B Export Promotion Service which are cluster-based services of STIKK, the export coaching & consulting program will be delivered individually on the enterprise level. Thus, this program will allow for a high level of customization to the specific needs of individual Kosovo IT companies.					
User story & results	As a Kosovo IT company I want to participate in the export coaching & consulting program so that I can further improve my export capabilities in order to successfully enter foreign markets.				
Acceptance criteria & indicators	▪ The export coaching & consulting program has been successfully implemented (fully operational) ▪ At least 5 Kosovo IT companies / year have successfully completed the export coaching & consulting program				
Responsible organization (lead)	STIKK, MZHE	Partner organizations	KIESA, GIZ, NMFA		
Task start:	15.01.2017	Task finish	30.12.2018		
Overall budget (€)	90,000	Financial sources	GIZ, NMFA, SDC, USAID		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
3.3.1	Develop concept for the export coaching & consulting program including methodology and tools (admission, audit, export business plan, capacity building, market access & business development)	ECCP concept	GIZ	15.01.-11.02.2017	8,000
3.3.2	Capacity building for STIKK (service manager)	Training documents, tools	STIKK, GIZ, NMFA	12.02.-25.02.2017	2,000
3.3.3	Implementing the export coaching & consulting program	Evaluation forms of IT companies	STIKK, GIZ, NMFA	26.02.2017-30.12.2018	80,000

Comments	Costs could be decreased by providing coaching and consulting services partly group-based; admission criteria need to be defined; a certain percentage of the ECCP costs should be covered by the IT companies; optionally this task could be also merged with task 2.2

Task No.	3.3	Task name	Establish export coaching & consulting program
	enterprise capacity building & excellence program		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.3.4. Develop and implement trade fair participation program

Task No.	3.4	Task name	Develop and implement trade fair participation program		
Priority	2	Predecessor tasks	-	% Complete	20%
Description & rationale					
Participation in trade fairs is an important activity for the Kosovo IT industry in terms of international branding and positioning as well as for export business development.					
User story & results	As a stakeholder of the Kosovo IT industry I want to participate in trade fairs to increase the international visibility and branding of the IT industry. As a Kosovo IT company I want to participate in relevant trade fairs so that I can conduct international business development.				
Acceptance criteria & indicators	▪ Trade fair participation program for the Kosovo IT industry has been elaborated ▪ At least 5 Kosovo IT companies have participated in at least one trade fair / year ▪ At least 2 contracts generated / trade fair				
Responsible organization (lead)	STIKK	Partner organizations	KIESA, GIZ, NMFA, SDC, USAID, EU		
Task start:	01.04.2016	Task finish	30.12.2018		
Overall budget (€)	80,000	Financial sources	IPAK, GIZ, NMFA, SDC, USAID, EU		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
3.4.1	Elaborate trade fair participation program including financing scheme	Trade fair participation program	STIKK, KIESA, GIZ	1.04.-4.04.2016	2,000
3.4.2	Implement training on trade fair management and business development	Training material	STIKK, GIZ	7.04.-14.04.2016	3,000
3.4.3	Implement trade fair participation program	Evaluation forms from trade fair participations	STIKK, KIESA	20.01.2017-30.12.2018	75,000

Comments	Selection of relevant trade fairs should reflect the strategic export markets of the Kosovo IT industry; well-balanced mixture of large-scale international trade fairs (e.g. CeBIT, GITEX) and smaller specialized trade fairs (e.g. Where IT works in Stuttgart)
Team	n.a.
Continuous Improvement	n.a.

5.1.3.5. Implement B2B match-making events

Task No.	3.5	Task name	Implement B2B mach-making events		
Priority	1	Predecessor tasks	-	% Complete	0%

Description & rationale
B2B match-making events are an important means for increasing the visibility of the Kosovo IT industry in export target markets and to generate concrete business opportunities for Kosovo IT companies. Furthermore, such events allow for the establishment of international cooperations between STIKK and foreign IT institutions.

User story & results	As a Kosovo IT company I want to participate in B2B match-making events so that I can meet with potential clients, establish international business partnerships and increase my export sales.		
Acceptance criteria & indicators	▪ At least 6 B2B match-making events have been conducted in strategic export target markets (DACH, NO, UK, NL) ▪ At least 1 B2B match-making event has been conducted in Kosovo in close cooperation with Norwegian and German partners		
Responsible organization (lead)	STIKK	Partner organizations	KIESA, NMFA, GIZ, German Embassy, SDC, WKO, USAID, EU
Task start:	1.10.2016	Task finish	5.12.2018
Overall budget (€)	54,000	Financial sources	KIESA, NMFA, GIZ, German Embassy, SDC, WKO, USAID, EU

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
3.5.1	Organize and implement at least 6 B2B match-making events	Programme, presentations, list of participants, evaluation forms	STIKK, KIESA	3.10.2016 / 1.05.2017 / 2.10.2017 / 2.05.2018 / 31.10.2018 / 5.12.2018	42,000
3.5.2	Organize and implement at least 1 B2B match-making event in Kosovo in close cooperation with Norwegian and German partners (trilateral match-making event with Norwegian, Kosovo and German companies; focus topics: e.g. e-energy, nearshoring, OSS, etc.)	Programme, presentations, list of participants, evaluation forms	STIKK, NMFA, GIZ	01.10.-10.10.2016	12,000

Comments	Option: Combination with KOSICT Conference; it is advisable to combine B2B match-making events with relevant trade fairs, summits or conferences in the export target markets
Team	n.a.
Continuous Improvement	n.a.

5.1.3.6. Organize SEE Outsourcing & Nearshoring Conference in Kosovo

Task No.	3.6	Task name	Organize SEE Outsourcing & Nearshoring Conference in Kosovo		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task is intended to position Kosovo as a leading outsourcing / nearshoring destination. The event concept should be regional (South East Europe) in order to increase the leverage and to draw more international attention and to attract more participants.					
User story & results	As a stakeholder of the Kosovo IT industry I want to participate to position and market Kosovo as a leading outsourcing destination within Europe. As a Kosovo IT company I want to participate in the SEE Outsourcing & Nearshoring Conference in order to establish international business partnerships, find potential new clients and to increase my exports.				
Acceptance criteria & indicators	▪ SEE Outsourcing & Nearshoring Conference successfully implemented ▪ At least 3 outsourcing contracts for Kosovo IT companies generated				
Responsible organization (lead)	STIKK	Partner organizations	MZHE, KIESA, NMFA, GIZ, SDC, WKO, USAID		
Task start:	01.05.2017	Task finish	22.10.2017		
Overall budget (€)	63,000	Financial sources	KIESA, GIZ, NMFA, SDC, USAID		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
3.6.1	Develop concept for SEE Outsourcing & Nearshoring Conference (program, marketing concept, financing)	Concept for conference	STIKK, GIZ	01.05.-07.05.2017	3,000
3.6.2	Implement SEE Outsourcing & Nearshoring Conference	Program, report	STIKK	01.10.-22.10.2017	60,000

Comments	The SEE Outsourcing & Nearshoring Conference should be conducted every two years; the initial event could be implemented in cooperation with the regional projects of GIZ (ORF SEE IT Project) and USAID
Team	n.a.
Continuous Improvement	n.a.

5.1.3.7. Develop integrated marketing & branding concept for the Kosovo IT industry

Task No.	3.7	Task name	Develop integrated marketing & branding concept for the Kosovo IT industry		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
In the framework of the strategic analysis, lack of branding and visibility of the Kosovo IT industry has been identified as one of the primary obstacles to Kosovo IT exports. Therefore, a comprehensive marketing & branding concept for the Kosovo IT industry is needed, which integrates all necessary elements of the marketing-mix and reflects specific customer requirements and key success factors of strategic export markets.					
User story & results	As a responsible stakeholder of the Kosovo IT industry I want to have a suitable marketing & branding concept so that I can effectively promote the Kosovo IT industry on strategic export markets. As a Kosovo IT company I want to use the marketing & branding concept as a guideline and support for my company's individual export marketing activities.				
Acceptance criteria & indicators	▪ Integrated marketing & branding concept developed ▪ Marketing & branding material elaborated: Logo, slogan, presentation of the Kosovo IT industry ("IT Business Partner Kosovo")				
Responsible organization (lead)	STIKK	Partner organizations	IPAK, GIZ, NMFA, USAID, KIESA		
Task start:	2.02.2017	Task finish	28.04.2017		
Overall budget (€)	20,000	Financial sources	IPAK, GIZ, NMFA, USAID		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
3.7.1	Develop integrated marketing & branding concept (strategic marketing, brand strategy, operational marketing & brand marketing, 6 Ps, marketing organization & controlling)	Integrated marketing & branding concept	STIKK, GIZ	2.02.-27.02.2017	10,000
3.7.2	Elaborate marketing & branding material (logo, slogan, presentation of the Kosovo IT industry)	Logo, slogan, presentation	STIKK, GIZ, NMFA	2.03.-28.04.2017	10,000

Comments	The integrated marketing & branding concept is needed as conceptual basis and input for other tasks in the area of export promotion and marketing the Kosovo IT industry. Best practice example: Brasil IT+: http://www.brasilitplus.com/brasilit/Ingles/
Team	n.a.
Continuous Improvement	n.a.

5.1.3.8. Implement digital marketing of the Kosovo IT industry ("Kosovo IT Excellence")

Task No.	3.8	Task name	Implement digital marketing of the Kosovo IT industry		
Priority	1	Predecessor tasks	3.7 Integrated marketing & branding concept	% Complete	0%

Description & rationale
Web marketing / digital marketing is a useful and cost-effective tool for marketing and branding the Kosovo IT industry. Based on the results of Task 3.7 Integrated marketing & branding concept, digital marketing measures for the Kosovo IT industry will be implemented, including website, SEO, social media integration and YouTube video. The website will serve as a **landing page / one-stop-shop** for companies interested in outsourcing to Kosovo or in investing into the Kosovo IT industry. Hence, the website will include information on the Kosovo IT industry, its value proposition and key benefits, company profiles and service offerings, international references and success stories, support services (e.g. B2B match-making service) and key contacts.

User story & results	As a Kosovo IT company I want to use the website and the digital marketing tools as a marketing instrument so that I can present my company to potential clients based on a joint marketing and branding approach. As a Kosovo IT industry stakeholder I want to use the website for marketing and branding the industry online. As a potential client I want to use the website to obtain information on the Kosovo IT industry and suitable outsourcing providers so that I can outsource to Kosovo.		
Acceptance criteria & indicators	▪ The website and the digital marketing tools are fully operational ▪ The website achieves a KPI of at least 3.000 visitors / year		
Responsible organization (lead)	STIKK	Partner organizations	MZHE, KIESA, USAID, NMFA, GIZ
Task start:	30.04.2017	Task finish	4.06.2017
Overall budget (€)	26,000	Financial sources	USAID

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
3.8.1	Elaborate digital marketing concept including functional specification for the website and digital marketing tools	Concept, functional specification	STIKK	30.04.-6.05.2017	5,000
3.8.2	Prepare tender documents and conduct tender	Tender documents, evaluation documents	STIKK	7.05.-11.05.2017	3,000
3.8.3	Develop website and implement social media integration (including content development); conduct SEO and linkage to relevant partner websites and portals	Website, google analytics reports	STIKK	8.05.-4.06.2017	10,000
3.8.4	Develop YouTube video on the Kosovo IT industry for viral marketing	YouTube video	KIESA	7.05.-27.05.2017	8,000

Comments	The website could be developed as a stand-alone application or integrated into the STIKK website. KIESA and a future ICT Ministry or Agency should be closely involved into this task. Best practice examples: Outsourcing to Russia: http://www.outsourcingrussia.com/ Brasil IT +: http://www.brasilitplus.com/brasilit/Ingles/index.php This task need to be closely coordinated with the activities of KIESA in pillar 9 Investment Promotion.

Task No.	3.8	Task name	Implement digital marketing of the Kosovo IT industry
Team	n.a.		
Continuous Improvement	n.a.		

5.1.3.9. Develop IT export manual for companies

Task No.	3.9	Task name	Develop IT export manual for companies		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
The IT export manual will provide Kosovo IT companies with a guideline on how to conduct IT exports and with information on export-related support programs, institutions and services in Kosovo.					
User story & results	As a Kosovo IT company I want to use the IT export manual in order to improve the export capabilities of my company.				
Acceptance criteria & indicators	▪ The IT export manual has been developed and disseminated to STIKK member companies ▪ At least 30% of STIKK member companies use the IT export manual for their export activities				
Responsible organization (lead)	STIKK	Partner organizations	IPAK, NMFA, GIZ		
Task start:	2.03.-27.03.2017	Task finish			
Overall budget (€)	12,000	Financial sources	NMFA, GIZ		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
3.9.1	Elaborate IT export manual	IT export manual	STIKK, GIZ	2.03.-26.03.2017	11,000
3.9.2	Present the IT export manual and disseminate it to STIKK members	Presentation of IT export manual	STIKK	27.03.2017	1,000

Comments	The IT export manual should also be used in the framework of Task 3.3 Establish export coaching & consulting program.
Team	n.a.
Continuous Improvement	n.a.

5.1.3.10. Provide export financing instruments

Task No.	3.10	Task name	Provide export financing instruments		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
Since most Kosovo IT companies have very limited financial resources and a rather weak equity position, special financial instruments need to be introduced in order to support their export activities. These instruments include export financing schemes as well as export credit insurance					

Task No.	3.10	Task name	Provide export financing instruments
User story & results	As a Kosovo IT company I want to have access to special financing instruments so that I can finance my export activities.		
Acceptance criteria & indicators	▪ Special export financing instruments have been implemented ▪ At least 15 Kosovo IT companies have successfully applied for export financing instruments ▪ At least 10 Kosovo IT companies have received loans for export financing and / or export credit insurance		
Responsible organization (lead)	MF	Partner organizations	MZHE, KIESA, EU
Task start:	5.01.2017	Task finish	30.12.2018
Overall budget (€)	210,000	Financial sources	EU

Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
3.10.1	Develop export financing instruments (export loan schemes, export credit insurance) for the Kosovo IT industry	Product description and implementation concept including application documents	MF	05.01.-22.01.2017	10,000
3.10.2	Provide export financing instruments (export loan schemes, export credit insurance) for the Kosovo IT industry	Presentation of IT export manual	MF	23.01.2017 - 30.12.2018	200,000

Comments	The export financing instruments should require only minimal collateral and the repayment period should be at least 3 years. It needs to be clarified whether special support schemes and instruments from development banks such as World Bank, EBRD, EIB, KFW could be used for this task.
Team	n.a.
Continuous Improvement	n.a.

5.1.3.11. Financial support program for export-specific consulting services

Task No.	3.11	Task name	Financial support program for export-specific consulting services		
Priority	2	Predecessor tasks	3.3 Export coaching & consulting program	% Complete	0%
Description & rationale					
This task will provide Kosovo IT companies with financial subsidies for export-specific consulting services, once donor support for task 3.3 “Establish export coaching & consulting program” is phasing out.					
User story & results	As a Kosovo IT company I want to receive financial support for export-oriented consulting services in order to increase the international competitiveness of my company.				
Acceptance criteria & indicators	▪ Financial support program for export-specific consulting services fully operational ▪ At least 5 Kosovo IT companies / year are receiving financial support for export-specific consulting services (starting in year 3 of the operational plan)				
Responsible organization (lead)	Ministry of Finance	Partner organizations	KIESA, Ministry of Economic Development		
Task start:	02.03.2017	Task finish	23.03.2017		

Task No.	3.11	Task name	Financial support program for export-specific consulting services		
Overall budget (€)	30,000		Financial sources	MF	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
3.11.1	Develop financial support program for export-specific consulting services	Implementation concept including application documents	MF	2.03.2017-20.03.2017	5,000
3.11.2	Implement financial support program for export-specific consulting services	Approved applications	MF	23.03.2017	25,000
Comments	This task is supposed to provide Kosovo IT companies with financial support for export-specific consulting services, once donor support for task 3.3 is no longer available. Companies need to fulfil eligibility criteria defined for task 3.3. The support program should be based on a cost-sharing model where companies have to cover a certain percentage of the expenses.				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.3.12. Develop integrated service portfolio and delivery model

Task No.	3.12	Task name	Develop integrated service portfolio and delivery model		
Priority	1	Predecessor tasks	3.2	% Complete	0%
Description & rationale					
At the core of this task stands the notion of creating a unique service portfolio and delivery model (outsourcing / nearshoring) by integrating the different capabilities and resources of STIKK member companies. Thereby, potential export clients will get access to a large pool of qualified and experienced IT specialists, who are able to cover a broad range of technologies and programming languages, at prices which are considerably below Western European levels. Thus, STIKK becomes a one-stop-shop providing an integrated portfolio of offshoring services ("turnkey solutions"), ranging from IT consulting, design and specification to coding and testing. At the same time, an innovative delivery model will ensure a high level of quality and efficiency and thereby maximizing customer value.					
User story & results	As a potential export client of the Kosovo IT industry I want to have access to an integrated service portfolio and delivery model which allows me to maximize the benefits of outsourcing / nearshoring for my enterprise.				
Acceptance criteria & indicators	▪ An integrated service portfolio and delivery model has been developed ▪ The service portfolio and delivery model has been included into the marketing material of the Kosovo IT industry ▪ The service portfolio and delivery model has been presented at least at 3 international events (conference, B2B event, trade fair)				
Responsible organization (lead)	STIKK		Partner organizations	GIZ, NMFA, KIESA	
Task start:	01.09.2016		Task finish	30.12.2018	
Overall budget (€)	31,200		Financial sources	GIZ	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
3.12.1	Analysis of existing service spectrum and	Presentation with	STIKK	1.09.-	2,500

Task No.	3.12	Task name	Develop integrated service portfolio and delivery model			
	delivery models of STIKK member companies		results of analysis		12.09.2016	
3.12.2	Needs assessment in strategic export markets (customer requirements)		Presentation with results of analysis	GIZ	15.09.-30.09.2016	3,000
3.12.3	Analysis of relevant concepts, models and international best practices		Presentation with results of analysis	GIZ	1.10.-14.10.2016	3,500
3.12.4	Development of integrated service portfolio and delivery model		Implementation concept	GIZ	15.10.-28.11.2016	7,200
3.12.5	Implementation of integrated service portfolio and delivery model		Marketing material	STIKK, GIZ	1.12.2016 - 30.12.2018	15,000
Comments	This task should be designed and implemented in tandem with task 3.2 “Implement B2B export promotion service”. The integrated service portfolio and delivery model should be used extensively to differentiate the Kosovo IT industry from competitors.					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.3.13. Establish Kosovo IT partner network

Task No.	3.13	Task name	Establish Kosovo IT partner network		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
The Kosovo IT partner network will be established to improve international branding and positioning of the Kosovo industry. The members of this network (IT associations, clusters, universities, research institutions) will serve as multipliers and promoters of the Kosovo IT industry					
User story & results	As a Kosovo IT industry stakeholder I want to use the IT partner network in order to support international branding and positioning of the Kosovo IT industry on strategic export markets.				
Acceptance criteria & indicators	▪ Kosovo IT promotion network established with at least 30 key contacts in Europe and the US (database) ▪ At least 9 Memoranda of Understanding (MoUs) with international cooperation partners (IT associations, clusters, universities, etc.) signed				
Responsible organization (lead)	STIKK	Partner organizations	GIZ, NMFA		
Task start:	7.01.2017	Task finish	06.10.2018		
Overall budget (€)	9,000	Financial sources	GIZ, NMFA		
Task activities:					

No	Activity	Deliverables:	Resp.	Timing	Budget
3.13.1	Establish Kosovo IT partner network	Database, MoUs	GIZ, NMFA	3.03.2016 – 29.12.2018	5,000
3.13.2	Link STIKK website to partner websites	Links	STIKK	3.03.2016 – 29.12.2018	1,000

Task No.	3.13	Task name	Establish Kosovo IT partner network			
3.13.3	Implement quarterly newsletter for the members of the Kosovo IT partner network and include partners into CRM system		Newsletter	STIKK	7.01.-8.01.2017 / 1.04.-2.04.2017 / 1.07.-2.07.2017 / 7.10.-8.10.2017 / 6.01.-7.01.2018 / 6.04.-7.04.2018 / 6.07.-7.07.2018 / 5.10.-6.10.2018	3,000
Comments	-					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.3.14. Establish framework contracts with leading IT staffing & project management service providers

Task No.	3.14	Task name	Establish framework contracts with leading IT staffing & project management service providers and IT incubators		
Priority	2	Predecessor tasks	3.2	% Complete	0%
Description & rationale					
This task will provide Kosovo IT companies with concrete business opportunities in strategic export markets. At the same time these framework contract will support the international branding and positioning of the Kosovo IT industry.					
User story & results	As a Kosovo IT industry I want to use framework contracts with leading IT staffing & project management service providers and IT incubators to generate business opportunities for my company on export markets.				
Acceptance criteria & indicators	▪ At least 3 framework contracts with IT staffing & project management service providers and IT incubators signed ▪ At least 3 business leads generated based on the framework contracts with IT staffing & project management service providers and IT incubators				
Responsible organization (lead)	STIKK	Partner organizations	GIZ		
Task start:	03.11.2016	Task finish	12.12.2016		
Overall budget (€)	9,000	Financial sources	GIZ		
Task activities:					

Task No.	3.14	Task name	Establish framework contracts with leading IT staffing & project management service providers and IT incubators

No	Activity	Deliverables:	Resp.	Timing	Budget
3.14.1	Establish framework contracts with leading IT staffing & project management service providers	Signed framework contract	GIZ	3.11.-18.11.2016	5,000
3.14.2	Integrate IT staffing & project management service providers into CRM system	Profiles in CRM system	STIKK	19.11.-20.11.2016	1,000
3.14.3	Generate at least 3 business leads	Business leads	GIZ	24.11.-12.12.2016	3,000

Comments	This task needs to be implemented in close collaboration with task 3.2 “Implement B2B Export Promotion Service”. Possible cooperation partners include Gulp, Hays, Westhouse Consulting and Huntress Group.
Team	n.a.
Continuous Improvement	n.a.

5.1.3.15. Qualify and position IT promoters

Task No.	3.15	Task name	Qualify and position IT promoters		
Priority	1	Predecessor tasks		% Complete	0%

Description & rationale
Trade attaches of Kosovo’s embassies and consulates will be trained to serve as promoters of the Kosovo IT industry on foreign markets.

User story & results	As a Kosovo IT industry stakeholder I want to use the IT promoters to support the branding and positioning of the Kosovo IT industry on export markets
Acceptance criteria & indicators	▪ At least 10 trade attaches of Kosovo’s embassies and consulates have been trained in order to promote the Kosovo IT industry abroad

Responsible organization (lead)	STIKK	Partner organizations	Ministry of Foreign Affairs, GIZ, NMFA, MZHE
Task start:	1.06.2017	Task finish	30.11.2017
Overall budget (€)	10,000	Financial sources	GIZ, NMFA, SMFA

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
3.15.1	Prepare training and marketing material for IT promoters	Training and marketing material	GIZ	1.06.-30.07.2017	8,000
3.15.2	Implement training and capacity building for IT promoters	Evaluation report of training	GIZ	1.10.-30.11.2017	2,000

Comments	Annual meeting of trade attaches in Prishtina should be used for training and capacity building.
Team	n.a.
Continuous Improvement	n.a.

5.1.3.16. Establish diaspora marketing network

Task No.	3.16	Task name	Establish diaspora marketing network		
Priority	2	Predecessor tasks		% Complete	0%
Description & rationale					
The large Kosovo diaspora in strategic export markets such as Germany, Switzerland or the USA is an important competitive advantage which needs to be closely integrated into export promotion activities					
User story & results	As a Kosovo IT company I want to get access to the Kosovo diaspora in order to use these contacts for business development on export markets. As a Kosovo IT industry stakeholder I want to use the diaspora to support international branding and positioning of the Kosovo IT industry.				
Acceptance criteria & indicators	▪ The diaspora marketing network has been successfully established by signing MoUs between STIKK and the diaspora organizations ▪ At least 3 business leads generated based on the diaspora marketing network				
Responsible organization (lead)	STIKK	Partner organizations	Ministry of Foreign Affairs, KIESA, GIZ, NMFA		
Task start:	1.12.2016	Task finish	30.06.2017		
Overall budget (€)	4,000	Financial sources	GIZ, NMFA		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
3.16.1	Establish diaspora marketing network and sign MoUs with diaspora organizations	Database with key contacts, MoUs	STIKK, GIZ	1.12.2016 – 16.06.2017	3,000
3.16.2	Include diaspora marketing network into CRM system	Profiles in CRM system	STIKK	17.06.-30.06.2017	1,000

Comments	In several countries diaspora organizations and associations (e.g. DIJA in Germany) have been established. These organizations should be used in order to establish a close cooperation with STIKK.
Team	n.a.
Continuous Improvement	n.a.

5.1.3.17. Establish award "Software Exporter of the Year"

Task No.	3.17	Task name	Establish award "Software and IT Services Exporter of the Year"		
Priority	2	Predecessor tasks		% Complete	0%
Description & rationale					
This task will raise the awareness on the importance of exports for the Kosovo economy in general and for its					

Task No.	3.17	Task name	Establish award “Software and IT Services Exporter of the Year”
software and IT services industry in particular.			
User story & results	As a Kosovo IT industry stakeholder I want to use the award “Software and IT Services Exporter of the Year” to raise the awareness of the public on the importance of exports for the Kosovo IT industry.		
Acceptance criteria & indicators	▪ At least one article or news coverage in one of Kosovo’s leading media (newspaper, magazine, TV) / year.		
Responsible organization (lead)	STIKK	Partner organizations	MZHE
Task start:	3.11.2016	Task finish	3.11.2018
Overall budget (€)	8,000	Financial sources	MZHE

Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
3.17.1	Establish award for “Software and IT Services Exporter of the Year” including logo, price and selection criteria	Concept	STIKK	3.11.-12.11.2016	2,000
3.17.2	Selection of candidates and implementation of award ceremony including PR	Article / news coverage	STIKK, KIESA	3.11.2017 / 3.11.2018	6,000

Comments	The award “Software and IT Services Exporter of the Year” should be awarded in the framework of an official event with high governmental as well as media presence. The winner should be entitled to use the “Exporter of the Year” logo for marketing and promotion purposes.
Team	n.a.
Continuous Improvement	n.a.

5.1.4. Strategic Pillar 4: Domestic Market Development

5.1.4.1. Establish Tender Information Service (TIS)

Task No.	4.1	Task name	Establish Tender Information Service (TIS)		
Priority	3	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task has been envisaged to provide Kosovo IT companies with up-to-date information on IT-related tenders on domestic as well as regional (SEE) markets. At the same time it will provide Kosovo companies from other industries as well as government institutions and donor organizations with the opportunity to optimize their procurement activities concerning IT solutions and services. The Tender Information Service will be designed and implemented as a cluster service of STIKK for its member companies.					
User story & results	As a Kosovo IT company I want to use the Tender Information Service as a tool to generate additional business opportunities for my enterprise. As a Kosovo company, government institution or donor organization I want to use the Tender Information Service in order to optimize my IT purchasing activities and to identify the most suitable provider (cost-performance ratio) of IT solutions and services.				
Acceptance criteria & indicators	▪ The Tender Information Service is fully operational. ▪ At least 5 tenders / year have been processed via the Tender Information System.				

Task No.	4.1	Task name	Establish Tender Information Service (TIS)		
Responsible organization (lead)	STIKK		Partner organizations	KRPP, USAID, EU	
Task start:	04.01.2018		Task finish	30.12.2018	
Overall budget (€)	11,000		Financial sources	USAID, EU	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
4.1.1	Elaborate concept for the Tender Information System (sources, screening procedures, process, tools, etc.)	Concept	USAID	4.01.-13.01.2018	5,000
4.1.2	Implement Tender Information Service	Newsletters with tender information	STIKK, USAID	14.01.-30.12.2018	6,000
Comments	The Tender Information Service should be designed as a cluster service, provided by STIKK to its member companies. It should be based on a simple e-mailing / newsletter service. Alternatively it could be based on an alert functionality provided that STIKK introduces a collaborative software application / groupware or ECM application (e.g. SharePoint, Trello, Yammer). Existing tender information platforms as they are being provided for instance by EuropeAid or EBRD should be used. STIKK should actively encourage companies, government institutions and donors to use the Tender Information Service for conducting IT-related tenders.				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.4.2. Provide trainings to IT companies on tender management

Task No.	4.2	Task name	Provide trainings to IT companies on tender management		
Priority	3	Predecessor tasks		% Complete	0%
Description & rationale					
Particularly for IT SMES, the often complex tender procedures represent a major challenge. Therefore special trainings on tender management will be implemented including topics such as evaluation of tender documents, elaborating technical and financial proposals as well as forming consortia.					
User story & results	As a Kosovo IT company I want to participate in trainings on tender management so that I can successfully participate in national as well as international tenders.				
Acceptance criteria & indicators	▪ A tender management training program and the corresponding training documents have been elaborated. ▪ At least 30 companies have successfully completed the tender management trainings.				
Responsible organization (lead)	STIKK		Partner organizations	KRPP, USAID, EU	
Task start:	2.11.2017		Task finish	16.08.2018	
Overall budget (€)	21,000		Financial sources	USAID, EU	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
4.2.1	Conduct needs assessment and identify	Needs assessment;	USAID	2.11.-	3,000

Task No.	4.2	Task name	Provide trainings to IT companies on tender management		
	most relevant organizations concerning IT-related tenders (focus on regional and domestic markets), based on insights from the Tender Information System	list of most relevant organizations in terms of IT-related tenders		6.11.2017	
4.2.2	Develop tender management training program (key topics: tender evaluation, tender procedures and requirements, technical proposal writing, elaborating financial proposals, forming consortia)	Training program	USAID, EU	9.11.-27.11.2017	9,000
4.2.3	Conducting tender management trainings (at least 1 / year)	List of participants; evaluation sheets	USAID, EU	30.11.2017 – 16.08.2018	9,000
Comments	The tender management training should be integrated into the program of the STIKK Education (see Task 2.1).				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.4.3. Conduct information campaign on digital transformation

Task No.	4.3	Task name	Conduct information campaign on digital transformation		
Priority	3	Predecessor tasks	1.2 National committee on digital transformation	% Complete	0%
Description & rationale					
Digital transformation today is pervasive across all industries and organizational functions. The key technological trends driving digital transformation are mobile computing / mobility, cloud computing, big data / analytics and social media. While there is almost no area within a company where digital transformation has not made its impact felt, it is particularly relevant for functional areas such as marketing and sales ("customer experience") and operations as well as for the overall business model (digitally-modified businesses, new digital businesses). At the same time, digital transformation requires specific technical know-how and new capabilities. For Kosovo's economy digital transformation is of paramount importance, enabling companies to improve productivity, enhance competitiveness and boost business growth and innovation. Thus, the main goal of this task is raising the awareness of other sectors of the Kosovo economy on the importance and the potential of digital transformation. At the very heart of this task stands the notion that this will create a win-win situation for both, the Kosovo IT industry as well as for the other sectors of the economy. The following **target industries and customer segments on the domestic market** have been identified (IT strategy module workshops 1 and 2): ▪ Retail & wholesale ▪ Tourism ▪ Energy ▪ Health ▪ Financial services ▪ Telecom ▪ Agriculture ▪ Public sector					
User story & results	As a Kosovo IT company I want to participate in the information campaign on digital transformation in order to open up new customer segments on the domestic market. As a Kosovo company from the non-IT sector I want to participate in information events on digital transformation so that I can learn about how to use digital technologies in order to improve the competitiveness of my enterprise.				

Task No.	4.3	Task name	Conduct information campaign on digital transformation
Acceptance criteria & indicators	▪ At least 100 companies from selected target industries on the domestic market have participated in information events on digital transformation.		
Responsible organization (lead)	STIKK	Partner organizations	MZHE, GIZ, NMFA, USAID, MTI
Task start:	02.03.2017	Task finish	30.12.2018
Overall budget (€)	23,000	Financial sources	GIZ, NMFA

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
4.3.1	Elaborate presentation on digital transformation (trends, technologies, areas of application, best practice examples, etc.)	Presentation	GIZ	2.03.-11.03.2017	5,000
4.3.2	Elaborate best practice examples of digital transformation from Kosovo (company case studies)	Presentation	STIKK	12.03.-17.03.2017	3,000
4.3.3	Develop video clip (YouTube) on digital transformation	Video-clip (YouTube)	USAID	12.03.-25.03.2017	9,000
4.3.4	Conduct at least 3 information events on digital transformation for Kosovo companies from selected target industries (see above)	List of participants	STIKK	18.03.2017 – 30.12.2018	6,000

Comments	The focus of the information campaign should be placed on practical applications such as social media integration, social CRM, e-commerce, mobile apps, e-recruiting, ECM, Cloud Computing (IaaS, PaaS, SaaS), big data & analytics, enterprise collaboration
Team	n.a.
Continuous Improvement	n.a.

5.1.4.4. Implement information event on e-government trends and open data

Task No.	4.4	Task name	Implement information event on e-government trends and open data		
Priority	3	Predecessor tasks	-	% Complete	0%

Description & rationale

Current e-government trends and open data are important topics for Kosovo's public sector but also for the Kosovo IT industry with regards to the development of corresponding IT applications (e.g. based on open data).
This task will promote awareness raising on e-government trends and open data and thus addresses public sector actors as well as the IT industry.

User story & results	As a Kosovo IT company I want to learn more about current e-government trends and open data so that I can develop corresponding IT applications. As a public actor I want to learn more about current e-government trends and open data so that I can effectively promote corresponding projects and IT applications.
Acceptance criteria & indicators	▪ At least 20 companies and 15 government representatives / public actors have participated in the information event on e-government and open data.

Responsible	ASHI	Partner	MZHE, KIPA, STIKK, USAID, EU

Task No.	4.4	Task name	Implement information event on e-government trends and open data
organization (lead)		organizations	
Task start:	01.04.2017	Task finish	29.05.2017
Overall budget (€)	10,500	Financial sources	ASHI, USAID, EU

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
4.4.1	Elaborate presentation on current e-government trends and open data including national and international best practice examples (e.g. selected open data portals)	Presentation	EU	1.04.-17.04.2017	6,000
4.4.2	Conduct information event on current e-government trends and open data and define next steps for public-private collaboration in this field	List of participants	ASHI, KIPA, MZHE	20.04.2017	3,000
4.4.3	Establish a joint working group / collaboration platform on e-government and open data	Protocols	ASHI, KIPA, STIKK, MZHE	21.04.-29.05.2017	1,500

Comments	Special emphasis should be placed on the economic benefits of open data for the government as well as for the private sector. Best practice examples: http://open-data.europa.eu/en/data/ http://publicdata.eu/ http://www.data.gov/ http://data.gov.uk/ http://www.opendata.bayern.de/ http://data.gov.sg/
Team	n.a.
Continuous Improvement	n.a.

5.1.4.5. Conduct information events on latest IT trends

Task No.	4.5	Task name	Conduct information events on latest IT trends		
Priority	3	Predecessor tasks	-	% Complete	0%

Description & rationale

The key rationale behind this task is to inform Kosovo companies (particularly SMEs), public actors as well as academics and students on latest IT trends in order to raise awareness on the importance of IT and to promote the digital transformation of the Kosovo economy. Secondary goal of this task are customer education and business development.

User story & results	As a Kosovo company or public actor I want to use information events on latest IT rends so that I can make informed decisions on how to apply IT effectively in my organization. As an academic or student I want to use information events on latest IT trends so that I can integrate them effectively in my academic activities (research, teaching, studies).
Acceptance criteria & indicators	▪ At least 3 information events / year have been conducted with a minimum of 30 participants / event.

