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This project has been funded with support from the European Commission.

INTRAPRISE – Infusing Entrepreneurial skills in the corporate ICT environment
Proj.no: 2014-1-CY01-KA202-000274

STATE OF THE ART ANALYSIS REPORT OF MANAGEMENT PRACTICES AND ORGANIZATIONAL CULTURE IN THE ICT SECTOR (In project countries Cyprus, Belgium, Greece, Italy, Romania, and Spain)

This report has been produced by the consortium of the Erasmus+ funded project Intraprise. You can use the information contained, by acknowledging the Intraprise consortium and project (www.intraprise-project.eu)

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EXECUTIVE SUMMARY

In an increasingly competitive environment that contemporary society is facing today, companies need to find that '*added value*' to stay competitive, to retain existing and attract new customers and to conquer new markets. Intense global competition and fast changing consumer needs have put the pressure on traditional companies to diversify, increase productivity, and develop new innovative practices. The most cost effective solution of achieving these goals, along with long term growth, is by taking advantage of the untapped potential and talent that already exists within organizations. One way of doing so is to encourage people with innovative and creative attitude within the organisation, that is to say to encourage the "intrapreneurs".

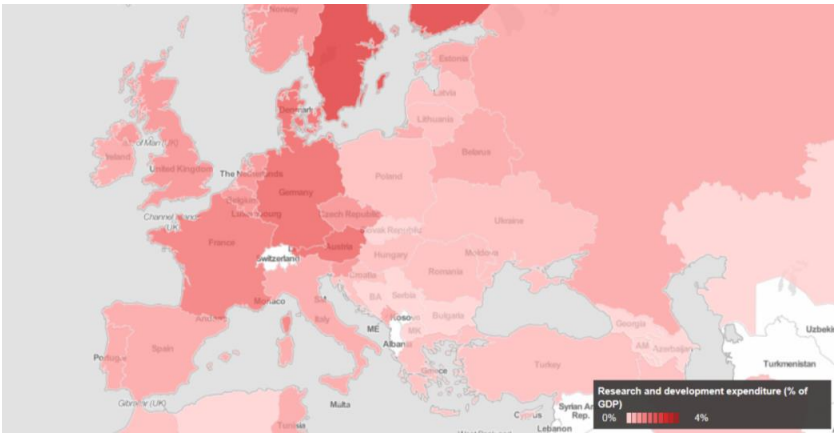

Fig. 1 Research and development expenditure (% of GDP).
Source: World bank website

The surveys conducted by Global Entrepreneurial Monitoring (GEM) confirm that "*the level of entrepreneurial activity varies among countries at a fairly constant rate, thus additionally confirming that it requires time and consistency in policy interventions in order to build factors that contribute to entrepreneurial activity*". In addition, it was found that "*entrepreneurial activity, in different forms (nascent, start-up, intrapreneurship), is positively correlated with the economic growth*". Literature suggests that this relationship differs along phases of economic development. Another important factor influencing creativity and competitiveness in business seems to be attention to research and development sector that could be related to R&D expenditure as a percentage of GDP, so called GERD (Fig 1).

On the other side, the Business R&D expenditures, commonly known as BERD, illustrates the readiness of business to actually invest in research and development hence into innovative solutions and people. ICT BERD, the Business R&D expenditures on ICT sector, was thoroughly examined by Digital Agenda in "ICT R&D, innovation and growth" and by The 2013 Predict report: An Analysis of ICT R&D in the EU and Beyond of European Joint Research Centre (JRC). Founding shows that in 2010, EU ICT business expenditure on R&D (ICT BERD) amounted to 26 billion euros, 2.46% more than in 2009 (25.4 billion euros). This represented 17.05% of the total EU BERD in 2010 (Fig. 2).

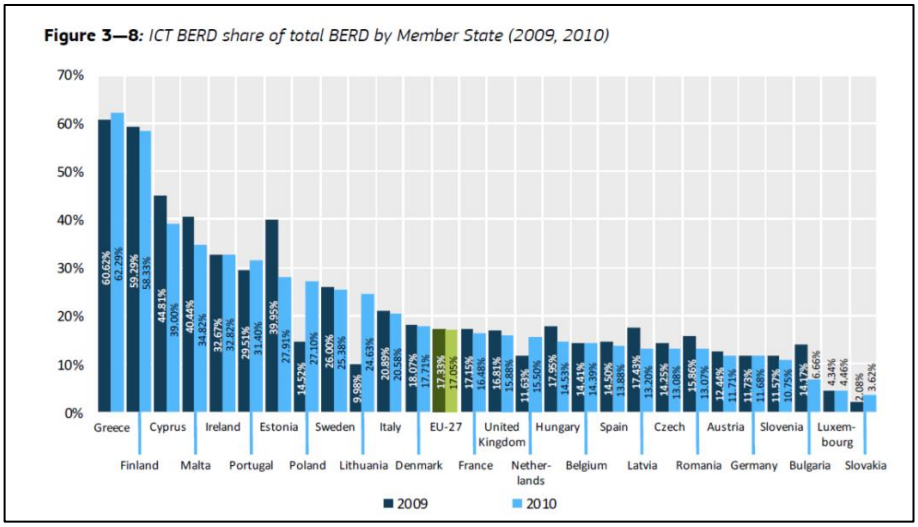

Fig. 2 ICT BERD share of total BERD by Member State (2009, 2010).
Source: Eurostat, elaborated JRC-IPTS and IVIE

The key enabling role of ICT to achieve smart, sustainable and inclusive economy and society has already been widely recognized. The use of ICT in all vital sectors of the economy like education, health, tourism, transport and generally in the exercise of every business activity is of paramount importance for the development of EU market. It has direct impact on the increase of GDP, the creation of new high-value jobs, the modernization and productivity increase of the public sector, the increase of transparency and the promotion of democracy and culture.

The creative attitude towards research and innovation is a characteristic of people that have an entrepreneurial approach, even in their own organisation. These individuals are "Intrapreneurs" who are already sitting within existing organizations at the intersection of innovation, social good, and entrepreneurship. They can be found at all levels of the organization and from any generation, working under the radar and struggling against bureaucracy to launch new programs, products, and initiatives that leverage the change making ability of established institutions. Intrapreneurs focus on revitalizing and strengthening firm competencies to acquire skills and innovative capabilities. The roles they play in achieving competitive advantages are increasingly gaining interest. The main source of this advantage lies in the firm's resources, the attitudes of employees and the capabilities identified with intangible resources. Hence, the resource based view considers ***intrapreneurship as a fundamental instrument for the accumulation, conversion and leveraging of resources for competitive purposes***.

The desktop research here presented examines several similar factors relevant to entrepreneurship in general and corporate entrepreneurship (or intrapreneurship) in particular. The aim of this exercise was to highlight main limitations and bottlenecks when it comes to intrapreneurship concept implementation in ICT sector and to identify opportunities for its further deployment and awareness rising, among the employers and employees in the companies of the consortium countries as well as in Europe.

INTRODUCTION

This report is the Intellectual output of the Project ***"Infusing entrepreneurial skills in the corporate ICT environment – INTRAPRISE"*** funded under the Erasmus Plus Programme, Key Action 2: Strategic Partnerships under agreement number: 2014-1-CY01-KA202-000274. This report is not an exhaustive study about the intrapreneurship in Information and Communication Technology (ICT) sector across Europe. The report represents a summary of all information and findings collected by the project partners, in particular regarding the countries of this consortium: Belgium, Cyprus, Greece, Italy, Romania and Spain.

The term ***"intrapreneurship"*** was used for the first time in 1976 by G. Pinchot III, that refers to intrapreneurs as "***dreamers that do***". Pinchot's text entitled "Intra-Corporate Entrepreneurship" in fact defines an intrapreneur as an "entrepreneur within the larger society" that is to say a person with entrepreneurial skills but acts within a larger company or organisation. The paper further states that "such a new way of doing business would be a social invention of considerable importance, both for the individuals in it, and for the productivity and responsivity of the corporation." In the past decades more attention was given to this phenomenon so further studies were produced examining the activity of entrepreneurship within existing organisations. It is usually referred to as "corporate entrepreneurship", "corporate venturing" or "intrapreneurship".

Recent studies examine the intrapreneurship trend in order to understand its dynamics and tendencies. The interest to this occurrence in organisational culture is of interest for both researchers and industrial investors as ***it touches upon management practices, social tendencies but also economic aspects and expectations of both the individual and the organisation itself***. Wennekers et al. (2010) argue that the aspect of the broader macro context has not been sufficiently taken into account. The study provides an interesting contribution with: a) an international comparative study on intrapreneurship in low and high income countries i.e. effects of macro context on prevalence and nature of the phenomena; and b) an insight into a relationship between independent entrepreneurship and intrapreneurship at the national as well as individual level. The findings show that, although intrapreneurship is not a widely spread phenomenon (on average less than 5% of the employees), it seems to be twice as high in high income countries than in low income countries. Moreover, higher level of autonomy in employees is encountered in high income countries that in those with lower income, leading to the conclusion that that the former might be more open to entrepreneurial behaviour in large organisations. This study also takes into account countries outside Europe while only the case of Spain is common to this research and the consortium. The report will therefore not take into consideration these assumptions for the overall conclusion but the paper remains important for this study as a part of literature overview.

An intrapreneurial culture supports an entrepreneurial spirit with emphasis on:

- strategic renewal and survival (major structural or organizational changes within a firm)
- fostering innovation (introduction of a new product, service or process in the market)
- corporate venturing (corporate entrepreneurial efforts that lead to the creation of new business organizations within the larger corporate umbrella organization)

- increased long term profitability and liquidity
- gaining knowledge of future revenue streams and international success
- retention of key HR assets
- building of knowledge assets and knowledge dissemination/exploitation

Finally, the aim of this report is to highlight the **nature of effective managerial practice and successful pro-intrapreneurship organizational structures in the partner countries** and in Europe, in particular in the ICT sector. It provides an insight of intrapreneurial training and competences for successful implementation i.e. current situation at country and EU level, regulatory frames, implemented initiatives/policies towards the improvement of employability / management, etc.

This report provides an explanation on the methodology adopted for the desktop research (section 2) and gives an overview on the intrapreneurship, in particular intrapreneurship in ICT sector in the partner countries (section 3). The European prospective of opportunities together with some main inputs of members of European CIO Association is illustrated in Section 4. Some preliminary inputs regarding the users' needs and recommendations on potential contents of the course to be developed by the project are outlined in the Conclusions of this document.

METHODOLOGICAL APPROACH ADOPTED FOR THE DESKTOP RESEARCH

In the vision of INTRAPRISE, the intrapreneurs are actors who can enable businesses to expand into other areas of their market by identifying new products or services to existing or new customers. In larger organisations this may challenge the management team, so an attitude towards accepting and promoting intrapreneurial behaviour needs to be incorporated within the strategy. Management practices need to adapt and undergo a change from a culture of imposing orders and rules to one with sufficiently flexible behaviour to stimulate innovation and creative visions that could guide and focus the efforts of potential intrapreneurs.

The methodological approach (O1-A1)in this analysis was based on a desktop research and a thorough exploration of papers, documents, interviews, websites and social media with a focus on the concept of intrapreneurship, in the ICT sector particular. The state-of-the-art illustrated in the next section attempts to depict a portrait of the current scenario in participating countries on issues the management practices and organisational culture. The general methodology approach applied was discussed with partners in joint conference calls and is illustrated in Annex I.

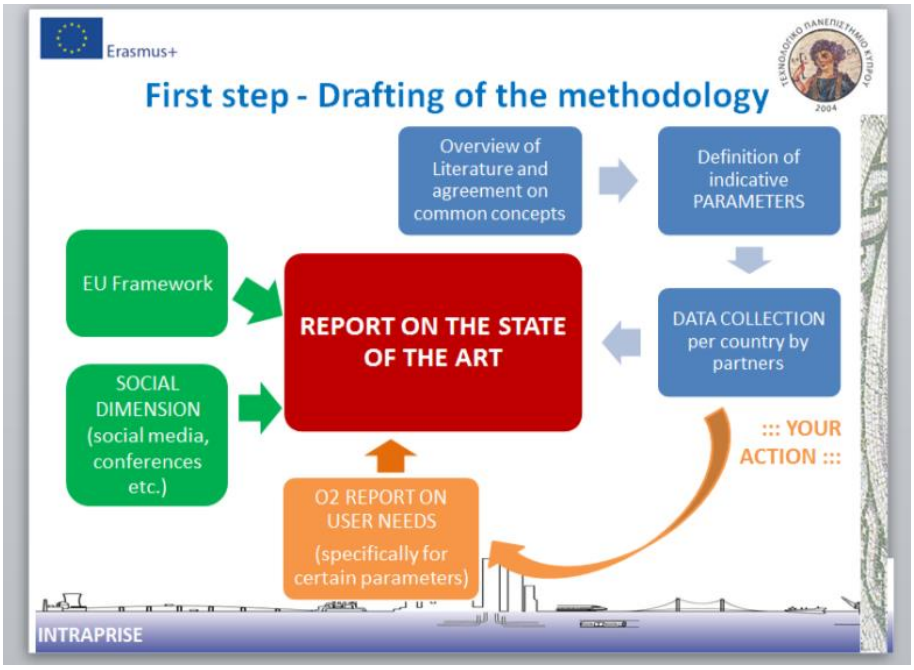

Fig. 3 An extract from Annex I illustrating a general methodology applied for desktop research (O1-A1 – Defining research and survey methodology, guidelines and tools)

In order to facilitate the information collection, the partners were provided with a questionnaire (Annex II), developed by Cyprus University of Technology (coordinator of this action).

The parameters were grouped into the following categories:

1. *Overview of the statistic information on ICT sector in your country*
2. *Organizational Culture of ICT sector in your country*
3. *Management practice of ICT sector in your country*
4. *Offers of Intrapreneurship courses in your country: Business/other schools, educational organizations and/or training courses*
5. *Best Practices of Intrapreneurship in ICT Sector in your country*
6. *Feedback on the document*

All partners have examined several specific issues in their countries (Activity O1-A2). The information was collected by: CUT and R&Do (Cyprus); Militos & Found.ation (Greece); SINLO (Romania); Melius (Italy) and MTC (Belgium). The steps followed during desktop research included:

1. Consultation of the Power Point working document discussed among partners;
2. Careful examination of the questionnaire and desktop research performance;
3. Desktop research and collection of well referenced data;
4. Feedback to the coordinator of this action (CUT);
5. Final discussion among all partners.