Task No.	4.5	Task name	Conduct information events on latest IT trends		
Responsible organization (lead)	STIKK		Partner organizations	MZHE, MASHT, Universities, Industry Associations, Chambers	
Task start:	17.11.2016		Task finish	14.12.2018	
Overall budget (€)	16,000		Financial sources	STIKK, NMFA, IT companies	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
4.5.1	Create concept for information events (format, duration, structure, etc.)	Concept	STIKK	4.05.-11.05.2017	2,000
4.5.2	Identify and evaluate relevant IT trends	List of IT trends with a short evaluation	STIKK, IT companies	12.05.2017	7,000
4.5.3	Conduct information event on latest IT trends	Presentations; lists of participants	IT companies, STIKK	17.11.2016 / 8.04.2017 / 12.08.2017 / 9.12.2017 / 13.04.2018 / 10.08.2018 / 14.12.2018	7,000
Comments	It is recommendable that the information events are being conducted by STIKK member companies or by universities and research institutes. The focus of these information events should be on illustrating the possible impacts, benefits / opportunities and applications of latest IT trends. There are several sources for the identification and evaluation of IT trends including Gartner's Hype Cycle, academic research as well as studies conducted by IT consulting companies and analysts.				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.4.6. Implement the Kosovo CIO Summit

Task No.	4.6	Task name	Implement the Kosovo CIO Summit		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
The Kosovo CIO Summit is supposed to serve as a platform for joint networking, exchange of experience, expert discussions and for strengthening cross-sectoral cooperation.					
User story & results	As a CIO I want to participate in the CIO summit in order to participate in expert discussions and to network with Kosovo IT companies. As a Kosovo IT company I want to participate in the CIO summit in order to network with potential partners and clients.				
Acceptance criteria & indicators	▪ The Kosovo CIO Summit is taking place on an annual basis with a minimum of 50 participants.				
Responsible	STIKK	Partner	Industry Associations, Chambers		

Task No.	4.6	Task name	Implement the Kosovo CIO Summit		
organization (lead)			organizations		
Task start:	06.02.2017		Task finish	12.05.2018	
Overall budget (€)	11,000		Financial sources	Companies (sponsorship and participation fee)	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
4.6.1	Create concept for CIO Summit (format, duration, structure, financing, PR, etc.)	Concept	STIKK	6.02.-12.02.2017	2,000
4.6.2	Conduct Kosovo CIO Summit on an annual basis	Program; list of participants	STIKK	12.05.2017 / 12.05.2018	9,000
Comments	The Summit should include particularly CIOs from the domestic target market segments, which have been defined in the framework of the Kosovo IT Strategy: Retail & wholesale, Tourism, Energy, Health, Financial services, Telecom, Agriculture, Public sector				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.4.7. Implement B2B match-making events with selected domestic market target industries

Task No.	4.7	Task name	Implement B2B match-making events with selected domestic market target industries		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
The main goals of this task are: ▪ Opening up the growth potential of the domestic market (in selected target industries) to Kosovo IT companies, thus creating an additional source of income and revenue streams ▪ Provide companies from other industries with innovative IT products and services in order to improve their efficiency and productivity.					
User story & results	As a Kosovo IT company I want to participate in B2B match-making events so that I can win new clients and business partners from other industries. As a company from the non-IT sector I want to participate in B2B match-making events in order to identify suitable providers of IT solutions and services.				
Acceptance criteria & indicators	▪ At least 2 match-making events / year have been successfully implemented. ▪ As a result of the match-making events at least 5 business cooperations / contracts / year have been established.				
Responsible organization (lead)	STIKK		Partner organizations	Industry Associations, Clusters, Chambers, KIESA, MTI, GIZ, NMFA, SDC, USAID, EU, MZHE	
Task start:	25.11.2016		Task finish	12.12.2018	
Overall budget (€)	34,000		Financial sources	GIZ, NMFA, SDC, USAID, EU	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
4.7.1	Create methodology and concept for	Methodology,	GIZ	2.02.-	5,000

Task No.	4.7	Task name	Implement B2B match-making events with selected domestic market target industries			
	B2B match-making events (methodology, format, agenda, duration, financing, marketing, etc.) **Note**: B2B match-making events should be vertically specialized (i.e. industry-specific)		concept		6.02.2017	
4.7.2	Conduct IT needs assessment in selected target industries		IT needs assessment report (PPT)	SDC	9.02.-30.03.2017	12,000
4.7.3	Definition of IT product / service portfolio (individually on company level as well as cluster-based: "integrated service portfolio")		Description of IT product / service portfolio	STIKK, IT companies	31.03.-6.04.2017	2,000
4.7.4	Organization and implementation of industry-specific B2B match-making events		Program, company presentations, list of participants	STIKK, IT companies	10.06.2017 / 14.12.2017 / 10.06.2018 / 12.12.2018	12,000
4.7.5	Provide business-development support (follow-up) to the companies after the match-making event		Evaluation reports	STIKK, SDC, GIZ	25.11.2016 / 25.05.2017 / 25.11.2017 / 25.05.2018 / 25.11.2018	3,000

Comments	It is advisable to conduct the B2B match-making events in close cooperation with the particular industry associations, clusters or chambers of the selected target industries (e.g. energy). Furthermore the whole task / process should be designed and implemented as a specific service of STIKK (cluster service) in order to increase efficiency and sustainability. A detailed description of such a service and the corresponding process model can be found in GIZ's Manual and Toolbox (5.1) for IT Sector Promotion: http://www2.gtz.de/dokumente/bib-2011/giz2011-0475en-it-sector-promotion-manual.pdf. Understanding the specific requirements and problems of users in the selected target industries is a key success factor. Therefore, a participative, user-engaged approach in combination with a vertical focus needs to be applied. **Vertical (industry-specific) specialization and process know-how** (e.g. in the financial services industry) are another key success factor and important differentiator from potential competitors. In the framework of the IT Strategy workshops the following product / service portfolio has been defined for the domestic market: ▪ CRM solutions ▪ CMS solutions ▪ Remote storage solutions ▪ Billing systems ▪ HR management systems ▪ Mobile apps ▪ Portal apps ▪ Web design ▪ Network support & maintenance ▪ Intranet solustions ▪ E-government solutions ▪ GIS ▪ Software testing Selected domestic market target industries are: Retail & wholesale, Tourism, Energy, Health,

Task No.	4.7	Task name	Implement B2B match-making events with selected domestic market target industries
	Financial services, Telecom, Agriculture, Public sector. An additional target industry could be Mining.		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.4.8. Organize B2B match-making with international investors (indirect exporting)

Task No.	4.8	Task name	Organize B2B match-making with international investors (indirect exporting)		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task intends to create additional business opportunities for the Kosovo IT industry by establishing linkages between local IT enterprises and international investors (FDI) / multinational corporations (MNCs) in Kosovo. Based on these linkages, Kosovo IT companies will not only win new clients on the domestic market but also get access to international markets through referrals by these investors / MNCs to their parent company or to other clients abroad. In addition to that Kosovo IT companies will be able to gain much-needed international references.					
User story & results	As a Kosovo IT company I want to use B2B match-making events with international investors so that I can win new clients and business partners.				
Acceptance criteria & indicators	▪ At least 2 match-making events with international investors implemented / year. ▪ As a result of the match-making events at least 3 business cooperations / contracts / year have been established.				
Responsible organization (lead)	STIKK	Partner organizations	Foreign Chambers (e.g. AmCham, KDWV, WKO),Embassies, KIESA, MTI, GIZ, NMFA, SDC, USAID		
Task start:	1.05.2016	Task finish	3.11.2018		
Overall budget (€)	20,000	Financial sources	GIZ, NMFA, SDC, USAID		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
4.8.1	Create concept for B2B match-making events (format, agenda, duration, financing, marketing, etc.)	Concept	GIZ	1.05.-2.05.2016	2,000
4.8.2	Conduct IT needs assessment of foreign investors in Kosovo (interviews)	IT needs assessment report (PPT)	SDC	7.05.-23.05.2016	6,000
4.8.3	Definition of IT product / service portfolio (individually on company level as well as cluster-based: “integrated service portfolio”)	Description of IT product / service portfolio	STIKK, IT companies	26.05.2016	1,000
4.8.4	Organization and implementation of B2B match-making events (e.g. in the form of an “STIKK IT Brunch”)	Program, company presentations, list of participants	STIKK, IT companies	4.03.2017 / 2.11.2017 / 2.03.2018 / 2.11.2018	8,000
4.8.5	Provide business-development support (follow-up) to the companies after the match-making event	Evaluation reports	STIKK, SDC, GIZ	4.11.2016 / 5.05.2017 / 3.11.2017 /	3,000

Task No.	4.8	Task name	Organize B2B match-making with international investors (indirect exporting)		
				3.05.2018 / 3.11.2018	
Comments	The match-making events should be organized and implemented in close cooperation with the corresponding foreign chambers of commerce (e.g. WKO, KDWV, AmCham, etc.). It is important to communicate effectively the business case / benefits for international investors resulting from a cooperation with Kosovo IT companies (e.g. local IT know-how, cost reduction, etc.). Based on the results of the needs assessment, STIKK needs to decide whether to organize the B2B match-makings on a vertical (industry-specific) basis.				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.4.9. Introduce financial incentive scheme for stimulating IT usage in SMEs (iSME)

Task No.	4.9	Task name	Introduce financial incentive scheme for stimulating IT usage in SMEs (iSME)		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
The rationale behind this task is to introduce a financial incentive scheme in order to stimulate the use of IT in small and medium-sized companies (SMEs) from different industries and sectors of the Kosovo economy.					
User story & results	As a Kosovo company (SME) I want to use the financial incentive scheme so that I can introduce IT solutions in my company and thereby improve productivity and competitiveness.				
Acceptance criteria & indicators	▪ Financial incentive scheme for stimulating IT usage in SMEs is fully operational. ▪ At least 30 companies (non-IT) / year made use of the financial incentive scheme for introducing IT solutions.				
Responsible organization (lead)	KIESA	Partner organizations	MF, KIESA, MTI, USAID, EU, EBRD		
Task start:	02.02.2017	Task finish	29.12.2018		
Overall budget (€)	2,02,2015	Financial sources	MF, USAID, EU, EBRD		
Task activities:					

No	Activity	Deliverables:	Resp.	Timing	Budget
4.9.1	Develop financial incentive scheme (financial instruments, application procedures, eligibility criteria, disbursement procedures, M&E, etc.)	Concept	MF, KIESA	2.02.-11.02.2017	8,000
4.9.2	Allocate budget for financial incentive scheme for SMEs (iSME)	Budget	MF	12.02.-27.02.2017	2,000,000
4.9.3	Launch information campaign on financial incentive scheme for SMEs (website, marketing material, information events, etc.)	Marketing material	KIESA	2.03.-13.03.2017	10,000
4.9.4	Implement financial incentive scheme for SMEs	Reports	KIESA	16.03.2017 –	45,000

Task No.	4.9	Task name	Introduce financial incentive scheme for stimulating IT usage in SMEs (iSME)		
				30.12.2018	
4.9.5	Conduct monitoring and evaluation of financial incentive scheme program for SMEs (iSME)	Evaluation reports	KIESA	1.06.-30.12.2018	9,000
Comments	The financial incentive scheme for SMEs (iSME) should cover support for IT specification, purchase, implementation and management. Financial incentives should be provided in the form of grants. Best practice examples: Brazil: SOFTEX: http://www.softex.br Singapore: Sectoral Productivity CFC: http://www.ida.gov.sg/blog/insg/featured/s42m-sectoral-boost-for-sme-productivity/ Singapore: SaaS CFC: http://www.ida.gov.sg/blog/insg/egov-sectors/saas-for-singular-sector-smes/ Germany: EBIGO: http://innovation.mfg.de/de/initiativen/ebigo-mittelstand-im-fokus				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.4.10. Develop digital maturity assessment tool

Task No.	4.10	Task name	Develop digital maturity assessment tool		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
The tool is supposed to raise the awareness of companies on the importance of IT for increasing productivity, innovation and competitiveness. Using the tool will allow local companies to assess their digital maturity and to identify potential for improvement in terms of IT / digital technologies. At the same time, the digital maturity assessment tool allows STIKK and the Kosovo IT companies to assess the specific IT needs of local companies from other industries and to identify potential clients.					
User story & results	As a Kosovo company I want to use the tool in order to assess the digital maturity of my enterprise and to identify potential for improvement in terms of IT.				
Acceptance criteria & indicators	▪ The digital maturity assessment tool is fully operational. ▪ At least 20 companies (non-IT) / year have made use of the digital maturity assessment tool.				
Responsible organization (lead)	STIKK	Partner organizations	UNIV, KIESA, MTI, GIZ, NMFA, USAID		
Task start:	15.05.2017	Task finish	31.12.2017		
Overall budget (€)	31,000	Financial sources	GIZ, NMFA, USAID		
Task activities:					

No	Activity	Deliverables:	Resp.	Timing	Budget
4.10.1	Develop digital maturity assessment tool (online version)	Digital maturity assessment tool	GIZ	15.05.-31.08.2017	20,000
4.10.2	Integrate digital maturity assessment tool into STIKK website and conduct information event with press conference	Website section, program of information event	STIKK	1.09.-15.09.2017	3,000

Task No.	4.10	Task name	Develop digital maturity assessment tool		
4.10.3	Implement digital maturity assessment (fully automated online version)	Number of registrations	STIKK	16.09.-30.10.2017	3,000
4.10.4	Elaborate summary report on digital maturity assessment (compiled results)	Report	STIKK	2.11.-31.12.2017	5,000
Comments	The digital maturity assessment tool should cover the following dimensions: ▪ Marketing / customer interaction ▪ Brand ▪ Operations ▪ Business models ▪ Capabilities ▪ Digital vision ▪ Engagement ▪ Governance ▪ Skills Note: For the online version of the digital maturity assessment tool, aspects of data protection need to be taken into account.				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.5. Strategic Pillar 5: IT Education

5.1.5.1. Implement continuous improvement system for IT education curricula in Kosovo

Task No.	5.1	Task name	Implement continuous improvement system for IT education in Kosovo		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
Education and human resource excellence are the key determinants of Kosovo's IT industry competitiveness. Therefore this task is directed at promoting education and human resources excellence by continuously monitoring, evaluating and improving IT education in Kosovo (particularly on the university level) based on close cooperation between STIKK (private sector), universities, schools and relevant ministries. This task involves the establishment of corresponding methodologies, processes and organizational structures as well as the implementation of operational measures such as the integration of applied courses and lectures by IT professionals into curricula.					
User story & results	As a Kosovo IT industry stakeholder I want to use the continuous improvement system for IT education in order to promote human resource excellence in Kosovo.				
Acceptance criteria & indicators	▪ The continuous improvement system for IT education in Kosovo has been established. ▪ Recommendations on IT education curricula in Kosovo are being elaborated and published on an annual basis. ▪ At least 3 recommendations of the competence group on IT education in Kosovo have been implemented until the end of 2018.				
Responsible organization (lead)	STIKK	Partner organizations	UNIV, MASHT, National Qualification Agency, SDC, NMFA, EU, USAID, GIZ		
Task start:	01.04.2017	Task finish	30.12.2018		
Overall budget (€)	140,000	Financial sources	SDC, NMFA, EU, USAID, GIZ		

Task No.	5.1	Task name	Implement continuous improvement system for IT education in Kosovo

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.1.1	Establish joint competence group on IT education in Kosovo (see Task 6.10 Competence groups for strategic IT topics) including all relevant stakeholders and define guidelines for collaboration	Guidelines; list of members	STIKK	1.04.-9.04.2017	1,000
5.1.2	Conduct evaluation and benchmarking of IT education curricula in Kosovo (universities and schools)	Report	STIKK	10.04.-8.05.2017	7,000
5.1.3	Elaborate recommendations on IT education curricula in Kosovo for: ▪ Universities ▪ Schools	Recommendations	STIKK	11.05.-29.05.2017	10,000
5.1.4	Elaborate recommendations on required IT qualification profiles / competence profiles (e.g. software engineering, software development, quality assurance, testing, system integration and administration, etc.)	IT qualification profiles / competence profiles	STIKK	1.06.-22.06.2017	10,000
5.1.5	Conduct information event and press conference to present recommendations on IT education curricula in Kosovo (annually)	Program; presentation; list of participants	STIKK	30.06.2017 / 30.06.2018	3,000
5.1.6	Integrate quality management and software testing (including ISTQB certification) as compulsory subjects into computer science curricula at universities	Revised curricula; certified students	UNIV	13.04.-30.12.2017	4,000
5.1.7	Incorporate established certification programs into the curriculum (e.g. ITIL, Scrum Master, BPMN, PMP, PRINCE2, etc.)	Course descriptions; certified students	UNIV	13.04.-30.12.2017	90,000
5.1.8	Develop and integrate applied courses and lectures by IT professionals (practitioners) into curricula	Course descriptions and material	STIKK	13.04.-30.12.2018	15,000

Comments	According the rationale of this task, evaluation of existing IT curricula and elaboration of corresponding recommendations need to be implemented on a regular basis (annually). It is recommendable to benchmark Kosovo IT curricula against corresponding curricula in other countries, particularly in strategic export markets. Besides pure technical / engineering skills, also capabilities in the areas of quality management, project management as well as vertical business process know-how ("hybrid capabilities") should be taken into account (see also results of the external analysis). Concerning the incorporation of established certification programs and applied courses and lectures by IT professionals, universities should cooperate closely with the STIKK Education (see Task 2.1) in order to use synergies. Applied courses and lectures delivered by IT professionals should cover practical topics and latest technology trends including mobile computing, cloud computing, agile methods, embedded software development, big data & analytics, etc.

Task No.	5.1	Task name	Implement continuous improvement system for IT education in Kosovo
	Best practice examples: Software industry requirements for the Bulgarian education system: http://www.basscom.org/activities?mi=4 Recommendations for IT education by the German Informatics Society: http://www.gi.de/service/publikationen/empfehlungen.html		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.5.2. Implement international academic cooperation and exchange program

Task No.	5.2	Task name	Implement international academic cooperation and exchange program		
Priority	3	Predecessor tasks	-	% Complete	0%
Description & rationale					
The main goal of this task is to provide Kosovo universities and students with the opportunity for academic exchange and cooperation, thereby facilitating capacity building and the transfer of know-how and technology. In addition to that, this task intends to equip IT professors and students from Kosovo to learn about international best practices in IT education and to gain experience abroad. This task also includes the establishment of networks and linkages with Kosovo academics studying, teaching and working abroad.					
User story & results	As an IT professor or student from Kosovo I want to participate in academic exchange and cooperation programs to further improve my capabilities and know-how and to gain international experience.				
Acceptance criteria & indicators	▪ At least 6 international academic cooperation agreements have been signed. ▪ At least 6 IT professors from universities in Western Europe or the US have been teaching at universities in Kosovo. ▪ At least 30 students have participated in an international exchange program.				
Responsible organization (lead)	MASHT	Partner organizations	UNIV, STIKK, NMFA, SDC, ADA, USAID, EU, GIZ		
Task start:	2.02.2017	Task finish	30.12.2018		
Overall budget (€)	510,000	Financial sources	NMFA, SDC, ADA, USAID, EU, GIZ		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.2.1	Develop international academic cooperation and exchange program for computer science (procedures, partner universities, budget, etc.)	Program concept	SDC	2.02.-27.02.2017	10,000
5.2.2	Implement international academic cooperation and exchange program for computer science	Cooperation agreements; list of exchange professors and students	MASHT	2.03.2017 – 30.12.2018	300,000
5.2.3	Establish network of Kosovo academics working abroad (online portal)	Online portal	MASHT	2.03.2017 – 30.12.2018	15,000
5.2.4	Implement “Brain Gain” program for motivating Kosovo academics working	“Brain Gain” program	MASHT	2.04.2017 –	200,000

Task No.	5.2	Task name	Implement international academic cooperation and exchange program		
	abroad to return and teach at universities in Kosovo			30.12.2018	
Comments	-				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.5.3. Introduce Student Placement Service (SPS)

Task No.	5.3	Task name	Introduce Student Placement Service (SPS)		
Priority	2	Predecessor tasks	-	% Complete	0%

Description & rationale

The student placement service (SPS) will be implemented as a cluster service of STIKK for its members companies. The main goals of this task are:

- Providing IT companies with suitable students and graduates
- Employer branding
- Infotainment and recrutainment
- Providing students and graduates with the opportunity to gain practical experiences and find attractive job opportunities in the Kosovo IT industry
- Deepening cooperation between universities and IT firms

By including Kosovo students studying abroad this service will also contribute to reversing the brain drain.

User story & results	As a Kosovo IT company I want to use the Student Placement Service to identify suitable students (interns) and graduates for my enterprise. As a Kosovo IT student I want to use the Student Placement Service in order to find a suitable employer and to gain work experience in the IT industry.		
Acceptance criteria & indicators	▪ The Student Placement Service (SPS) has been implemented as a cluster service of STIKK. ▪ At least 20 students / graduates per year find a job / internship through the Student Placement Service (SPS).		
Responsible organization (lead)	STIKK	Partner organizations	UNIV, NMFA, GIZ
Task start:	15.01.2017	Task finish	30.12.2018
Overall budget (€)	23,000	Financial sources	NMFA, GIZ

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.3.1	Develop service concept for the Student Placement Service including service description, features, customer benefit, delivery mode, process model, templates, financing	Service concept	GIZ	15.01.-30.01.2017	3,000
5.3.2	Implement Student Placement Service, including integration into STIKK job exchange (see Task 6.6)	Job / internship offers	STIKK	2.02.2018	6,000
5.3.3	Develop and implement special Student Placement Service for Kosovo students studying abroad	Extension of the service concept; job / internship offers	GIZ	2.03.2017 – 30.12.2018	5,000

Task No.	5.3	Task name	Introduce Student Placement Service (SPS)			
5.3.4	Design and implement infotainment and recrutainment events for IT students		Program; list of participants	STIKK	1.10.-3.10.2017 / 2.05.2018 / 3.10.2018	9,000
Comments	Internships at IT firms should be a compulsory element of the university curriculum and should be integrated into the ECTS system. Best practice examples: BASSCOM: http://www.basscom.org/jobs IT FOR WORK: Jobtournee: http://www.it-for-work.de/Inhalte/Kompetenz/Services/2196676/Jobtournee.html CYBERFORUM: Recrutainment: http://www.en.cyberforum.de/offering/for-businesspeople/recruitainment For including Kosovo students abroad, associations of Kosovo students should be actively involved (e.g. association of Kosovo students at the Technical University of Darmstadt, Germany)					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.5.4. Introduce Kosovo IT Scholarship Program

Task No.	5.4	Task name	Introduce Kosovo IT scholarship program		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
The main objective of this task is to promote high-potential students in computer science with scholarships, which are being financed by the Kosovo IT industry. Thereby underprivileged students get the opportunity to study computer science and at the same time the Kosovo IT industry demonstrates its commitment to education an HR excellence.					
User story & results	As a Kosovo IT company I want to participate in the Kosovo IT scholarship program in order to promote IT education and HR excellence.				
Acceptance criteria & indicators	▪ The Kosovo IT scholarship program is fully operational. ▪ At least 5 students / year have received the Kosovo IT scholarship.				
Responsible organization (lead)	STIKK	Partner organizations	UNIV, MASHT, IT companies, NMFA, SDC		
Task start:	1.12.2016	Task finish	30.12.2018		
Overall budget (€)	91,000	Financial sources	IT companies, NMFA, SDC		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.4.1	Develop concept for the Kosovo IT scholarship program (application process, selection process, financing, etc.)	Concept	STIKK	1.12.2016 – 30.01.2017	1,000
5.4.2	Implement and manage the Kosovo IT scholarship program	List of scholarship holders; reports	STIKK	2.02.2017 – 30.12.2018	90,000

Task No.	5.4	Task name	Introduce Kosovo IT scholarship program
Comments	The Kosovo IT scholarship should be granted based on academic merit and should focus on students from underprivileged families. Financing of the Kosovo IT scholarship should be based on a PPP-model including IT companies, MASHT and donors. The scholarship program should include a compulsory internship in an IT company to allow students to obtain practical work experience. While the program will primarily focus on academic education in Kosovo it might be also advisable to provide scholarships for studying computer science abroad.		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.5.5. Introduce STIKK competence assessment standard for IT students

Task No.	5.5	Task name	Introduce STIKK competence assessment standard for IT students		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task implies the development and implementation of a special competence assessment standard and certification for final year and pre-final year IT students in order to ensure employability and quality and to provide feedback to students and universities for continuous improvement of IT education in Kosovo.					
User story & results	As a Kosovo IT company I want to use the STIKK competence assessment standard in order to ensure employability of IT students / graduates and to evaluate job candidates. As a Kosovo university I want to use the STIKK competence assessment standard to ensure quality and continuous improvement of IT education in Kosovo.				
Acceptance criteria & indicators	▪ The STIKK competence assessment standard for IT students has been implemented. ▪ At least 100 students have taken the STIKK competence assessment test for IT students until the end of 2018.				
Responsible organization (lead)	STIKK	Partner organizations	UNIV, MASHT, EU, USAID		
Task start:	02.11.2017	Task finish	30.12.2018		
Overall budget (€)	33,000	Financial sources	EU, USAID		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.5.1	Develop concept for STIKK competence assessment standard for IT students based on international standards (eligibility, test matrix, employment facilitation, delivery model, etc.)	Concept	STIKK	2.11.-30.11.2017	8,000
5.5.2	Implement and manage STIKK competence assessment standard for IT students	Test system; evaluation report	STIKK	1.12.2017 – 30.12.2018	25,000

Comments	STIKK competence assessment standard for IT students needs to be based on international IT standards. Particularly EU qualification frameworks need to be taken into account. Best practice examples: India: NASSCOM Assessment of Competence: http://nac.nasscom.in

Task No.	5.5	Task name	Introduce STIKK competence assessment standard for IT students
Team	n.a.		
Continuous Improvement	n.a.		

5.1.5.6. Establish university ranking (IT)

Task No.	5.6	Task name	Establish university ranking (IT)		
Priority	3	Predecessor tasks	-	% Complete	0%
Description & rationale					
The rationale behind this task is to establish a ranking system for IT-related degree programs at Kosovo universities in order to increase transparency and competition within the Kosovo IT education system.					
User story & results	As a Kosovo IT company I want to use the university ranking system (IT) so that I can get a better overview on IT education in Kosovo. As a student I want to use the university ranking system (IT) as a tool for selecting a suitable computer science degree program for me.				
Acceptance criteria & indicators	▪ The university ranking system (IT) has been implemented. ▪ At least one university ranking (IT) has been conducted until the end of 2018.				
Responsible organization (lead)	STIKK	Partner organizations	UNIV, MASHT, EU, NMFA, GIZ		
Task start:	4.01.2018	Task finish	30.12.2018		
Overall budget (€)	11,000	Financial sources	EU		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.6.1	Develop concept for university ranking (methodology, evaluation criteria, etc.)	Concept	STIKK	4.01.-29.01.2018	5,000
5.6.2	Conduct university ranking (every 2 years)	Test system; evaluation report	STIKK	1.02.-30.12.2018	6,000 (per ranking)

Comments	Best practice examples: CHE Ranking: http://www.che-ranking.de
Team	n.a.
Continuous Improvement	n.a.

5.1.5.7. Introduce National Hackathon / IT Olympics

Task No.	5.7	Task name	Introduce National IT Olympics		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task includes the introduction of the National IT Olympics in the form of a national informatics and programming contest for Kosovo. Its main goals are:					

Task No.	5.7	Task name	Introduce National IT Olympics

- Promoting IT talent and HR excellence in Kosovo
- Motivating and mobilizing
- Raising the awareness on the importance of IT education
- Recrutainment and employer branding for the Kosovo IT industry

The National IT Olympics will be organized annually in a partnership of STIKK, IT companies, universities and the government.
In order to increase its visibility and reputation, the National IT Olympics will be organized under the patronage of the Prime Minister of the Republic of Kosovo.

User story & results	As a Kosovo IT industry stakeholder I want to use the National IT Olympics to promote IT talent and HR excellence in Kosovo. As a Kosovo IT company I want to use the National IT Olympics for recrutainment and employer branding.		
Acceptance criteria & indicators	▪ The National IT Olympics have been conducted in 2017 and 2018 with at least 60 participants / event.		
Responsible organization (lead)	STIKK	Partner organizations	UNIV, MSHT, ZKM, EU, NMFA, GIZ
Task start:	2.03.2017	Task finish	16.05.2018
Overall budget (€)	6,000	Financial sources	EU, NMFA

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.7.1	Develop concept for National IT Olympics (format, program, organization, application process, sponsorship, etc.)	Concept	STIKK	2.03.-16.03.2017	3,000
5.7.2	Organize National IT Olympics on an annual basis	Program; list of participants	STIKK	15.05.2017 / 16.05.2018	3,000 (additional budget from sponsorship)

Comments	The National IT Olympics could be organized in different formats such as programming competitions, hackathons, etc. Best practice examples: CodeIT: http://codeit.bg/eng hackMIT: http://www.hackmit.org National Infocomm Competition: http://www.infocommtalent.sg
BUTeam	n.a.
Continuous Improvement	n.a.

5.1.5.8. Promoting part-time and distance learning IT education

Task No.	5.8	Task name	Promoting part-time and distance learning IT education		
Priority	3	Predecessor tasks	-	% Complete	0%
Description & rationale					

Task No.	5.8	Task name	Promoting part-time and distance learning IT education

Promoting education and human resource excellence is of paramount importance for the international competitiveness of the Kosovo IT industry. At the same time, requirements concerning technical skills and competences are quickly changing, making life-long learning and qualification a key success factor.
Hence, this task will promote part-time and distance learning IT education, allowing professionals to obtain a university degree while working. This task is particularly relevant in terms of skills development and IT workforce development.

User story & results	As a Kosovo IT industry stakeholder I want to use part-time and distance learning programs to improve the qualitative and quantitative output of universities in Kosovo in terms of IT experts. As a Kosovo IT company I want to use part-time and distance learning programs to improve the skills and capabilities of my staff. As a professional I want to use part-time and distance learning programs to obtain an university degree while working.
Acceptance criteria & indicators	▪ At least two new part-time or distance learning programs in computer science or related subjects (Bachelor, Master, PGDip, PGCert) have been established by the universities.

Responsible organization (lead)	UNIV	Partner organizations	STIKK, MASHT, National Qualification Agency, EU, USAID, NMFA, GIZ
Task start:	01.01.2018	Task finish	30.12.2018
Overall budget (€)	78,000	Financial sources	MSHT, EU, USAID

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.8.1	Conduct needs assessment for part-time and distance learning IT education	Needs assessment report	STIKK	1.01.-29.01.2018	8,000
5.8.2	Develop curricula for part-time and distance learning IT education	Curricula	UNIV	1.02.-30.03.2018	10,000
5.8.3	Implement part-time and distance learning IT education programs	Reports	UNIV	31.03.-30.12.2018	60,000 (initial funding)

Comments	This task needs to be closely coordinated with Task 2.1 STIKK Education in order to generate synergies. It is recommendable to establish academic cooperation / strategic alliances with universities abroad which also have the necessary know-how and experience in developing and implementing part-time and distance learning IT education programs. In addition to that, this would also promote know-how transfer to Kosovo. Strategic cooperations with renowned providers of Massive Open Online Courses (MOOC) should be established such as: ▪ Coursera: https://www.coursera.org ▪ edX: https://www.edx.org ▪ The Website of STIKK/STIKK Education should be directly linked to these providers. Best practice examples: OpenHPI: https://openhpi.de
Team	n.a.
Continuous Improvement	n.a.

5.1.5.9. Establish Kosovo Institute of Digital Technology (PPP)

Task No.	5.9	Task name	Establish Kosovo Institute of Digital Technology (PPP)		
Priority	3	Predecessor tasks	-	% Complete	0%

Description & rationale

The Kosovo Institute of Digital Technology (KIDT) will have the following functions:

- Bundling the competences in the area of digital technology
- Promoting and coordinating IT education
- Coordinating the Competence Centers for applied R&D in strategic IT topics (see Task 8.6)
- Fostering interdisciplinary research
- Promoting digital transformation in Kosovo

The KIDT should be established within a future ICT Ministry.

User story & results	As a Kosovo IT industry stakeholder I want to use the Kosovo Institute of Digital Technology to promote digital transformation in Kosovo and to coordinate IT education as well as applied R&D.		
Acceptance criteria & indicators	▪ The Kosovo Institute of Digital Technology has been established and is fully operational.		
Responsible organization (lead)	MZHE, MASHT	Partner organizations	STIKK, UNIV, National Qualification Agency, MTI, EU, USAID, NMFA, GIZ, SDC
Task start:	01.04.2017	Task finish	30.12.2018
Overall budget (€)	318,000	Financial sources	MZHE, EU

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.9.1	Elaborate concept for the KIDT including functions, organizational structure, financing, etc.	Concept	MZHE	1.04.-29.05.2017	15,000
5.9.2	Establish and manage the KIDT	Annual reports	MZHE	1.06.2017 – 30.12.2018	300,000
5.9.3	Establish partnerships with relevant universities, research institutes and organizations abroad	MoUs	SDC	2.02.-30.12.2018	3,000

Comments	This task needs to be closely coordinated with Task 8.6 Competence Centers for applied R&D in strategic IT topics. Best practice examples: Information Technology Institute (ITI): http://www.iti.gov.eg Romania: National Institute for Research & Development in Informatics: http://www.ici.ro/ICIenglish/English/index.php
Team	n.a.
Continuous Improvement	n.a.

5.1.5.10. Promote MINT subjects in primary and secondary education

Task No.	5.10	Task name	Promote MINT subjects in primary and secondary education		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
The main goal of this task is to promote human resource excellence in the Kosovo IT industry on a sustainable, long-term basis by fostering MINT (mathematics, information sciences, natural sciences, technology) subjects in primary and secondary education. This will motivate and inspire future talent to study MINT subjects, thereby laying the foundations for digital transformation and the knowledge based economy in Kosovo.					
User story & results	As a Kosovo IT industry stakeholder I want to promote MINT subjects in primary and secondary education in order to foster future talent.				
Acceptance criteria & indicators	▪ The number of lessons for MINT subjects in the curricula has been increased by 10% until the end of 2018. ▪ At least 300 teachers have successfully completed further education program (teacher training) in teaching IT subjects.				
Responsible organization (lead)	MASHT	Partner organizations	STIKK, UNIV, National Qualification Agency, EU, USAID, NMFA, GIZ, SDC, ADA		
Task start:	01.06.2017	Task finish	30.12.2018		
Overall budget (€)	510,000	Financial sources	MASHT, EU		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.10.1	Develop proposal on how to promote MINT subjects in primary and secondary education	Proposal	MASHT	1.06.-30.06.2017	10,000
5.10.2	Revise curricula and implement proposal for promoting MINT subjects in primary and secondary education	Report	MASHT	1.07.2017 – 30.12.2018	300,000
5.10.3	Develop and implement further education program (teacher-training) in teaching IT subjects / computer science	Further education program; list of teachers who have completed teacher-training in IT subjects	MASHT	15.07.2017 – 30.12.2018	200,000

Comments	-
Team	n.a.
Continuous Improvement	n.a.

5.1.5.11. Promote university alliance programs

Task No.	5.11	Task name	Promote university alliance programs		
Priority	3	Predecessor tasks	-	% Complete	0%

Description & rationale

The rationale behind this task is to establish special cooperation programs (alliance programs) between Kosovo universities and multinational IT companies and software vendors with the aim to:

- Promote technology transfer
- Provide students with skills in leading IT / software solutions (e.g. Oracle, SAP, etc.)
- Donation of software licences to universities
- Provide students with international internships
- Organize special courses, lectures and trainings
- Sponsorship for applied R&D projects

User story & results	As a Kosovo IT industry stakeholder I want to use university alliance programs to promote HR excellence and skills development in Kosovo.		
Acceptance criteria & indicators	▪ At least 2 university alliance programs have been implemented until the end of 2018.		
Responsible organization (lead)	UNIV	Partner organizations	MASHT, STIKK, National Qualification Agency, EU, USAID, NMFA, GIZ
Task start:	1.10.2017	Task finish	30.12.2018
Overall budget (€)	6,000	Financial sources	University alliance partners, EU, USAID

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.11.1	Identify suitable alliance partners and areas of cooperation (multinational IT companies and software vendors)	List of suitable alliance partners	STIKK	1.10.-30.10.2017	3,000
5.11.2	Establish and implement university alliance programs	MoUs	UNIV	2.11.2017 – 30.12.2018	3,000 Financing by alliance partners

Comments	It is advisable to also include vendors of frameworks and standards such as ITIL, PRINCE2 and PMP into university alliance programs. Best practice examples: SAP University Alliances: http://global.sap.com/corporate-en/our-company/university-alliances
Team	n.a.
Continuous Improvement	n.a.

5.1.5.12. Introduce vocational education for IT

Task No.	5.12	Task name	Introduce vocational education for IT		
Priority	1	Predecessor tasks	-	% Complete	0%

Description & rationale
Skills shortage represents a serious challenge for the future development and growth of the Kosovo IT industry. In order to address this challenge a second line of IT qualification will be introduced in the form of vocational education. The overall objective of vocational IT education in Kosovo will be to produce highly-qualified IT specialists who are able to bridge the existing qualification gap within the Kosovo IT labour market and to complement existing qualification profiles.

User story & results	As a Kosovo IT company I want to use vocational education for IT so that I can find suitable staff for my enterprise		
Acceptance criteria & indicators	▪ At least 2 vocational training schools for IT have been established.		
Responsible organization (lead)	MZHE, MASHT	Partner organizations	STIKK, National Qualification Agency, EU, NMFA, GIZ, SDC, ADA
Task start:	2.03.2017	Task finish	30.12.2018
Overall budget (€)	315,000	Financial sources	EU, NMFA, GIZ, SDC, ADA

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
5.12.1	Develop implementation concept and curricula for vocational IT education in Kosovo based on the German dual system for vocational education	Concept; curricula	GIZ	2.03.-29.05.2017	15,000
5.12.2	Establish vocational education for IT in Kosovo	at least 2 vocational training schools for IT	UNIV	1.06.2017 – 30.12.2018	300,000

Comments	Vocational education for IT in Kosovo should be based on the German dual education system (“Duales Ausbildungssystem”) which combines apprenticeships in a company and vocational education at a vocational training school. The precise skills and theory taught should be strictly regulated and defined as national standards. The dual education system could be also extended in order to create special IT colleges. Best practice examples: IT-Berufe: http://www.it-berufe.de Fachinformatiker: http://berufenet.arbeitsagentur.de/berufe/docroot/r2/blobs/pdf/bkb/7847.pdf Estonian IT College: http://www.itcollege.ee/en/it-college
Team	n.a.
Continuous Improvement	n.a.

5.1.6. Strategic Pillar 6: IT Clusters & Collaboration

5.1.6.1. Implement capacity building in IT cluster management

Task No.	6.1	Task name	Implement capacity building in IT cluster management		
Priority	1	Predecessor tasks	-	% Complete	0%

Description & rationale
Clusters are an important tool for promoting the Kosovo IT industry, particularly with regards to export promotion, industry collaboration and innovation / R&D. Furthermore, clusters allow Kosovo IT companies to overcome limitations in resources and to jointly target new markets. This task intends to equip Kosovo IT industry stakeholders with the necessary know-how, methodologies and tools in terms of IT cluster management.

User story & results	As a Kosovo IT industry stakeholder I want to use methodologies and tools of IT cluster management so that I can promote the IT industry more effectively.		
Acceptance criteria & indicators	▪ Training material and case studies on IT cluster management have been developed and approved by STIKK. ▪ At least 10 IT industry stakeholders have successfully participated in the IT cluster management training.		
Responsible organization (lead)	MZHE	Partner organizations	MTI, MASHT, KIESA, STIKK, GIZ, NMFA
Task start:	2.11.2017	Task finish	18.12.2017
Overall budget (€)	10,000	Financial sources	GIZ

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
6.1.1	Elaborate training material and case studies on IT cluster management	Training material and case studies	GIZ	2.11.-30.11.2017	6,000
6.1.2	Conduct training workshop (3 days) on IT cluster management for selected stakeholders	Program; results of group works / assignments; list of participants	GIZ	7.12.-11.12.2017	4,000
6.1.3	Provide cluster management manual and toolbox	Cluster management manual and toolbox	GIZ	14.12.-18.12.2017	-

Comments	The IT cluster management training should inter alia cover the following topics: Business planning, Organizational structure, quality management, IT cluster services, cluster marketing, project & process management, cluster financing, HR management, innovation, knowledge management. Best practice examples: Germany: Software Cluster: http://www.software-cluster.com Germany: bwcon: http://www.bwcon.de/
Team	n.a.
Continuous Improvement	n.a.

5.1.6.2. Establish STIKK as an IT Cluster of Excellence

Task No.	6.2	Task name	Establish STIKK as an IT Cluster of Excellence		
Priority	2	Predecessor tasks	-	% Complete	0%

Description & rationale
This task encompasses a range of activities designed to further enhance STIKK's capabilities in terms of market and customer orientation, service portfolio, quality management, innovation as well as financial sustainability. The main goals of this task are: ▪ Establishing STIKK as a Cluster of Excellence in the global IT industry ▪ Increasing the international competitiveness of STIKK member companies by providing specialized cluster services ▪ Promoting collaboration between Kosovo IT industry stakeholders.

User story & results	As a Kosovo IT industry stakeholder I want to use STIKK as a platform for collaboration and innovation and in order to get access to specific cluster services provided by STIKK.
Acceptance criteria & indicators	▪ By the end of 2018, STIKK has achieved a member base of at least 120 companies. ▪ By the end of 2018, STIKK has been certified according to ISO 9001 or a comparable quality certification. ▪ At least 70% of STIKK members interviewed assess the service portfolio provided by STIKK as good.