Furthermore, one-on-one Skype meetings followed in order to elaborate on the responses given by partners and provide some additional feedback. The report was further shared with all partners for the final revision and evaluation.

This collection of information, data and references has served to give an overview of the current situation, to identify possible limits and bottleneck in managerial organisations but also to give suggestions on possible solutions for better implementation of intrapreneurship in practice. Finally, an attempt to identify the user requirements and define inputs for further learning content was done in the section "Some first findings of Intraprise project".

Belgium

Population 11 161 642
(projection at 2013)

1. Overview of the ICT sector in Belgium

- ***Statistics information***

The Gross domestic product (GDP) in Belgium for 2014 amounts to Euro 402 270 MIL, while GDP in ICT sector in 2010 accounted for Euro € 17,089,305,600 i.e. 4.64% of GDP of that year.

The employment rate in Belgium in 2011 (Eurostat) amounted to **61.9%** while a partner's source for December 2014 indicates **91.7%.** In the tear 2010, **2.84% accounts for employment in ICT sector.** According to Eurostat, **the labour cost, wages and salaries, and direct remuneration in ICT sector,** expressed in unit "*Per employee in full-time units, per month*" are the following:

- Total labour costs (excluding apprentices) – **Euro 7,440**
- W GEM ages and salaries (excluding apprentices) – **Euro 5,322**
- Direct remuneration, bonuses and allowances – **Euro 4,803**

The investment in research in ICT sector accounts for 1.96% of the national budget (for 2011)[1].

- ***Profile of ICT companies in Belgium***

***Number and size*[2].** ICT companies currently present in Belgium are 35038 (in 2012)[3]**.** The scenario of companies classified by size into small (>10 people), medium and large is the following:
Small (11-50): 99**%**
Medium (50-250): 0,7**%**
Large (>250): 0,2**%**

Type of business. According to the statistical segmentation for the ICT sector, the main type of business in Belgium is Telecommunications, Other sectors of ICT companies in Belgium are:

- Manufacture of computers, electronics and optics
- Wholesale of ITC and communication equipment
- Software Publishing
- Computer programming, consultancy and related activities
- Data processing, hosting and related activities; internet portals
- Repair of computers and communication equipment

NOTE. *Belgium's ICT sector currently contributes over 4% of Belgium's gross domestic product, and between 1997 and 2007 it accounted for a sixth of the country's growth in GDP. The latest IT Industry Competitiveness Index 2009 ranked Belgium in eighteenth place worldwide*[4].

Start-up companies. No specific information was provided on start-ups, however in 2012 the total of new businesses was 28 086 out of 560 222 active companies.

[1] *Innovation Union Competitiveness report 2011 (Country profile)*
[2] http://www.ontsi.red.es/ontsi/sites/default/files/informe_del_sector_ticc_2013_edicion_2014.pdf
[3] http://economie.fgov.be/fr/binaries/0274-13-01-barom%C3%A8tre_2013_tcm326-226083.pdf page 69
[4] http://business.belgium.be/en/investing_in_belgium/key_sectors/ict/

2. Organizational Culture of ICT sector in Belgium

Common organizational culture in ICT sector in Belgium. ICT companies tend to reflect traditional divisions, though there is evidence that some companies, particularly start-ups, are influenced by practices in Berlin and London and are beginning to follow a Silicon Valley model, encouraging team-working on projects, participation, workplace democracy and the encouragement of side projects. Company leaders still tend to take the lead and make the important decisions, but consultations is more likely with specialists from within and outside the company (see section 3 for outsourcing).

Research and Development. In Belgium, benefits are provided regarding special investment deduction for investments in research and development of new products and forward-looking technologies that are environmentally friendly[5]. This innovative law has encouraged the formation of R&D divisions. The investment deduction creates the possibility for taxpayers to claim a tax deduction - in addition to the normal tax depreciations - when making qualifying R&D investments. A sense of openness stems from communication networks such as social networks, start-ups, and ICT cluster organisations, conferences and events.

- ***Organizational structure among ICT sector***

Differences in structure will generally be related to size and/or maturity of the company. Although Belgium is not studied specifically in Bloom et al., 2012, some compelling arguments of this paper seem to apply across the borders. Government, family, and founder owned firms are usually poorly managed, while multinational, dispersed shareholder and private-equity owned firms are typically well managed. Stronger product market competition and higher worker skills are associated with better management practices. Less regulated labour markets are associated with improvements in incentive management practices such as performance based promotion.

Focus on intrapreneurship in general in Belgium. Intrapreneurship generally seems to be a focus in global companies with a branch network internationally, although there is evidence that much of this could be related to public relations activities.

Focus on intrapreneurship in ICT companies in Belgium. It appears that sectors such as bio-technology and telecommunications, among medium to large companies, have a greater focus on intrapreneurship than other sectors.

3. Management practice of ICT sector in Belgium

- ***Management practice in general in Belgium***

The business set-up in Belgium is hierarchical. Cross-cultural management relies on understanding that Belgians are formal and courteous. They adhere to established rules of protocol for most situations and expect others to do the same. They respect corporate hierarchy and those who have attained a senior-level position and they do not readily mix their private and business lives.

Workers in Belgium generally like working in teams and collaborate quite well across hierarchical lines. The communication within a team is generally quite collegial, albeit somewhat direct. Role allocation within the team is generally quite clearly defined and people will take greater responsibility for their specific task than for the group as a whole. It is expected of the leader to harness the talent of the group assembled, and develop any resulting synergies. The leader will be referred to as the final authority in any decisions that are made, but they do not dominate the discussion or generation of ideas: praise is given to the entire group as well as to individuals.

Belgium is a controlled-time culture and adherence to schedules is important and expected. Missing

[5]*Federal Public Service - Finance*

a deadline is a sign of poor management and inefficiency, and will shake people's confidence. Successful cross-cultural management will depend on the individual's ability to meet deadlines. However, it is not a common practice to employees to work late or on weekends in order to meet targeted deadlines. Intercultural tolerance and readiness for change is medium. Changes are made, albeit slowly, and require considerable amount of thought, planning and evaluation.

Centralized decision-making based upon information that has been gathered by all concerned parties is accustomed. Supervisors and managers make most decisions for their work group, even ones that would be implemented by subordinates in other cultures. When managers delegate their authority, they provide explicit details about what is to be done and how it is to be accomplished. Since decision-making occurs at the highest levels and each reviewing level is expected to verify that the matter has been researched thoroughly and that all interested parties have been consulted, decision-making can be a time-consuming and laborious process. Each individual's role remains clearly defined although global and intercultural expansion means that employees are now beginning to feel that they are authorized by station, education, or position, to either aspire to leadership or to express themselves freely in management circles. Negotiations are direct, however pushing for an immediate decision is seen as aggressive.

In Flanders (Dutch speaking part of Belgium), decisions are group or consensus focused. In Wallonia (French speaking part of Belgium), business seem to be more hierarchical and the top-ranking person at the meeting makes decisions.

- ***Management practice in ICT companies in Belgium***

Although management practices in Belgium are traditionally hierarchical there has always been an appreciation for teamwork (though with a clear leadership structure). This element is more to the forefront in the ICT sector. In fact, there is a new culture developing, led by ICT companies, particularly start-ups, although it is still immature in many ways and does not compare to other top scenes in Europe, such as London or Berlin. The community is building up and there are events thriving in all cities of the country on weekly basis. Furthermore, there seems to be a shift in working mentality: local entrepreneurs have come to realize they have something original to offer to customers from around the world.

Local authorities have also started to adapt to this new state of mind and now offer a variety of programs to help entrepreneurs jump start their business. Whether in Flanders, in Wallonia or in the Brussels region, initiatives emerge and funding is more readily available than ever to test drive ideas or bring them to the market, braving Belgium's political landscape complexity and traditional hierarchical ways of organising.

Using outsourcing and crowdsourcing in ICT companies in Belgium. No specific figures are available on this issue. However, many companies offering outsourcing refer to the fast growth and cost-effectiveness of their services in Belgium.

Providing outsourcing services for the ICT sector in Belgium. This does not generally appear to be the case in Belgium. Companies offering outsourcing generally appear to have a global perspective and are multi-national in nature.

Remote work practices/telecommuting In Belgium the majority of teleworkers are men with high educational qualifications, who work in the information and communication technologies (ICT) sector and occupy a management position (Taskin and Vendramin, 2004). In addition, the majority of teleworkers live in urban areas and are not willing to lose time commuting. Women are underrepresented among teleworkers in Belgium, as fewer women work in ICT (Eurofound, 2010). 24% of Belgians consider themselves to be at least in part telecommuters (worldwide 35%)[6].

[6] http://www.ipsos-na.com/download/pr.aspx?id=11326

The main identified obstacles for intrapreneurship in the existing management/organizational structure in ICT sector in Belgium:

- **Regulated labour market:** Belgium is a highly regulated labour market. Studies have shown that less regulated labour markets are associated with improvements in incentive management practices such as performance based promotion. This also has implications for innovation and corporate entrepreneurship. The Global Entrepreneurship Monitor (GEM) report however shows that Belgium and the Scandinavian countries score high in terms of intrapreneurship. As stated by Prof. Meuleman of Vlerick Business School (2013), the reason for this lies in the employment system: "*Just like in Finland, Sweden and Denmark, we enjoy a high level of employment protection and social security. People with a safe job seek their challenges within their position instead of taking the risk of becoming self-employed entrepreneurs. In other countries people with an entrepreneurial profile will more easily consider setting up their own company.*"

- ***Hierarchical management****: Belgium (especially Wallonia) has generally hierarchical management practices, which make it less likely that those in non-managerial positions feel able to take risks and innovate in a way associated with entrepreneurial behaviour.*

- **Time flexibility:** While respecting schedules and deadlines, Belgian workers can tend to be less time-flexible than their counterparts in other countries.

As found in GEM 2012 Report "*Four areas were detected by experts to be critical in constraining or fostering entrepreneurial activity in Belgium using both open questions and Likert scales: Government Policy is valued most negative and recommendations are formulated concerning: (1) the difference in social benefits of the employee and self-employed status inhibiting pulled entrepreneurship; (2) high labour costs inhibiting job creation aspirations; (3) complex and changing regulations regarding taxes, legal certainty, environmental legislation; and (4) administrative burden interfering with an essential entrepreneurial pace.*
Specific recommendations are formulated for a gender neutral policy, incentives for proactive behaviour, and measures against perception of failure for life. In general, the need for a consistent long-term policy and political stability is expressed.
Cultural & Social Norms is valued negative and recommendations are formulated concerning: (1) a risk-averse culture with negative connotation of failure; (2) absence of communication on the advantages of the self-employed regarding work-life balance; (3) a discouraging public opinion and media; (4) a lack of transparency in corporate culture withholding employees of entering in entrepreneurship themselves; (5) a general encouragement to become managers, not leaders."

4. Educational offer of Intrapreneurship courses in Belgium

***Offer of educational organizations*.**

- **Liège University**

- **Intrapreneurs Program at the second year of Master's degree in Business Management**

Postgraduate, full-time
Nominal duration: 2 years
Awards: MSc

Tuition fee: 850,00 € per year
This training year takes an original approach focused on guiding a strategic project in an enterprise: establishing a CRM, expanding the range of e-business services, improving or developing a management control system, a skills management system, a traceability system along the entire logistics chain, optimizing the flows of raw materials in a production system, etc. The student adds depth to the content of the project by consulting experts; analyzes the context of its implementation by making audits; proposes concrete solutions and analyzes their potential impact; comes up with a strategy for managing the change linked to the project; and finally, implements it (process). The student also attends theoretical seminars relevant to the project at the University over about 5 days at the end of each month. In this way, an exchange of expertise is activated at all levels: the student receives expertise from the enterprise and from HEC-Ulg, but exchange also takes place between scientific and professional experts.

- **Master's degree in Business engineering with specialisation in HEC-ULG Intrapreneurs.**

Postgraduate, full-time
Nominal duration: 2 years
Awards: MSc
Tuition fee: 850,00 € per year
This action-training focuses on steering complex projects within a business, i.e., multi-faceted strategic projects, in various domains (finance, information systems, human resources, marketing, supply chain, etc.). Based on an inductive approach using problem-based learning, it consists of a full year of alternating between Company and University in order to achieve a better connection between academic and professional demands. It has the following objectives: detailed study of a particular topic as the object of a complex project (the content); use of diagnostic tools from the context in which this project takes place (audit of an organization, audit of the information systems, financial audit, marketing audit, financial audit[TO1] , etc.); explore and put into action tools relating to the process of change (project management, management of human aspects of change). Successfully complete a concrete project, acquiring competencies related to personal development: taking initiative, teamwork, better self-knowledge (personal development).

Offer by companies of any in house training.

- **Vlerick Business School, Ghent**

- *Growth Through Innovation: Lead your organisation towards innovative results*

Duration: 4 days and Cost: Euro 3095 (excl. 21% VAT)

- I*n Search of New Business Opportunities: Installing an entrepreneurial culture in your organisation*

Duration: 4 days and Cost: Euro 3495 (excl. 21% VAT)

- *SME excellence: Management education combined with coaching for entrepreneurs in the professionalisation phase*

Duration: 10 days and Cost: Euros 4895 (excl. 21% VAT)

- **Trends Vlerick Business Academy programme** includes Intrapreneurial track.

5. Best Practices of Intrapreneurship in ICT Sector in Belgium

Case 1 – Janssen Pharmaceutica

A game for children with ADHD, goggles against winter depression, a new test to avoid a sudden cardiac arrest. These are just a few examples of successful projects which once originated in the fantasy of Janssen employees, and, which thanks to the Entrepreneurial Boot Camp became concrete projects with an important added-value for patients and healthcare alike. The Entrepreneurial Boot Camp is a 4 to 6 month training and coaching process which deals with all aspects of successfully setting up a new business. It helps employees to convert their innovative ideas for better healthcare in a solid business plan. This process is organized by the Janssen Campus Office, which was set up to promote innovative collaboration between internal and external partners. After much brainstorming and fine-tuning, the teams present their plan to a jury and the senior management in a 15 minute presentation. "The methodology we use allows us to decide quickly whether new ideas have a chance of (commercial) success", says Tom. "Promising ideas can become projects with an added-value for our patients.". The concept will eventually leave the coaching process once there is a clear vision about how the product or service will be further developed. And this can be done within the Janssens structure. But the product or service can also be further developed according to a specific independently operating business model.