Responsible organization (lead)	STIKK	Partner organizations	MIT, KIESA, GIZ, NMFA, USAID, EU, SDC
Task start:	2.02.2017	Task finish	30.12.2018
Overall budget (€)	59,000	Financial sources	GIZ, NMFA, USAID, EU, SDC

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
6.2.1	Develop cluster business plan for STIKK (IT Cluster of Excellence)	Business plan	STIKK, GIZ	2.02.-16.03.2017	6,000
6.2.2	Further develop organizational structure and process model of STIKK	Organizational chart; job descriptions; process model	STIKK, GIZ	17.03.-15.06.2017	8,000
6.2.3	Develop and implement STIKK service portfolio (including integration of existing services)	STIKK service portfolio	STIKK, GIZ	17.03.-30.06.2017	15,000
6.2.4	Introduces a collaborative software application / groupware or ECM application (e.g. SharePoint, Trello, Yammer) to support IT stakeholder collaboration and knowledge management	Collaborative software application / groupware or ECM application	STIKK	16.06.-15.07.2017	6,000
6.2.5	Introduce QM system and support certification of STIKK according to ISO 9001 or a comparable quality certification	Quality manual for STIKK; certification document	STIKK	16.06.2017 – 30.12.2018	20,000
6.2.6	Support STIKK in enlarging its membership base	New members	GIZ	2.02.2017 – 3.08.2018	3,000
6.2.7	Integrate universities into STIKK as associated members	University membership	STIKK	17.03.-16.06.2017	1,000

Comments	It should be taken into consideration to include companies from related industries (e.g

Task No.	6.2	Task name	Establish STIKK as an IT Cluster of Excellence
	creative industries) in order to enlarge STIKK's membership base. However these related industries need to have a strong IT focus.		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.6.3. Establish international advisory board within STIKK ("Brand Ambassadors")

Task No.	6.3	Task name	Establish international advisory board within STIKK ("Brand Ambassadors")		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
One of the key challenges for the Kosovo IT industry is its lack of branding and international visibility. Therefore this task will address this issue by establishing an international advisory board within STIKK, consisting of top-ranking professionals and personalities from the international IT industry, politics and the academia. The members of the advisory boards will advice STIKK on strategic decisions and will serve as "brand ambassadors" for the Kosovo IT industry.					
User story & results	As a Kosovo IT industry stakeholder I want to use the international advisory board as "brand ambassadors" for the Kosovo IT industry.				
Acceptance criteria & indicators	▪ The international advisory board within STIKK is fully operational.				
Responsible organization (lead)	STIKK	Partner organizations	MTI, MZHE, GIZ, NMFA, USAID, EU, SDC		
Task start:	1.12.2016	Task finish	24.10.2018		
Overall budget (€)	24,000	Financial sources	GIZ, NMFA, USAID, EU, SDC		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
6.3.1	Develop concept and selection criteria for the international advisory board	Concept	STIKK	1.12.-5.12.2016	1,000
6.3.2	Integrate international advisory board into statute and organizational structure of STIKK	Statute; organizational chart	STIKK	8.12.-12.12.2016	1,000
6.3.3	Identify and appoint members of the international advisory board	List of members of the international advisory board	STIKK	15.12.2016 – 30.12.2017	4,000
6.3.4	Organize annual meetings / reunions of the international advisory board	Meeting reports	STIKK	23.10.2017 / 24.10.2018	18,000

Comments	Selection of the international advisory board needs to be organized in the form of a transparent process. Members of the international advisory board should be selected based on their merit, reputation and network within the global IT community. Annual meetings could be organized in the framework of the KosICT conference or STIKKs general meetings.

Task No.	6.3	Task name	Establish international advisory board within STIKK (“Brand Ambassadors”)
Team	n.a.		
Continuous Improvement	n.a.		

5.1.6.4. Establish specialized sub-clusters for targeted marketing and positioning

Task No.	6.4	Task name	Establish specialized sub-clusters for targeted marketing and positioning		
Priority	2	Predecessor tasks	-	% Complete	0%

Description & rationale
Global IT markets are characterized by increasing competition, differentiation and specialization. Therefore STIKK will organize sub-clusters specializing on specific vertical, horizontal or technical capabilities. This will allow them to differentiate themselves from competitors, to improve their market positioning and to address selected customer segments more effectively. This is particularly relevant with regards to export promotion. Optionally, Kosovo IT companies could use these sub-clusters for the formation of consortia, allowing them to bundle their competences, leverage opportunities and penetrate new markets.

User story & results	As a Kosovo IT company I want to participate in specialized sub-clusters, so that I can improve my marketing and positioning.
Acceptance criteria & indicators	▪ Specialized sub-clusters have been successfully established. ▪ Specialized sub-clusters have successfully participated in at least 3 national or international projects.

Responsible organization (lead)	STIKK	Partner organizations	MTI, KIESA, MZHE, GIZ, NMFA, USAID, EU, SDC
Task start:	1.05.2017	Task finish	15.06.2018
Overall budget (€)	23,000	Financial sources	GIZ, NMFA

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
6.4.1	Identify focus topics (e.g. software testing) for specialized sub-clusters	Evaluation report on focus topics	GIZ	1.05.-29.05.2017	3,000
6.4.2	Elaborate organizational concept for specialized sub-clusters	Concept	GIZ	1.06.-30.06.2017	3,000
6.4.3	Establish specialized sub-clusters	Short profile of sub-clusters	STIKK	1.07.-30.09.2017	5,000
6.4.4	Develop and implement action plans for specialized sub-clusters	Action plans; reports	STIKK	1.10.2017 – 15.06.2018	12,000

Comments	The establishment of the specialized sub-clusters needs to be market driven. Therefore market intelligence generated by STIKK’s Export Information Service (see task 3.1) should be taken into account. Bundling capabilities and resources in specialized sub-clusters could be also useful to address the issue of lack of scale and to reach level playing field with large-scale competitors from Eastern Europe or from Asia. Best practice examples: Brazil: PAEMPE (Programa de Alianças Empresariais)

Task No.	6.4	Task name	Establish specialized sub-clusters for targeted marketing and positioning
	Brazil: The Whale Strategy: http://brasilexportati.com/artigos/the-whale-strategy/		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.6.5. Implement cluster promotion program

Task No.	6.5	Task name	Implement cluster promotion program		
Priority	2	Predecessor tasks	-	% Complete	0%

Description & rationale
In order to promote STIKK as an IT Cluster of Excellence as well as to foster the formation of specialized sub-clusters / consortia, a special cluster promotion program should be introduced including grants for cluster management as well as joint research and marketing projects. In addition to that public tender procedures will be adapted in order to encourage the formation of strategic cooperation in the form of clusters or consortia.

User story & results	As a Kosovo IT company I want to participate in the cluster promotion program so that I can cooperate with other companies and IT industry stakeholders (e.g. universities) more effectively.
Acceptance criteria & indicators	▪ The cluster promotion program has been successfully implemented. ▪ At least 1 cluster project submitted by STIKK has been approved.

Responsible organization (lead)	MZHE	Partner organizations	MTI, STIKK, KRPP, EU
Task start:	2.02.2017	Task finish	30.09.2017
Overall budget (€)	35,000	Financial sources	EU

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
6.5.1	Develop cluster promotion program	Concept	MZHE, EU	2.02.-27.02.2017	3,000
6.5.2	Implement cluster promotion program	Project proposals (applications)	MZHE	2.03.-29.05.2017	30,000 (IT industry)
6.5.3	Adapt tender procedures to promote clusters / consortia	Adapted tender procedures	KRPP	1.09.-30.09.2017	2,000

Comments	It is advisable to design and implement a generic cluster promotion program for all industries of the Kosovo economy or a group of selected industries (e.g. high-tech industries), where the Kosovo IT sector is eligible to submit project proposals. Best practice examples: Germany: Go Cluster: http://www.go-cluster.de Latvia: http://www.itbaltic.com/en/case-studies/export-promotion-activities-of-latvian-it-companies
Team	n.a.
Continuous Improvement	n.a.

5.1.6.6. Establish job exchange within STIKK website

Task No.	6.6	Task name	Establish job exchange within STIKK website		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
Identifying and hiring suitable staff is one of the key challenges for Kosovo IT SMEs due to skills shortage, an intransparent labour market and lack of employer branding. Besides, most IT SMEs don't have HR departments to manage the hiring process. In order to address this issue in a collaborative approach, STIKK will establish a job exchange for its member companies. The job exchange will be designed and implemented as a cluster service.					
User story & results	As a Kosovo IT company I want to use the job exchange in order to identify and hire suitable job candidates for my enterprise.				
Acceptance criteria & indicators	▪ The job exchange within the STIKK website has been successfully implemented ▪ A minimum of 20 job offers / year have been published via the exchange.				
Responsible organization (lead)	STIKK	Partner organizations	MPMS, UNIVs, SDC, USAID		
Task start:	2.03.2017	Task finish	31.07.2017		
Overall budget (€)	17,000	Financial sources	SDC, USAID		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
6.6.1	Elaborate concept and requirements specification for the STIKK job exchange	Concept, requirements specification	STIKK	2.03.-20.03.2017	5,000
6.6.2	Conduct tender and implement the STIKK job exchange	Job exchange within STIKK website	STIKK	23.03.-31.07.2017	12,000

Comments	The STIKK job exchange should be actively promoted among companies and the IT community and should be integrated in STIKK's service portfolio. Best practice examples: Germany: Software Cluster: http://www.software-cluster.com/de/karriere/jobvermittlung/stellenausschreibungen-regional
Team	n.a.
Continuous Improvement	n.a.

5.1.6.7. Support the OSS community

Task No.	6.7	Task name	Support the OSS community		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
Promoting Open Source Software (OSS) in Kosovo is important for establishing a well-balanced portfolio of technical capabilities within the Kosovo IT industry which is important for export promotion as well as for the development of the domestic market. As an alternative to proprietary technologies, OSS also plays an important strategic role with regards to technological independence, IT security and innovation. This task has been envisaged in order to promote the OSS community in Kosovo, in particular the Free Libre Open Source Software Kosova (FLOSSK).					
User story & results	As a member of the OSS community I want to use the support provided through the				

Task No.	6.7	Task name	Support the OSS community		
	National IT Strategy so that I can promote OSS in Kosovo more effectively.				
Acceptance criteria & indicators	▪ The Software Freedom Kosova Conference (SFK) has been successfully implemented on an annual basis in close cooperation with STIKK.				
Responsible organization (lead)	STIKK		Partner organizations	STIKK, MASHT, EU, USAID, GIZ, NMFA	
Task start:	10.10.2016		Task finish	14.10.2018	
Overall budget (€)	10,000		Financial sources	EU, USAID, GIZ, NMFA	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
6.7.1	Support the organization and implementation of the Software Freedom Kosova Conference on an annual basis	Program; list of participants	EU, USAID	10.10.-12.10.2016 / 13.10.-14.10.2017 / 13.10.-14.10.2018	9,000
6.7.2	Promote cooperation between FLOSSK and international OSS communities	MoUs	NMFA, GIZ	3.11.2016 – 30.12.2018	1,000
Comments	Best practice examples: Germany: Software Cluster: Open Source Business Alliance (OSBA): http://www.osb-alliance.de				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.6.8. Establish joint competence center on EU projects

Task No.	6.8	Task name	Establish joint competence center on EU projects		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task is directed at establishing a joint competence center at STIKK, including all relevant stakeholders (particularly universities) and bundling their resources and capabilities in order to acquire EU projects. This is particularly relevant with regards to the Kosovo IT community where most of the stakeholders do not have the necessary resources and competences to participate in the application / tender process on an individual basis. The main goal of this task is to acquire much needed funds / subsidies for the Kosovo IT industry and the academia.					
User story & results	As a Kosovo IT stakeholder, I want to use the joint competence center so that I can acquire EU projects and funds for my organization.				
Acceptance criteria & indicators	▪ The joint competence center on EU projects has been successfully established. ▪ The joint competence center on EU projects has acquired at least 1 EU project / year (as lead or consortium partner).				
Responsible organization (lead)	STIKK		Partner organizations	ICK, EU	
Task start:	1.09.2017		Task finish	30.12.2018	
Overall budget (€)	12,000		Financial sources	EU	
Task activities:					

Task No.	6.8	Task name	Establish joint competence center on EU projects			
No	Activity		Deliverables:	Resp.	Timing	Budget
6.8.1	Develop concept for the joint competence center on EU projects including services portfolio (e.g. formation of consortia, proposal writing, supporting the application process, etc.) and financing model		Concept for joint competence center on EU projects	STIKK	1.09.-11.09.2017	3,000
6.8.2	Implement and operate joint competence center on EU projects		Project proposals	STIKK	14.09.2017 – 30.12.2018	9,000 (start-up)
Comments	Best practice examples: Germany: EU project advisory services: http://www.htai.de/dynasite.cfm?dsmid=19820					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.6.9. Promote international cluster linkage

Task No.	6.9	Task name	Promote international cluster linkage		
Priority	2	Predecessor tasks	-	% Complete	20%
Description & rationale					
The goal of this task is to link STIKK with relevant IT clusters and associations (particularly in export target markets) in order to increase the international visibility of the Kosovo IT industry and to establish a platform for the exchange of experiences and best practices, for match-making and joint projects.					
User story & results	As a Kosovo IT stakeholder, I want to use international IT cluster partners for the exchange of experiences and best practices, for match-making and joint projects.				
Acceptance criteria & indicators	▪ At least 10 MoUs with international IT clusters and associations have been signed. ▪ At least 3 cooperation projects with international IT cluster partners or IT associations have been successfully implemented until the end of 2018.				
Responsible organization (lead)	STIKK	Partner organizations	GIZ, NMFA, USAID, EU		
Task start:	01.04.2016	Task finish	30.12.2018		
Overall budget (€)	4,000	Financial sources	GIZ, NMFA, EU		
Task activities:					

No	Activity	Deliverables:	Resp.	Timing	Budget
6.9.1	Identify suitable cooperation partners (IT clusters and association) and identify areas of cooperation	Profiles of cooperation partners; description of areas of cooperation / potential cooperation projects	GIZ	1.04.-31.12.2016	2,000
6.9.2	Establish cooperation with IT clusters and associations	MoUs	STIKK, GIZ	1.05.2016 – 30.12.2018	2,000
Comments	It could be advisable for STIKK to become member of TCI – The Global Practitioners Network				

Task No.	6.9	Task name	Promote international cluster linkage
	for Competitiveness, Clusters and Innovation.		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.6.10. Establish special competence groups for strategic IT topics ("Triple Helix")

Task No.	6.10	Task name	Establish special competence groups for strategic IT topics		
Priority	2	Predecessor tasks	-	% Complete	0%

Description & rationale

Special Competence Groups (SCG) will be established within STIKK in order to address strategic topics for the IT industry such as human resources (HR) or technology trends. The main goals of these SCGs are:

- Awareness raising & information
- Networking between providers and users
- Promoting collaboration between companies, public sector and academia on specific topics ("Triple Helix")
- Developing and implementing joint projects

Special Competence Groups (SCGs) should cover the following strategic IT topics:

- Cloud Computing
- Mobile Computing
- Big Data & Analytics
- Industry 4.0 (Cyber-Physical-Systems) and Embedded Systems
- IT Security
- Open Source Software (OSS)
- E-Health
- Human Resources (HR)
- Export Promotion & Internationalization

User story & results	As a Kosovo IT stakeholder I want to participate in Special Competence Groups so that I can exchange information on strategic IT topics and find suitable cooperation partners.		
Acceptance criteria & indicators	▪ At least 6 Special Competence Groups have been successfully established. ▪ At least 2 whitepapers, guidelines or project proposals have been elaborated by the SCGs / year.		
Responsible organization (lead)	STIKK	Partner organizations	MASHT, MIT, MZHE, ASHI, KIESA, ZKM, UNIV, GIZ, NMFA, SDC, USAID, EU
Task start:	1.05.2017	Task finish	30.12.2018
Overall budget (€)	21,000	Financial sources	GIZ, NMFA, SDC, USAID, EU

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
6.10.1	Develop concept for the SCGs including goals, structure and procedures	Concept	GIZ	1.05.-15.05.2017	1,000
6.10.2	Define the topics for the SCGs	List of topics with evaluation report	STIKK	18.05.-5.06.2017	2,000
6.10.3	Establish and manage the SCGs	List of members, meeting reports, whitepapers, guidelines, project proposals	STIKK	8.06.2017 – 30.12.2018	9,000

Task No.	6.10	Task name	Establish special competence groups for strategic IT topics		
6.10.4	Organize participation of international experts in SCG meetings (presentations, lectures, etc.)	reports	EU	2.10.2017 – 30.12.2018	6,000
6.10.5	Organize international linkage to similar competence groups or networks (in IT clusters, associations, universities, research institutes, etc.)	Cooperation agreements	GIZ, NMFA	2.11.2017 – 30.12.2018	3,000
Comments	In contrast to the specialized sub-clusters (see Task 6.4), which are market-driven, the SCGs are mostly technology driven and cover strategic topics for the IT industry. The SCGs should be also used to promote cooperation between IT providers and users from other industries of the Kosovo IT industry (cross-sectoral cooperation).				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.7. Strategic Pillar 7: Entrepreneurship

5.1.7.1. Establish coaching committee at STIKK / ICK

Task No.	7.1	Task name	Establish mentoring committee at STIKK / ICK		
Priority	3	Predecessor tasks	-	% Complete	0%
Description & rationale					
The rationale behind this task is to establish a special committee at STIKK / ICK consisting of experienced managers of IT companies who will provide mentoring to young entrepreneurs and start-ups. In addition to that, the mentoring committee organizes monthly entrepreneurship dinners for informal match-making between start-ups, business angels, VCs, managers of IT companies (coaches) as well as for coaching and mentoring.					
User story & results	As an IT start-up I want to use the mentoring services provided by the mentoring committee in order to learn from experienced managers and to successfully establish and manage my business.				
Acceptance criteria & indicators	▪ The mentoring committee has been successfully established. ▪ The committee has conducted at least 10 mentoring sessions / year.				
Responsible organization (lead)	STIKK / ICK	Partner organizations	IT companies		
Task start:	01.10.2017	Task finish	30.12.2018		
Overall budget (€)	12,000	Financial sources	NMFA, USAID		
Task activities:					

No	Activity	Deliverables:	Resp.	Timing	Budget
7.1.1	Elaborate concept for the mentoring committee (members, procedures, etc.)	Concept	STIKK	1.10.-7.10.2017	1,000
7.1.2	Establish mentoring committee at STIKK / ICK and conduct coachings for start-ups	List of participants	ICK	8.10.-16.10.2017	3,000

Task No.	7.1	Task name	Establish mentoring committee at STIKK / ICK			
7.1.3	Organize monthly entrepreneurship dinners with the members of the mentoring committee, start-ups, business angels and VCs		List of participants	ICK	19.10.2017 – 30.12.2018	8,000
Comments	This task needs to be closely coordinated with the introduction of specialized consulting services for entrepreneurs and start-ups (see Task 7.5).					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.7.2. Support the establishment of the Kosovo Business Angels and VC Association

Task No.	7.2	Task name	Support the establishment of the Kosovo Business Angels and VC Association		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
Lack of capital is one of the main obstacles to entrepreneurship and growth in the Kosovo IT industry. Supporting the establishment of a Kosovo Business Angels and VC Association will foster the provision of angel and VC investment for Kosovo IT start-ups and companies. Furthermore the association will become an important element of the entrepreneurial ecosystem of the Kosovo IT industry and provide an effective cooperation-platform for investors and entrepreneurs.					
User story & results	As a Kosovo IT start-up / company I want to use the Kosovo Business Angels and VC Association in order to get access to angel capital and VC.				
Acceptance criteria & indicators	▪ The Kosovo Business Angels and VC Association has been successfully established.				
Responsible organization (lead)	CEED / ICK	Partner organizations	MF, MTI, MZHE, KIESA, USAID, EU, NMFA		
Task start:	17.11.2016	Task finish	30.12.2018		
Overall budget (€)	17,000	Financial sources	USAID, EU		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
7.2.1	Elaborate a proposal for the establishment of a Kosovo Business Angels and VC Association	Proposal	USAID / ICK	17.11.- 3.12.2016	5,000
7.2.2	Mobilize potential partners and members for the association	List of potential partners and members	USAID	4.12.- 31.12.2016	3,000
7.2.3	Support the establishment of the Kosovo Business Angels and VC Association (technical and financial support)	Statute of the association, list of founding members	USAID	1.01.- 29.05.2017	8,000
7.2.4	Create international linkage for the Kosovo Business Angels and VC Association (particularly with NVCA and EVCA)	MoUs	USAID	1.06.2017 – 30.12.2018	1,000
Comments	The Kosovo Business Angels and VC Association should include a broad range of potential				

Task No.	7.2	Task name	Support the establishment of the Kosovo Business Angels and VC Association
	financiers including business angels, individual investors, VCs, incubators, regulated crowdfunders. The association should include national as well as international members. International linkage and cooperation should be established in particular with the following organizations: USA: National Venture Capital Association: http://www.nvca.org EU: European Private Equity & Venture Capital Association: http://www.evca.eu Best practice example: Serbian Business Angels Network: http://sban.eu/eng/ UK Business Angels Association: http://www.ukbusinessangelsassociation.org.uk		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.7.3. Organize B2B match-making events between investors and IT entrepreneurs on a national level

Task No.	7.3	Task name	Organize B2B match-making events between investors and IT entrepreneurs on a national level		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task will facilitate match-making between potential investors and IT start-ups / companies.					
User story & results	As a Kosovo IT start-up / company I want to participate in B2B match-making events with potential investors in order to get access to finance for my enterprise.				
Acceptance criteria & indicators	▪ At least 3 B2B match-making events between investors and entrepreneurs have been implemented until the end of 2018.				
Responsible organization (lead)	STIKK / ICK	Partner organizations	KIESA, USAID, EU, NMFA, Development Banks, CEED		
Task start:	2.03.2017	Task finish	7.10.2018		
Overall budget (€)	21,000	Financial sources	USAID, EU, NMFA, Development Banks		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
7.3.1	Provide preparatory trainings for IT start-ups / entrepreneurs participating in match-making / pitching events (business planning, finance, elevator pitch, etc.)	Training material, list of participants	Development Banks	2.03.-30.04.2017	12,000
7.3.2	Conduct at least 3 B2B match-making events between investors and IT entrepreneurs	Program, list of participants	Development Banks	2.06.-3.06.2017 / 1.06.-2.06.2018 / 6.10.-7.10.2018	9,000

Comments	The preparatory trainings should be conducted in English and should meet international quality standards so that participants would be also able to participate in international

Task No.	7.3	Task name	Organize B2B match-making events between investors and IT entrepreneurs on a national level
	match-making / pitching events and start-up competitions.		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.7.4. Organize international VC4IT conference in Kosovo

Task No.	7.4	Task name	Organize international VC4IT conference in Kosovo		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
The rationale behind this task is to organize an international venture forum with a focus on IT in Kosovo in order to attract international business angels and VC companies to invest in IT start-ups and companies from Kosovo and the region (Southeast Europe). At the same time this event will increase the international visibility of the Kosovo IT industry as an attractive destination for investment. In terms of IT (particularly software) Southeast Europe is one of the most innovative and dynamic regions in Europe. Therefore, such an event is likely to attract a substantial number of international investors.					
User story & results	As a Kosovo IT start-up / company I want to participate in the VC4IT conference in order to find international investors (business angels and VCs) for my business.				
Acceptance criteria & indicators	▪ The VC4IT conference has been attended by at least 20 international business angels and VC companies.				
Responsible organization (lead)	STIKK / ICK	Partner organizations	MTI, KIESA, MZHE, MF, USAID, EU, NMFA, GIZ, SDC, Development Banks, CEED		
Task start:	15.10.2017	Task finish	2.05.2018		
Overall budget (€)	23,000	Financial sources	USAID, EU, Development Banks		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
7.4.1	Develop concept for the VC4IT conference (program, financing, participants, logistics, etc.)	Concept	STIKK	15.10.-6.11.2017	3,000
7.4.2	Organize international VC4IT conference in Kosovo	Program, list of participants	STIKK	9.11.2017 – 2.05.2018	20,000

Comments	The program of the VC4IT conference should include inter alia: ▪ Pitching sessions ▪ Coaching sessions ▪ Expert presentations ▪ Discussion panels Good practice examples: Balkan Venture Forum: http://www.balkanventureforum.org Belgrade Venture Forum: http://www.belgradeventureforum.org
Team	n.a.
Continuous Improvement	n.a.

5.1.7.5. Introduce specialized consulting & coaching service for IT entrepreneurs and start-ups

Task No.	7.5	Task name	Introduce specialized consulting & coaching service for IT entrepreneurs and start-ups		
Priority	2	Predecessor tasks	-	% Complete	0%

Description & rationale
This task is directed at providing specialized consulting & coaching services in order to equip entrepreneurs and start-ups with the necessary capabilities and know-how to successfully establish and manage their businesses. This service will combine specializes start-up consulting with coaching and mentoring by experienced managers from the IT industry in Kosovo (STIKK).

User story & results	As a Kosovo IT start-up I want to use specialized consulting & coaching services so that I can establish and manage my business successfully.
Acceptance criteria & indicators	▪ The specialized consulting & coaching service for entrepreneurs and start-ups is fully operational. ▪ At least 20 Kosovo start-ups made use of the specialized consulting & coaching service.

Responsible organization (lead)	ICK / STIKK	Partner organizations	KIESA, NMFA, GIZ, USAID
Task start:	01.04.2017	Task finish	30.12.2018
Overall budget (€)	55,000	Financial sources	NMFA, GIZ, USAID

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
7.5.1	Conduct needs assessment with ICK and its member companies (incubator) (e.g. through interviews and / or focus group)	Needs assessment	ICK / STIKK	1.04.-17.04.2017	3,000
7.5.2	Develop concept for the specialized consulting & coaching service for IT entrepreneurs and start-ups including selection criteria, focus areas, methods and tools and delivery model. Focus areas should include: ▪ Business planning ▪ Financing & accounting ▪ Marketing & sales ▪ Operations management ▪ Entrepreneurship & innovation ▪ IP / legal	Concept	NMFA	20.04.-20.05.2017	8,000
7.5.3	Develop financial support scheme for the specialized consulting services for entrepreneurs and start-ups based on a voucher system (IT start-up vouchers)	Financial support scheme	NMFA	21.05.-29.05.2017	2,000
7.5.4	Establish pool of suitable consultants and coaches (see Task 7.1 Mentoring committee)	List of consultants and coaches	STIKK	21.05.-31.07.2017	1,000
7.5.5	Conduct information events on specialized consulting services for entrepreneurs and start-ups	Presentation	ICK / STIKK	1.09.2017	1,000
7.5.6	Implement specialized consulting service	Consulting reports,	NMFA	2.09.2017	40,000

	for entrepreneurs and start-ups	evaluation reports		– 30.12.2018	
Comments	The specialized consulting & coaching service for entrepreneurs and start-ups should be developed and implemented by ICK in close collaboration with STIKK. The members of the STIKK / ICK coaching committee (see Task 7.1) should be directly integrated into the service. Synergy effects should be generated by using components of the enterprise capacity building & excellence program (see Task 2.2). Best practice examples: Cyberforum e.V. Start-up services: http://www.cyberforum.de/angebote/fuer-gruender/ Bwcon Coaching & Finance: http://www.bwcon.de/coaching_finance.html				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.7.6. IT Entrepreneurship Award ("DigitalOne")

Task No.	7.6	Task name	Establish IT Entrepreneurship Award ("DigitalOne")		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
The main goal of this task is to create awareness for the strategic importance of entrepreneurship for the Kosovo IT industry and the overall economy. The annual IT Entrepreneurship Award is aimed primarily at young entrepreneurs / university spin-offs and start-ups at their early stage.					
User story & results	As a Kosovo IT industry stakeholder I want to use the IT Entrepreneurship Award to create awareness for the strategic importance of entrepreneurship for the Kosovo IT industry.				
Acceptance criteria & indicators	▪ The IT Entrepreneurship Award has been successfully established.				
Responsible organization (lead)	STIKK / ICK	Partner organizations	MTI, KIESA, NMFA, CEED		
Task start:	1.05.2017	Task finish	15.11.2018		
Overall budget (€)	7,000	Financial sources	NMFA		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
7.6.1	Define selection criteria for the IT Entrepreneurship Award	Selection Criteria	STIKK	1.05.-5.05.2017	1,000
7.6.2	Establish the IT Entrepreneurship award and conduct award ceremony annually	Program	STIKK	10.11.-12.11.2017 / 11.11.-15.11.2018	6,000

Comments	It might be advisable to combine the award ceremony with the international IT VC conference (Task 7.4)
Team	n.a.

Task No.	7.6	Task name	Establish IT Entrepreneurship Award (“DigitalOne”)
Continuous Improvement	n.a.		

5.1.7.7. Establish high-tech start-up fund (PPP)

Task No.	7.7	Task name	Establish high-tech start-up fund (PPP)		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task is directed at establishing a high-tech start-up fund in order to facilitate access to finance for IT start-ups and entrepreneurs in Kosovo, particularly during the early stage / seed phase. The high-tech start-up fund will be established in the form of a public private partnership including ministries, private sector companies from high-tech industries (e.g. IT, telecommunications, energy, etc.) and development banks. The PPP-approach and the inclusion of private sector partners will increase the leverage of the fund in terms of synergy effects, networking, coaching and mentoring for the start-ups.					
User story & results	As a Kosovo IT start-up I want to use the high-tech start-up fund in order to get access to capital at attractive conditions and transform my business idea into an enterprise.				
Acceptance criteria & indicators	▪ The high-tech start-up fund has been successfully established.				
Responsible organization (lead)	MZHE	Partner organizations	MF, MTI, KIESA, Development Banks		
Task start:	01.06.2017	Task finish	30.12.2018		
Overall budget (€)	5,030,000	Financial sources	Development Banks		

Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
7.7.1	Elaborate business plan and feasibility study for the high-tech start-up fund	Business plan; feasibility study	MZHE	1.06.-15.09.2017	30,000
7.7.2	Establish and operate the high-tech start-up fund	Decree on the establishment of the high-tech start-up fund; annual report	MZHE	16.09.2017 – 30.12.2018	5,000,000

Comments	Best practice example: High-Tech Gruenderfonds: http://www.en.high-tech-gruenderfonds.de
Team	n.a.
Continuous Improvement	n.a.

5.1.7.8. Introduce IT entrepreneurship@school program

Task No.	7.8	Task name	Introduce IT entrepreneurship@school program		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
The main goal of this task is to motivate and inspire the entrepreneurial spirit of students at an early age and to promote Kosovo’s IT entrepreneurs of the future.					

Task No.	7.8	Task name	Introduce IT entrepreneurship@school program
User story & results	As a student I want to participate in the IT entrepreneurship@school program so that I can learn about entrepreneurship in the IT industry.		
Acceptance criteria & indicators	▪ The IT entrepreneurship@school program has been successfully implemented in at least 10 high schools in Kosovo.		
Responsible organization (lead)	MASHT	Partner organizations	STIKK / ICK, NMFA, USAID
Task start:	01.10.2017	Task finish	30.12.2018
Overall budget (€)	9,000	Financial sources	NMFA, USAID

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
7.8.1	Develop IT entrepreneurship@school program including business plan competition, excursions to ICK, presentations by IT entrepreneurs, etc.	Program	STIKK / ICK	1.10.-30.10.2017	3,000
7.8.2	Implement IT entrepreneurship@school program	Evaluation reports	MASHT	2.11.2017 – 30.12.2018	6,000

Comments	-
Team	n.a.
Continuous Improvement	n.a.

5.1.7.9. Establish international linkage and sponsorship for ICK

Task No.	7.9	Task name	Establish international linkage and sponsorship for ICK		
Priority	1	Predecessor tasks	-	% Complete	0%

Description & rationale

The rationale behind this task is to link ICK to incubators abroad, particularly in Norway, Germany, Netherlands, UK and in the US in order to promote:

- Exchange of best practices and experiences in IT incubation and entrepreneurship
- Access to finance
- Know-how transfer
- Joint projects
- Business development

Furthermore, this task includes the identification and acquisition of international sponsors for the ICK.

User story & results	As a stakeholder of ICK I want to use the international linkages of ICK to conduct joint projects with other incubators and to generate business opportunities for my members.		
Acceptance criteria & indicators	▪ ICK signed at least 6 MoUs with incubators and innovation centers abroad.		
Responsible organization (lead)	STIKK / ICK	Partner organizations	KIESA, NMFA, GIZ, SDC, USAID, EU
Task start:	2.09.2016	Task finish	30.12.2018
Overall budget (€)	12,000	Financial sources	NMFA, GIZ, SDC, USAID, EU

Task activities:

Task No.	7.9	Task name	Establish international linkage and sponsorship for ICK			
No	Activity		Deliverables:	Resp.	Timing	Budget
7.9.1	Identify suitable cooperation partners for ICK in strategic export markets as well as in the US		List of potential cooperation partners	NMFA, GIZ	2.09.-30.09.2016	2,000
7.9.2	Establish international linkage for ICK with incubators and innovation centers abroad		MoUs	ICK	1.10.2016 – 30.12.2018	5,000
7.9.3	Develop and implement international sponsorship program for ICK		International sponsorship program	ICK	13.04.2017 – 30.12.2018	5,000
Comments	It is recommendable to establish international linkage not only to incubators abroad but also to accelerators, innovation centers, IT-specific business parks and IT clusters and agencies promoting IT entrepreneurship. Best practice examples: German Silicon Valley Accelerator: http://www.exist.de/silicon-valley-accellerator					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.8. Strategic Pillar 8: Innovation & Applied R&D

5.1.8.1. Conduct information events on Horizon 2020 program (IT)

Task No.	8.1	Task name	Conduct information events on Horizon 2020 program (IT)		
Priority	1	Predecessor tasks	-	% Complete	30%
Description & rationale					
Horizon 2020 is the biggest EU programme for research and innovation ever with nearly EUR 80 billion of funding available over 7 years (during the period 2014 to 2020).[33] The main goal of this task is to inform Kosovo IT industry stakeholders (particularly IT companies) on how they can use funds provided by Horizon 2020 for their innovation and research activities.					
User story & results	As a Kosovo IT industry stakeholder I want to participate in information events on the Horizon 2020 program so that I can learn about how to use the funds provided by the program for my innovation and research activities.				
Acceptance criteria & indicators	▪ At least 3 information events on the Horizon 2020 program have been implemented. ▪ At least 15 companies and / or institutions have participated / information event.				
Responsible organization (lead)	STIKK		Partner organizations	MASHT, MTI, MZHE, UNIV, EU	
Task start:	13.03.2016		Task finish	28.03.2018	
Overall budget (€)	9,000		Financial sources	EU	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget

[33] http://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020.

Task No.	8.1	Task name	Conduct information events on Horizon 2020 program (IT)			
8.1.1	Analyze documents on Horizon 2020 (ICT focus) and elaborate information material for the Kosovo IT industry		Information material (presentation)	STIKK	13.03.-27.03.2016	3,000
8.1.2	Carry out at least 3 information events on Horizon 2020 program for the Kosovo IT industry		Program; list of participants	STIKK	27.03.2016 / 27.03.2017 / 28.03.2018	6,000
Comments	The information events on the Horizon 2020 program should address the following questions: ▪ Focus topics in the area of ICT ▪ Conditions and rules for applicants for Horizon 2020 funding? ▪ What is being funded and to what degree? ▪ What are the average success rates for applications? ▪ Which forms of funding do exist? ▪ What are the official criteria? Activities should be closely coordinated with Task 6.8 Competence center on EU projects in order to support Kosovo IT stakeholders with the application process (e.g. proposal writing).					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.8.2. Introduce capitalization of patents, licences and development costs

Task No.	8.2	Task name	Introduce capitalization of patents, licences and development costs		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
The rationale behind this task is to incentivize investment into innovation and applied R&D for Kosovo IT companies by introducing capitalization of patents, licenses and development costs in financial statements according to the International Financial Reporting Standards (IFRS).					
User story & results	As a Kosovo IT company I want to capitalize patents, licences and development costs so that I can improve the credit rating of my enterprise.				
Acceptance criteria & indicators	▪ The capitalization of patents, licences and development costs according to IFRS has been successfully implemented.				
Responsible organization (lead)	MF	Partner organizations	STIKK, MZHE, MTI, MASHT, EU, USAID, Development Banks		
Task start:	15.01.2018	Task finish	15.07.2018		
Overall budget (€)	9,000	Financial sources	EU, USAID		

Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
8.2.1	Analyze international best practices and standards and elaborate proposal for an amendment on introducing the capitalization of patents, licences and development costs	Proposal for amendment	MF	15.01.-15.03.2018	6,000

Task No.	8.2	Task name	Introduce capitalization of patents, licences and development costs			
8.2.2	Adopt amendment on introducing the capitalization of patents, licences and development costs		Amendment	MF	16.03.-15.07.2018	3,000
Comments	-					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.8.3. Introduce tax incentives for investments into innovation and R&D

Task No.	8.3	Task name	Introduce tax incentives for investments into innovation and R&D		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
The main goal of this task is to provide tax incentives for Kosovo IT companies investing into innovation and research and development (R&D). This is particularly relevant in terms of the international competitiveness of the Kosovo IT industry.					
User story & results	As a Kosovo IT company I want to benefit from tax incentives for investments into innovation and R&D so that I can improve the innovation capability and competitiveness of my enterprise.				
Acceptance criteria & indicators	▪ Tax incentives for investments into innovation and R&D have been introduced.				
Responsible organization (lead)	MF	Partner organizations	STIKK, MZHE, MTI, MASHT, EU, USAID, Development Banks		
Task start:	01.05.2017	Task finish	30.10.2017		
Overall budget (€)	9,000	Financial sources	EU, USAID		
Task activities:					

No	Activity	Deliverables:	Resp.	Timing	Budget
8.3.1	Analyze international best practices and elaborate proposal for an decree to introduce tax incentives for investments into innovation and R&D	Proposal for decree	MF	1.05.-30.06.2017	6,000
8.3.2	Adopt decree on introducing tax incentives for investments into innovation and R&D	Decree	MF	1.07.-30.10.2017	3,000

Comments	Best practice example: Law Nº 11.908: permits a company to income tax deductions of up to 200% for spending on labour training and R&D. For the purchase of equipment used in R&D, there is a 50% reduction in the tax on industrial products (IPI), in addition to exemption from this tax for imports of materials used to develop software. There are also tax reductions on amounts paid for technology transfer, licenses and royalties. Source: Brasil IT+: http://www.brasilitplus.com/brasilit/Ingles/detAmbienteNegocios.php
Team	n.a.

Task No.	8.3	Task name	Introduce tax incentives for investments into innovation and R&D
Continuous Improvement	n.a.		

5.1.8.4. Establish open innovation system for the Kosovo IT industry

Task No.	8.4	Task name	Establish open innovation system for the Kosovo IT industry		
Priority	3	Predecessor tasks	-	% Complete	0%

Description & rationale

Open innovation is based on the idea of using internal as well as external sources of innovation such as customers, competitors, and academic institutions. The concept is closely related to ideas and models such as collaborative innovation, cluster-based innovation, user-engaged innovation as well as Open Source Software (OSS).
Open innovation provides the following benefits for the IT industry:

- Collaboratively developing product innovations, process innovations and business model innovations
- User / customer integration in the development process
- Ensuring market fit of new products and services
- Using synergies
- Reducing the costs of conducting R&D
- Leveraging external knowledge and technologies
- Sharing risks

Taking into account the complexity and dynamics of the global IT industry and the limited resources of Kosovo IT SMEs, open innovation represents a highly relevant topic for the Kosovo IT sector. Therefore this task is directed at establishing an open innovation system for the Kosovo IT industry, based on close collaboration with all relevant stakeholders as well as potential customers / users.

User story & results	As a Kosovo IT company I want to use the open innovation system so that I can develop innovative IT solutions in close cooperation with partners and clients.
Acceptance criteria & indicators	▪ The open innovation system has been implemented. ▪ At least 30 companies have completed the training and capacity building on open innovation.

Responsible organization (lead)	MASHT	Partner organizations	STIKK, UNIV, MZHE, MTI, KIESA, EU, USAID
Task start:	2.02.2017	Task finish	28.10.2018
Overall budget (€)	43,000	Financial sources	EU, USAID

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
8.4.1	Develop and implement at least 3 trainings on open innovation (methods, tools, processes, best practice examples)	Training materials; training program; list of participants; evaluation reports	MASHT	1.09.-25.09.2017 / 28.09.2017 / 1.04.2018 / 1.09.2018	12,000
8.4.2	Develop and implement open innovation platform (web solution) to promote open innovation projects between IT	Requirements specification; open innovation platform	EU	2.02.-31.03.2017	15,000

Task No.	8.4	Task name	Establish open innovation system for the Kosovo IT industry			
	companies and the academia					
8.4.3	Open innovation events (information events) with presentations, expert talks, etc. (annually)		Program; list of participants	EU	5.10.2017 / 5.10.2018	6,000
8.4.4	Organize KosICT Innovation Hackathon on an annual basis (focus on specific platform (e.g. mobile apps), a specific programming language or framework or a specific purpose (e.g. e-health))		Program; list of participants	STIKK	26.10.-30.10.2017 / 24.10.-28.10.2018	10,000

Comments	The activities of this task need to be closely coordinated with Task 8.6 Competence Center for applied R&D in strategic IT topics. STIKK / ICK together with the Competence Centers for applied R&D should serve as platform for open innovation based on close cooperation between the IT industry, government and academia. The training and capacity building on open innovation should address all relevant stakeholders of the Kosovo IT industry in the area of innovation and applied R&D. The following topics should be covered by the trainings: ▪ Introduction to open innovation ▪ Concepts and terms in open innovation ▪ Application areas of open innovation ▪ Benefits and concerns of open innovation ▪ Open innovation processes (outside-in and inside-out processes, coupled process) ▪ Open innovation methods and tools (e.g. Lead User Method, Living Labs, Cross-Innovation, Idea Competitions, Co-Creation, Crowd Sourcing, etc.) ▪ Open innovation and IP ▪ Best practice examples The Trainings on open innovation should be implemented by the STIKK Education. Best practice examples: Open Alps Project: http://www.open-alps.eu INNOCENTIVE: https://www.innocentive.com Finnland: DEMOLA innovation platform: http://www.demola.fi BioHackathon: http://www.biohackathon.org
Team	n.a.
Continuous Improvement	n.a.

5.1.8.5. Introduce IT innovation and R&D program

Task No.	8.5	Task name	Introduce IT innovation and R&D program		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					

The main goal of this task is to develop and implement a support program for promoting IT innovation and applied R&D in the Kosovo IT industry. The program will provide funding for business-academia cooperation in the area of innovation and R&D based on competitive and transparent tender procedures. The support program is mainly targeted at the Competence Centers for applied R&D in strategic IT topics (see Task 8.6).
The IT innovation and R&D program will focus on the following strategic IT topics:

- Cloud Computing
- Mobile Computing
- Big Data & Analytics

Task No.	8.5	Task name	Introduce IT innovation and R&D program
▪ Industry 4.0 (Cyber-Physical-Systems) and Embedded Systems ▪ IT Security ▪ Open Source Software (OSS) ▪ E-Health ▪ E-Energy			
User story & results	As a Kosovo IT stakeholder I want to use the IT innovation and R&D program to conduct joint research projects for my organization together with partners from the Competence Centers.		
Acceptance criteria & indicators	▪ The IT innovation and R&D program is fully operational. ▪ At least 3 R&D project proposals by Kosovo IT companies / IT industry stakeholders have been approved and supported by the IT innovation and R&D program.		
Responsible organization (lead)	MASHT	Partner organizations	STIKK, UNIV, MTI, MZHE, KIESA, EU
Task start:	1.10.2017	Task finish	30.12.2018
Overall budget (€)	211,000	Financial sources	EU

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
8.5.1	Elaborate concept for the IT innovation and R&D program including procedures, selection criteria, financing, etc.	Concept	EU	1.10.-30.10.2017	8,000
8.5.2	Conduct information events on the IT innovation and R&D program (at least 3 information events)	Program; list of participants	MASHT	2.12.2017 / 2.05.2018 / 2.12.2018	3,000
8.5.3	Implement the IT innovation and R&D program	Project proposals; evaluation reports	MASHT, EU	15.01.-30.12.2018	200,000

Comments	-
Team	n.a.
Continuous Improvement	n.a.

5.1.8.6. Establish Competence Centers for applied R&D in strategic IT topics

Task No.	8.6	Task name	Establish Competence Centers for applied R&D in strategic IT topics		
Priority	2	Predecessor tasks	6.10 Special competence groups for strategic IT topics	% Complete	0%

Description & rationale

This task is directed at establishing Competence Centers for applied R&D in strategic IT topics. These Competence Centers will be established within universities or research institutions and will fulfil the following functions:

- Conducting applied R&D for the Kosovo IT industry
- Trend scouting
- Acquisition and implementation of joint R&D projects (e.g. Horizon 2020)
- Promoting R&D cooperation between companies, public sector and academia on strategic IT topics (“Triple Helix”)
- Fostering technology transfer
- Developing innovative IT solutions for other sectors of the Kosovo IT industry (user-centric innovation)

The Competence Centers for applied R&D should cover the following strategic IT topics:

Task No.	8.6	Task name	Establish Competence Centers for applied R&D in strategic IT topics

- Cloud Computing
- Mobile Computing
- Big Data & Analytics
- Industry 4.0 (Cyber-Physical-Systems) and Embedded Systems
- IT Security
- Open Source Software (OSS)
- E-Health
- E-Energy

The Special Competence Groups (see Task 6.10) consisting of IT experts from the private sector, public sector and the academia will form the basis and nucleus for establishing the Competence Centers for applied R&D.

User story & results	As a Kosovo IT stakeholder I want to use the Competence Centers for applied R&D for my organization.
Acceptance criteria & indicators	▪ At least 3 Competence Centers for applied R&D in strategic IT topics have been established. ▪ At least 6 Kosovo IT companies or public institutions have used the Competence Centers for applied R&D (joint R&D projects or contract research).

Responsible organization (lead)	MASHT	Partner organizations	STIKK, UNIV, MIT, MZHE, KIESA, NMFA, SDC, USAID, EU, GIZ,
Task start:	01.07.2017	Task finish	30.12.2018
Overall budget (€)	275,000	Financial sources	EU, USAID, MASHT

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
8.6.1	Develop proposal for the Competence Centers for applied R&D in strategic IT topics (business plan)	Proposal	EU	1.07.-31.08.2017	15,000
8.6.2	Define research focus / topics for the Competence Centers	List of research topics with evaluation report	MASHT, STIKK	1.09.-30.10.2017	5,000
8.6.3	Establish and manage the Competence Centers for applied R&D including Living Labs	Project proposals; evaluation reports	MASHT	2.11.2017 – 30.12.2018	250,000
8.6.4	Organize international linkage to similar research institutions to ensure exchange of experience and technology transfer	Cooperation agreements (MoUs)	EU	2.09.2017 – 30.12.2018	5,000

Comments	The Competence Centers for applied R&D in strategic IT topics should be financed on a sustainable basis through: ▪ EU projects / funds ▪ Revenues from contract research for IT companies ▪ Technology transfer projects and R&D projects financed by the Kosovo government. It is recommendable to use the Competence Centers also for developing innovative IT solutions (e.g. cloud solutions for SMEs) for other sectors of the Kosovo IT industry in order to promote the digital transformation of the Kosovo economy and to increase its international competitiveness (see also Pillar 4 Domestic Market Development).. Best practice examples: Forschungskampus: PPP to foster innovation: http://www.bmbf.de/en/16944.php Open cloud initiative: Open source initiative for the development of a federal cloud infrastructure in Germany (Deutsche Wolke): http://www.deutsche-wolke.de/index.php?option=com_content&view=article&id=17 MIT Living Labs: http://livinglabs.mit.edu

Task No.	8.6	Task name	Establish Competence Centers for applied R&D in strategic IT topics
	FZI House of Living Labs: http://www.fzi.de/en/forschung/house-of-living-labs		
Team	n.a.		
Continuous Improvement	n.a.		

5.1.8.7. Establish vendor roundtables

Task No.	8.7	Task name	Establish vendor roundtables		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
The rationale behind this task is to establish a roundtable where local IT companies can discuss latest technology trends as well as opportunities for product and service innovations with large-scale IT vendors.					
User story & results	As a Kosovo IT company I want to participate in vendor roundtables in order to discuss opportunities for product and service innovations with large-scale IT vendors.				
Acceptance criteria & indicators	▪ At least 3 vendor roundtables have been established.				
Responsible organization (lead)	STIKK	Partner organizations	STIKK, MIT, MZHE, KIESA, NMFA, SDC, USAID, EU, GIZ, IT vendors		
Task start:	01.04.2017	Task finish	02.11.2018		
Overall budget (€)	4,000	Financial sources	USAID		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
8.7.1	Develop concept for vendor roundtables including selection of participants and IT topics	Concept	STIKK	1.04.-7.04.2017	1,000
8.7.2	Conduct vendor roundtables	Program; list of participants	STIKK	25.052017 / 25.05.2018 / 2.11.2018	3,000

Comments	-
Team	n.a.
Continuous Improvement	n.a.

5.1.9. Strategic Pillar 9: Investment Promotion

5.1.9.1. Elaborate IT-specific marketing material (investment promotion)

Task No.	9.1	Task name	Elaborate IT-specific marketing material (investment promotion)		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
This task encompasses the elaboration of marketing material for promoting investment (FDI) in the Kosovo IT industry. The marketing material will focus on the opportunities and competitive advantages provided by the Kosovo IT industry as well as on attractive framework conditions (e.g. tax system). It will be designed according the specific needs of international investors from the IT industry and from other relevant high-tech industries.					
User story & results	As a potential foreign investor I want to use the marketing material so that I can obtain relevant information on the Kosovo IT industry and corresponding investment opportunities.				
Acceptance criteria & indicators	▪ IT-specific marketing material for investment promotion has been elaborated and approved by KIESA and STIKK.				
Responsible organization (lead)	KIESA	Partner organizations	STIKK, USAID, NMFA, GIZ		
Task start:	17.11.2016	Task finish	27.02.2017		
Overall budget (€)	18,000	Financial sources	USAID		

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
9.1.1	Elaborate presentation on investment opportunities in the Kosovo IT industry	Presentation (PPT)	KIESA	17.11.2016 – 30.01.2017	8,000
9.1.2	Develop brochure on the Kosovo IT industry including investment opportunities	Brochure	KIESA	5.01.- 27.02.2017	10,000

Comments	The content of the marketing material (particularly value proposition and competitive advantages) needs to be closely coordinated with the marketing material used for export promotion of the Kosovo IT industry. A comprehensive marketing and branding approach is required as well as the corresponding “corporate identity” (CI).
Team	n.a.
Continuous Improvement	n.a.

5.1.9.2. Develop special information section on the Kosovo ICT industry on KIESA website

Task No.	9.2	Task name	Develop special information section on the Kosovo ICT industry on KIESA website		
Priority	1	Predecessor tasks	3.7 integrated marketing & branding concept	% Complete	0%
Description & rationale					
This task includes the development and integration of a special information section on the Kosovo ICT industry on the KIESA website. The goal of this task is to maximize the reach of the investment and export promotion activities for the Kosovo IT industry.					
User story & results	As a potential foreign investor I want to use the KIESA website so that I can obtain relevant				

Task No.	9.2	Task name	Develop special information section on the Kosovo ICT industry on KIESA website
	information on the Kosovo IT industry and corresponding investment opportunities.		
Acceptance criteria & indicators	▪ The special information section on the Kosovo ICT industry has been included in the KIESA website. ▪ The ICT industry section on the KIESA-website has achieved a KPI of at least 150 visitors / month.		
Responsible organization (lead)	KIESA	Partner organizations	STIKK, USAID, NMFA, GIZ
Task start:	1.05.2017	Task finish	30.09.2017
Overall budget (€)	3,000	Financial sources	USAID

Task activities:

No	Activity	Deliverables:	Resp.	Timing	Budget
9.2.1	Develop and integrate special information section on the Kosovo ICT industry in the KIESA website (e.g. under section “Investment Opportunities” / “Main Export Sectors”), including success stories, key contacts and links	Website section	KIESA	1.05.-15.05.2017	2,000
9.2.2	Establish linkage to relevant websites and partners (e.g. Kosovo IT industry website (see task 3.8 digital marketing), STIKK, ministries, foreign chambers of commerce, analysts, multinational organizations, etc.)	Links	KIESA	18.05.-30.09.2017	1,000

Comments	Close coordination with corresponding activities in Pillar 3 Export Promotion required.
Team	n.a.
Continuous Improvement	n.a.

5.1.9.3. Introduce incentive scheme for FDI in the Kosovo IT industry

Task No.	9.3	Task name	Introduce incentive scheme for FDI in the Kosovo IT industry		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
A climate conducive to Foreign Direct Investment (FDI) in the Kosovo IT industry needs to be created. Therefore this task includes the introduction of financial and non-financial incentives for FDI in the Kosovo IT industry. FDI in the Kosovo IT industry is important with regards to job creation / employment promotion and technology transfer. Furthermore, local IT companies can benefit from the presence of international companies in Kosovo in terms of subcontracting / outsourcing (indirect internationalization).					
User story & results	As a potential foreign investor I want to use incentive schemes so that I can generate specific benefits for my investment in the Kosovo IT industry. As a Kosovo IT industry stakeholder I want to use incentive schemes to attract FDI to the Kosovo IT sector.				
Acceptance criteria & indicators	▪ Incentive scheme for FDI in the Kosovo IT industry have been introduced. ▪ FDI in the Kosovo IT industry has increased by at least 10% / year.				
Responsible	MF	Partner	KIESA, MTI, MZHE, STIKK, EU, USAID,		

Task No.	9.3	Task name	Introduce incentive scheme for FDI in the Kosovo IT industry		
organization (lead)			organizations	GIZ	
Task start:	15.01.2017		Task finish	30.12.2018	
Overall budget (€)	10,000		Financial sources	USAID, EU	
Task activities:					
No	Activity	Deliverables:	Resp.	Timing	Budget
9.3.1	Conduct international (and particularly regional) benchmarking and identify best practice examples of incentives schemes for promoting FDI in the IT industry	Benchmarking study	GIZ	15.01.-27.02.2017	5,000
9.3.2	Develop incentive scheme for promoting FDI in the Kosovo IT industry including financial incentives (e.g. Tax holidays, tax breaks, grants for investments into education and training, R&D, supplier development, etc.) and non-financial incentives	Incentive scheme	MF	2.03.-29.05.2017	5,000
9.3.3	Implement incentive scheme for promoting FDI in the Kosovo IT industry	Reports	MF	1.06.2017 – 30.12.2018	-
Comments	Incentive schemes need to be competitive and attractive on a global but particularly also on a regional level.				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.9.4. Engage key account manager for the IT industry at KIESA

Task No.	9.4	Task name	Engage key account manager for the IT industry at KIESA		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
The rationale behind this task is to proactively attract FDI in the Kosovo IT industry by engaging a key account manager. The key account manager will also contribute to transforming KIESA in a customer-oriented One-Stop-Shop for foreign investors.					
User story & results	As a potential foreign investor I want to have a key account manager who is able to provide information and advice on the Kosovo IT industry and who supports me with my investment activities in Kosovo.				
Acceptance criteria & indicators	▪ A suitable key account manager has been engaged. ▪ The key account manager has presented the Kosovo IT industry at least at 5 international events / year and has conducted at least 30 meetings / year with potential IT investors / export clients.				
Responsible organization (lead)	KIESA		Partner organizations	MTI, STIKK, USAID, EU	
Task start:	01.12.2016		Task finish	30.12.2018	
Overall budget (€)	54,000		Financial sources	USAID, EU, KIESA	
Task activities:					

Task No.	9.4	Task name	Engage key account manager for the IT industry at KIESA			
No	Activity		Deliverables:	Resp.	Timing	Budget
9.4.1	Elaborate job description for key account manager		Job description	KIESA	1.12.-5.12.2016	1,000
9.4.2	Select and engage key account manager for the IT industry at KIESA		Employment contract	KIESA	8.12.2016 – 27.02.2017	50,000
9.4.3	Provide key account manager with coaching and training on the Kosovo IT industry (industry structure, companies, service portfolio, value proposition, etc.)		Training documents	STIKK	2.03.-27.03.2017	3,000
Comments	The key account manager should be also involved in export promotion activities for the Kosovo IT industry.					
Team	n.a.					
Continuous Improvement	n.a.					

5.1.9.5. Conduct specialized marketing & PR activities

Task No.	9.5	Task name	Conduct specialized marketing & PR activities		
Priority	2	Predecessor tasks	-	% Complete	0%
Description & rationale					
Marketing and PR activities to promote Kosovo as IT investment and outsourcing location will include publications in relevant media as well as information events in target countries.					
User story & results	As a Kosovo IT industry stakeholder I want to use specialized marketing and PR activities in order to promote Kosovo as a high-potential investment and outsourcing location.				
Acceptance criteria & indicators	▪ At least two articles / year have been published. ▪ At least 3 information events on the Kosovo IT industry (focus: investment promotion) / year have been conducted.				
Responsible organization (lead)	KIESA	Partner organizations	MTI, USAID, EU		
Task start:	02.03.2017	Task finish	30.12.2018		
Overall budget (€)	40,000	Financial sources	USAID, EU, KIESA		
Task activities:					

No	Activity	Deliverables:	Resp.	Timing	Budget
9.5.1	Elaborate and publish articles and whitepapers on the Kosovo IT industry (investment and outsourcing opportunities) in relevant media	Publications	STIKK	2.03.2017 – 30.12.2018	10,000
9.5.2	Organize information events on the Kosovo IT industry in target markets	Programs of information events; lists of participants	KIESA	3.04.-7.04.2017 / 3.09.7.09.2017 / 3.11.-5.11.2017 / 4.02.-8.2.2018 /	30,000

Task No.	9.5	Task name	Conduct specialized marketing & PR activities		
				3.06.-7.06.2018 / 3.11.-7.11.2018	
Comments	If possible, information events should be combined with the task 3.5 B2B match-making events as well as with trade fair participation. Whitepapers and specialized publications on relevant IT topics have turned out to be particularly effective. Best practice example: Investor's Guide on Mexico's IT Industry: http://nearshoreamericas.com/wp-content/uploads/2012/05/Mexico-investment-guide-business-technology-services-2012.pdf Special emphasis should be placed on publishing articles in relevant media such as the Outsourcing Journal: http://www.outsourcing-journal.org; articles should be also placed in publications of leading IT industry analysts such as Gartner, IDC, Forrester or PAC.				
Team	n.a.				
Continuous Improvement	n.a.				

5.1.9.6. Establish Digital Tech Park

Task No.	9.6	Task name	Establish Digital Tech Park		
Priority	1	Predecessor tasks	-	% Complete	0%
Description & rationale					
Establishing a Digital Tech Park, which provides special framework conditions and infrastructure customized to the specific needs of ICT companies (particularly MNCs), will attract additional investment (FDI) into the Kosovo IT industry and generate multiplier effects for the local IT industry. The Digital Tech Park will also have a positive impact on branding Kosovo as a high-potential IT destination.					
User story & results	As an investor / IT company I want to establish my business in the Digital Tech Park in order to get access to special framework conditions, incentive schemes and infrastructure, which allow me to operate my business more effectively.				
Acceptance criteria & indicators	▪ The Digital Tech Park is fully operational by the end of 2018.				
Responsible organization (lead)	MTI, MZHE	Partner organizations	KIESA, MF, EU, STIKK, Development Banks, private investors		
Task start:	5.01.2017	Task finish	30.12.2018		
Overall budget (€)	1,110,000	Financial sources	Development Banks, private investors, EU		
Task activities:					

No	Activity	Deliverables:	Resp.	Timing	Budget
9.6.1	Adapt the law on Free Economic Zones including incentive scheme (preferential tax, investment credit and customs procedures)	Adapted law on Free Economic Zones	MF	5.01.-27.03.2017	10,000
9.6.2	Elaborate feasibility study and concept for the Digital Tech Park	Feasibility study and concept	Development Banks	1.04.-28.08.2017	100,000
9.6.3	Establish Digital Tech Park	Digital Industry Park	Private investors, Developme	1.09.2017 – 30.12.2018	1,000,000 (public contributi

Task No.	9.6	Task name	Establish Digital Tech Park			
				nt Banks, MF		on)
Comments	The Digital Tech Park should be established in the form of a PPP-project. Based on the corresponding law / government decree, enterprises and organizations in the Digital Tech Park should receive preferential tax, investment credit and customs procedures treatment (incentive scheme). Best practice examples: Vietnam: Government's Decree No154/2013/ND-CP regulating incentives for investment in centralised IT zone: http://www.moit.gov.vn/en/News/492/incentive-policy-for-new-business-investment-in-it-field-at-the-centralized-it-zone.aspx Egypt Smart Villages: http://www.smart-villages.com/ Poland: Malopolska IT Park: http://www.sse.krakow.pl/en/malopolska-it-park.html Romania: HIT Park: http://www.hitpark.ro/en					
Team	n.a.					
Continuous Improvement	n.a.					

5.2. Timetable

The following timetable (Gantt Charts) provides a detailed project schedule for the implementation of the Kosovo IT Strategy. It includes the timing and sequence of tasks and activities according to the operational plan, as well as the corresponding priorities, responsibilities and budgets. The files in MS Project have been stored in the Kosovo IT Strategy SharePoint.

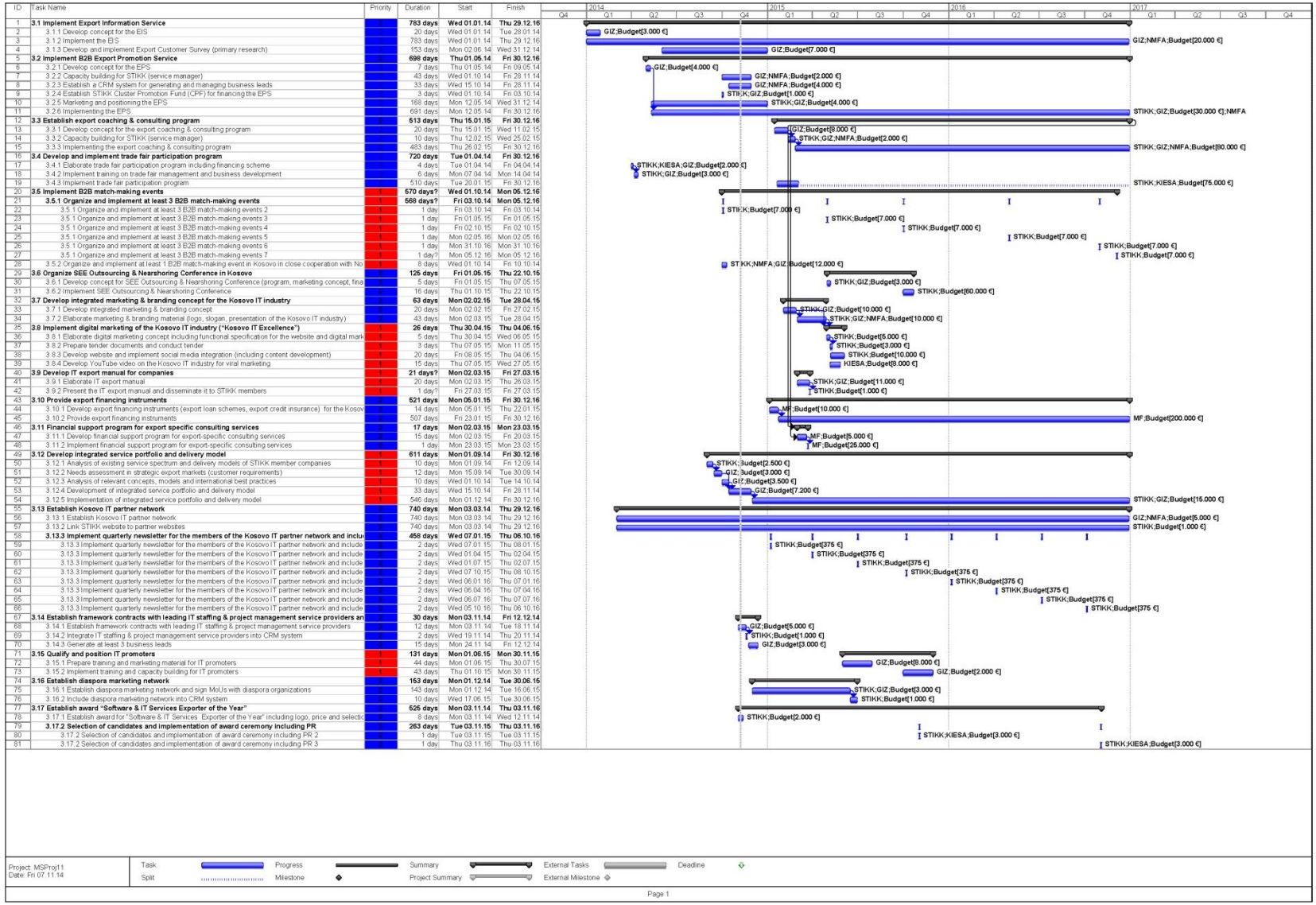
5.2.1. Timetable Strategic Pillar 1: IT Promotion Policy

ID	Vorgangsname	Priority	Duration	Start	Finish
1	**1.1 Establish Ministry of Information and Communications Technology**	1	**471 dys?**	**Wed 01.10.14**	**Wed 20.07.16**
2	1.1.1 Develop implementation concept for the ICT Ministry of Kosovo (feasibility study, analysis	1	80 dys	Wed 01.10.14	Tue 20.01.15
3	1.1.2 Elaborate legislative proposal for the establishment of the ICT Ministry of Kosovo	1	10 dys	Wed 21.01.15	Tue 03.02.15
4	1.1.3 Adopt decree / law on the establishment of the ICT Ministry of Kosovo	1	1 dy?	Wed 04.02.15	Wed 04.02.15
5	1.1.4 Establish ICT Ministry of Kosovo	1	235 dys	Thu 05.02.15	Wed 30.12.15
6	1.1.5 Introduce position of National CIO within the ICT Ministry of Kosovo	1	80 dys	Thu 05.02.15	Wed 27.05.15
7	1.1.6 Establish National IT Promotion Agency	1	300 dys	Thu 28.05.15	Wed 20.07.16
8	**1.2 Establish National Committee on Digital Transformation**	1	**565 dys?**	**Mon 03.11.14**	**Fri 30.12.16**
9	1.2.1 Identify committee members	1	1 dy?	Mon 03.11.14	Mon 03.11.14
10	1.2.2 Establish National Committee on Digital Transformation and identify focus topics (e.g. indu	1	3 dys	Tue 04.11.14	Thu 06.11.14
11	**1.2.3 Organize meetings / workshops of National Committee on Digital Transformation on**	1	**262 dys**	**Sun 08.11.15**	**Tue 08.11.16**
12	1.2.3 Organize meetings / workshops of National Committee on Digital Transformation on a	1	1 dy	Sun 08.11.15	Mon 09.11.15
13	1.2.3 Organize meetings / workshops of National Committee on Digital Transformation on a	1	1 dy	Tue 08.11.16	Tue 08.11.16
14	1.2.4 Implement awareness raising campaign on digital transformation and the strategic importa	1	10 dys	Mon 03.11.14	Fri 14.11.14
15	1.2.5 Place the IT industry on national priority list	1	561 dys	Fri 07.11.14	Fri 30.12.16
16	**1.3 Implement capacity building on IT sector promotion**	2	**9 dys?**	**Mon 01.12.14**	**Thu 11.12.14**
17	1.3.1 Develop training concept and material for capacity building in IT sector promotion	2	4 dys	Mon 01.12.14	Thu 04.12.14
18	1.3.2 Conduct training workshop (3 days) on IT sector promotion	2	4 dys	Mon 08.12.14	Thu 11.12.14
19	1.3.3 Provide manual and toolbox on IT sector promotion	2	1 dy?	Mon 01.12.14	Mon 01.12.14
20	**1.4 Promote digital ecosystem**	2	**522 dys**	**Thu 01.01.15**	**Fri 30.12.16**
21	1.4.1 Design and implement measures to protect Intellectual Property Rights (IPR)	2	30 dys	Thu 01.01.15	Wed 11.02.15
22	1.4.2 Design and implement measures to stimulate the supply of venture capital (e.g. tax incentiv	2	22 dys	Thu 01.01.15	Fri 30.01.15
23	**1.4.3 Implement at least 3 information events on open source software (OSS) for IT compa**	2	**262 dys**	**Wed 14.01.15**	**Thu 14.01.16**
24	1.4.3 Implement at least 3 information events on open source software (OSS) for IT compar	2	1 dy	Wed 14.01.15	Wed 14.01.15
25	1.4.3 Implement at least 3 information events on open source software (OSS) for IT compar	2	1 dy	Thu 14.01.16	Thu 14.01.16
26	1.4.4 Introduce educational leave (3 days / year) to promote continuing education and professior	2	23 dys	Wed 14.01.15	Fri 13.02.15
27	1.4.5 Promote the availability of public company data	2	513 dys	Wed 14.01.15	Fri 30.12.16
28	**1.5 Introduce income tax incentives for certified software developers**	2	**46 dys**	**Thu 01.01.15**	**Thu 05.03.15**
29	1.5.1 Elaborate draft decree on income tax incentives for certified software developers	2	6 dys	Thu 01.01.15	Thu 08.01.15
30	1.5.2 Adopt decree on income tax incentives for certified software developers	2	40 dys	Fri 09.01.15	Thu 05.03.15
31	**1.6 Reform public IT procurement system**	2	**72 dys**	**Thu 15.01.15**	**Fri 24.04.15**
32	1.6.1 Revise tender procedures for public IT procurement	2	16 dys	Thu 15.01.15	Thu 05.02.15
33	1.6.2 Provide capacity building on IT procurement for public servants	2	56 dys	Fri 06.02.15	Fri 24.04.15
34	**1.7 Introduce standards and methodologies for IT management in the public sector**	2	**588 dys**	**Wed 01.10.14**	**Fri 30.12.16**
35	1.7.1 Identify relevant IT standards and methodologies (description o standard, scope, evaluatio	2	5 dys	Wed 01.10.14	Tue 07.10.14
36	1.7.2 Elaborate proposal for capacity building and training in standards and methodologies for pu	2	12 dys	Wed 08.10.14	Thu 23.10.14
37	1.7.3 Conduct capacity building and training in IT standards and methodologies for civil servants	2	570 dys	Mon 27.10.14	Fri 30.12.16
38	1.7.4 Conduct capacity building and training in IT standards and methodologies for Kosovo IT cc	2	570 dys	Fri 24.10.14	Thu 29.12.16
39	**1.8 Reduce customs tariffs and VAT for IT equipment**	1	**84 dys**	**Thu 01.01.15**	**Tue 28.04.15**
40	1.8.1 Elaborate legislative proposal for the reduction of customs tariffs and VAT for IT equipmen	1	64 dys	Thu 01.01.15	Tue 31.03.15
41	1.8.2 Adopt decree / law on the reduction of customs tariffs and VAT for IT equipment	1	20 dys	Wed 01.04.15	Tue 28.04.15
42	**1.9 Establish National IT Quality Policy**	3	**480 dys**	**Mon 02.03.15**	**Fri 30.12.16**
43	1.9.1 Establishment of a joint working group or forum including all relevant stakeholders of the IT	3	3 dys	Mon 02.03.15	Wed 04.03.15
44	1.9.2 Elaborate National IT Quality Policy (analysis, objectives, measures, implementation, moni	3	477 dys	Thu 05.03.15	Fri 30.12.16
45	1.9.3 Implement National IT Quality Policy	3	327 dys	Thu 01.10.15	Fri 30.12.16
46	**1.10 Introduce IT Industry Barometer**	1	**620 dys**	**Wed 01.01.14**	**Tue 17.05.16**
47	1.10.1 Customize the IT Industry Barometer methodology and tool provided by GIZ to the specifi	1	4 dys	Wed 01.01.14	Mon 06.01.14
48	**1.10.2 Implement the Kosovo IT Industry Barometer on an annual basis**	1	**542 dys**	**Mon 21.04.14**	**Tue 17.05.16**
49	1.10.2 Implement the Kosovo IT Industry Barometer on an annual basis 1	1	40 dys	Mon 21.04.14	Fri 13.06.14
50	1.10.2 Implement the Kosovo IT Industry Barometer on an annual basis 2	1	20 dys	Mon 20.04.15	Fri 15.05.15
51	1.10.2 Implement the Kosovo IT Industry Barometer on an annual basis 3	1	20 dys	Wed 20.04.16	Tue 17.05.16
52	1.10.3 Conduct press conference to present the ITIB results	1	2 dys	Tue 15.04.14	Wed 16.04.14
53	**1.11 Implement initiative "IT 4 Social Inclusion" (CSR)**	3	**36 dys**	**Fri 01.05.15**	**Fri 19.06.15**
54	1.11.1 Define and implement joint CSR activities on STIKK level (donations, trainings for disable	3	3 dys	Fri 01.05.15	Tue 05.05.15
55	1.11.2 Elaborate proposal on how IT solutions could empower the elderly and people with disabi	3	3 dys	Wed 06.05.15	Fri 08.05.15
56	1.11.3 Design and implement special job integration program for persons with autism, including t	3	30 dys	Mon 11.05.15	Fri 19.06.15