Case 2 – Alcatel-Lucent

Another element of a corporate intrapreneurship program is about bringing entrepreneurship in the workplace, for instance through creating internal ventures, as shared by Olivier Leclerc from Alcatel-Lucent. Starting with an inspiring quote **"Innovation is the responsibility of everyone within a company"** (tweet), Olivier Leclerc developed and led an intrapreneurial Bootcamp within his company during 6 years. Engaging at first only the 1% of employees focused on technical innovation, during its third year the Bootcamp was already open to all the 10,000 employees of Alcatel-Lucent throughout Belgium and France. The Bootcamp, run once every six months, first collects ideas through an existing IT platform in the company, and then narrows from about 35 propositions to five selected teams pitching their projects. The openness of the process stays until the end, with all the employees being invited to attend this event, on top of the Innovation Board made up of sixteen individuals from everywhere in the corporate group. Before pitching, the teams of intrapreneurs follow a 3-month training from experts and entrepreneurs coming from partner Business Schools and incubators. In the end, despite losing 30 participants out of the 150 participants, including 10 starting new businesses, the program has allowed successes like the diversification of the products portfolios; some revenues from the projects; a new image for the company and a reinforced employees engagement through a culture change, innovation in return of engagement, fulfilment and happiness at work.

Case 3 – Nick de Mey, Co-founder Board of Innovation, Intrapreneurship evangelist

"I support large international corporates to innovate as start-ups. As co-founder of Board of Innovation, I give structure to innovation & entrepreneurship programs. I get most motivated when I see the impact on the people I work with.

Everyone in our team is able to pull people out of their comfort zone. We give them the tools & frameworks to become effective innovation champions. By acting as a start-up we unlock the entrepreneurial potential of employees. Seeing someone evolve from "corporate rat" to "start-ups founder" is one of the most motivation aspects of the work I do. People hire me and our team for: disruptive innovate challenges (avoid your Nokia/Kodak Moment), training & workshops, brainstorms & innovation boot camps, Co-entrepreneur in a new venture team and keynotes & lectures. I steer bright people and their innovation team in generating new business ideas. I try to live 5 years ahead and make that future comprehensible and tangible in the economic reality we live in today. By

studying trends and societal evolutions I'm in a perfect position to bring inspiration to the table.

*An innovation project will take up several months. On a shorter term I facilitate brainstorm sessions and structure workshops to find new revenue streams. On top of that I give training and coaching for management teams, spin-offs and start-ups. I consider myself a digital mobile nomad. Our company is built on a mix of digital/new media services: dropbox, wunderlist, wordpress, skype, harvest and niche products. Over the past years I've worked for a variety of sectors. From retail, automotive, chemistry/pharma, IT, e-commerce, web, finance over Food/Beverage, Government, Non-profit, Consumer and the Space industry.", as extracted from Board of Innovation website (*http://www.boardofinnovation.com/).

Case 4 - Anis Bedda, Cofounder and transformer in chief at "transforma bxl", Public speaker and Intrapreneurship evangelist

"After working in Tunisia, Turkey, Spain, and Canada, I finally settled down in Brussels, Belgium where I cofounded BottomUp Innovation, a company helping organisations innovate from the bottom up using the principles of Intrapreneurship, open innovation and crowd sourcing. We help organisations tap into the potential of their staff to generate these years, I passionately lived the leadership development experiences provided by this wonderful network and helped members and stakeholders develop and become change agents. This experience has shaped the man that I am today (Entrepreneur, innovation enabler, multilingual and a global citizen...) and left me with one obsession: Personal fulfilment at work. I speak 5 languages fluently (Arabic, French, English, Italian, Spanish) and Dutch (intermediate level). My international insight has enabled me to develop a cultural awareness that is critical to successfully building relationships and communicating effectively with multicultural audiences. Building up on this international experience I followed a couple of trainings on intercultural communications to strengthen my knowledge of the topic: Cultural detective and Initiation à l'approche interculturelle - Centre Bruxellois d'Action Interculturelle.", as extracted from Bedda, 2013.

Case 5 - Spirit of Freedom INGO - Young Entrepreneurs Society, (YES), http://www.yesforeurope.eu/
"YES is an informal educational platform, based in Belgium, to support young entrepreneurs in the field of Personal Development, Entrepreneurship and Financial education. **YES** will challenge you to think different, to increase your knowledge and to develop yourselves as young sustainable entrepreneur who deliberate creates his own live experiences by taking responsibility for their actions and results."
CountryHopper is an informal program developed to practise the intrapreneurs skills and gaining life & street experience. SoF INGO believes that you can only learn if you practise and live your knowledge. As a young intrapreneur you go on a short mission to another country where you will participate in their culture, nature, traditions, habits, businesses and networking activities. Youngsters from all over the world can participate to YES.

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Cyprus

Population: 865,878[7].
(projection at 2013)

1. Overview of the ICT sector in Cyprus

- ***Statistics information***

The Gross domestic product (GDP) in Cyprus for 2013 amounts to Euro 17 506, 3 MIL, while GDP in ICT sector accounts for Euro 732,2 MIL.[8]

The employment rate in Cyprus in 2011 (Eurostat) amounted to **67.6%** while the Statistical Service of Cyprus (Cystat) cites a value of **49,3%** for 2013. For the same year (2013) **2,4%** of employment was in the ICT sector (Information and Communication sector).[2] According to Eurostat (values for 2012), the **hourly rates for *labour cost, wages and salaries, and direct remuneration in ICT sector in Cyprus,*** expressed in unit "*Per employee in full-time units, per month*", are the following:

Total labour costs (excluding apprentices) – **Euro 3,513**
Wages and salaries (excluding apprentices) – **Euro 2,767**
Direct remuneration, incl. bonuses & allowances (excl. apprentices) – **Euro 2,415**

However, according to the report from Cystat, on 7 January 2014, the average salary of an ICT employee in Cyprus in 2012 was 1,964 euros monthly, while the average salary of an ICT employee in Cyprus in 2013 was 1,666 euros monthly, indicating a decrease of 15%.

The Cystat report shows a more realistic image of the private sector of ICT in Cyprus while the Eurostat figures are more representative of the public sector of ICT in Cyprus. In 2013, the public sector experienced tiered cuts in salaries from 10% to 17%.