5.2.2. Timetable Strategic Pillar 2: Company Excellence & Quality

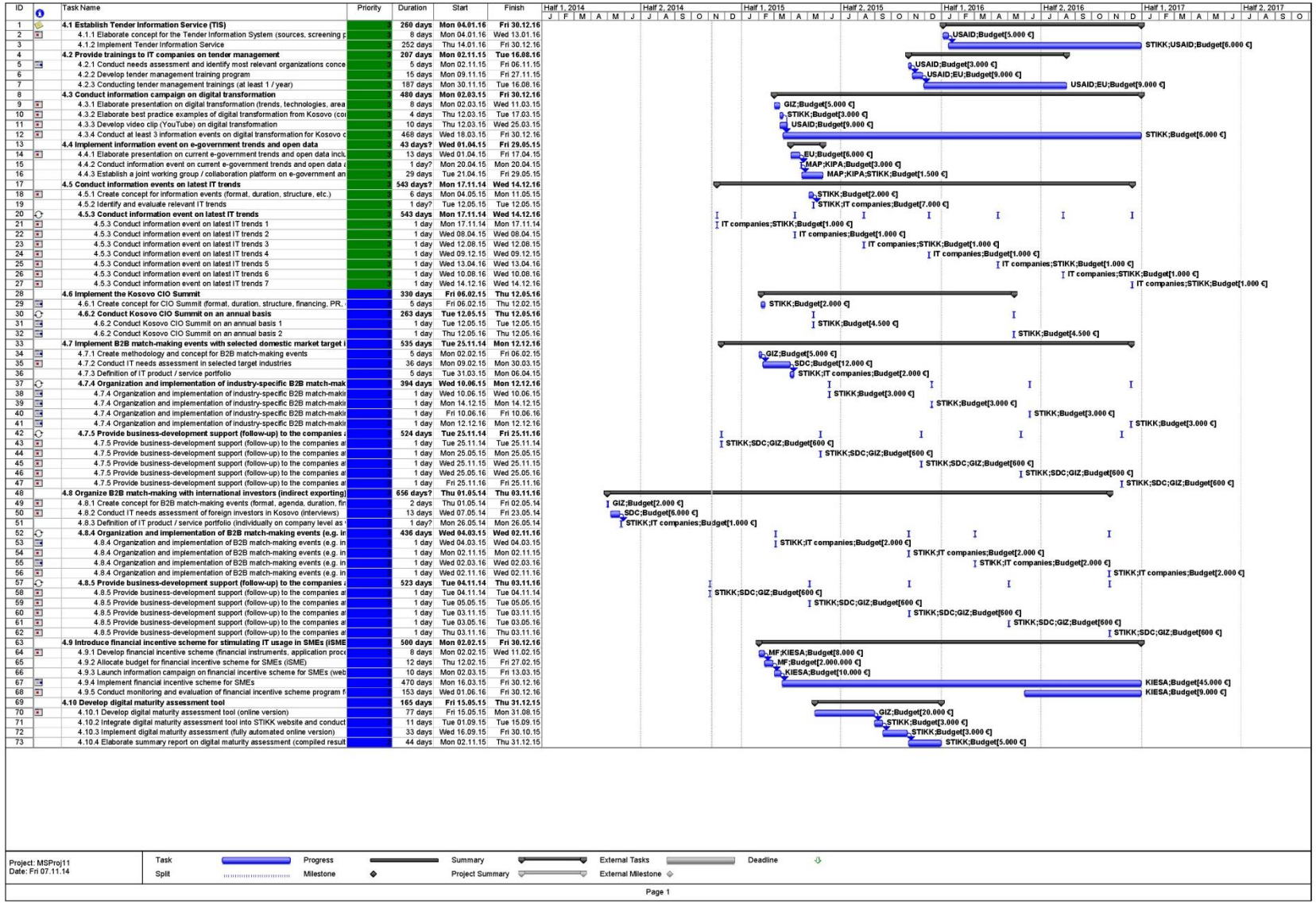
ID	Task Name	Priority	Duration	Start	Finish
1	**2.1 Establish STIKK Training Academy**	1	**783 days**	**Wed 01.01.14**	**Fri 30.12.16**
2	2.1.1 Develop concept for STIKK Training Academy	1	60 days	Wed 01.01.14	Tue 25.03.14
3	2.1.2 Implementation of STIKK Training Academy concept including the following c	1	200 days	Wed 26.03.14	Tue 30.12.14
4	2.1.3 Implement technical and management trainings	1	723 days	Wed 26.03.14	Fri 30.12.16
5	2.1.4 Implement German language training in cooperation with Sprachlehrzentrum	1	260 days	Mon 03.11.14	Fri 30.10.15
6	2.1.5 Develop and implement train the trainers (ToT) program for the STIKK Trainin	1	260 days	Thu 01.01.15	Wed 30.12.15
7	**2.1.6 Market STIKK Training Academy on national and regional level**	1	**351 days**	**Mon 20.10.14**	**Mon 22.02.16**
8	2.1.6 Market STIKK Training Academy on national and regional level 1	1	1 day	Mon 20.10.14	Mon 20.10.14
9	2.1.6 Market STIKK Training Academy on national and regional level 2	1	1 day	Fri 20.02.15	Fri 20.02.15
10	2.1.6 Market STIKK Training Academy on national and regional level 3	1	1 day	Mon 22.02.16	Mon 22.02.16
11	**2.2 Introduce enterprise capacity building & excellence program**	1	**545 days?**	**Mon 01.12.14**	**Fri 30.12.16**
12	2.2.1 Conduct needs assessment with STIKK member companies	1	65 days	Mon 01.12.14	Fri 27.02.15
13	2.2.2 Develop concept for the enterprise capacity building & excellence program	1	42 days	Mon 02.03.15	Tue 28.04.15
14	2.2.3 Conduct information event on enterprise capacity building & excellence progr	1	1 day?	Fri 15.05.15	Fri 15.05.15
15	2.2.4 Implement enterprise capacity building & excellence program (15 companies)	1	415 days	Mon 01.06.15	Fri 30.12.16
16	**2.3 Establish National IT Quality Forum**	3	**447 days?**	**Thu 01.01.15**	**Fri 16.09.16**
17	2.3.1 Establish National IT Quality Forum with STIKK	3	23 days	Thu 01.01.15	Mon 02.02.15
18	2.3.2 Establish cooperation with international IT quality management institutions	3	5 days?	Wed 04.02.15	Tue 10.02.15
19	**2.3.3 Organize information events, seminars and roundtable sessions on qual**	3	**443 days?**	**Wed 07.01.15**	**Fri 16.09.16**
20	2.3.3 Organize information events, seminars and roundtable sessions on quali	3	1 day	Wed 07.01.15	Wed 07.01.15
21	2.3.3 Organize information events, seminars and roundtable sessions on quali	3	1 day	Fri 15.05.15	Fri 15.05.15
22	2.3.3 Organize information events, seminars and roundtable sessions on quali	3	1 day	Tue 15.09.15	Tue 15.09.15
23	2.3.3 Organize information events, seminars and roundtable sessions on quali	3	1 day	Thu 07.01.16	Thu 07.01.16
24	2.3.3 Organize information events, seminars and roundtable sessions on quali	3	1 day?	Mon 16.05.16	Mon 16.05.16
25	2.3.3 Organize information events, seminars and roundtable sessions on quali	3	1 day?	Fri 16.09.16	Fri 16.09.16
26	**2.4 Provide QM Manual & Maturity Assessment Tool**	2	**71 days?**	**Tue 09.06.15**	**Tue 15.09.15**
27	2.4.1 Elaborate QM Manual (customization of generic version)	2	5 days	Tue 09.06.15	Mon 15.06.15
28	2.4.2 Develop Maturity Assessment Tool (customization of generic version)	2	11 days	Tue 16.06.15	Tue 30.06.15
29	2.4.3 Presentation and dissemination of QM Manual and Maturity Assessment Tool	2	1 day?	Tue 15.09.15	Tue 15.09.15
30	**2.5 Establish quality management & certification program**	2	**499 days?**	**Tue 03.02.15**	**Fri 30.12.16**
31	2.5.1 Design cluster-based quality management & certification program including s	2	15 days	Tue 03.02.15	Mon 23.02.15
32	2.5.2 Conduct information event in collaboration with National IT Quality Forum	2	1 day?	Tue 15.09.15	Tue 15.09.15
33	2.5.3 Implement quality management & certification program	2	484 days	Tue 24.02.15	Fri 30.12.16
34	**2.6 Elaborate manual on corporate financing**	3	**80 days?**	**Wed 01.10.14**	**Tue 20.01.15**
35	2.6.1 Elaborate manual on corporate financing	3	65 days	Wed 01.10.14	Tue 30.12.14
36	2.6.2 Present and disseminate manual on corporate financing	3	1 day?	Tue 20.01.15	Tue 20.01.15
37	**2.7 Implement access to finance program**	2	**515 days?**	**Mon 12.01.15**	**Fri 30.12.16**
38	2.7.1 Develop special grant scheme for training & certification (including application	2	6 days	Mon 12.01.15	Mon 19.01.15
39	2.7.2 Elaborate concept for Kosovo IT Enterprise Development Fund (including app	2	7 days	Tue 20.01.15	Wed 28.01.15
40	2.7.3 Conduct information event on access to finance program for Kosovo IT compi	2	1 day?	Thu 29.01.15	Thu 29.01.15
41	2.7.4 Implement and manage special grant schemes for training & certification (incl	2	501 days	Fri 30.01.15	Fri 30.12.16
42	2.7.5 Establish and manage the Kosovo IT Enterprise Development Fund (including	2	441 days	Fri 24.04.15	Fri 30.12.16
43	**2.8 Introduce tax incentives for investments into continuing education and trainin**	2	**85 days**	**Mon 02.02.15**	**Fri 29.05.15**
44	2.8.1 Develop concept / draft law for tax incentives	2	5 days	Mon 02.02.15	Fri 06.02.15
45	2.8.2 Implement tax incentives for investments into continuing education and trainin	2	80 days	Mon 09.02.15	Fri 29.05.15
46	**2.9 Introduce National IT Award**	2	**529 days**	**Mon 01.12.14**	**Thu 08.12.16**
47	2.9.1 Establish award for National IT Award including logo, price and selection crite	2	5 days	Mon 01.12.14	Fri 05.12.14
48	**2.9.2 Selection of candidates and implementation of award ceremony includir**	2	**524 days**	**Mon 08.12.14**	**Thu 08.12.16**
49	2.9.2 Selection of candidates and implementation of award ceremony including	2	1 day	Mon 08.12.14	Mon 08.12.14
50	2.9.2 Selection of candidates and implementation of award ceremony including	2	1 day	Tue 08.12.15	Tue 08.12.15
51	2.9.2 Selection of candidates and implementation of award ceremony including	2	1 day	Thu 08.12.16	Thu 08.12.16
52	**2.10 Implement monthly newsletter on latest technology trends**	3	**349 days**	**Tue 01.09.15**	**Fri 30.12.16**
53	2.10.1 Develop technology newsletter concept including content structure, template	3	5 days	Tue 01.09.15	Mon 07.09.15
54	2.10.2 Implement technology newsletter (monthly basis)	3	344 days	Tue 08.09.15	Fri 30.12.16

5.2.3. Timetable Strategic Pillar 3: Export Promotion



ID	Task Name	Priority	Duration	Start	Finish
1	**3.1 Implement Export Information Service**		**783 days**	**Wed 01.01.14**	**Thu 29.12.16**
2	3.1.1 Develop concept for the EIS		20 days	Wed 01.01.14	Tue 28.01.14
3	3.1.2 Implement the EIS		783 days	Wed 01.01.14	Thu 29.12.16
4	3.1.3 Develop and implement Export Customer Survey (primary research)		153 days	Mon 02.06.14	Wed 31.12.14
5	**3.2 Implement B2B Export Promotion Service**		**698 days**	**Thu 01.05.14**	**Fri 30.12.16**
6	3.2.1 Develop concept for the EPS		7 days	Thu 01.05.14	Fri 09.05.14
7	3.2.2 Capacity building for STIKK (service manager)		43 days	Wed 01.10.14	Fri 28.11.14
8	3.2.3 Establish a CRM system for generating and managing business leads		33 days	Wed 15.10.14	Fri 28.11.14
9	3.2.4 Establish STIKK Cluster Promotion Fund (CPF) for financing the EPS		3 days	Wed 01.10.14	Fri 03.10.14
10	3.2.5 Marketing and positioning the EPS		168 days	Mon 12.05.14	Wed 31.12.14
11	3.2.6 Implementing the EPS		691 days	Mon 12.05.14	Fri 30.12.16
12	**3.3 Establish export coaching & consulting program**		**513 days**	**Thu 16.01.15**	**Fri 30.12.16**
13	3.3.1 Develop concept for the export coaching & consulting program		20 days	Thu 15.01.15	Wed 11.02.15
14	3.3.2 Capacity building for STIKK (service manager)		10 days	Thu 12.02.15	Wed 25.02.15
15	3.3.3 Implementing the export coaching & consulting program		483 days	Thu 26.02.15	Fri 30.12.16
16	**3.4 Develop and implement trade fair participation program**		**720 days**	**Tue 01.04.14**	**Fri 30.12.16**
17	3.4.1 Elaborate trade fair participation program including financing scheme		4 days	Tue 01.04.14	Fri 04.04.14
18	3.4.2 Implement training on trade fair management and business development		6 days	Mon 07.04.14	Mon 14.04.14
19	3.4.3 Implement trade fair participation program		510 days	Tue 20.01.15	Fri 30.12.16
20	**3.5 Implement B2B match-making events**		**570 days?**	**Wed 01.10.14**	**Mon 05.12.16**
21	**3.5.1 Organize and implement at least 3 B2B match-making events**		**568 days?**	**Fri 03.10.14**	**Mon 05.12.16**
22	3.5.1 Organize and implement at least 3 B2B match-making events 2		1 day	Fri 03.10.14	Fri 03.10.14
23	3.5.1 Organize and implement at least 3 B2B match-making events 3		1 day	Fri 01.05.15	Fri 01.05.15
24	3.5.1 Organize and implement at least 3 B2B match-making events 4		1 day	Fri 02.10.15	Fri 02.10.15
25	3.5.1 Organize and implement at least 3 B2B match-making events 5		1 day	Mon 02.05.16	Mon 02.05.16
26	3.5.1 Organize and implement at least 3 B2B match-making events 6		1 day	Mon 31.10.16	Mon 31.10.16
27	3.5.1 Organize and implement at least 3 B2B match-making events 7		1 day?	Mon 05.12.16	Mon 05.12.16
28	3.5.2 Organize and implement at least 1 B2B match-making event in Kosovo in close cooperation with No		8 days	Wed 01.10.14	Fri 10.10.14
29	**3.6 Organize SEE Outsourcing & Nearshoring Conference in Kosovo**		**125 days**	**Fri 01.05.15**	**Thu 22.10.15**
30	3.6.1 Develop concept for SEE Outsourcing & Nearshoring Conference (program, marketing concept, fina		5 days	Fri 01.05.15	Thu 07.05.15
31	3.6.2 Implement SEE Outsourcing & Nearshoring Conference		16 days	Thu 01.10.15	Thu 22.10.15
32	**3.7 Develop integrated marketing & branding concept for the Kosovo IT industry**		**63 days**	**Mon 02.02.15**	**Tue 28.04.15**
33	3.7.1 Develop integrated marketing & branding concept		20 days	Mon 02.02.15	Fri 27.02.15
34	3.7.2 Elaborate marketing & branding material (logo, slogan, presentation of the Kosovo IT industry)		43 days	Mon 02.03.15	Tue 28.04.15
35	**3.8 Implement digital marketing of the Kosovo IT industry ("Kosovo IT Excellence")**		**26 days**	**Thu 30.04.15**	**Thu 04.06.15**
36	3.8.1 Elaborate digital marketing concept including functional specification for the website and digital mark		5 days	Thu 30.04.15	Wed 06.05.15
37	3.8.2 Prepare tender documents and conduct tender		3 days	Thu 07.05.15	Mon 11.05.15
38	3.8.3 Develop website and implement social media integration (including content development)		20 days	Fri 08.05.15	Thu 04.06.15
39	3.8.4 Develop YouTube video on the Kosovo IT industry for viral marketing		15 days	Thu 07.05.15	Wed 27.05.15
40	**3.9 Develop IT export manual for companies**		**21 days?**	**Mon 02.03.15**	**Fri 27.03.15**
41	3.9.1 Elaborate IT export manual		20 days	Mon 02.03.15	Thu 26.03.15
42	3.9.2 Present the IT export manual and disseminate it to STIKK members		1 day?	Fri 27.03.15	Fri 27.03.15
43	**3.10 Provide export financing instruments**		**521 days**	**Mon 05.01.15**	**Fri 30.12.16**
44	3.10.1 Develop export financing instruments (export loan schemes, export credit insurance) for the Kosov		14 days	Mon 05.01.15	Thu 22.01.15
45	3.10.2 Provide export financing instruments		507 days	Fri 23.01.15	Fri 30.12.16
46	**3.11 Financial support program for export specific consulting services**		**17 days**	**Mon 02.03.15**	**Mon 23.03.15**
47	3.11.1 Develop financial support program for export-specific consulting services		15 days	Mon 02.03.15	Fri 20.03.15
48	3.11.2 Implement financial support program for export-specific consulting services		1 day	Mon 23.03.15	Mon 23.03.15
49	**3.12 Develop integrated service portfolio and delivery model**		**611 days**	**Mon 01.09.14**	**Fri 30.12.16**
50	3.12.1 Analysis of existing service spectrum and delivery models of STIKK member companies		10 days	Mon 01.09.14	Fri 12.09.14
51	3.12.2 Needs assessment in strategic export markets (customer requirements)		12 days	Mon 15.09.14	Tue 30.09.14
52	3.12.3 Analysis of relevant concepts, models and international best practices		10 days	Wed 01.10.14	Tue 14.10.14
53	3.12.4 Development of integrated service portfolio and delivery model		33 days	Wed 15.10.14	Fri 28.11.14
54	3.12.5 Implementation of integrated service portfolio and delivery model		546 days	Mon 01.12.14	Fri 30.12.16
55	**3.13 Establish Kosovo IT partner network**		**740 days**	**Mon 03.03.14**	**Thu 29.12.16**
56	3.13.1 Establish Kosovo IT partner network		740 days	Mon 03.03.14	Thu 29.12.16
57	3.13.2 Link STIKK website to partner websites		740 days	Mon 03.03.14	Thu 29.12.16
58	**3.13.3 Implement quarterly newsletter for the members of the Kosovo IT partner network and inclu**		**458 days**	**Wed 07.01.15**	**Thu 06.10.16**
59	3.13.3 Implement quarterly newsletter for the members of the Kosovo IT partner network and include		2 days	Wed 07.01.15	Thu 08.01.15
60	3.13.3 Implement quarterly newsletter for the members of the Kosovo IT partner network and include		2 days	Wed 01.04.15	Thu 02.04.15
61	3.13.3 Implement quarterly newsletter for the members of the Kosovo IT partner network and include		2 days	Wed 01.07.15	Thu 02.07.15
62	3.13.3 Implement quarterly newsletter for the members of the Kosovo IT partner network and include		2 days	Wed 07.10.15	Thu 08.10.15
63	3.13.3 Implement quarterly newsletter for the members of the Kosovo IT partner network and include		2 days	Wed 06.01.16	Thu 07.01.16
64	3.13.3 Implement quarterly newsletter for the members of the Kosovo IT partner network and include		2 days	Wed 06.04.16	Thu 07.04.16
65	3.13.3 Implement quarterly newsletter for the members of the Kosovo IT partner network and include		2 days	Wed 06.07.16	Thu 07.07.16
66	3.13.3 Implement quarterly newsletter for the members of the Kosovo IT partner network and include		2 days	Wed 05.10.16	Thu 06.10.16
67	**3.14 Establish framework contracts with leading IT staffing & project management service providers an**		**30 days**	**Mon 03.11.14**	**Fri 12.12.14**
68	3.14.1 Establish framework contracts with leading IT staffing & project management service providers		12 days	Mon 03.11.14	Tue 18.11.14
69	3.14.2 Integrate IT staffing & project management service providers into CRM system		2 days	Wed 19.11.14	Thu 20.11.14
70	3.14.3 Generate at least 3 business leads		15 days	Mon 24.11.14	Fri 12.12.14
71	**3.15 Qualify and position IT promoters**		**131 days**	**Mon 01.06.15**	**Mon 30.11.15**
72	3.15.1 Prepare training and marketing material for IT promoters		44 days	Mon 01.06.15	Thu 30.07.15
73	3.15.2 Implement training and capacity building for IT promoters		43 days	Thu 01.10.15	Mon 30.11.15
74	**3.16 Establish diaspora marketing network**		**163 days**	**Mon 01.12.14**	**Tue 30.06.15**
75	3.16.1 Establish diaspora marketing network and sign MoUs with diaspora organizations		143 days	Mon 01.12.14	Tue 16.06.15
76	3.16.2 Include diaspora marketing network into CRM system		10 days	Wed 17.06.15	Tue 30.06.15
77	**3.17 Establish award "Software & IT Services Exporter of the Year"**		**525 days**	**Mon 03.11.14**	**Thu 03.11.16**
78	3.17.1 Establish award for "Software & IT Services Exporter of the Year" including logo, price and selectio		8 days	Mon 03.11.14	Wed 12.11.14
79	**3.17.2 Selection of candidates and implementation of award ceremony including PR**		**263 days**	**Tue 03.11.15**	**Thu 03.11.16**
80	3.17.2 Selection of candidates and implementation of award ceremony including PR 2		1 day	Tue 03.11.15	Tue 03.11.15
81	3.17.2 Selection of candidates and implementation of award ceremony including PR 3		1 day	Thu 03.11.16	Thu 03.11.16

5.2.4. Timetable Strategic Pillar 4: Domestic Market Development

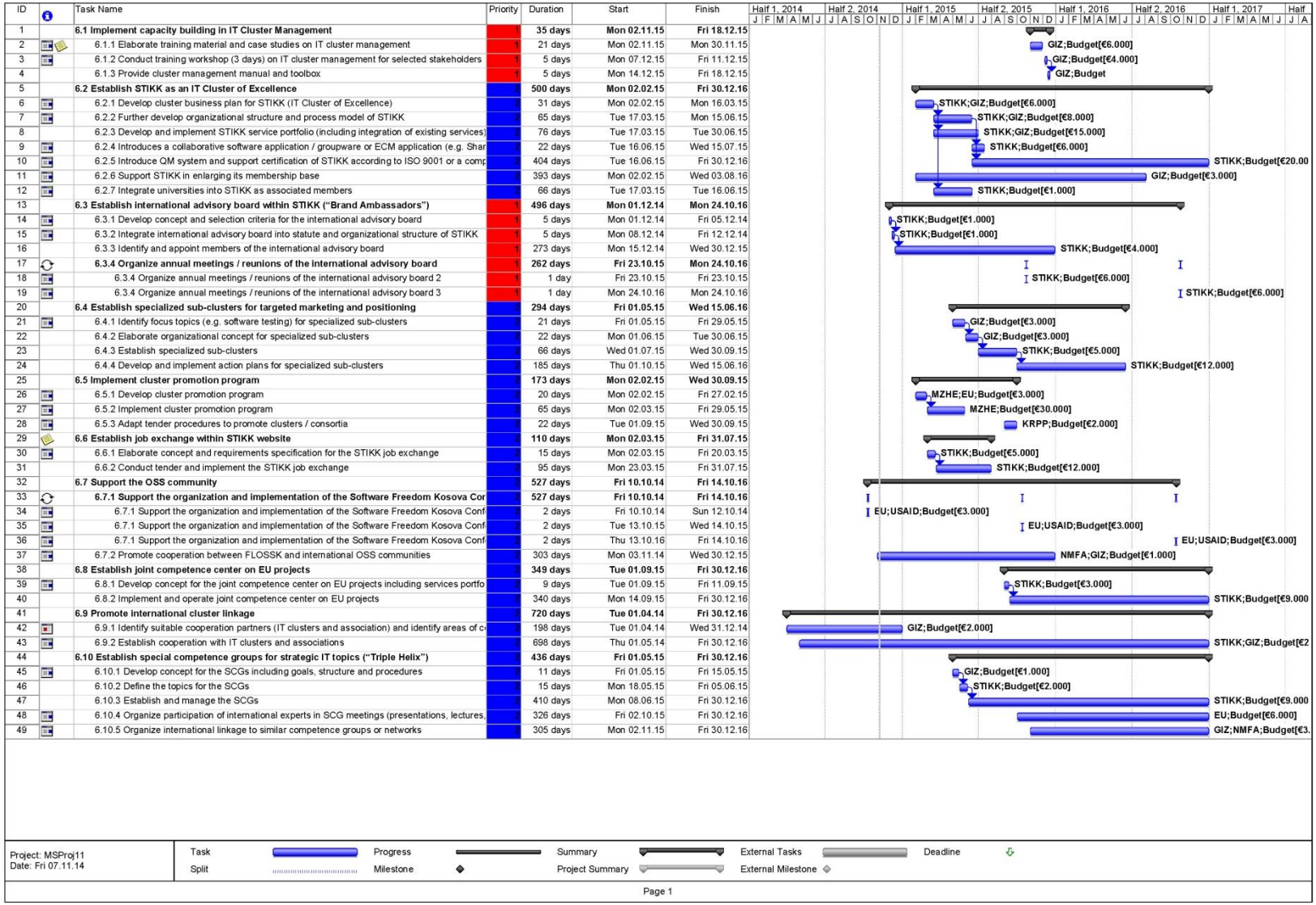


ID	Task Name	Priority	Duration	Start	Finish
1	**4.1 Establish Tender Information Service (TIS)**		**260 days**	**Mon 04.01.16**	**Fri 30.12.16**
2	4.1.1 Elaborate concept for the Tender Information System (sources, screening p		8 days	Mon 04.01.16	Wed 13.01.16
3	4.1.2 Implement Tender Information Service		252 days	Thu 14.01.16	Fri 30.12.16
4	**4.2 Provide trainings to IT companies on tender management**		**207 days**	**Mon 02.11.15**	**Tue 16.08.16**
5	4.2.1 Conduct needs assessment and identify most relevant organizations conce		5 days	Mon 02.11.15	Fri 06.11.15
6	4.2.2 Develop tender management training program		15 days	Mon 09.11.15	Fri 27.11.15
7	4.2.3 Conducting tender management trainings (at least 1 / year)		187 days	Mon 30.11.15	Tue 16.08.16
8	**4.3 Conduct information campaign on digital transformation**		**480 days**	**Mon 02.03.15**	**Fri 30.12.16**
9	4.3.1 Elaborate presentation on digital transformation (trends, technologies, area		8 days	Mon 02.03.15	Wed 11.03.15
10	4.3.2 Elaborate best practice examples of digital transformation from Kosovo (co		4 days	Thu 12.03.15	Tue 17.03.15
11	4.3.3 Develop video clip (YouTube) on digital transfomation		10 days	Thu 12.03.15	Wed 25.03.15
12	4.3.4 Conduct at least 3 information events on digital transformation for Kosovo c		468 days	Wed 18.03.15	Fri 30.12.16
13	**4.4 Implement information event on e-government trends and open data**		**43 days?**	**Wed 01.04.15**	**Fri 29.05.15**
14	4.4.1 Elaborate presentation on current e-government trends and open data incl		13 days	Wed 01.04.15	Fri 17.04.15
15	4.4.2 Conduct information event on current e-government trends and open data a		1 day?	Mon 20.04.15	Mon 20.04.15
16	4.4.3 Establish a joint working group / collaboration platform on e-government an		29 days	Tue 21.04.15	Fri 29.05.15
17	**4.5 Conduct information events on latest IT trends**		**543 days?**	**Mon 17.11.14**	**Wed 14.12.16**
18	4.5.1 Create concept for information events (format, duration, structure, etc.)		6 days	Mon 04.05.15	Mon 11.05.15
19	4.5.2 Identify and evaluate relevant IT trends		1 day?	Tue 12.05.15	Tue 12.05.15
20	**4.5.3 Conduct information event on latest IT trends**		**543 days**	**Mon 17.11.14**	**Wed 14.12.16**
21	4.5.3 Conduct information event on latest IT trends 1		1 day	Mon 17.11.14	Mon 17.11.14
22	4.5.3 Conduct information event on latest IT trends 2		1 day	Wed 08.04.15	Wed 08.04.15
23	4.5.3 Conduct information event on latest IT trends 3		1 day	Wed 12.08.15	Wed 12.08.15
24	4.5.3 Conduct information event on latest IT trends 4		1 day	Wed 09.12.15	Wed 09.12.15
25	4.5.3 Conduct information event on latest IT trends 5		1 day	Wed 13.04.16	Wed 13.04.16
26	4.5.3 Conduct information event on latest IT trends 6		1 day	Wed 10.08.16	Wed 10.08.16
27	4.5.3 Conduct information event on latest IT trends 7		1 day	Wed 14.12.16	Wed 14.12.16
28	**4.6 Implement the Kosovo CIO Summit**		**330 days**	**Fri 06.02.15**	**Thu 12.05.16**
29	4.6.1 Create concept for CIO Summit (format, duration, structure, financing, PR,		5 days	Fri 06.02.15	Thu 12.02.15
30	**4.6.2 Conduct Kosovo CIO Summit on an annual basis**		**263 days**	**Tue 12.05.15**	**Thu 12.05.16**
31	4.6.2 Conduct Kosovo CIO Summit on an annual basis 1		1 day	Tue 12.05.15	Tue 12.05.15
32	4.6.2 Conduct Kosovo CIO Summit on an annual basis 2		1 day	Thu 12.05.16	Thu 12.05.16
33	**4.7 Implement B2B match-making events with selected domestic market target i**		**535 days**	**Tue 25.11.14**	**Mon 12.12.16**
34	4.7.1 Create methodology and concept for B2B match-making events		5 days	Mon 02.02.15	Fri 06.02.15
35	4.7.2 Conduct IT needs assessment in selected target industries		36 days	Mon 09.02.15	Mon 30.03.15
36	4.7.3 Definition of IT product / service portfolio		5 days	Tue 31.03.15	Mon 06.04.15
37	**4.7.4 Organization and implementation of industry-specific B2B match-mak**		**394 days**	**Wed 10.06.15**	**Mon 12.12.16**
38	4.7.4 Organization and implementation of industry-specific B2B match-makir		1 day	Wed 10.06.15	Wed 10.06.15
39	4.7.4 Organization and implementation of industry-specific B2B match-makir		1 day	Mon 14.12.15	Mon 14.12.15
40	4.7.4 Organization and implementation of industry-specific B2B match-makir		1 day	Fri 10.06.16	Fri 10.06.16
41	4.7.4 Organization and implementation of industry-specific B2B match-makir		1 day	Mon 12.12.16	Mon 12.12.16
42	**4.7.5 Provide business-development support (follow-up) to the companies**		**524 days**	**Tue 25.11.14**	**Fri 25.11.16**
43	4.7.5 Provide business-development support (follow-up) to the companies at		1 day	Tue 25.11.14	Tue 25.11.14
44	4.7.5 Provide business-development support (follow-up) to the companies at		1 day	Mon 25.05.15	Mon 25.05.15
45	4.7.5 Provide business-development support (follow-up) to the companies at		1 day	Wed 25.11.15	Wed 25.11.15
46	4.7.5 Provide business-development support (follow-up) to the companies at		1 day	Wed 25.05.16	Wed 25.05.16
47	4.7.5 Provide business-development support (follow-up) to the companies at		1 day	Fri 25.11.16	Fri 25.11.16
48	**4.8 Organize B2B match-making with international investors (indirect exporting)**		**656 days?**	**Thu 01.05.14**	**Thu 03.11.16**
49	4.8.1 Create concept for B2B match-making events (format, agenda, duration, fir		2 days	Thu 01.05.14	Fri 02.05.14
50	4.8.2 Conduct IT needs assessment of foreign investors in Kosovo (interviews)		13 days	Wed 07.05.14	Fri 23.05.14
51	4.8.3 Definition of IT product / service portfolio (individually on company level as		1 day?	Mon 26.05.14	Mon 26.05.14
52	**4.8.4 Organization and implementation of B2B match-making events (e.g. in**		**436 days**	**Wed 04.03.15**	**Wed 02.11.16**
53	4.8.4 Organization and implementation of B2B match-making events (e.g. in		1 day	Wed 04.03.15	Wed 04.03.15
54	4.8.4 Organization and implementation of B2B match-making events (e.g. in		1 day	Mon 02.11.15	Mon 02.11.15
55	4.8.4 Organization and implementation of B2B match-making events (e.g. in		1 day	Wed 02.03.16	Wed 02.03.16
56	4.8.4 Organization and implementation of B2B match-making events (e.g. in		1 day	Wed 02.11.16	Wed 02.11.16
57	**4.8.5 Provide business-development support (follow-up) to the companies**		**523 days**	**Tue 04.11.14**	**Thu 03.11.16**
58	4.8.5 Provide business-development support (follow-up) to the companies at		1 day	Tue 04.11.14	Tue 04.11.14
59	4.8.5 Provide business-development support (follow-up) to the companies at		1 day	Tue 05.05.15	Tue 05.05.15
60	4.8.5 Provide business-development support (follow-up) to the companies at		1 day	Tue 03.11.15	Tue 03.11.15
61	4.8.5 Provide business-development support (follow-up) to the companies at		1 day	Tue 03.05.16	Tue 03.05.16
62	4.8.5 Provide business-development support (follow-up) to the companies at		1 day	Thu 03.11.16	Thu 03.11.16
63	**4.9 Introduce financial incentive scheme for stimulating IT usage in SMEs (iSME**		**500 days**	**Mon 02.02.15**	**Fri 30.12.16**
64	4.9.1 Develop financial incentive scheme (financial instruments, application proce		8 days	Mon 02.02.15	Wed 11.02.15
65	4.9.2 Allocate budget for financial incentive scheme for SMEs (iSME)		12 days	Thu 12.02.15	Fri 27.02.15
66	4.9.3 Launch information campaign on financial incentive scheme for SMEs (web		10 days	Mon 02.03.15	Fri 13.03.15
67	4.9.4 Implement financial incentive scheme for SMEs		470 days	Mon 16.03.15	Fri 30.12.16
68	4.9.5 Conduct monitoring and evaluation of financial incentive scheme program f		153 days	Wed 01.06.16	Fri 30.12.16
69	**4.10 Develop digital maturity assessment tool**		**165 days**	**Fri 15.05.15**	**Thu 31.12.15**
70	4.10.1 Develop digital maturity assessment tool (online version)		77 days	Fri 15.05.15	Mon 31.08.15
71	4.10.2 Integrate digital maturity assessment tool into STIKK website and conduct		11 days	Tue 01.09.15	Tue 15.09.15
72	4.10.3 Implement digital maturity assessment (fully automated online version)		33 days	Wed 16.09.15	Fri 30.10.15
73	4.10.4 Elaborate summary report on digital maturity assessment (compiled result		44 days	Mon 02.11.15	Thu 31.12.15

5.2.5. Timetable Strategic Pillar 5: IT Education

ID	Task Name	Priority	Duration	Start	Finish
1	**5.1 Implement continuous improvement system for IT education in Kosovo**		**458 days**	**Wed 01.04.15**	**Fri 30.12.16**
2	5.1.1 Establish joint competence group on IT education in Kosovo (see Task 6.1		7 days	Wed 01.04.15	Thu 09.04.15
3	5.1.2 Conduct evaluation and benchmarking of IT education curricula in Kosovo		21 days	Fri 10.04.15	Fri 08.05.15
4	5.1.3 Elaborate recommendations on IT education curricula in Kosovo for: Unive		15 days	Mon 11.05.15	Fri 29.05.15
5	5.1.4 Elaborate recommendations on required IT qualification profiles / compete		16 days	Mon 01.06.15	Mon 22.06.15
6	**5.1.5 Conduct information event and press conference to present recomm**		**263 days**	**Tue 30.06.15**	**Thu 30.06.16**
7	5.1.5 Conduct information event and press conference to present recomme		1 day	Tue 30.06.15	Tue 30.06.15
8	5.1.5 Conduct information event and press conference to present recomme		1 day	Thu 30.06.16	Thu 30.06.16
9	5.1.6 Integrate quality management and software testing (including ISTQB certif		188 days	Mon 13.04.15	Wed 30.12.15
10	5.1.7 Incorporate established certification programs into the curriculum (e.g. ITIL		188 days	Mon 13.04.15	Wed 30.12.15
11	5.1.8 Develop and integrate applied courses and lectures by IT professionals (p		450 days	Mon 13.04.15	Fri 30.12.16
12	**5.2 Implement international academic cooperation and exchange program**		**500 days**	**Mon 02.02.15**	**Fri 30.12.16**
13	5.2.1 Develop international academic cooperation and exchange program for co		20 days	Mon 02.02.15	Fri 27.02.15
14	5.2.2 Implement international academic cooperation and exchange program for		480 days	Mon 02.03.15	Fri 30.12.16
15	5.2.3 Establish network of Kosovo academics working abroad (online portal)		480 days	Mon 02.03.15	Fri 30.12.16
16	5.2.4 Implement "Brain Gain" program for motivating Kosovo academics working		457 days	Thu 02.04.15	Fri 30.12.16
17	**5.3 Introduce Student Placement Service (SPS)**		**512 days**	**Thu 15.01.15**	**Fri 30.12.16**
18	5.3.1 Develop service concept for the Student Placement Service including serv		12 days	Thu 15.01.15	Fri 30.01.15
19	5.3.2 Implement Student Placement Service, including integration into STIKK jo		11 days	Mon 02.02.15	Mon 16.02.15
20	5.3.3 Develop and implement special Student Placement Service for Kosovo st		480 days	Mon 02.03.15	Fri 30.12.16
21	**5.3.4 Design and implement infotainment and recrutainment events for IT**		**263 days**	**Thu 01.10.15**	**Mon 03.10.16**
22	5.3.4 Design and implement infotainment and recrutainment events for IT		1 day	Thu 01.10.15	Thu 01.10.15
23	5.3.4 Design and implement infotainment and recrutainment events for IT		1 day	Mon 02.05.16	Mon 02.05.16
24	5.3.4 Design and implement infotainment and recrutainment events for IT		1 day	Mon 03.10.16	Mon 03.10.16
25	**5.4 Introduce Kosovo IT scholarship program**		**545 days**	**Mon 01.12.14**	**Fri 30.12.16**
26	5.4.1 Develop concept for the Kosovo IT scholarship program (application proce		45 days	Mon 01.12.14	Fri 30.01.15
27	5.4.2 Implement and manage the Kosovo IT scholarship program		500 days	Mon 02.02.15	Fri 30.12.16
28	**5.5 Introduce STIKK competence assessment standard for IT students**		**305 days**	**Mon 02.11.15**	**Fri 30.12.16**
29	5.5.1 Develop concept for STIKK competence assessment standard for IT stude		21 days	Mon 02.11.15	Mon 30.11.15
30	5.5.2 Implement and manage STIKK competence assessment standard for IT st		284 days	Tue 01.12.15	Fri 30.12.16
31	**5.6 Establish university ranking (IT)**		**260 days**	**Mon 04.01.16**	**Fri 30.12.16**
32	5.6.1 Develop concept for university ranking (methodology, evaluation criteria, e		20 days	Mon 04.01.16	Fri 29.01.16
33	5.6.2 Conduct university ranking (every 2 years)		240 days	Mon 01.02.16	Fri 30.12.16
34	**5.7 Introduce National IT Olympics**		**316 days**	**Mon 02.03.15**	**Mon 16.05.16**
35	5.7.1 Develop concept for National IT Olympics (format, program, organization,		11 days	Mon 02.03.15	Mon 16.03.15
36	**5.7.2 Organize National IT Olympics on an annual basis**		**262 days**	**Fri 15.05.15**	**Mon 16.05.16**
37	5.7.2 Organize National IT Olympics on an annual basis 1		1 day	Fri 15.05.15	Fri 15.05.15
38	5.7.2 Organize National IT Olympics on an annual basis 2		1 day	Mon 16.05.16	Mon 16.05.16
39	**5.8 Promoting part-time and distance learning IT education**		**261 days**	**Fri 01.01.16**	**Fri 30.12.16**
40	5.8.1 Conduct needs assessment for part-time and distance learning IT educati		21 days	Fri 01.01.16	Fri 29.01.16
41	5.8.2 Develop curricula for part-time and distance learning IT education		43 days	Mon 01.02.16	Wed 30.03.16
42	5.8.3 Implement part-time and distance learning IT education programs		197 days	Thu 31.03.16	Fri 30.12.16
43	**5.9 Establish Kosovo Institute of Digital Technology (PPP)**		**458 days**	**Wed 01.04.15**	**Fri 30.12.16**
44	5.9.1 Elaborate concept for the KIDT including functions, organizational structur		43 days	Wed 01.04.15	Fri 29.05.15
45	5.9.2 Establish and manage the KIDT		415 days	Mon 01.06.15	Fri 30.12.16
46	5.9.3 Establish partnerships with relevant universities, research institutes and or		239 days	Tue 02.02.16	Fri 30.12.16
47	**5.10 Promote MINT subjects in primary and secondary education**		**415 days**	**Mon 01.06.15**	**Fri 30.12.16**
48	5.10.1 Develop proposal on how to promote MINT subjects in primary and seco		22 days	Mon 01.06.15	Tue 30.06.15
49	5.10.2 Revise curricula and implement proposal for promoting MINT subjects in		393 days	Wed 01.07.15	Fri 30.12.16
50	5.10.3 Develop and implement further education program (teacher-training) in te		383 days	Wed 15.07.15	Fri 30.12.16
51	**5.11 Promote university alliance programs**		**327 days**	**Thu 01.10.15**	**Fri 30.12.16**
52	5.11.1 Identify suitable alliance partners and areas of cooperation (multinational		22 days	Thu 01.10.15	Fri 30.10.15
53	5.11.2 Establish and implement university alliance programs		305 days	Mon 02.11.15	Fri 30.12.16
54	**5.12 Introduce vocational education for IT**		**480 days**	**Mon 02.03.15**	**Fri 30.12.16**
55	5.12.1 Develop implementation concept and curricula for vocational IT educatio		65 days	Mon 02.03.15	Fri 29.05.15
56	5.12.2 Establish vocational education for IT in Kosovo		415 days	Mon 01.06.15	Fri 30.12.16