The investment in Research and Development in Cyprus accounts for **Euro 83.322.000**, which is **0,47% of GDP**. More specifically the expenditure in the Engineering and Technology sector is **Euro 19.618.000**, which is **0,1% of GDP**.[2] and is still struggling to develop the proper strategies and mechanisms through which to promote innovation and technological growth but are faced with strong social and political barriers. R&D expenditures as a share of GDP are amongst the lowest of all member states

- ***Profile of ICT companies in Cyprus***

***Number and size*[9]. ICT companies currently present in Cyprus are **1027 enterprises (2013), 114 of which have more than 10 employees.** The scenario of companies classified by size into small (>10 people), medium and large is the following:

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[7] *Censuses after 1974 refer to the Government controlled area. Figures have been adjusted for under-enumeration as well as to include certain population groups not covered by the census.*
[8] *CYPRUS IN FIGURES 2014 (CYSTAT)*
http://www.mof.gov.cy/mof/cystat/statistics.nsf/All/77F7F7493CC4EBBEC2257705004843DB/$file/CYPRUS_IN_FIGURES-2014-E%CE%9D-291214.pdf?OpenElement
[9] *http://www.mof.gov.cy/mof/cystat/statistics.nsf/labour_33main_en/labour_33main_en?OpenForm&sub=3&sel=4*
BUSINESS REGISTER 2013. Number of Enterprises by Economic Activity NACE (Rev. 2) and Size Group (2013)

- Small (11-50): **93** (2013)
- Medium (50-250): **16** (2013)
- Large (>250): **5** (2013)

Type of business. According to BUSINESS REGISTER 2013[10], the main sector of ICT companies in Cyprus is **Computer programming, consultancy and related activities** where 45 enterprises are present.
Other sectors are:

- Publishing activities (26)
- Motion picture, video and television programme production, sound recording and music publishing activities (8)
- Programming and broadcasting activities (13)
- Telecommunications (13)
- Information service activities (9)

- ***Start-up companies***

Number in Cyprus: No actual numbers are available. However, several incubators and facilitators in ICT were identified:

- Diogenes incubator of the University of Cyprus
- CYBAN (Cyprus Business Angels Network)
- Junior Achievement - Young Enterprise (JA-YE) Cyprus
- Industry Disruptors - Game Changers
- CEL (Cypriot Enterprise Link)

Note: the last four are in partnership with the national telecommunications provider CYTA.

When it comes to setting new businesses, even start-ups, Cyprus has three key strengths: a robust professional services sector, favourable tax legislation and energy resources. Despite all odds and amidst dire financial crisis, nascent grass roots entrepreneurial activity with disruptive innovation tech start-ups, hackathons, meet-ups and a start-up accelerator are sprouting fast in Cyprus.

However, as stated by Cyprus Entrepreneurship Ecosystem: A Roadmap for Economic Growth[11] "The key determinants of the demand side of Venture Capital (VC) are entrepreneurial activity and pipeline, R&D expenditure as a percentage of GDP and favourable company law and tax regime for start-ups and SMEs." The figures show that a very small percentage of national GDP is invested in research in Cyprus "therefore on the supply side of VC while Cyprus shows the highest density of new business registrations per capital, the numbers don't follow suit when it comes to ICT start-ups and investment in R&D as a percentage of GDP."

2. Organizational Culture of ICT sector in Cyprus

- ***Common organizational culture in ICT sector in Cyprus***

The local economy is rather small and therefore flexible but also sensitive in time of crisis. Organizational culture and management practices in Cyprus reflect the links present in a small community, due to the population of Cyprus being only 800,000 people. The geo-political situation of the country has affected all social sectors such as education, public administration, legislation and hence the market; eventually affecting the ways companies are developed, organized and

[10] http://www.mof.gov.cy/mof/cystat/statistics.nsf/labour_33main_en/labour_33main_en?OpenForm&sub=3&sel=4
BUSINESS REGISTER, 2013. Number of Enterprises by Economic Activity NACE (Rev. 2) and Size Group (2013)
[11] Cyprus Entrepreneurship Ecosystem: A Roadmap for Economic Growth, Curveball Ltd., November 2012

managed. The inherent structure of most ICT companies are geared towards a community mentality as opposed to a corporate mentality. Cyprus is still struggling to develop the proper strategies and mechanisms through which to promote innovation and technological growth but are faced with strong barriers, which are predominately political and societal. The political elites are unable to appreciate the multiplier effect on the economy from investing in innovation and R & D and are unable to justify the investment. The society at large prefers to see the available funds directed to other policy areas such as a major construction projects, better road network and direct transfers to different groups such as professional classes, farmers, business and home owners.

- ***Companies with in-house R&D division***

There is no specific information on this issue.

- ***Organizational structure among ICT sector***

There is no specific information on this issue.

- ***Focus on intrapreneurship in general in Cyprus***

Intrapreneurship is a novel aspect in the country. In general, it is not taken up by companies but it is mostly recognised by the ICT sector.

- ***Focus on intrapreneurship in ICT companies in Cyprus***

For example, the largest Telecommunication company in the country (public/private) is implementing an internal intrapreneurship program. From the company's website (accessed Feb 27th 2015)[12]:

"Cyta is in the stage of the development of an intrapreneurship program that will be applied internally. In the developmental state of the program, several factors are being considered such as the regime of the organization, its status as well as the culture within. It is expected that Cyta's intrapreneurship program will provide not only new opportunities for the company and the employees but will also renew a sense of optimism to employees and as a result encourage the development of skills and ideas, allowing for the creation of start-ups."

3. Management practice of ICT sector in Cyprus

- ***Management practice in general in Cyprus***

Managerial behaviour and eventually management practices of Cypriot managers and Cypriot companies/enterprises conflate cultural characteristics/idiosyncrasies into a new composite whole. However there seems to be no thorough research sources or data available justifying ortesting this cross/multi-cultural aspects as an hypothesis. In particular, none seem to be done for the ICT sector.

Some effort have been done to describe the general situation in terms of blogs or dedicated websites (Kwintessential)[13]: "Cypriot business is hierarchical and managers are more autocratic than in many other countries. There are remnants of social class distinctions in the business arena. Managers do not seek a consensus before making decisions, as they believe it would make them appear weak." Furthermore, management practice in Cyprus could often be very paternalistic: "Managers may take a somewhat paternalistic attitude toward their employees. They may demonstrate a concern for employees that goes beyond the workplace and strictly professional concerns. This may include involvement in their family, housing, health, and other practical life issues." However, no further research has been found on this issue.

[12] https://www.cyta.com.cy/intrapreneurship/en
[13] http://www.kwintessential.co.uk/intercultural/management/cyprus.html

- ***Management practice in ICT companies in Cyprus***

Managerial practice in ICT sector does not appear to be different that in general.

- ***Using outsourcing and crowdsourcing in ICT companies in Cyprus***

Enterprises in Cyprus - predominantly small or very small – do follow outsourcing practices even though they are often not aware of such practices are labelled as outsourcing, e.g. shifting activities like accounting services, production, e-sales services, etc. (Partners experience)

- ***Providing outsourcing services for the ICT sector in Cyprus***

Companies is Cyprus perform and advertise their outsourcing services well. This is particularly true for the ICT sector due to several factors including an excellent talent pool, competitive wages, and geographic location. The main markets served are USA., UK, Australia and India (mainly all English speaking markets and/or ex British colonies).

- ***Remote work practices/telecommuting***

Remote work and telecommuting in Cyprus, both at the institutional as well as at the business level, is not generally practiced. About 5.7% of workers are involved in telework for about a quarter of their working time, while no workers are working involved in teleworking fulltime (Eurofound, 2010).