5.2.6. Timetable Strategic Pillar 6: IT Clusters & Collaboration



ID	Task Name	Priority	Duration	Start	Finish
1	**6.1 Implement capacity building in IT Cluster Management**		**35 days**	**Mon 02.11.15**	**Fri 18.12.15**
2	6.1.1 Elaborate training material and case studies on IT cluster management		21 days	Mon 02.11.15	Mon 30.11.15
3	6.1.2 Conduct training workshop (3 days) on IT cluster management for selected stakeholders		5 days	Mon 07.12.15	Fri 11.12.15
4	6.1.3 Provide cluster management manual and toolbox		5 days	Mon 14.12.15	Fri 18.12.15
5	**6.2 Establish STIKK as an IT Cluster of Excellence**		**500 days**	**Mon 02.02.15**	**Fri 30.12.16**
6	6.2.1 Develop cluster business plan for STIKK (IT Cluster of Excellence)		31 days	Mon 02.02.15	Mon 16.03.15
7	6.2.2 Further develop organizational structure and process model of STIKK		65 days	Tue 17.03.15	Mon 15.06.15
8	6.2.3 Develop and implement STIKK service portfolio (including integration of existing services)		76 days	Tue 17.03.15	Tue 30.06.15
9	6.2.4 Introduces a collaborative software application / groupware or ECM application (e.g. Shar		22 days	Tue 16.06.15	Wed 15.07.15
10	6.2.5 Introduce QM system and support certification of STIKK according to ISO 9001 or a comp		404 days	Tue 16.06.15	Fri 30.12.16
11	6.2.6 Support STIKK in enlarging its membership base		393 days	Mon 02.02.15	Wed 03.08.16
12	6.2.7 Integrate universities into STIKK as associated members		66 days	Tue 17.03.15	Tue 16.06.15
13	**6.3 Establish international advisory board within STIKK ("Brand Ambassadors")**		**496 days**	**Mon 01.12.14**	**Mon 24.10.16**
14	6.3.1 Develop concept and selection criteria for the international advisory board		5 days	Mon 01.12.14	Fri 05.12.14
15	6.3.2 Integrate international advisory board into statute and organizational structure of STIKK		5 days	Mon 08.12.14	Fri 12.12.14
16	6.3.3 Identify and appoint members of the international advisory board		273 days	Mon 15.12.14	Wed 30.12.15
17	**6.3.4 Organize annual meetings / reunions of the international advisory board**		**262 days**	**Fri 23.10.15**	**Mon 24.10.16**
18	6.3.4 Organize annual meetings / reunions of the international advisory board 2		1 day	Fri 23.10.15	Fri 23.10.15
19	6.3.4 Organize annual meetings / reunions of the international advisory board 3		1 day	Mon 24.10.16	Mon 24.10.16
20	**6.4 Establish specialized sub-clusters for targeted marketing and positioning**		**294 days**	**Fri 01.05.15**	**Wed 15.06.16**
21	6.4.1 Identify focus topics (e.g. software testing) for specialized sub-clusters		21 days	Fri 01.05.15	Fri 29.05.15
22	6.4.2 Elaborate organizational concept for specialized sub-clusters		22 days	Mon 01.06.15	Tue 30.06.15
23	6.4.3 Establish specialized sub-clusters		66 days	Wed 01.07.15	Wed 30.09.15
24	6.4.4 Develop and implement action plans for specialized sub-clusters		185 days	Thu 01.10.15	Wed 15.06.16
25	**6.5 Implement cluster promotion program**		**173 days**	**Mon 02.02.15**	**Wed 30.09.15**
26	6.5.1 Develop cluster promotion program		20 days	Mon 02.02.15	Fri 27.02.15
27	6.5.2 Implement cluster promotion program		65 days	Mon 02.03.15	Fri 29.05.15
28	6.5.3 Adapt tender procedures to promote clusters / consortia		22 days	Tue 01.09.15	Wed 30.09.15
29	**6.6 Establish job exchange within STIKK website**		**110 days**	**Mon 02.03.15**	**Fri 31.07.15**
30	6.6.1 Elaborate concept and requirements specification for the STIKK job exchange		15 days	Mon 02.03.15	Fri 20.03.15
31	6.6.2 Conduct tender and implement the STIKK job exchange		95 days	Mon 23.03.15	Fri 31.07.15
32	**6.7 Support the OSS community**		**527 days**	**Fri 10.10.14**	**Fri 14.10.16**
33	**6.7.1 Support the organization and implementation of the Software Freedom Kosova Cor**		**527 days**	**Fri 10.10.14**	**Fri 14.10.16**
34	6.7.1 Support the organization and implementation of the Software Freedom Kosova Conf		2 days	Fri 10.10.14	Sun 12.10.14
35	6.7.1 Support the organization and implementation of the Software Freedom Kosova Conf		2 days	Tue 13.10.15	Wed 14.10.15
36	6.7.1 Support the organization and implementation of the Software Freedom Kosova Conf		2 days	Thu 13.10.16	Fri 14.10.16
37	6.7.2 Promote cooperation between FLOSSK and international OSS communities		303 days	Mon 03.11.14	Wed 30.12.15
38	**6.8 Establish joint competence center on EU projects**		**349 days**	**Tue 01.09.15**	**Fri 30.12.16**
39	6.8.1 Develop concept for the joint competence center on EU projects including services portfo		9 days	Tue 01.09.15	Fri 11.09.15
40	6.8.2 Implement and operate joint competence center on EU projects		340 days	Mon 14.09.15	Fri 30.12.16
41	**6.9 Promote international cluster linkage**		**720 days**	**Tue 01.04.14**	**Fri 30.12.16**
42	6.9.1 Identify suitable cooperation partners (IT clusters and association) and identify areas of c		198 days	Tue 01.04.14	Wed 31.12.14
43	6.9.2 Establish cooperation with IT clusters and associations		698 days	Thu 01.05.14	Fri 30.12.16
44	**6.10 Establish special competence groups for strategic IT topics ("Triple Helix")**		**436 days**	**Fri 01.05.15**	**Fri 30.12.16**
45	6.10.1 Develop concept for the SCGs including goals, structure and procedures		11 days	Fri 01.05.15	Fri 15.05.15
46	6.10.2 Define the topics for the SCGs		15 days	Mon 18.05.15	Fri 05.06.15
47	6.10.3 Establish and manage the SCGs		410 days	Mon 08.06.15	Fri 30.12.16
48	6.10.4 Organize participation of international experts in SCG meetings (presentations, lectures,		326 days	Fri 02.10.15	Fri 30.12.16
49	6.10.5 Organize international linkage to similar competence groups or networks		305 days	Mon 02.11.15	Fri 30.12.16

Project: MSProj11
Date: Fri 07.11.14

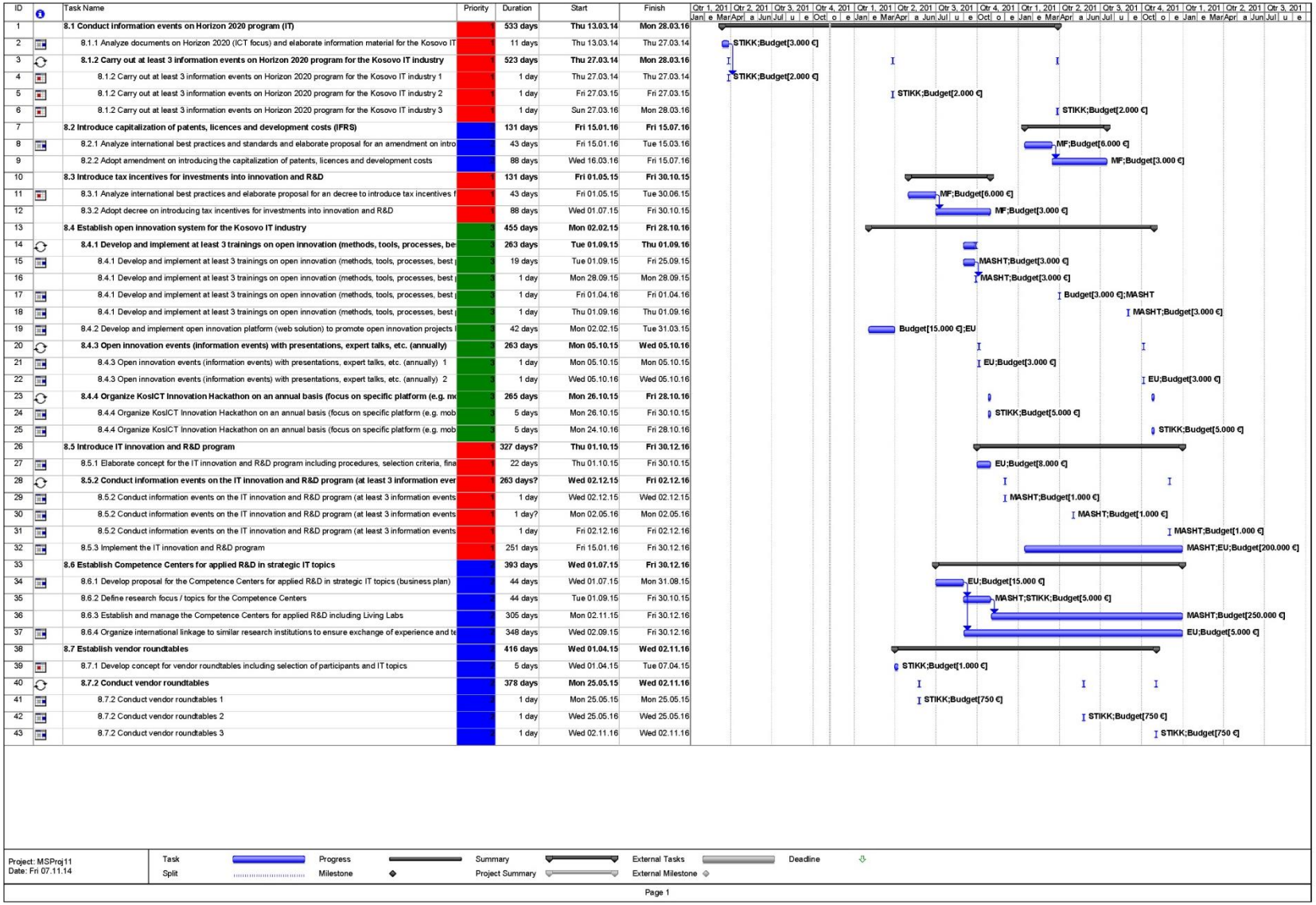
Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

Page 1

5.2.7. Timetable Strategic Pillar 7: Entrepreneurship

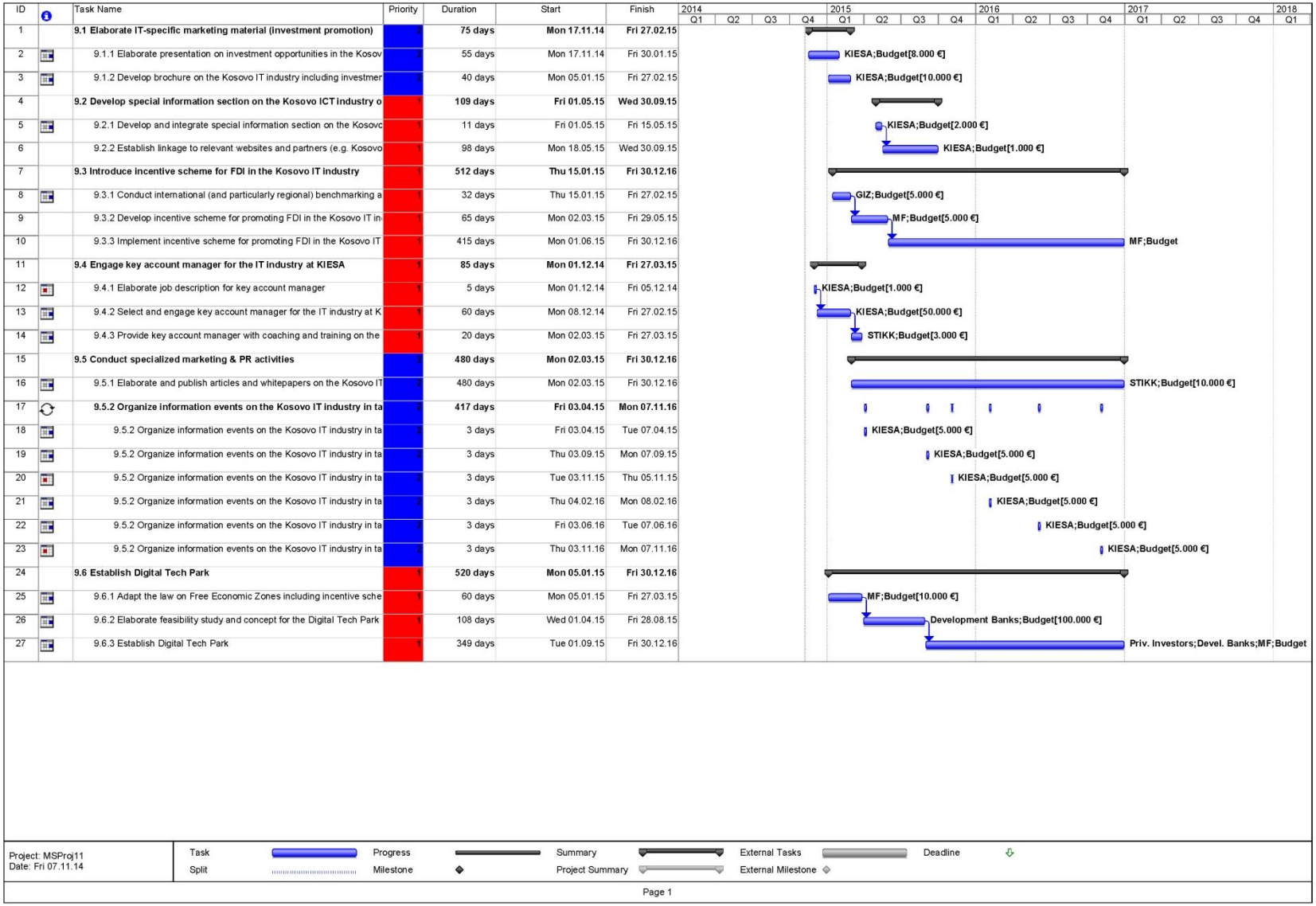
ID	Task Name	Priority	Duration	Start	Finish
1	**7.1 Establish mentoring committee at STIKK / ICK**		**327 days**	**Thu 01.10.15**	**Fri 30.12.16**
2	7.1.1 Elaborate concept for the mentoring committee (members, procedures, etc.)		5 days	Thu 01.10.15	Wed 07.10.15
3	7.1.2 Establish mentoring committee at STIKK / ICK and conduct coachings for start-ups		7 days	Thu 08.10.15	Fri 16.10.15
4	7.1.3 Organize monthly entrepreneurship dinners with the members of the mentoring committ		315 days	Mon 19.10.15	Fri 30.12.16
5	**7.2 Support the establishment of the Kosovo Business Angels and VC Association**		**555 days**	**Mon 17.11.14**	**Fri 30.12.16**
6	7.2.1 Elaborate a proposal for the establishment of a Kosovo Business Angels and VC Associ		13 days	Mon 17.11.14	Wed 03.12.14
7	7.2.2 Mobilize potential partners and members for the association		20 days	Thu 04.12.14	Wed 31.12.14
8	7.2.3 Support the establishment of the Kosovo Business Angels and VC Association (technica		107 days	Thu 01.01.15	Fri 29.05.15
9	7.2.4 Create international linkage for the Kosovo Business Angels and VC Association (partic		415 days	Mon 01.06.15	Fri 30.12.16
10	**7.3 Organize B2B match-making events between investors and IT entrepreneurs on a nation**		**420 days**	**Mon 02.03.15**	**Fri 07.10.16**
11	7.3.1 Provide preparatory trainings for IT start-ups / entrepreneurs participating in match-maki		44 days	Mon 02.03.15	Thu 30.04.15
12	**7.3.2 Conduct at least 3 B2B match-making events between investors and IT entreprene**		**354 days**	**Tue 02.06.15**	**Fri 07.10.16**
13	7.3.2 Conduct at least 3 B2B match-making events between investors and IT entreprene		2 days	Tue 02.06.15	Wed 03.06.15
14	7.3.2 Conduct at least 3 B2B match-making events between investors and IT entreprene		2 days	Wed 01.06.16	Thu 02.06.16
15	7.3.2 Conduct at least 3 B2B match-making events between investors and IT entreprene		2 days	Thu 06.10.16	Fri 07.10.16
16	**7.4 Organize international VC4IT conference in Kosovo**		**143 days**	**Thu 15.10.15**	**Mon 02.05.16**
17	7.4.1 Develop concept for the VC4IT conference (program, financing, participants, logistics, et		17 days	Thu 15.10.15	Fri 06.11.15
18	7.4.2 Organize international VC4IT conference in Kosovo		126 days	Mon 09.11.15	Mon 02.05.16
19	**7.5 Introduce specialized consulting & coaching service for IT entrepreneurs and start-ups**		**458 days?**	**Wed 01.04.15**	**Fri 30.12.16**
20	7.5.1 Conduct needs assessment with ICK and its member companies (incubator) (e.g. throug		13 days	Wed 01.04.15	Fri 17.04.15
21	7.5.2 Develop concept for the specialized consulting & coaching service for IT entrepreneurs		23 days	Mon 20.04.15	Wed 20.05.15
22	7.5.3 Develop financial support scheme for the specialized consulting services for entreprene		7 days	Thu 21.05.15	Fri 29.05.15
23	7.5.4 Establish pool of suitable consultants and coaches (see Task 7.1 Coaching committee)		52 days	Thu 21.05.15	Fri 31.07.15
24	7.5.5 Conduct information events on specialized consulting services for entrepreneurs and sta		1 day?	Tue 01.09.15	Tue 01.09.15
25	7.5.6 Implement specialized consulting service for entrepreneurs and start-ups		348 days	Wed 02.09.15	Fri 30.12.16
26	**7.6 Establish IT Entrepreneurship Award ("DigitalOne")**		**403 days**	**Fri 01.05.15**	**Tue 15.11.16**
27	7.6.1 Define selection criteria for the IT Entrepreneurship Award		3 days	Fri 01.05.15	Tue 05.05.15
28	**7.6.2 Establish the IT Entrepreneurship award and conduct award ceremony**		**266 days**	**Tue 10.11.15**	**Tue 15.11.16**
29	7.6.2 Establish the IT Entrepreneurship award and conduct award ceremony 1		3 days	Tue 10.11.15	Thu 12.11.15
30	7.6.2 Establish the IT Entrepreneurship award and conduct award ceremony 2		3 days	Fri 11.11.16	Tue 15.11.16
31	**7.7 Establish high-tech start-up fund (PPP)**		**415 days**	**Mon 01.06.15**	**Fri 30.12.16**
32	7.7.1 Elaborate business plan and feasibility study for the high-tech start-up fund		77 days	Mon 01.06.15	Tue 15.09.15
33	7.7.2 Establish and operate the high-tech start-up fund		338 days	Wed 16.09.15	Fri 30.12.16
34	**7.8 Introduce IT entrepreneurship@school program**		**327 days**	**Thu 01.10.15**	**Fri 30.12.16**
35	7.8.1 Develop IT entrepreneurship@school program including business plan competition, exc		22 days	Thu 01.10.15	Fri 30.10.15
36	7.8.2 Implement IT entrepreneurship@school program		305 days	Mon 02.11.15	Fri 30.12.16
37	**7.9 Establish international linkage and sponsorship for ICK**		**609 days**	**Tue 02.09.14**	**Fri 30.12.16**
38	7.9.1 Identify suitable cooperation partners for ICK in strategic export markets as well as in th		21 days	Tue 02.09.14	Tue 30.09.14
39	7.9.2 Establish international linkage for ICK with incubators and innovation centers abroad		588 days	Wed 01.10.14	Fri 30.12.16
40	7.9.3 Develop and implement international sponsorship program for ICK		450 days	Mon 13.04.15	Fri 30.12.16
41	**7.10 Promote university-based IT start-ups**		**415 days**	**Mon 01.06.15**	**Fri 30.12.16**
42	7.10.1 Develop program for promoting university-based IT start-ups		22 days	Mon 01.06.15	Tue 30.06.15
43	7.10.2 Implement program for promoting university-based IT start-ups		349 days	Tue 01.09.15	Fri 30.12.16

5.2.8. Timetable Strategic Pillar 8: Innovation & Applied R&D



ID	Task Name	Priority	Duration	Start	Finish
1	**8.1 Conduct information events on Horizon 2020 program (IT)**		**533 days**	**Thu 13.03.14**	**Mon 28.03.16**
2	8.1.1 Analyze documents on Horizon 2020 (ICT focus) and elaborate information material for the Kosovo IT		11 days	Thu 13.03.14	Thu 27.03.14
3	**8.1.2 Carry out at least 3 information events on Horizon 2020 program for the Kosovo IT industry**		**523 days**	**Thu 27.03.14**	**Mon 28.03.16**
4	8.1.2 Carry out at least 3 information events on Horizon 2020 program for the Kosovo IT industry 1		1 day	Thu 27.03.14	Thu 27.03.14
5	8.1.2 Carry out at least 3 information events on Horizon 2020 program for the Kosovo IT industry 2		1 day	Fri 27.03.15	Fri 27.03.15
6	8.1.2 Carry out at least 3 information events on Horizon 2020 program for the Kosovo IT industry 3		1 day	Sun 27.03.16	Mon 28.03.16
7	**8.2 Introduce capitalization of patents, licences and development costs (IFRS)**		**131 days**	**Fri 15.01.16**	**Fri 15.07.16**
8	8.2.1 Analyze international best practices and standards and elaborate proposal for an amendment on intro		43 days	Fri 15.01.16	Tue 15.03.16
9	8.2.2 Adopt amendment on introducing the capitalization of patents, licences and development costs		88 days	Wed 16.03.16	Fri 15.07.16
10	**8.3 Introduce tax incentives for investments into innovation and R&D**		**131 days**	**Fri 01.05.15**	**Fri 30.10.15**
11	8.3.1 Analyze international best practices and elaborate proposal for an decree to introduce tax incentives f		43 days	Fri 01.05.15	Tue 30.06.15
12	8.3.2 Adopt decree on introducing tax incentives for investments into innovation and R&D		88 days	Wed 01.07.15	Fri 30.10.15
13	**8.4 Establish open innovation system for the Kosovo IT industry**		**455 days**	**Mon 02.02.15**	**Fri 28.10.16**
14	**8.4.1 Develop and implement at least 3 trainings on open innovation (methods, tools, processes, be**		**263 days**	**Tue 01.09.15**	**Thu 01.09.16**
15	8.4.1 Develop and implement at least 3 trainings on open innovation (methods, tools, processes, best		19 days	Tue 01.09.15	Fri 25.09.15
16	8.4.1 Develop and implement at least 3 trainings on open innovation (methods, tools, processes, best		1 day	Mon 28.09.15	Mon 28.09.15
17	8.4.1 Develop and implement at least 3 trainings on open innovation (methods, tools, processes, best		1 day	Fri 01.04.16	Fri 01.04.16
18	8.4.1 Develop and implement at least 3 trainings on open innovation (methods, tools, processes, best		1 day	Thu 01.09.16	Thu 01.09.16
19	8.4.2 Develop and implement open innovation platform (web solution) to promote open innovation projects		42 days	Mon 02.02.15	Tue 31.03.15
20	**8.4.3 Open innovation events (information events) with presentations, expert talks, etc. (annually)**		**263 days**	**Mon 05.10.15**	**Wed 05.10.16**
21	8.4.3 Open innovation events (information events) with presentations, expert talks, etc. (annually) 1		1 day	Mon 05.10.15	Mon 05.10.15
22	8.4.3 Open innovation events (information events) with presentations, expert talks, etc. (annually) 2		1 day	Wed 05.10.16	Wed 05.10.16
23	**8.4.4 Organize KosICT Innovation Hackathon on an annual basis (focus on specific platform (e.g. m**		**265 days**	**Mon 26.10.15**	**Fri 28.10.16**
24	8.4.4 Organize KosICT Innovation Hackathon on an annual basis (focus on specific platform (e.g. mob		5 days	Mon 26.10.15	Fri 30.10.15
25	8.4.4 Organize KosICT Innovation Hackathon on an annual basis (focus on specific platform (e.g. mob		5 days	Mon 24.10.16	Fri 28.10.16
26	**8.5 Introduce IT innovation and R&D program**		**327 days?**	**Thu 01.10.15**	**Fri 30.12.16**
27	8.5.1 Elaborate concept for the IT innovation and R&D program including procedures, selection criteria, fina		22 days	Thu 01.10.15	Fri 30.10.15
28	**8.5.2 Conduct information events on the IT innovation and R&D program (at least 3 information ever**		**263 days?**	**Wed 02.12.15**	**Fri 02.12.16**
29	8.5.2 Conduct information events on the IT innovation and R&D program (at least 3 information events		1 day	Wed 02.12.15	Wed 02.12.15
30	8.5.2 Conduct information events on the IT innovation and R&D program (at least 3 information events		1 day?	Mon 02.05.16	Mon 02.05.16
31	8.5.2 Conduct information events on the IT innovation and R&D program (at least 3 information events		1 day	Fri 02.12.16	Fri 02.12.16
32	8.5.3 Implement the IT innovation and R&D program		251 days	Fri 15.01.16	Fri 30.12.16
33	**8.6 Establish Competence Centers for applied R&D in strategic IT topics**		**393 days**	**Wed 01.07.15**	**Fri 30.12.16**
34	8.6.1 Develop proposal for the Competence Centers for applied R&D in strategic IT topics (business plan)		44 days	Wed 01.07.15	Mon 31.08.15
35	8.6.2 Define research focus / topics for the Competence Centers		44 days	Tue 01.09.15	Fri 30.10.15
36	8.6.3 Establish and manage the Competence Centers for applied R&D including Living Labs		305 days	Mon 02.11.15	Fri 30.12.16
37	8.6.4 Organize international linkage to similar research institutions to ensure exchange of experience and te		348 days	Wed 02.09.15	Fri 30.12.16
38	**8.7 Establish vendor roundtables**		**416 days**	**Wed 01.04.15**	**Wed 02.11.16**
39	8.7.1 Develop concept for vendor roundtables including selection of participants and IT topics		5 days	Wed 01.04.15	Tue 07.04.15
40	**8.7.2 Conduct vendor roundtables**		**378 days**	**Mon 25.05.15**	**Wed 02.11.16**
41	8.7.2 Conduct vendor roundtables 1		1 day	Mon 25.05.15	Mon 25.05.15
42	8.7.2 Conduct vendor roundtables 2		1 day	Wed 25.05.16	Wed 25.05.16
43	8.7.2 Conduct vendor roundtables 3		1 day	Wed 02.11.16	Wed 02.11.16

5.2.9. Timetable Strategic Pillar 9: Investment Promotion



ID	Task Name	Priority	Duration	Start	Finish
1	**9.1 Elaborate IT-specific marketing material (investment promotion)**		**75 days**	**Mon 17.11.14**	**Fri 27.02.15**
2	9.1.1 Elaborate presentation on investment opportunities in the Kosov		55 days	Mon 17.11.14	Fri 30.01.15
3	9.1.2 Develop brochure on the Kosovo IT industry including investmer		40 days	Mon 05.01.15	Fri 27.02.15
4	**9.2 Develop special information section on the Kosovo ICT industry o**		**109 days**	**Fri 01.05.15**	**Wed 30.09.15**
5	9.2.1 Develop and integrate special information section on the Kosovc		11 days	Fri 01.05.15	Fri 15.05.15
6	9.2.2 Establish linkage to relevant websites and partners (e.g. Kosovo		98 days	Mon 18.05.15	Wed 30.09.15
7	**9.3 Introduce incentive scheme for FDI in the Kosovo IT industry**		**512 days**	**Thu 15.01.15**	**Fri 30.12.16**
8	9.3.1 Conduct international (and particularly regional) benchmarking a		32 days	Thu 15.01.15	Fri 27.02.15
9	9.3.2 Develop incentive scheme for promoting FDI in the Kosovo IT in		65 days	Mon 02.03.15	Fri 29.05.15
10	9.3.3 Implement incentive scheme for promoting FDI in the Kosovo IT		415 days	Mon 01.06.15	Fri 30.12.16
11	**9.4 Engage key account manager for the IT industry at KIESA**		**85 days**	**Mon 01.12.14**	**Fri 27.03.15**
12	9.4.1 Elaborate job description for key account manager		5 days	Mon 01.12.14	Fri 05.12.14
13	9.4.2 Select and engage key account manager for the IT industry at K		60 days	Mon 08.12.14	Fri 27.02.15
14	9.4.3 Provide key account manager with coaching and training on the		20 days	Mon 02.03.15	Fri 27.03.15
15	**9.5 Conduct specialized marketing & PR activities**		**480 days**	**Mon 02.03.15**	**Fri 30.12.16**
16	9.5.1 Elaborate and publish articles and whitepapers on the Kosovo IT		480 days	Mon 02.03.15	Fri 30.12.16
17	**9.5.2 Organize information events on the Kosovo IT industry in ta**		**417 days**	**Fri 03.04.15**	**Mon 07.11.16**
18	9.5.2 Organize information events on the Kosovo IT industry in ta		3 days	Fri 03.04.15	Tue 07.04.15
19	9.5.2 Organize information events on the Kosovo IT industry in ta		3 days	Thu 03.09.15	Mon 07.09.15
20	9.5.2 Organize information events on the Kosovo IT industry in ta		3 days	Tue 03.11.15	Thu 05.11.15
21	9.5.2 Organize information events on the Kosovo IT industry in ta		3 days	Thu 04.02.16	Mon 08.02.16
22	9.5.2 Organize information events on the Kosovo IT industry in ta		3 days	Fri 03.06.16	Tue 07.06.16
23	9.5.2 Organize information events on the Kosovo IT industry in ta		3 days	Thu 03.11.16	Mon 07.11.16
24	**9.6 Establish Digital Tech Park**		**520 days**	**Mon 05.01.15**	**Fri 30.12.16**
25	9.6.1 Adapt the law on Free Economic Zones including incentive sche		60 days	Mon 05.01.15	Fri 27.03.15
26	9.6.2 Elaborate feasibility study and concept for the Digital Tech Park		108 days	Wed 01.04.15	Fri 28.08.15
27	9.6.3 Establish Digital Tech Park		349 days	Tue 01.09.15	Fri 30.12.16

5.3. Organizational Structure

Another key challenge concerning the implementation of the Kosovo IT Strategy is establishing an appropriate organizational structure, which facilitates effective collaboration and coordination between stakeholders.

The implementation of the Kosovo IT Strategy requires a stakeholder-setting which could best be described as an "extended" triple helix, including actors from the IT industry (private sector), government institutions, academia, as well as donor organizations:

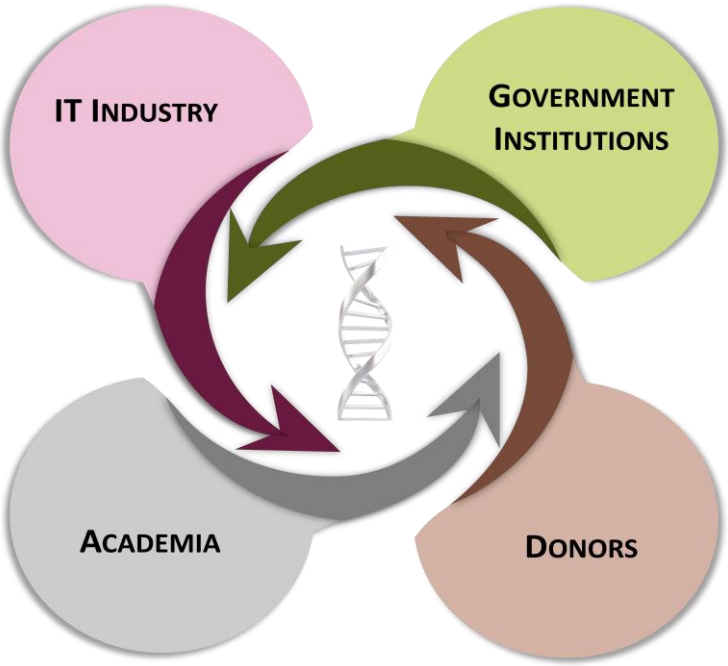


Figure 41: Stakeholder setting and "extended" triple helix

In order to allow for effective strategy implementation an organizational structure is needed which closely involves all the above-shown stakeholders and coordinates their joint efforts towards promoting the Kosovo IT industry and achieving the vision and goals of the strategy. Defining such an organizational structure is particularly difficult, since these stakeholders are legally independent and have different structures, capabilities, resources and organizational cultures. Unlike in a company or ministry, there is no central unit or hierarchy.

Therefore, an innovative form of organization is needed which allows for collaborative strategy implementation in a multi-stakeholder setting and which is beyond traditional corporate or bureaucratic organizational structures based on control or hierarchy. At the same time, the organizational structure needs to reflect the strategy and its principles, goals and measures ("structure follows strategy"). Considering the dynamics of the IT industry, it also needs to facilitate flexible adaptability to changing market conditions as well as effective monitoring and decision-making.

Taking into account the above considerations, the working group defined a network-oriented organization for the implementation of the Kosovo IT Strategy. Such form of organization directly engages all relevant stakeholders from the Kosovo IT industry and is based on voluntaristic collaboration through multilateral coordination by a joint steering committee. The following scheme outlines the proposed organizational structure:

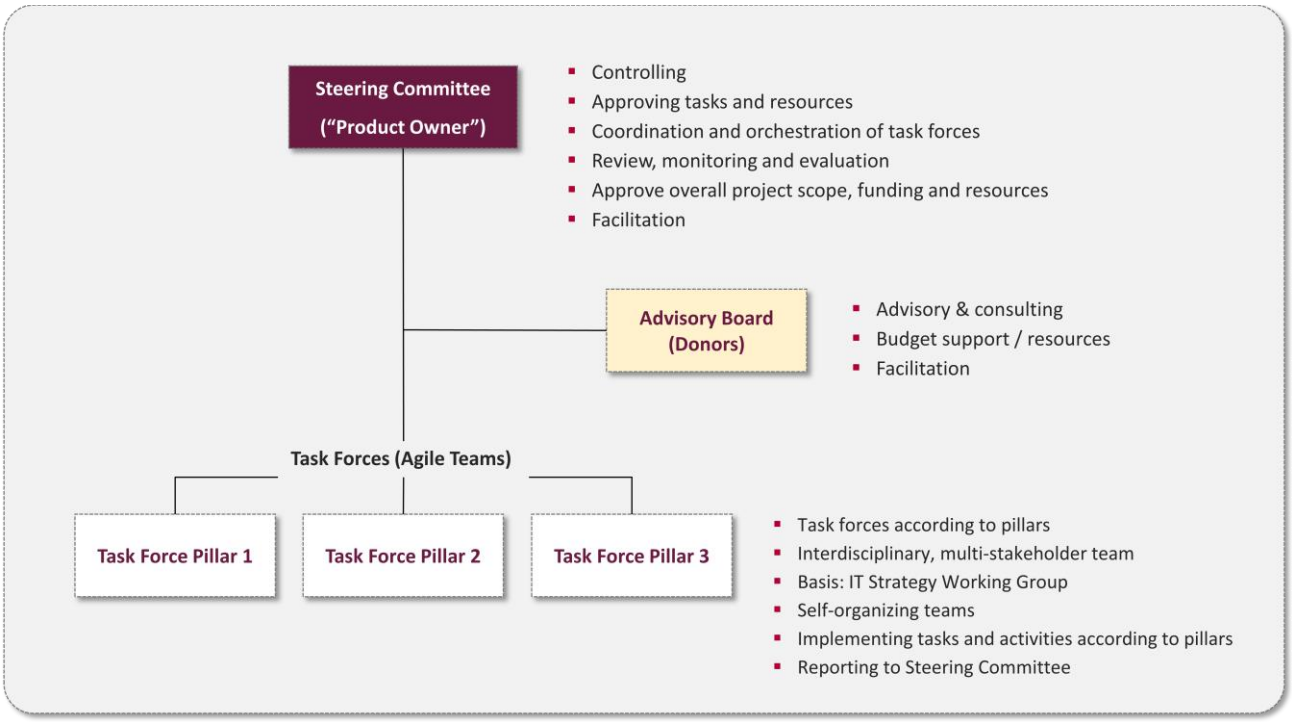


Figure 42: Organizational structure for implementing the Kosovo IT Strategy

As seen above, the **steering committee** is responsible for the overall management and coordination of strategy implementation and also approves tasks and resources according to the operational plan. It orchestrates the different task forces and monitors the implementation of the strategy.

For each of the 9 strategic pillars, specialized **task forces** responsible for implementing corresponding tasks or work packages will be established. These task forces are self-managing teams, which report directly to the steering committee. In case the task forces are not able to fulfil their tasks due to inadequate resources or capabilities, they can be assisted by consultants through donor organization.

Furthermore, an **advisory board** will provide additional support with regards to consulting, resources and external know-how. The advisory board will also be particularly relevant with regards to coordinating donor support in close cooperation with the steering committee.

In the following table, the strategy working group has defined the members (stakeholders and institutions) of the organizational units mentioned above. The corresponding representatives of each stakeholder / institution will be defined during the kick-off event for the implementation of the Kosovo IT Strategy.

Organizational Unit	Members and Staffing
Steering Committee ("Product Owner")	STIKK, MED, MTI, Public University, Private University, Donor Organizations
Advisory Board	Universities, ICK, MF, ASHI, ZKM, MASHT, OEK, AmCham, OEGJ, Donor Organizations,
Task Forces (Agile Teams)	

Organizational Unit	Members and Staffing
Task Force 1: IT Promotion Policy	STIKK, ZKM, MF, MTI, ASHI, USAID
Task Force 2: Company Excellence & Quality	STIKK, MF, Donors, CBC
Task Force 3: Export Promotion	STIKK, KIESA, MF, Donors
Task Force 4: Domestic Market Development	STIKK, ASHI, KIESA
Task Force 5: IT Education	MASHT, STIKK, UP, UBT, Universum College, Riinvest University
Task Force 6: IT Clusters & Collaboration	STIKK, Donors, KIESA
Task Force 7: Entrepreneurship	ICK, KIESA, Donors
Task Force 8: Innovation & Applied R&D	ICK, MASHT, STIKK, MF, FIEK
Task Force 9: Investment Promotion	KIESA, MF, MTI

As can be seen from the above list, all members of the strategy working group have been integrated into the organizational structure, thus ensuring personal consistency throughout the whole strategy development and implementation cycle. Thus, the stakeholders who have already been involved in the development of the Kosovo IT Strategy will also take part in its implementation.