- ***The main identified obstacles for intrapreneurship in the existing management/organizational structure in ICT sector in Cyprus:***

No reference found specifically on ICT sector. However, some generally encountered barriers that could be taken into account are (Kwintessential):

- Paternalistic management practices
- Labour-intensive nature
- Reliance on public sector
- Necessity driven entrepreneurship
- Bureaucratic structures hindering development
- Lack of targeted education and training (intracompany or else)

4. Educational offer of Intrapreneurship courses in Cyprus

***Offer of educational organizations*:** Specific courses targeting intrapreneurship are not available in Cyprus. However, although it is not promoted as a distinct field, some higher education institutions do include intrapreneurship as part of the curricula, as an entrepreneurial practice. In particular, the following courses are proposed:

- **University of Cyprus**

The Department of Business and Public Administration (BPA)
Optional course for Concentration in Management (Undergraduate Bachelor degree)
BPA 434: Entrepreneurship (6 ECTS)
The purpose of this course is to explore the many dimensions of new venture creation and growth. While most of the examples in class will be drawn from new venture formation, we will also draw on cases from intrapreneurship, social and non-profit entrepreneurship. The class sessions will be devoted to the process of conceptualizing, developing, and managing successful new ventures, ideas or products towards the creation of a business plan. Prerequisites for BPA434: BPA231, BPA131, or approval by the instructor. (as from the website of the Department)[14]

[14] https://www.ucy.ac.cy/bpa/en/undergraduate/courses-description

- **University of Central Lancashire, Cyprus**

The Centre for Entrepreneurial Development and Research (CEDAR)

CEDAR faculty and associate fellows are of international repute and are credited with local, regional and global initiatives seeking to promote teaching, executive education, research, consulting and outreach activities in the entrepreneurship discipline and other interdisciplinary fields, including All types of Entrepreneurship (e.g. familial entrepreneurship; green entrepreneurship, social enterprising, intrapreneurship, etc.). (as from the website of the Department)[15]

Offer by companies of any in house training. In house training is under development by Cyprus Telecommunications Authority (Cyta) Please refer to section 2.

It is important to note that the overall environment does not support the establishment of collaborations between universities and business, does not encourage entrepreneurial activities and risk taking. A possible failure may be detrimental to the future career prospects of aspiring entrepreneurs. As a result of these factors and the others discussed above, the best and the brightest graduates seek jobs within the extended public sector to secure a respectable living and social status.

In the absence of an appropriate vision and specific goals for the R&D and business development and faced by the recent economic crisis, the Government has almost stopped all funds going towards R&D and has absorbed most of the liquidity in the market. As a tragic consequence of this action, Cyprus is denied in most cases EU funds available to Cyprus for projects because the state can't contribute the 15% local contribution. Along the same lines the Research Promotion Foundation, the main vehicle for the promotion of R&D in Cyprus, has been struggling for the past few years to support the already awarded grants and to secure new funds for the future. At this point the outlook looks bleak.

5. Best Practices of Intrapreneurship in ICT Sector in Cyprus

Case 1: InfoScreen company is a specialist software developer for the professional services sector since 1995. Tony Ellinas, founder and Managing Director of Infoscreen, was recently recognised as a Digital Icon for Cyprus by the European Commission's Whatify Initiative. The interview with Mr. Ellinas can be found on the webiiste of the European Commission (https://ec.europa.eu/growth/tools-databases/dem/watify) or youtube channel (https://www.youtube.com/watch?v=2yomXpc1oaY).

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Greece

Population: 11,062,508
(projection at 2013)

1. Overview of the ICT sector in Greece

- ***Statistics information***

The Gross domestic product (GDP) in Greece for 2013 amounts to **Euro 179 080,6,** while **GDP in ICT sector** accounts for Euro **5 874 MIL**[16] .

The employment rate in Greece in 2011 (Eurostat) amounted to **55.6%** while National statistical agency refers to a value of **74.5%** (2014Q3)[17]. Employment in ICT sector accounts for **2.1%**[18] in the year 2013. According to Eurostat (values for 2012), the ***labour cost, wages and salaries, and direct remuneration in ICT sector,*** "*Per employee in full-time units, per month*", are the following:

- Total labour costs (excluding apprentices) – **Euro 2,985**
- Wages and salaries (excluding apprentices) – **Euro 2,333**
- Direct remuneration, bonuses and allowances – **Euro 2,154**

In addition, as found by the local daily paper (I Kathimerini) the salaries in ICT sector in Greece on annual bases account to ca. Euro 30 000 for a Developer and ca. Euro 50 000 for a Programmer-analyst.

The investment in research in ICT sector in Greece accounts for Euro 95 MIL (as of 2011) that is to say for 19, 5% of the national budget.[19]

- ***Profile of ICT companies in Greece***

Number and size. ICT companies currently present in Greece are **4500**[20]**.** The scenario of companies classified by size into small (>10 people), medium and large is the following:
Small (11-50): 45%
Medium (50-250): 12%
Large (>250): 2%

Type of business. According to the statistical segmentation for the ICT sector (ΣΤΑΚΟΔ 2008, NACE Rev.2), there are 5 sub-sectors of ICT companies in Greece determined:

- Manufacturing
- Software
- Telecoms
- IT-Computer services
- Commerce

In terms of the actual ICT market, the ICT sector comprises of the IT-Computer services sector (86%) and the Telecoms sector (14%), the one actually "feeding" the other through collaborations, predominantly focused on Telecoms services and production. According to data available up to 2012, the Telecoms sector is carrying thus out approx. 60% of the gross production of the whole

[16] https://www.linkedin.com/in/sepegr
[17] http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/A0101/PressReleases/A0101_SJO01_DT_QQ_03_2014_01_F_GR.pdf
[18] https://www.linkedin.com/in/sepegr
[19] http://www.startupgreece.gov.gr/sites/default/files/Exploring%20ICT%20market%20in%20Greece.pdf
[20] http://www.investingreece.gov.gr/default.asp?pid=36&sectorID=39&la=2

sector.
Thus, the business sectors of ICT companies in Greece, following the actual taxonomies in the world of the market, are as follows:

- IT Equipment (ref. to Manufacturing)
- IT Services (ref. to IT-Computer services)
- Software (ref. to Software)
- Telecom Equipment (ref. to Manufacturing and Telecoms)
- Telecom Services (ref. to Telecoms)
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Sources:

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- *General Secretariat of Research and Technology – Ministry of Education and religious Affairs (July 2013, Dept. of IT and Communications)*

Start-up companies. In 2013 the total of start-up companies in Greece was 144[21],[22], of which 72[23] i.e. almost 50%, were ICT companies. This number amounts for the 1.6% of of the overall number of the ICT companies on Greece (previous section).

2. Organizational Culture of ICT sector in Greece

Common organizational culture in ICT sector in Greece. Until very recently, there were only large IT companies, subsisting on public/government funded projects. This more or less determined their organisational cultures, relying and being heavily depended on the public sector, eventually assimilating organisational cultures to the ones present in the public sector bodies and organisations. However, these large companies were surrounded by smaller ones, being somewhat bad 'replicas' of the larger ones. Actual business planning and expertise were largely missing, accounting for extremely weak knowledge - intensive models. These factors have had and are still having, although to a lesser extent, a substantial negative impact on a developmental potential which could be based on innovative and more effective organisational cultures.