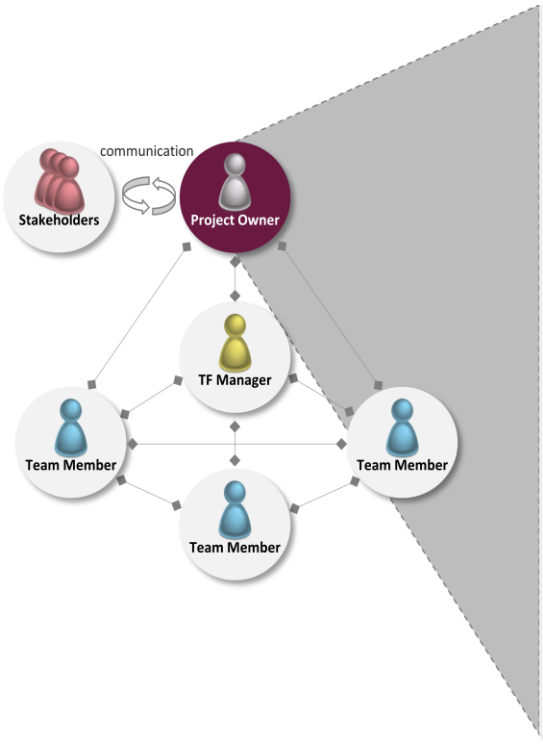
In this context, it deserves mentioning that STIKK will play a key role within the organizational structure and will provide a central platform for managing and coordinating the implementation of the Kosovo IT Strategy in close cooperation with other stakeholders.

In fact, **STIKK will serve as a "system integrator" for the implementation of the strategy**. STIKK represents the actual target group of the strategy, i.e. Kosovo IT enterprises. Moreover, it has a well-established and effective organizational structure, with highly qualified full-time staff, as well as excellent infrastructure including office space, conference rooms, training facilities and IT facilities.

In order to further increase the organizational and operational effectiveness of STIKK, it will be enhanced into an IT cluster, thus allowing for a closer integration of key stakeholders such as universities. Such a cluster structure will enable STIKK to implement selected support measures of the IT strategy as specialized cluster services for the Kosovo IT industry (e.g. STIKK Education, export-oriented support services, etc.). Another benefit of using STIKK as a system integrator within the organizational structure stems from the fact that unlike ministries or public agencies, it is less susceptible to political influences and reshuffles.

The agile approach of the strategy (see chapter 2) is directly reflected in the organizational structure through an agile team framework based on Scrum. As shown in the above table, the organizational structure exhibits several agile elements which will be described in the diagrams below, including the project owner (steering committee) and the agile teams or task forces with their task force managers/agile managers and team members:

Product owner (steering committee):



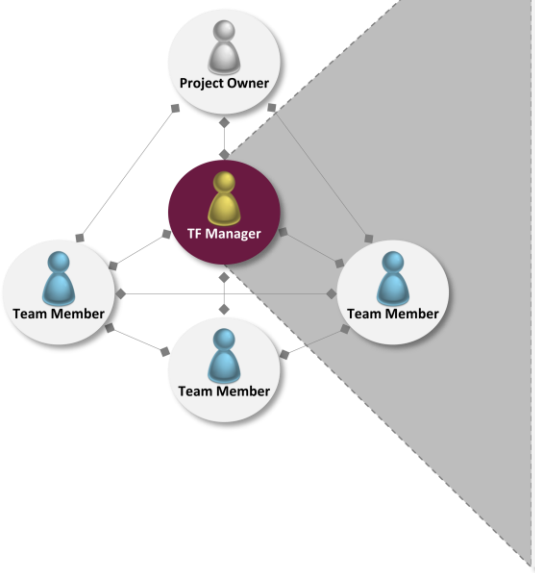
Role

- Steering Committee
- "Internal customer"
- Representatives of stakeholders

Tasks

- Stakeholder management
- Responsible for vision and goals
- Approving tasks and resources
- Coordination and orchestration of task forces (agile teams)
- Controlling
- Reviewing, monitoring and evaluation
- Approve overall project scope, funding and resources
- Facilitation
- Approving results and deliverables ("done")
- Communication to the public

Task force manager / agile manager:



Role

- Stakeholder representative with experience / interest in a specific pillar (e.g. IT education, export promotion, etc.)
- Person with project management / leadership experience
- Member of the IT Strategy Working Group (?)

Tasks

- Managing the task force team
- Facilitating meetings
- Coordinating the implementation of tasks / WPs
- Reporting to Steering Committee
- Constantly involving relevant stakeholders

Agile team members:

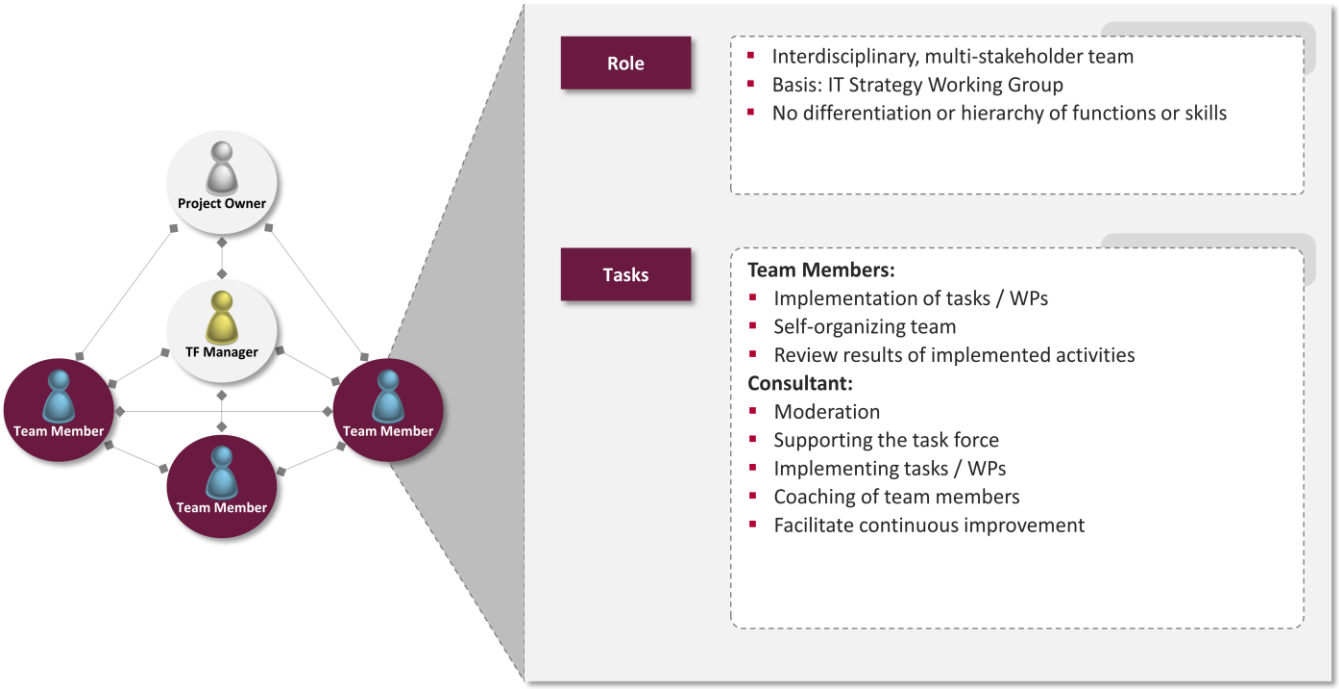


Figure 43: Organizational structure and agile team framework based on Scrum

The effectiveness of these agile task forces is attributable to small, multi-disciplinary teams and close cooperation in iterative cycles (sprints). Concrete benefits of this agile organizational structure include:

- Effective cooperation and coordination through joint task definition & prioritization (sprint planning), as well as regular meetings to align tasks
- Ownership and stakeholder involvement through constant collaboration and communication
- Accelerated implementation of the strategy and its support measures
- Flexibility and enhanced ability to manage changes of priorities, scope and tasks
- Self-managing team empowered to make decisions
- Increased effectiveness due to multi-disciplinary teams
- Reduction of risks through constant feasibility checks during sprints
- Innovativeness due to multidisciplinary teams and the integration of new inputs and ideas
- Constant tracking of team progress with regular review meetings
- Transparency and effective communication
- Learning organization and continuous improvement through iteration and constant feedback loops

Throughout the implementation of the Kosovo IT Strategy, constant communication between the steering committee (product owner) and the agile task forces is required in order to coordinate activities between the different teams and assess implementation progress.

Regular communication and interaction between the task forces as well as with the steering committee will also be needed in order to ensure continuous improvement of the Kosovo IT Strategy.

5.4. Process Model & Project Management

The agile organization outlined in the previous chapter is a process-oriented structure. Taking into account the fact that there are many different stakeholders involved in the implementation of the Kosovo IT Strategy, an effective process model is essential.

To establish the necessary organizational structure and implement the Kosovo IT Strategy, the working group defined the following process:

Step	Activity
1	Formation of Steering Committee
2	Steering Committee establishes Task Forces (1-9) and appoints Task Force Managers
3	Steering Committee approves tasks and corresponding budgets (based on Operational Plan)
4	Task Forces start implementation of tasks according to prioritization (1-3) and timetable (Gantt chart)
5	Task forces conduct monthly team-meetings (self-managing teams)
6	Steering Committee conducts coordination meeting with task force managers every 3 months (reporting & task implementation review based on deliverables and indicators)
7	Steering Committee and Task Forces review and update OP (every 6 months)
8	Steering Committee approves completion of tasks and activities based on deliverables and indicators (“done”)
9	Completion of implementation
10	Monitoring & Evaluation (M&E)
11	Restart IT strategy development cycle (see methodology for the development of the Kosovo IT Strategy)

In combination with a suitable overall process model for strategy implementation, a process-oriented organizational structure would provide many advantages, including fewer interfaces, higher flexibility, more effective cooperation among stakeholders, as well as higher efficiency and transparency. Accordingly, the working group elaborated an overall process model for the implementation of the Kosovo IT Strategy, taking into consideration the structural peculiarities of the Kosovo IT industry, as well as the specific goals and methodology of the strategy.

The following diagram illustrates the overall process model, including the implementation process, support process, communication process and change request process:

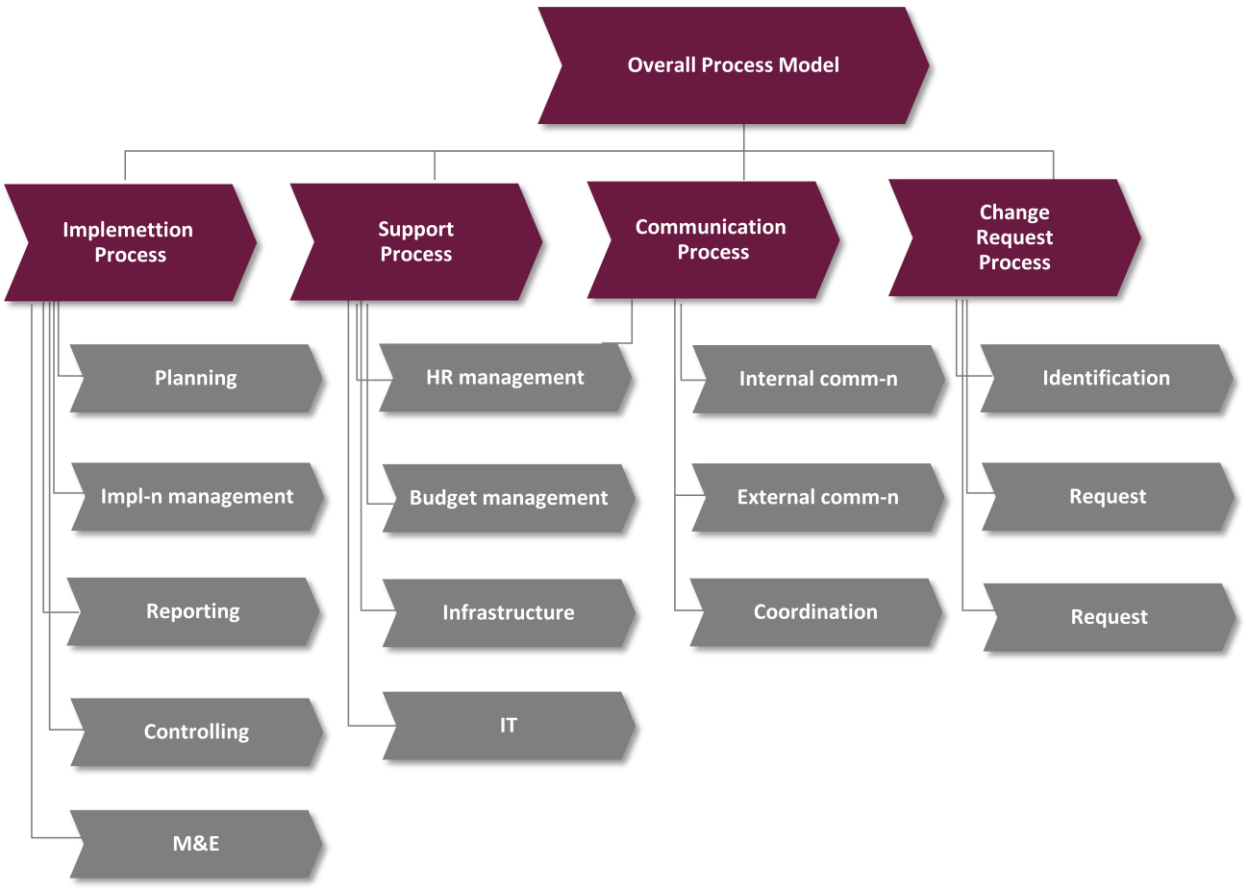


Figure 44: Overall process model for the implementation of the Kosovo IT Strategy

In line with the agile approach of the strategy (see chapter 2), the implementation of the operational plan of the Kosovo IT Strategy will be conducted according to an **agile process model** based on Scrum.

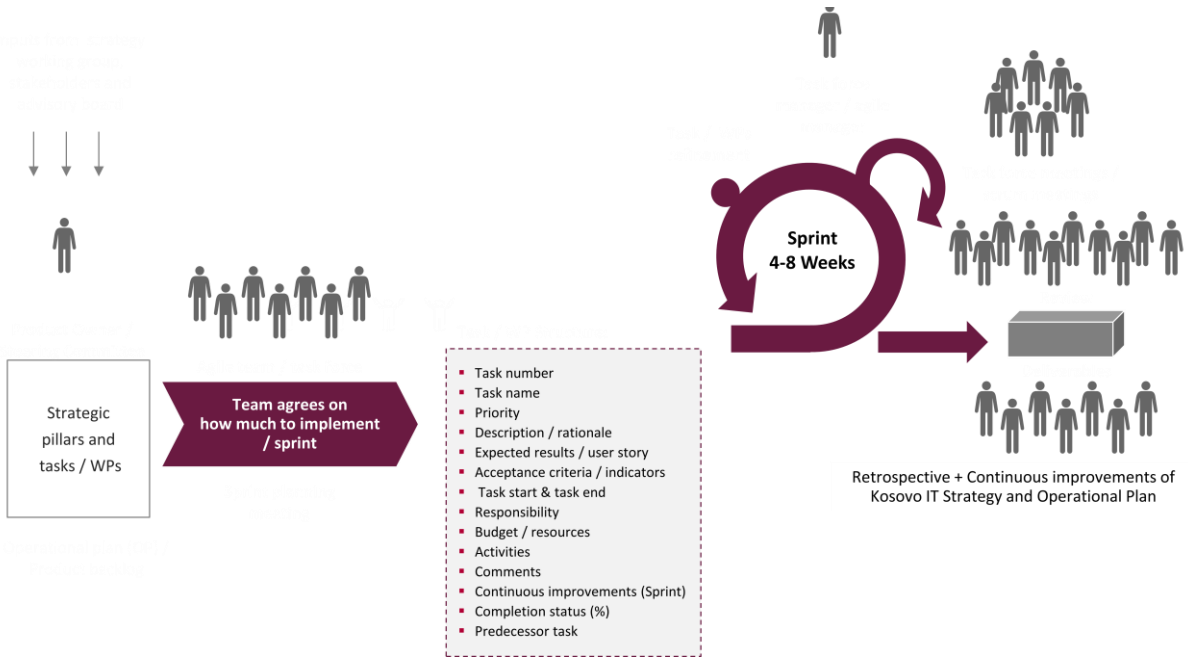


Figure 45: Agile process model for the implementation of the Kosovo IT Strategy.

In accordance with the operational plan, the agile team selects tasks and activities according to its strategic pillar (e.g. IT education) for the current sprint (iteration). Coordinated and supported by the agile manager/task force manager, the team implements the selected tasks and activities within a sprint of 4-8 weeks, including regular scrum meetings to review the progress and orchestrate activities. The iterative process or sprint ends with a sprint review and retrospective. The review results are documented task descriptions/WP descriptions to ensure continuous improvement. Subsequently, the cycle restarts.

It is obvious that effective teamwork and project management constitute an important prerequisite for the successful implementation the Kosovo IT Strategy. Therefore, the working group identified key elements of effective teamwork, as well as the corresponding tools to support it:

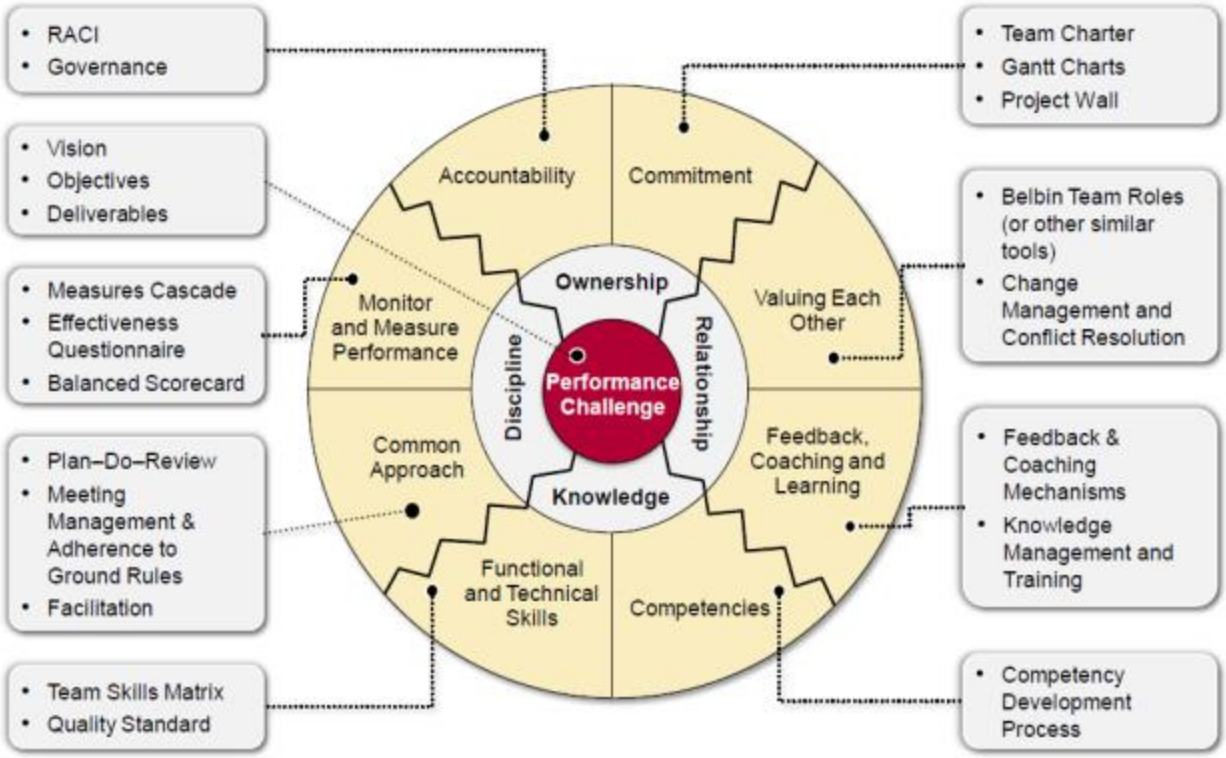


Figure 46: Key elements and tools of effective teamwork

Source: Capgemini

In terms of project management the working group identified the following key success factors:

- Clearly defined objectives
- Stable teams/task forces
- Commitment and reliability
- Open communication
- Common language (English) to include donors and external experts
- Collaborative atmosphere
- Proactive attitude
- Self-organizing and self-managing teams
- Broad range of relevant capabilities, skills and know-how (interdisciplinary)
- Effective methodologies and tools to support collaboration
- Team spirit

The working group decided to develop a concise manual for the implementation of the Kosovo IT Strategy ("implementation manual"), describing the organizational structure, functions, processes, tools, documents and templates to be used by all stakeholders and team members involved in strategy implementation.

5.5. Tools

In order to support the collaborative implementation of the Kosovo IT Strategy, the working group identified a set of specific tools which will be presented in this section.

The most important tool for managing and coordinating the implementation process of the strategy are regular **strategy workshops** as well as **task force meetings or Scrum meetings**.

For the purpose of properly managing the overall strategy implementation, STIKK and the steering committee will organize **strategy workshops** every three months. These workshops will be attended by the members of the steering committee, by the 9 task force managers/agile team members, representing their team as well as by the members of the advisory board. During the strategy workshops, the results of the implementation process will be reviewed and discussed according to strategic pillars and task forces. Furthermore, tasks and corresponding resources will be approved, whilst additional planning will be conducted. In addition, the operational plan will be updated.

Task force meetings/Scrum meetings will be organized on a monthly basis by the teams, in order to review the progress of task/WP implementation (sprint review) and to coordinate activities (see agile process model in chapter 5.4). These meetings will be attended by the members of the task forces and moderated by the task force manager.

Management and moderation of the workshops and meetings will be primarily based on Scrum and other suitable methodologies already applied during the strategy development process, such as Metaplan, ASE and Design Thinking.

A key tool for managing the implementation of the Kosovo IT Strategy within an agile process model framework will be the **Strategy Scrum Board,** which will facilitate visual planning and management within the task forces. The following chart shows the envisaged Strategy Scrum Board and its key elements:

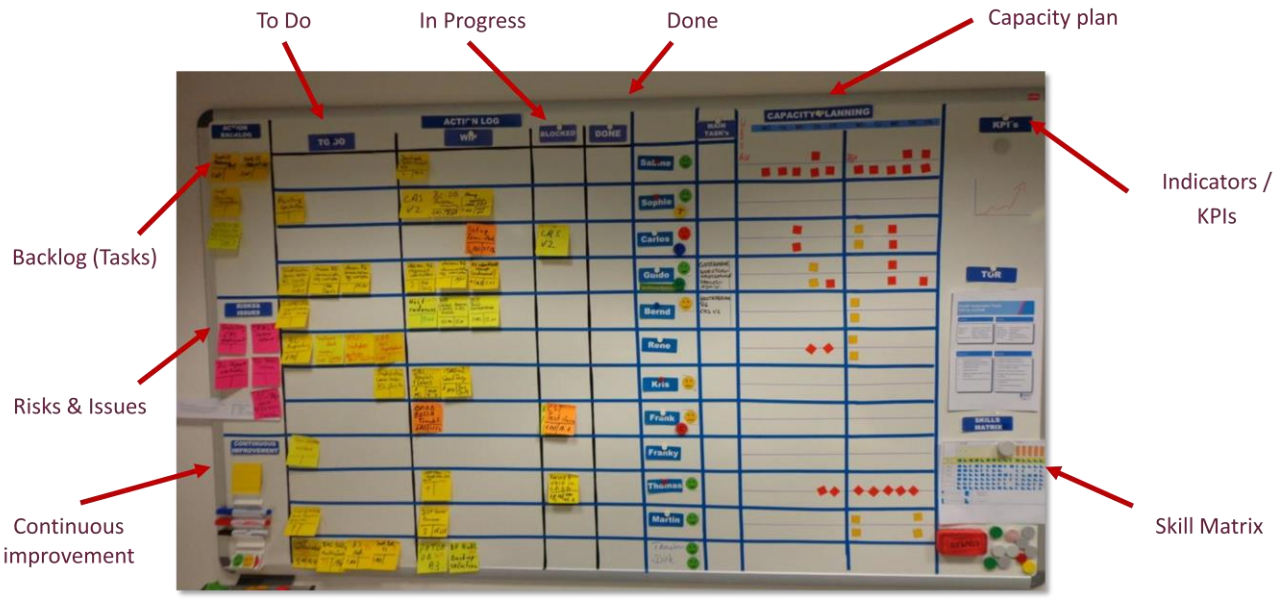


Figure 47: IT Strategy Scrum Board

Source: Capgemini

The Strategy Scrum board will also improve team communication and ensure the visibility of task distribution, capacity planning and implementation progress ("To Do", "In Progress", "Done"). It has been planned to establish an IT Strategy Scrum Board for each of the task forces at STIKK premises.

In terms of IT solutions for supporting the implementation process, the strategy working group evaluated several collaboration and so-called enterprise 2.0 tools, illustrated in the following chart:

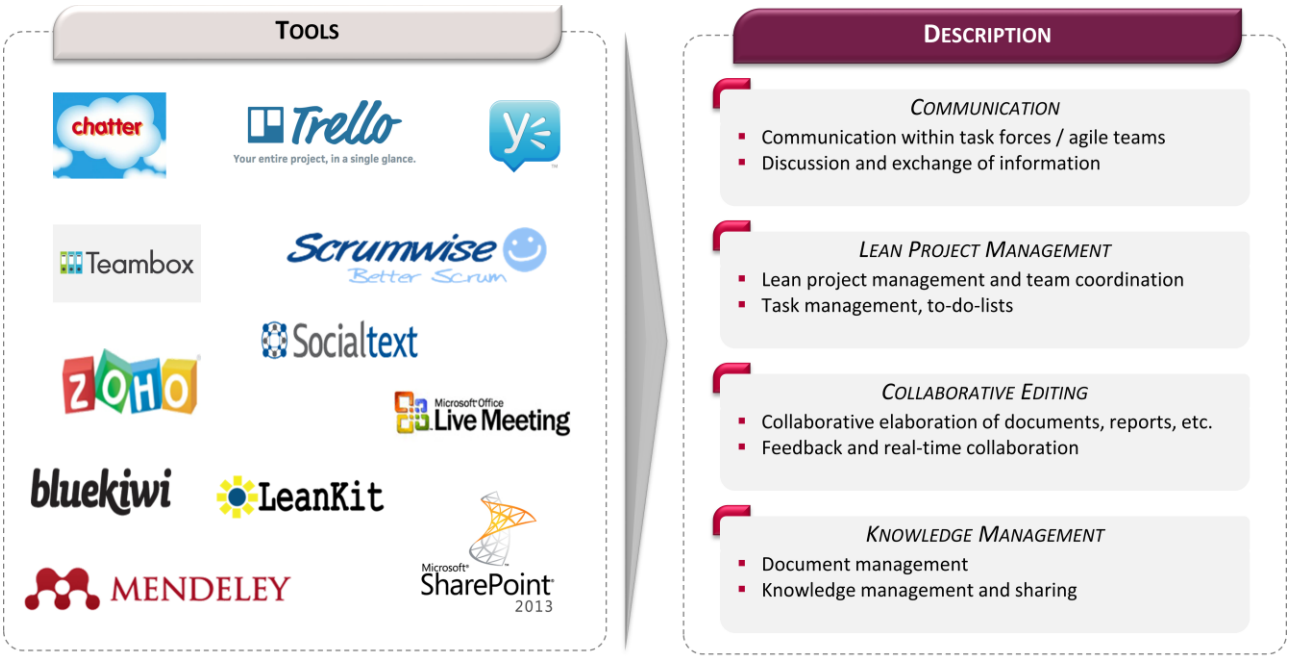


Figure 48: IT tools for strategy implementation

After carefully assessing the functionality of the above-shown tools, the strategy working group decided to use MS SharePoint as a central IT solution for facilitating the implementation of the Kosovo IT Strategy. As mentioned in chapter 2.5, SharePoint has already been used to support the development process of the Kosovo IT Strategy.

SharePoint has been selected by the working group as a central tool because it provides a specific functionality, which is very relevant for the collaborative implementation of the Kosovo IT Strategy based on an agile process model. This functionality encompasses, *inter alia*:

- Document Library
- Calendar
- Tasks
- Issue Tracking
- Wiki
- Discussion Board
- Survey
- Announcements
- Contacts
- Custom List
- User Alerts
- RSS
- Workflow

In addition to this functionality the application is comparatively easy to handle and most of the stakeholders are familiar with its function and interface due to the fact that SharePoint had already been used during the strategy development process.

The following screenshot illustrates the structure of the SharePoint for the implementation of the Kosovo IT Strategy:

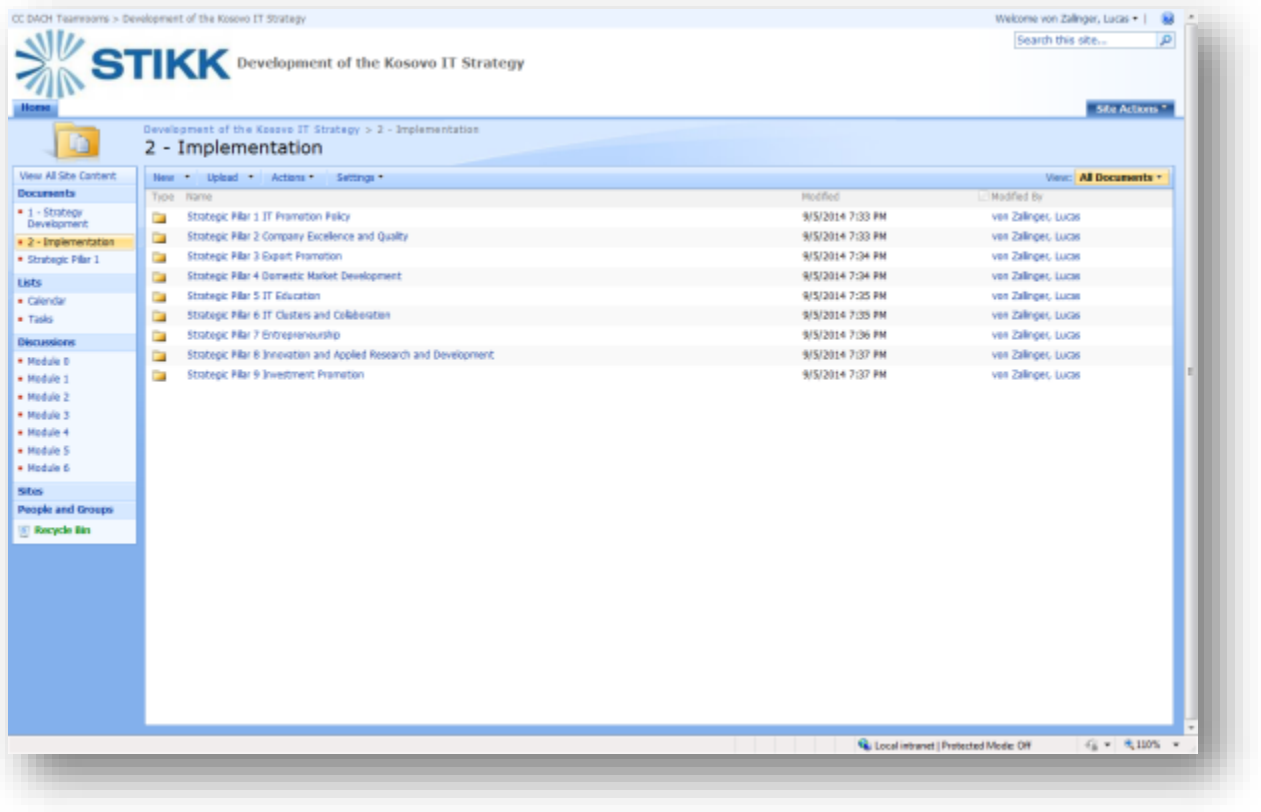


Figure 49: SharePoint for the implementation of the Kosovo IT Strategy

The Kosovo IT Strategy SharePoint will be used for organizing and coordinating strategy workshops and task force meetings (calendar function). Furthermore, it will be particularly useful for supporting the steering committee and the task forces in terms of progress tracking and document management (task force meeting reports, protocols, deliverables, concepts, market studies, etc.).

5.6. Risk Management

Taking into account the dynamics and volatility of global IT markets, the disruptive nature of digital transformation and the framework conditions and uncertainties of Kosovo's domestic market, risk management becomes an important element of the Kosovo IT Strategy.

In general, risk management can be de defined as follows:

"Risk management is the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor and control the probability and/or impact of unfortunate events."[34]

According to ISO 31000, the risk management process includes the following steps:

1. Establish the context
2. Risk identification
3. Risk analysis
4. Risk evaluation
5. Risk treatment

In order to address the issue of risk management, the strategy working group identified the key risks surrounding the implementation of the Kosovo IT Strategy, and defined possible counteractive measures for risk mitigation:

Possible Risks	Counteractive Measures for Risk Treatment
No government support	▪ Capacity building for public sector stakeholders ▪ Awareness raising campaigns, lobbying and PR ▪ Donor support ▪ Contingency plan and "critical path"
Recession in the domestic market	▪ Increasing export promotion ▪ Investment promotion ▪ Indirect internationalization
Recession in target export markets	▪ Developing additional export markets ▪ Domestic market development
Pull-out of donor organizations	▪ Multi-stakeholder approach ▪ Ensuring sustainability of support measures (e.g. cluster services through STIKK) ▪ Contingency plan and "critical path"
Massive brain drain	▪ Increasing support measures in the area of IT education ▪ Extending student placement service ▪ Awareness campaigns and information events on the attractiveness and opportunities of the Kosovo IT industry ▪ Implementing specific tax incentives
Massive increase in labour costs	▪ Increasing support measures in the area of IT education ▪ Promoting vocational education for IT ▪ Leveraging demographic development in Kosovo

[34] Hubbard, Douglas (2009): 46.

Increasing regional competition	▪ Increasing investment in company excellence and quality ▪ Further increasing differentiation and focus ▪ Establishing strategic alliances (e.g. SEE IT initiative)

The issue of risk management has been directly addressed within the Kosovo IT Strategy through several measures, including its agile approach, a multi-stakeholder setting, collaborative strategy implementation, diversified support budgets and a focus on financially sustainable support measures.

In addition to that, the monitoring and evaluation system for the Kosovo IT Strategy has been designed specifically to support risk management by detecting and analyzing possible risks for the Kosovo IT industry as early as possible and supporting the rapid development and deployment of effective counteractive measures.

5.7. Change Management & Activation

In order to successfully implement the strategy and to achieve the overall goal of the IT industry becoming the main driver for economic growth, employment and innovation in Kosovo, all relevant stakeholders have to be mobilized, integrated and motivated to support the Kosovo IT Strategy.

Therefore, the working group identified change management and the activation and mobilization of its public partners as key success factors for the successful implementation of the Kosovo IT Strategy. Building on the strategy's collaborative approach and the idea of systemic competitiveness, the working group elaborated a specific change management framework aimed at mobilizing and integrating all relevant stakeholders and maximizing public support for the strategy. The key elements and stages within this framework are described in the following diagram:

Figure 50: Change management framework for the Kosovo IT Strategy

Source: Capgemini

For each of the stages of the change management framework for the Kosovo IT Strategy, the working groups defined a set of specific measures and activities further explained in the table below:

Key Elements	Change management measures
1. Change Vision & Goals	▪ Developing a compelling vision and goals for the Kosovo IT Strategy, which are in line with the overall developmental goals of Kosovo, particularly with regards to digital transformation and the establishment of a knowledge based economy. ▪ Communicating the IT strategy vision and goals effectively to stakeholders and the public through public events and PR campaigns, including social media.
2. Leadership Commitment & Engagement	▪ Ensuring active support and sponsorship of the Kosovo IT Strategy by top management in the IT industry, government institutions and academia. ▪ Supporting the adoption of the Kosovo IT Strategy by the government. ▪ Maximizing commitment by stakeholders. ▪ Aligning stakeholders and donor organizations towards the goals of the IT strategy.
3. Stakeholder Mobilization	▪ Conducting stakeholder analysis on a regular basis. ▪ Raising awareness about the strategic importance of the IT industry for Kosovo's economy and society through information workshops, case studies and visits to IT companies. ▪ Conducting study trips for public stakeholders to countries such as Estonia, Lithuania, Bulgaria, Germany and Norway, in order to promote learning about success stories and good practices in IT sector promotion. ▪ Making the rationale behind the IT strategy and its implementation tangible and comprehensible by providing corresponding data on exports, job creation and innovation (e.g. by publishing the results of the Kosovo IT Industry Barometer). ▪ Ensuring the realization of quick wins during the implementation of the Kosovo IT Strategy. ▪ Motivating stakeholders to engage and commit to the IT strategy.
4. Organization & Alignment	▪ Understanding the collaboration/communication needs of stakeholders, particularly in the public sector. ▪ Develop a methodology for collaborative IT strategy development and implementation. ▪ Establishing appropriate organizational structures and processes for collaborative IT strategy development and implementation, whereby public stakeholders are closely integrated, ▪ Enabling members of the steering committee and the task forces to serve as "change agents", in order to support the

Key Elements	Change management measures
	implementation of the Kosovo IT Strategy.
5. Capability Development	▪ Building the necessary capabilities and skills for strategy development and implementation. ▪ Establishing STIKK Education to build necessary capabilities and know-how among IT companies and other IT industry stakeholders. ▪ Providing capacity building on IT sector promotion for public stakeholders (ministries, agencies, etc.). For further information, see task 1.3 of the Kosovo IT Strategy.
6. Cultural Development	▪ Identifying necessary cultural changes among stakeholder organizations and making them transparent. ▪ Supporting a collaborative culture within the IT industry and among the different stakeholders. ▪ Promoting the branding and positioning of the IT industry (both nationally and internationally). ▪ Fostering proactive communication and cooperation between public actors and the Kosovo IT industry. ▪ Promote an open innovation culture among stakeholders.
7. Change Sustainability	▪ Introducing performance monitoring and evaluation with reference to the implementation of the Kosovo IT Strategy. ▪ Fostering positive motivation among stakeholders and ensuring commitment. ▪ Creating quick wins and success stories to demonstrate concrete benefits of strategy implementation. ▪ Promoting long-term cooperation between public stakeholders and the Kosovo IT industry through joint task forces and special competence groups. ▪ Communicating progress through strategy maps and formal communication channels. ▪ Promulgating the achievements of the IT strategy and the transformation process.

In terms of change management and activation, it will be particularly important that the government adopt the Kosovo IT Strategy as a national strategy. In addition, a statement of commitment by public stakeholders or a Memorandum of Understanding between relevant ministries and STIKK concerning the implementation of the strategy would be highly recommendable.

Lastly, practical experience from other transformation countries shows that specialized trainings on IT sector promotion for public stakeholders are an important tool for awareness raising and creating the necessary capabilities for effectively implementing national IT strategies. In addition, study trips to countries which have successfully developed their IT industries into drivers for economic growth and innovation such as Estonia, Lithuania or Bulgaria are a valuable instrument for stakeholder activation and mobilization.

5.8. Information & Knowledge Management

The specific methodology for the development and implementation of the Kosovo IT Strategy (see chapter 2), based on the principles of collaboration and agility, aims at creating an integrated

"learning system", which facilitates continuous improvement and flexible adaptation of the strategy to changing market conditions and technology trends.

The basis for such a collaborative learning system is knowledge management, enabling the integration and application of knowledge by the members of the task forces, the steering committee, the advisory board and external partners. Further to this point, insights from monitoring and evaluation will be incorporated in the following chapter (see chapter 6).

According to Grant, knowledge management can be defined as follows:

"Knowledge management refers to processes and practices through which organizations generate value from knowledge."[35]

There are different types of knowledge, including implicit knowledge, explicit knowledge and organizational knowledge. While implicit knowledge, which could also be described as know-how, is primarily tacit and difficult to transfer between people, explicit knowledge comprises facts, theories and procedures, which can easily be codified and transferred across individuals and space. Organizational knowledge is generated through interaction and pooling of information between the members of an organization or group.

In knowledge-intensive and dynamic industries such as IT, knowledge management is an important competitive factor, particularly with regards to establishing technical know-how and so-called dynamic capabilities.

Due to its complexity and scope, effective information and knowledge management is of paramount importance for the successful implementation of the Kosovo IT Strategy within a collaborative, multi-stakeholder setting. Taking this into account, the working group developed a specific knowledge management system for the Kosovo IT Strategy, consisting of six different steps or elements:

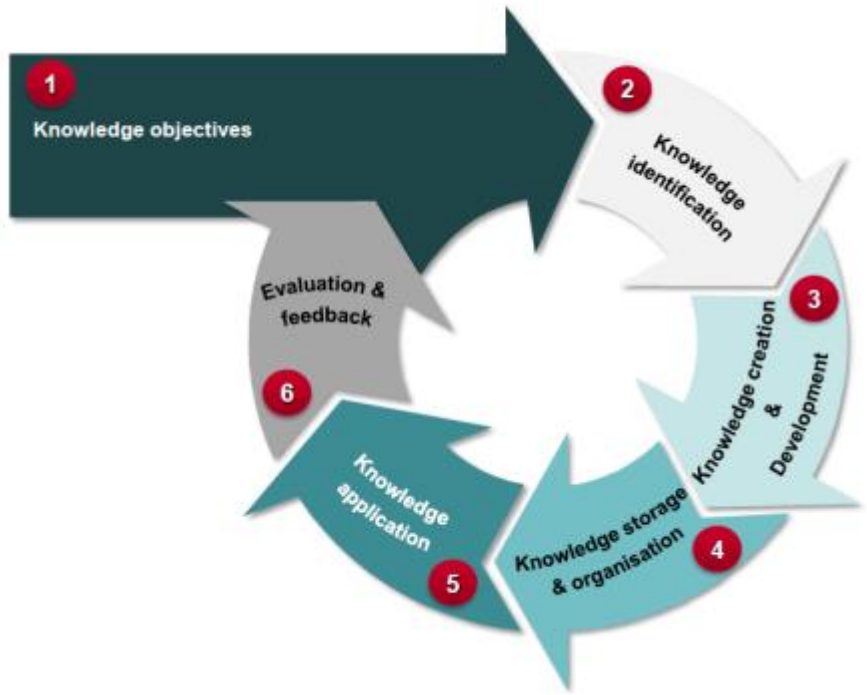


Figure 51: Knowledge management system

[35] Grant (2008): 159.

Each of these six elements of the knowledge management system encompasses specific measures and tools which will be described in the following table:

KM Elements	Measures & Tools
1. Knowledge objectives	▪ Generating organizational knowledge for the Kosovo IT Strategy by transforming individual knowledge of stakeholders into collective knowledge ▪ Internalizing knowledge and know-how of all stakeholders involved in the development and implementation of the Kosovo IT Strategy ▪ Generating and disseminating knowledge relevant for the collaborative implementation of the Kosovo IT Strategy and the corresponding support measures (pillars 1-9) ▪ Using network effects and synergies ▪ Creating the basis for developing new, innovative support measures ▪ Knowledge areas: IT promotion policy, company excellence & quality, export promotion, domestic market development, IT education, IT clusters & collaboration, entrepreneurship, innovation & applied R&D, investment promotion, technology trends
2. Knowledge identification	▪ Identification of existing knowledge areas among stakeholders and creation of a knowledge map and MindMaps ▪ Identification of resource persons and experts ▪ Identification of knowledge gaps
3. Knowledge creation & development	▪ Identification of additional knowledge partner (universities, research institutes, IT clusters abroad, etc.) ▪ Generation of additional knowledge within the identified knowledge areas through workshops, conferences, study tours, trainings, cooperation with external partners etc. ▪ Conducting the Kosovo IT Industry Barometer on an annual basis
4. Knowledge storage & organization	▪ Definition of knowledge processes (“who is doing what”) ▪ Knowledge storage (knowledge carrier / medium): SharePoint of the Kosovo IT Strategy, knowledge managers and resource persons in each task force ▪ Organization of knowledge dissemination ▪ Establishing a knowledge sharing culture among stakeholders and the members of the task forces / agile teams
5. Knowledge application	▪ Application of knowledge to the implementation of the Kosovo IT Strategy ▪ Promoting direct exchange of knowledge within and between task forces through joint events, meetings, trainings, etc. ▪ Integration of STIKK members into the knowledge

KM Elements	Measures & Tools
	management system ▪ Provision of good practice examples
6. Evaluation & feedback	▪ Definition of indicators ▪ Evaluating the achievements of knowledge objectives ▪ Evaluation of knowledge management system ▪ Getting feedback from task force members on the knowledge management system ▪ Continuous improvement of the knowledge management system of the Kosovo IT Strategy

The knowledge management system described above will enable the creation of a collaborative learning system for the implementation of the Kosovo IT Strategy, supporting communication and cooperation between stakeholders and task forces. It will also help to feed back insights and lessons learnt from monitoring and evaluation (see chapter 6) into the agile strategy development and implementation cycle.

The Kosovo IT Strategy SharePoint will serve as the primary tool and platform for knowledge storage and organization. This reflects the specific functionality of the SharePoint described in chapter 5.5, which should facilitate effective communication, information and collaboration among members of the task forces – an important factor not only for knowledge management, but also for the overall implementation of the strategy. The following screenshots show the specific structure of the SharePoint designed to support knowledge and information management for the implementation of the Kosovo IT Strategy:

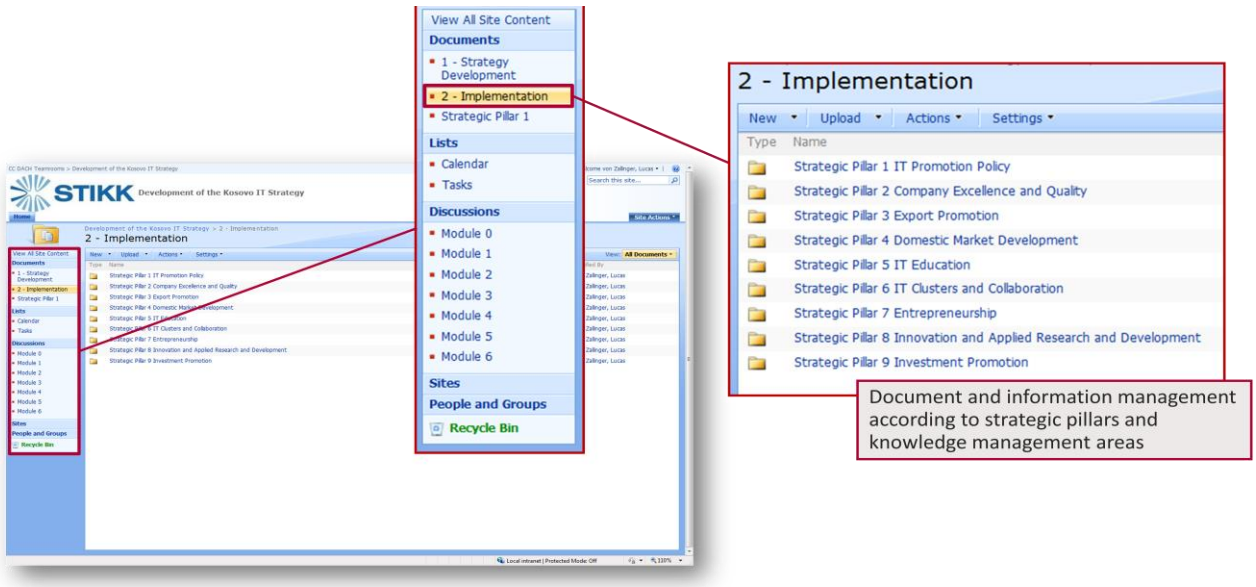


Figure 52: Knowledge and information management with SharePoint

The functional features of SharePoint which are most relevant to knowledge management are document library and search (knowledge storage & organization), as well as Wiki and discussion boards (knowledge creation & development).

In this context, it is noteworthy that direct face-to-face communication and interaction between different stakeholders involved in the implementation of the Kosovo IT Strategy are particularly

important for effective knowledge management. The personal interaction among the members of the task forces, the steering committee and the advisory board is also important to externalize implicit knowledge into explicit knowledge through discussions and close cooperation. For this purpose, knowledge managers will be appointed within each task force and special competence groups for strategic IT topics (see task 6.10 in the operational plan).

6. Performance Monitoring and Evaluation

Based on the collaborative and agile methodology outlined in chapter 2, we are now turning to the last module or phase in the development cycle of the Kosovo IT Strategy, which is monitoring and evaluation.

This module includes the elaboration of an M&E system in order to evaluate the effectiveness of the support measures, to provide feedback and to ensure continuous improvement of the Kosovo IT Strategy.

6.1. Monitoring & Evaluation: Background

Before describing the proposed M&E system for the Kosovo IT Strategy, the terminology concerning monitoring and evaluation needs to be described as well as its importance in the context of strategy development and implementation.

Since the expressions "monitoring" and "evaluation" are closely related, they are often used interchangeably. However, it is important to clearly define these two concepts and differentiate between them.

According to the Swiss Agency for Development Cooperation (DEZA), "monitoring entails the conscious selection of the areas to be observed, and also the systematic, purposeful collection and production of data and information, during the implementation of a project."[36]

Evaluation is defined as "the systematic and objective assessment of an on-going or completed project, programme, policy or strategy, its design, implementation and results.[37] Hence, one can conclude that while evaluation is concerned with the assessment of a project or strategy according to specific criteria such as relevance, effectiveness, efficiency or impact, monitoring is a management tool providing the information needed to carry out evaluation. Contrary to monitoring, which relates to a process over a certain period of time, evaluation refers to a specific point in time.

Concerning the implementation of the Kosovo IT Strategy, monitoring and evaluation is particularly important for the following reasons:

- Indicating whether the IT strategy implementation process is still on track
- Revealing information on the effectiveness of the IT strategy and its measures
- Providing feedback which can be used as a basis for continuous improvement of the strategy
- Facilitating the creation of organizational knowledge
- Ensuring accountability to the general public and the tax payer
- Ensuring public support for the implementation of the strategy by creating transparency concerning the outcome and the results of the strategy
- Providing a basis for informed decision-making within the strategy implementation process.

In the framework of a special strategy module workshop, the working group analyzed different methods and tools for monitoring and evaluation, as well as international examples of M&E

[36] Direktion für Entwicklung und Zusammenarbeit (DEZA) (1999): 22.

[37] Organization for Economic Co-operation and Development (OECD): http://www.oecd.org/glossary.

systems for IT strategies. Based on this analysis, the working group identified the following key success factors and challenges:

Key Success Factors & Lessons Learnt	Challenges
▪ M&E measures have to be conducted on different levels of the M&E system ▪ To conduct M&E, it is often necessary to combine a series of methods ▪ It is important to have clearly defined responsibilities of stakeholders involved in M&E activities ▪ Specific staff members who will be responsible for monitoring have to be appointed ▪ Ensure close coordination between project management and M&E	▪ Outcomes & impacts of implemented measures are often only visible after many years ▪ Outcomes & impacts are often not directly linked to the inputs and activities ("attribution gap") ▪ Monitoring is mainly output-based and does not consider how provided outputs were used and what related outcomes have been achieved ▪ Terminology related to M&E often not clear to all involved stakeholders

The working group took the above mentioned findings into consideration when developing the monitoring and evaluation system for the Kosovo IT Strategy, which will be presented in the following chapter.

6.2. Monitoring & Evaluation System

There are many different methods and tools for establishing a monitoring and evaluation system, including impact-oriented M&E and impact chains, Logical Framework (LogFrame) approach, Balanced Scorecard and so-called rapid appraisal methods.

The M&E system for the Kosovo IT Strategy is based on the object-oriented approach of the European Commission's logical framework (LogFrame) and the concept of impact-chains used by the German Agency for International Cooperation (GIZ). In the following section, we will describe the M&E system for the Kosovo IT Strategy, consisting of the three key elements "structure", "goal system & indicators" and "methods & tools".

The overall structure of the M&E system is composed of four different levels of goals, as well as the corresponding indicators and means of verification:

Level	Intervention Logic	Indicator	Verification
Level 1	Overall goal	Overall indicators	Means of verification
Level 2	Sub-goals (strategic pillars)	Sub-indicators	Means of verification
Level 3	User story & results (tasks)	Acceptance criteria & indicators	Means of verification
Level 4	Activities	Deliverables	Means of verification

At the centre of the M&E system and its structure stands the goal system with its indicators. The overall goal of the strategy represents the first level of the M&E system. Because this goal cannot be achieved through a single measure, sub-goals have been set as "interim targets". These sub-goals are directly related to the different strategic pillars and can thus be verified more quickly and easily.

The sub-goals and their respective indicators are logically related to the achievement of the desired overall goal. Thus, the overall goal of the export promotion strategy is to be accomplished as a consequence of the sub-goals having been reached.

Level 3 of the M&E system is represented by the user story & results of the individual tasks, while level 4 represents the activities. It deserves mentioning that level 3 and level 4 are particularly important for monitoring and evaluating the implementation of the operational plan and they constitute the logical basis for achieving the sub-goals, as well as the overall goal.

Indicators constitute another important element of the M&E system and have been defined for each of the four levels. According to the Swiss Agency for Development and Co-operation (SDC), an indicator can be defined as a "Quantitative or qualitative factor or variable that provides a simple and reliable mean to measure achievement, results, and to reflect processes as well as changes in the context."[38] With reference to the Kosovo IT Strategy, indicators help simplify complex, IT-related issues and reduce them to an observable dimension.

The following table shows the overall M&E system of the Kosovo IT Strategy with its different levels, goals and indicators:

Level	Intervention Logic	Indicator
Level 1	Overall Goal	Overall indicators
	To become the main driver for economic growth, employment and innovation until the year 2020 by increasing the international competitiveness of the Kosovo IT industry based on digital excellence	The Kosovo IT industry achieves a growth rate of 10% per year
		Exports of the Kosovo IT industry grow by 30% within a period of 3 years
		Employment in the Kosovo IT industry grows by 7% per year
Level 2	Sub-goals	Sub-indicators
	Strategic Pillar 1: Introducing a comprehensive IT promotion policy	At least 70% of the Kosovo IT companies interviewed evaluate the framework conditions for the IT industry as satisfactory
	Strategic Pillar 2: Promoting company excellence & quality	At least 50% of Kosovo IT companies are certified according to ISO, CMMI or other internationally recognized quality standards
	Strategic Pillar 3: Promoting exports of the Kosovo IT industry	Exports of the Kosovo IT industry increased by at least 30% within 3 years
	Strategic Pillar 4: Developing the domestic market and increasing domestic productivity through IT	The domestic IT market increased by at least 10% per year
	Strategic Pillar 5: Improving IT education and promoting HR excellence	Number of graduates employed by IT companies in Kosovo increased by 20% per year
		Time to reach job readiness of

[38] Swiss Agency for Development and Co-operation SDC: http://www.deza.admin.ch/ressources/resource_en_23569.pdf

Level	Intervention Logic	Indicator
		graduates on company level reduced by 30% within 3 years
		Number of internships conducted by students with Kosovo IT companies grew by 20% per year
		The satisfaction of Kosovo IT companies with the quality level of IT graduates increased by 15 % within three years
	Strategic Pillar 6: Increasing systemic competitiveness through IT clusters and collaboration	At least 1 sub-cluster per year established
		At least 2 MoUs per year signed with international IT clusters, associations or other relevant institutions
		At least 1 cooperation project with other clusters or associations conducted per year (e.g. EU projects)
	Strategic Pillar 7: Enhancing IT entrepreneurship	The number of business incubated start-ups increased by 30% per year
		The number of business angels and VCs funded start-ups increased by 20% per year
		The number of participants in tech entrepreneurship education programs grew by 35% per year
	Strategic Pillar 8: Fostering innovation and applied R&D	At least 1 IT-related R&D project started per year
		At least 1% of public budget assigned to R&D
	Strategic Pillar 9: Promoting Kosovo as an IT investment location	At least EUR 3 million of foreign direct investment (FDI) into the Kosovo IT industry generated until 2018
Level 3	User story & results	Acceptance criteria & indicators
	Individual task results (task 1.1 – task 9.6) according to the operational plan	Acceptance criteria & indicators according to the operational plan
Level 4	Activities	Deliverables
	Activities defined within the individual tasks (task 1.1 – task 9.6) according to the operational plan	Deliverables defined for each activity of a task according to the operational plan

In order to illustrate the M&E system of the Kosovo IT Strategy on level 3 (tasks) and level 4 (activities), the chart below has also been included. It shows a special functionality/section which has been introduced to the operational plan and the M&E system in order to ensure continuous improvement of each task and thus of the overall strategy performance. This is an important element of the agile approach of the strategy.

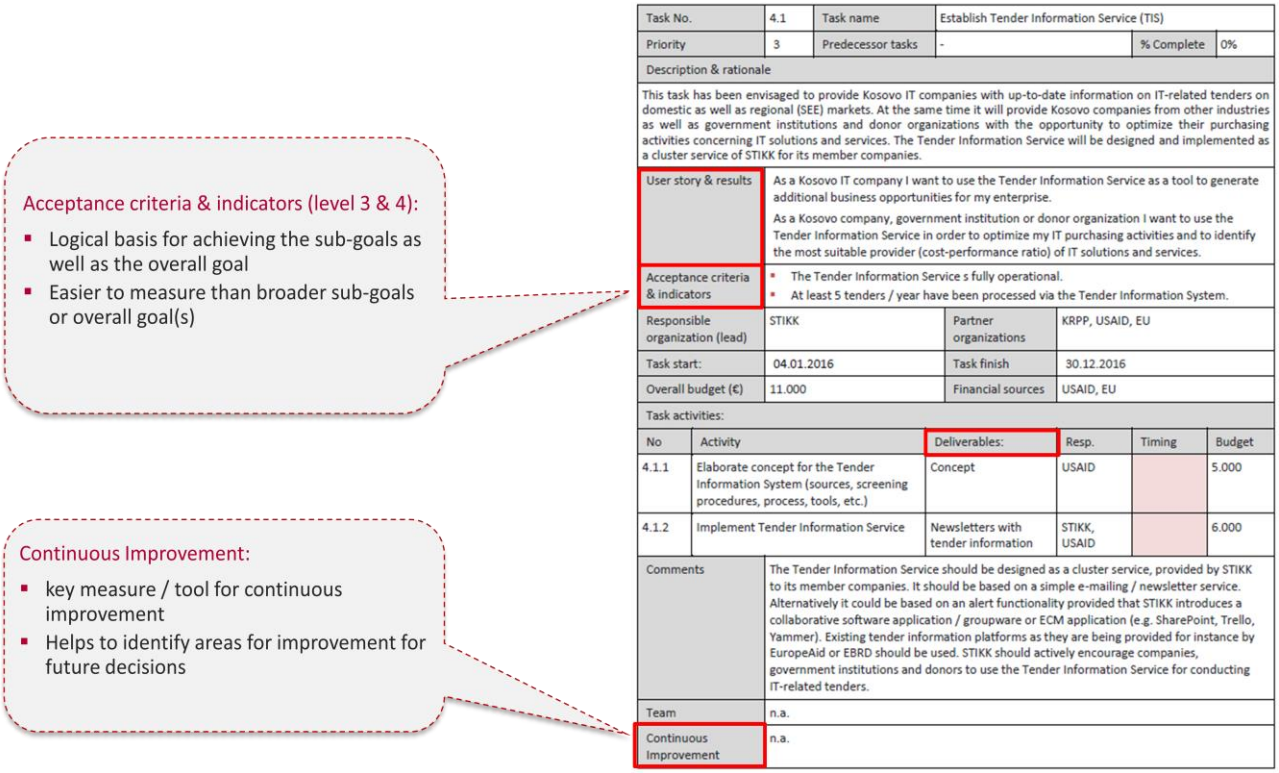


Figure 53: M&E system level 3 and 4

The above chart also shows the user stories which have been embedded into each task, allowing the establishment and evaluation of consistent impact chains within the M&E system.

The M&E system has been designed for an implementation phase of three years. By using the defined indicators, the progress of the strategy implementation can be effectively monitored and evaluated. However, it is important to mention that the M&E system needs to be adapted and updated on a regular basis. Furthermore, responsibilities for M&E have to be assigned. While specific members of the task forces (e.g. knowledge managers) and the steering committee will be responsible for monitoring, evaluation will be conducted with support of external partners.

The third element of the M&E system of the Kosovo IT Strategy implies methods and tools for gathering and analyzing the information needed for monitoring the implementation of the strategy. These methods and tools include:

- Reports of the task forces on implementing specific tasks
- Focus group interviews (stakeholders)
- Joint workshops
- IT Industry Barometer (ITIB)

A very important tool for monitoring and evaluating the implementation of the Kosovo IT Strategy will be the Kosovo IT Industry Barometer (KITIB), which has been developed by STIKK in close cooperation with GIZ.[39] The following chart describes the KITIB and its functionality:

[39] For further information on the IT Industry Barometer (ITIB) tool please refer to GIZ (2011), Toolbox for IT Sector Promotion in Developing and Emerging Countries: 71 ff.

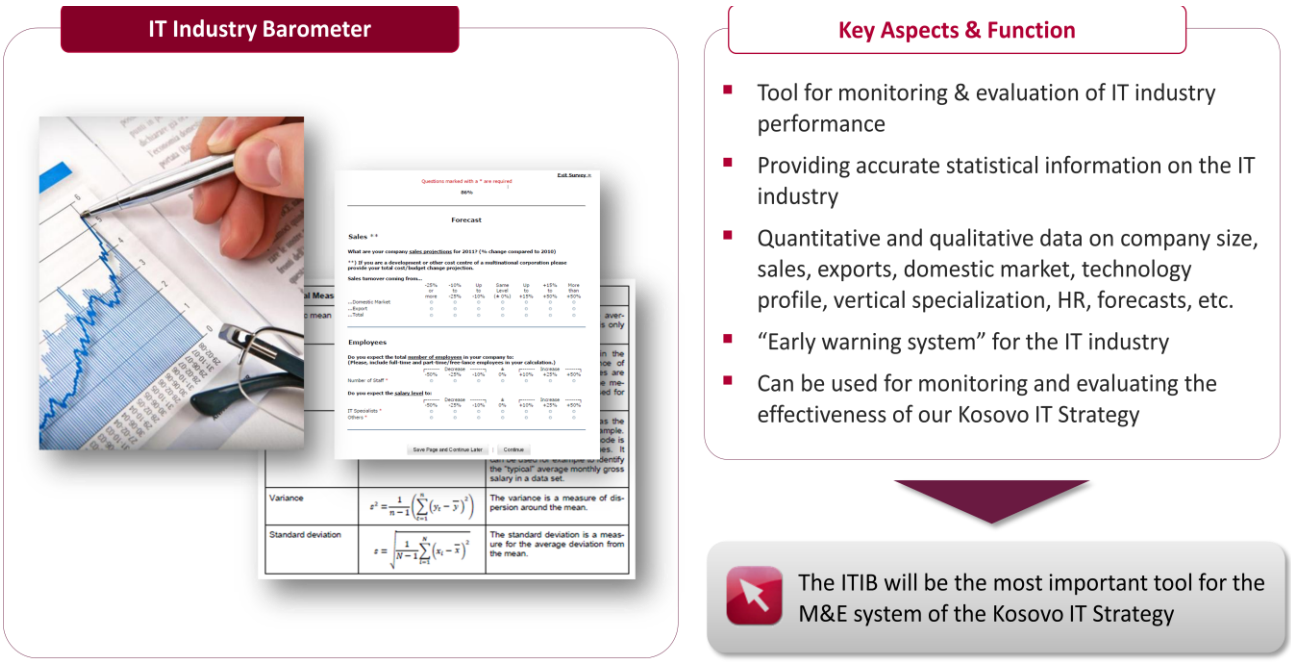


Figure 54: Kosovo IT Industry Barometer (KITIB)

Evaluation will take place at least on an annual basis in the form of joint evaluation workshops, including all relevant stakeholders. During these workshops, the results from monitoring will be evaluated and lessons learnt and improvement measures for the Kosovo IT Strategy deducted. Evaluation of strategy implementation will be conducted according to the following evaluation criteria:

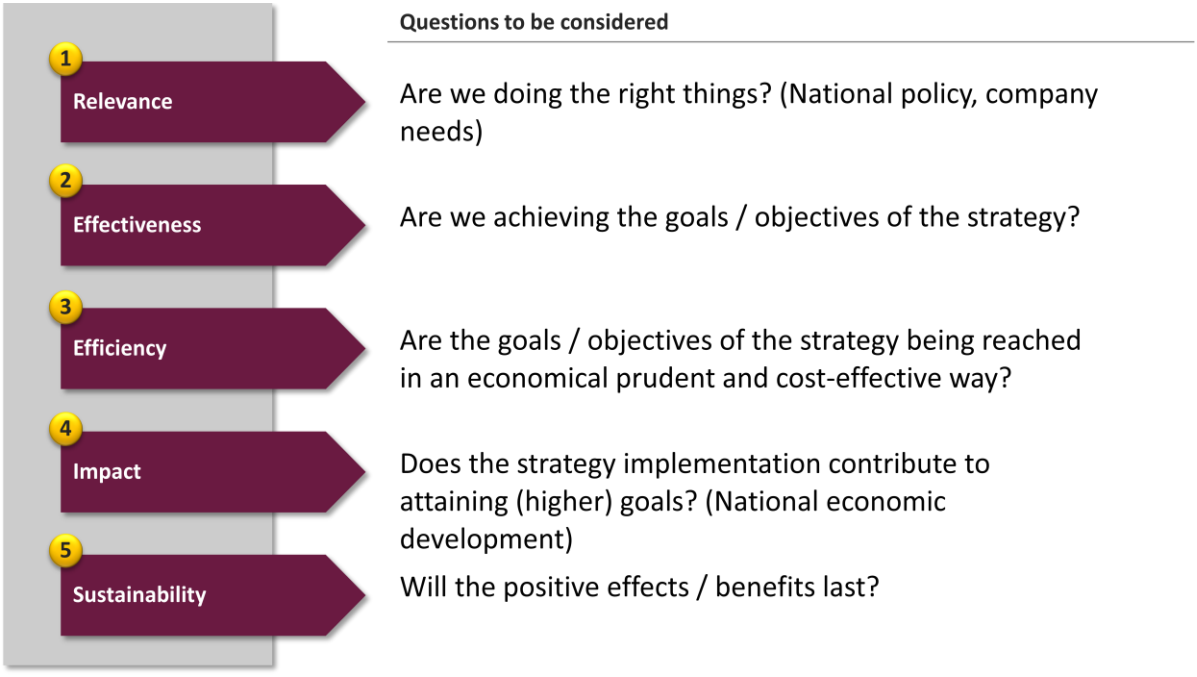


Figure 55: Evaluation criteria

The proposed M&E system aims at facilitating effective, time-efficient and impact-oriented M&E, which will in turn promote collaborative learning and continuous improvement of the Kosovo IT

Strategy. In addition, it seeks to enhance the agility and strategic response capabilities of stakeholders, thereby increasing the international competitiveness of the Kosovo IT industry and promoting digital transformation.

Literature and Sources

Arora, A./ Drev, M./ Forman, C. (2009): Economic and Business Dimensions: The Extent of Globalization of Software Innovation. Communications of the ACM, Vol. 52, Iss. 2, pp. 20-22.

ASEAN (2011): ASEAN ICT Masterplan 2015.

Balabanis, G./ Spyropoulou, S. (2007): Matching Modes of Export Strategy Development to Different Environmental Conditions. British Journal of Management, Vol. 18, Iss. 1, pp. 45-62.

Bayerisches Staatsministerium für Wirtschaft, Infrastruktur, Verkehr und Technologie (2013): Digital Bavaria. Strategie für die digitale Zukunft Bayerns.

Bulgarian Association of Software Companies (BASSCOM): http://www.basscom.org.

Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (2006): Evaluierungskriterien für die deutsche bilaterale EZ. Eine Orientierung für Evaluierungen des BMZ und der Durchführungsorganisationen. Bonn.

Bundesverband Informationswirtschaft Telekommunikation und Neue Medien (BITKOM): http://www.bitkom.org.

Capgemini (2013): World Quality Report 2013-2014.

Capgemini (2014): Digital Transformation Review No. 6. (August 2014).

Capgemini (2014): Industry 4.0. Sharpening the Picture beyond the Hype.

Capgemini (2014): Studie IT-Trends 2014.

Capgemini (2014): TechnoVision 2014. Technology Building Blocks for Digital Transformation.

Capgemini (2014): The Internet of Things: Are Organizations Ready for a Multi-Trillion Dollar Prize?

Capgemini (2014): World Quality Report 2014-2015.

Capgemini Consulting (2013): Agile Methodologies. Enlarge The Available Skill-Set.

Capgemini Consulting (2013): Assessment Report: Analysis of the Kosovo IT Industry.

Capgemini Consulting (2013): The Digital Talent Gap. Developing Skills for Today's Digital Organizations.

Carnegie Mellon University – Software Engineering Institute: http://www.sei.cmu.edu/cmmi.

Chan, K./ Mauborgne, R. (2005): Blue Ocean Strategy. How to Create Uncontested Market Space and Make the Competition Irrelevant. Boston, Massachusetts: Harvard Business School Press.

Cusumano, M.A. (2006): Envisioning the Future of India's Software Services Business. Communications of the ACM, Vol. 49, Iss. 10, pp. 15-17.

De Chernatony, L./ McDonald, M. (2003): Creating Powerful Brands in Consumer, Service and Industrial Markets. Oxford: Elsevier.

Deutsche Gesellschaft für Internationale Zusammenarbeit (Ed) (2011), Manual for IT Sector Promotion in Developing and Emerging Countries.

Deutsche Gesellschaft für Internationale Zusammenarbeit (Ed) (2011), Toolbox for IT Sector Promotion in Developing and Emerging Countries.

Direktion für Entwicklung und Zusammenarbeit, DEZA (1999): Schlüsselfragen und Indikatoren. Bern: Selbstverlag.

Esser, K./ Hillebrand, W./ Messner, D./ Meyer-Stamer, J. (1994): Systemische Wettbewerbsfähigkeit. International Wettbewerbsfähigkeit der Unternehmen und Anforderungen an die Politik. Berlin: Deutsches Institut für Entwicklungspolitik (DIE).

Estonian Association of Information Technology and Telecommunications: http://www.itl.ee.

European Commission (2004): Project Cycle Management Guidelines. http://ec.europa.eu/europeaid

European Commission (2014): eGovernment Benchmark. Insight Report.

European Information Technology Observatory (EITO): http://www.eito.com.

European Information Technology Observatory, EITO (2013): ICT Market Report 2013.

European Information Technology Observatory, EITO (2014): ICT Market Report 2014/2015.

Evangelou, C.E./ Karacapilidis, N. (2007): A Multidisciplinary Approach For Supporting Knowledge-Based Decision Making in Collaborative Settings. International Journal of Artificial Intelligence Tools, Vol. 16, Iss. 6, pp. 1069-1092.

Fraunhofer Institute for Systems and Innovation Research (2013): EU Software Cluster Benchmark 2013. Karlsruhe

Gartner (2014): Forecast Analysis: IT Outsourcing, Worldwide, 1Q14 Update.

Grant, R.M. (2008): Contemporary Strategy Analysis. Malden: Blackwell Publishing.

GULP: http://www.gulp.de.

Heeks, R./ Nicholson, B. (2004): Software Export Success Factors and Strategies in "Follower" Nations. Competition & Change, Vol. 8, Iss. 3, pp. 267-303.

Hubbard, D. (2009): The Failure of Risk Management: Why It's Broken and How to Fix It. Hoboken, New Jersey: John Wiley & Sons, Inc.

IKT Norge: http://ikt-norge.no

INDEXKOSOVA (2013): ICT Market Analysis and Skills Gap Analysis Kosovo. Prishtina.

Infocomm Development Authority of Singapore (2010): Realising the iN2015 Vision. Singapore

International Data Corporation (IDC): http://www.idc.com.

Kosovo Agency for Statistics (2013): https://ask.rks-gov.net/eng/

Kosovo IT Strategy SharePoint: https://troom-x.capgemini.com/sites/ccdach/itstrategykosovo/default.aspx?PageView=Shared.

Lithuanian ICT Association (INFOBALT): http://www.infobalt.lt.

Macedonian ICT Chamber of Commerce (MASIT): http://www.masit.org.mk.

McFarland, K. (2008): Should You Build Strategy Like You Build Software. MIT Sloan Management Review, Vol. 49, Iss. 3, pp. 69-74.

Ministry of Communication and Information Technology of the Republic of Egypt (2012): National ICT Strategy 2012-2017. Towards a Digital Society and Knowledge Based Economy. Cairo.

National Association of Software and Services Companies of India (NASSCOM): http://www.nasscom.org.

Nicholson, B./ Sahay, S. (2009): Software Exports Development in Costa Rica: Potential for Policy Reform. Information Technology for Development, Vol. 15, Iss. 1, pp. 4-16.

Ojala, A./ Tyrväinen, P. (2007): Market Entry and Priority of Small and Medium-Sized Enterprises in the Software Industry: An Empirical Analysis of Cultural Distance, Geographic Distance, and Market Size. Journal of International Marketing, Vol. 15, Iss. 3, pp. 123-149.

Organization for Economic Co-operation and Development (OECD): http://www.oecd.org/glossary.

Porter, M.E. (1980): Competitive Strategy. New York: Free Press.

Porter, M.E. (1986): Competition in Global Industries. Boston: Harvard Business School Press.

Porter, M.E. (1990): The Competitive Advantage of Nations. New York: Free Press.

Porter, M.E. (1996): What is strategy? Harvard Business Review, Vol. 74, Iss. 6, 61-78.

Porter, M.E. (1998): On Competition. Cambridge: Harvard Business School Press.

Prahalad, C.K./ Hamel, G. (1990): The Core Competence of the Corporation. Harvard Business Review, Vol. 68, Iss. 3, pp. 79-91.

Russian Software Cluster (RUSSOFT): http://www.russoft.org.

Saleh, N./ Carmel, E./ Mroczkowski, T. (2004): Becoming Software Exporters? The Cases of Three Central European Nations – Romania, Poland, and the Czech Republic. Journal of East-West Business, Vol. 10, Iss. 1, pp. 43-67.

Scheer, G. und L. von Zallinger (2006), *Cluster Management*, Deutsche Gesellschaft für Technische Zusammenarbeit (Ed).

Scrum.org (2011): The Scrum Guide. The Definite Guide to Scrum: The Rules of the Game.

Silicon.de: http://www.silicon.de.

STIKK (2012), Public Procurement for ICT in the Period June 2009 – June 2012. Prishtina.

STIKK / GIZ (2014): Kosovo IT Industry Barometer 2014 (KITIB)

STIKK / INDEXKOSOVA (2013): ICT market analysis and skills gap analysis Kosovo.

Swiss Agency for Development and Co-operation (SDC):
http://www.deza.admin.ch/ressources/resource_en_23569.pdf

Terjesen, S./ O'Gorman, C./ Acs, Z.J. (2008): Intermediated mode of internationalization: new software ventures in Ireland and India. Entrepreneurship & Regional Development, Vol. 20, Iss. 1, pp. 89-109.

The German Outsourcing Association (2013): The Outsourcing Journal Q 2/3. Central & Eastern Europe. A Colorful Outsourcing Landscape.

United Nations Conference on Trade and Development (2013): Information Economy Report 2013. The Cloud Economy and Developing Countries. Geneva.

United Nations Conference on Trade and Development (2013): Information Economy Report 2012. The Software Industry and Developing Countries. Geneva

USAID (2007): IT Sector Development Concept Paper for Armenia. Yerevan.

Xu, L./ Brinkkemper, S. (2007): Concepts of product software. European Journal of Information Systems, Vol. 16, Iss. 5, pp. 531-541.

Appendix 1

IT Industry Capability Model

Capability Dimension	Capability Factors	Evaluation	Assessment Scale from 1 = poor to 10 = excellent										Assessment value (a)	Weighting (w) (total 100 points)	Capability value (a x w)
			1	2	3	4	5	6	7	8	9	10			
State Institutions	Strategy				3								3	11	24,75
	Institutions			2									2		
	Investment				3								3		
	Support programmes		1										1		
												∑ of assessment points / number of capability factors =	2,25		
ICT Infrastructure	Energy supply								7				7	6	44
	Telecommunications								7				7		
	Internet									8			8		
												∑ of assessment points / number of capability factors =	7,33		
Demand	Export market						5						5	10	40
	Domestic market				3								3		
												∑ of assessment points / number of capability factors =	4		
Structural characteristics of the industry	Number of companies				3								3	11	47,67
	Average size of companies				3								3		
	Structure					4							4		
	Wages							6					6		
	Organization level and associations									8			8		
	Cluster			2									2		
												∑ of assessment points / number of capability factors =	4,33		
Company capabilities	Management skills							6					6	16	72
	Export skills & references			2									2		
	Technology skills							6					6		
	Quality management, processes and standards					4							4		
												∑ of assessment points / number of capability factors =	4,5		
Academia & support institutions	Education and human resources					4							4	16	48
	Continuous education & training						5						5		
	Research & development			2									2		
	Capital & financing		1										1		
												∑ of assessment points / number of capability factors =	3		
International linkage & branding	Image & branding			2									2	11	50,6
	Offshore / nearshore factors (geography, language, culture)									8			8		
	Intellectual property (IP)			2									2		
	Linkages & networks						5						5		
	Diaspora							6					6		
												∑ of assessment points / number of capability factors =	4,6		
Innovation	Institutional framework for innovation		1										1	5	8,33
	Public sector based research & innovation		1										1		
	Private sector led research & innovation				3								3		
												∑ of assessment points / number of capability factors =	1,67		
Dynamic capabilities	Detection (monitoring, scanning, scouting)					4							4	11	41,25
	Strategic response development					4							4		
	Joint learning & capacity building					4							4		
	Change management & implementation				3								3		
												∑ of assessment points / number of capability factors =	3,75		
													Total:	**97**	**41,84**