An emerging start-up ecosystem in the ICT sector which is rather young, is steadily enough changing the 'paradigm' in the sector because first, it draws in new talent and unconventional thinking, and second, it provides the opportunity to the traditional, large IT companies of the past to pursue collaborations and strategic/clustering partnerships, more likely to effectively respond to the needs of the highly competitive ICT sector at international level.

Research and Development. The overall contribution of the ICT sector of Greece to achieving the EU 2020 target (i.e. 3% of GDP invested in R&D, ICT Business R&D expenditures) is one of the lowest among EU member-states (less than 0,2%) compared to 1,3% at EU level.

Organizational structure among ICT sector. In 2005, the Information Society Observatory (http://www.infosoc.gr) introduced a segmentation model for the ICT sector businesses and enterprises consisting of established companies, rapidly developing ones, and low performing companies. This model makes implications to the organisational structures in play, which either are more or less present, or have to substantially change.

For the established ones, the appropriate strategy in order to respond to the challenges of the ICT

[21] http://www.away.gr/2014/03/20/greek-startup-scene-infographic/
[22] http://www.tovima.gr/finance/article/?aid=578841
[23] http://www.tovima.gr/finance/article/?aid=578841

sector is to diversify products and services, meeting the needs of new markets and customer base. This is eventually calling for diversification in terms of organisational structure as they know it. This would particularly involve strategic partnerships, investment in R&D, and eventually knowledge-intensive structures and models, which is a far cry from the bureaucratic or even post-bureaucratic organisational structure of the recent past.

For the rapid developing ones, a necessary strategy focusing on international markets would also allow for the emergence of alternative, more innovative organisational structures.

For the low performers, the future seems to be bleak, allowing them however to benefit by focusing on niche markets which, by nature, ask for flexible and innovative organisational structures.

In any case, since the demand of the public sector is substantially shrinking – especially now during the economic crisis – while the private sector and household demand is increasing, all of the three aforementioned categories of ICT enterprises are gradually abandoning the organisational structures of the past, which were more or less determined by the overt dependence on public sector demand.

Focus on intrapreneurship in general in Greece. There are no concrete or easily accessible data documenting the uptake of intrapreneurship in Greek companies in general. However, according to the Global Entrepreneurship Monitor 2103 Global Report, the total 'entrepreneurial employee activity' rate (a term related to "intrapreneurship" or "corporate entrepreneurship") in Greece is very low (below 0, 3%) compared to the average rate for the rest of innovation-driven economies at international level.

Focus on intrapreneurship in ICT companies in Greece. No official data are available. As demonstrated above, large companies in the ICT sector follow traditional, bureaucratic models of management. The emergent start-up ecosystem, especially in the field of ICT exhibits some characteristics of intrapreneurial attitudes. A special mention could be made with respect to spin-off companies established by researchers in the field of Academy and Research centres. Key ICT clusters across major cities of Greece, comprising of industrial and academic members, for example, display very high rate in the development of talents (137,5 % growth rate in the years 2006-2008). Thus, by implication only, Research Centres, spin-offs, as well as key clusters across the country, relying heavily on innovation, can be considered as facilitators of value-adding talent pool, allowing for intrapreneurial endeavours.

3. Management practice of ICT sector in Greece

Management practice in general in Greece. Management practices/styles/models are closely associated with the concept of organisational culture, as well as leadership. In the case of Greece they cannot rely on the presence of a stable, continuous, long-term 'culture', which could condition notions of relationships between businesses and the state mechanism, the market, and the consumers. This eventually affects certain management styles practised within companies. Most enterprises in Greece are SMEs or even micro-enterprises, usually family businesses. Organisational cultures and thus management styles in Greece are rather human-cantered than business-cantered, i.e. interpersonal relationships both within companies, but also with respect to the institutional level are a determining factor in 'doing business'. Moreover, they are rather individualistic, and at the same time paternalistic, collective and hierarchical in nature. Furthermore, the concepts of "leadership", "strategy" and "trade-unionism" are grasped in extremely diverse ways, building communication break-downs between employees, employers, and diverse actor in the field of economy and businesses.

Although there are certain researches, addressing the 'Greek management model', no well-documented aspects are available. What is actually of importance here, is the fact of how common

wisdom addresses the concept of management, rendering it 'suspicious', defensive in sharing knowledge and information, based on a rather emotional approach of relationships and problems, and following a 'putting out fires'/situational approach.

As demonstrated in a relevant publication: '…The [Greek] business system is characterized by a majority of micro firms and a small minority of medium and larger firms and multinational corporations. The role of business is precarious; the firm is kept under the control of the owners, in a small organic form characterized by a strong entrepreneurial spirit, which is responsive, flexible, and opportunistic, inhabiting markets with unstable conditions'.

Management practice in ICT companies in Greece. Apart from new, innovative start-ups, spin-offs, and ICT clusters, the large ICT companies rely mostly on standard, traditional management practices. Unfortunately, no further, adequate data are available.

Using outsourcing and crowdsourcing in ICT companies in Greece. Although Greek enterprises - predominantly small or very small – are following 'outsourcing' practices without even knowing that such practices are labelled as outsourcing, e.g. shifting activities like accounting services, production, e-sales services, etc., outsourcing as such is a relatively novel concept in the business world in general. (No further data are available).

Providing outsourcing services for the ICT sector in Greece. Based on the fact that in the past 10 years Greece has shown significant growth in combination with significant increase in higher education orientation, especially in electrical and computer engineering education, outsourcing seems to be a much promising practice.

At the moment, no concrete data are available, besides bilateral communication between the institutional level and the ICT sector representative bodies, showing interest to turn the country to an outsourcing 'paradise' in South-eastern Europe. Towards this goal, Greece is exhibiting certain advantages for the provision of outsourcing services such as ;

- Excellent talent pool
- Competitive wages
- Geographic location
- Strong market (regional headquarters)

However, significant players in the Greek ICT sector, as well as key clusters, provide outsourcing services in the following fields:
a) IT resourcing & professional services
b) Application management services
c) Infrastructure management & IT support
d) Service desk outsourcing

Remote work practices/telecommuting. Remote work and telecommuting is rather uncharted in Greece, both at the institutional, as well as at the business level. ICT companies seem to have the leading role in telecommuting practices; however, no well-documented data are available. According to the latest available data (2010), remote workers account only for 0, 5-1% of the entire work-force. The absence of statistical data – i.e. registering telecommuting as a distinct form of 'employment' – doesn't allow for elaborate information.

The main identified obstacles for intrapreneurship in the existing management/organizational structure in ICT sector in Greece:

- Paternalistic management practices
- Labour-intensive nature
- Reliance on public sector
- Necessity driven entrepreneurship

Bureaucratic structures hindering development

- Lack of targeted education and training (intracompany or else)

4. Educational offer of Intrapreneurship courses in Greece

***Offer of educational organizations*:** Targeted intrapreneurship courses at all levels are not available in Greece. Higher education institutions, business management departures across Greek Universities, include sporadically intrapreneurship as part of the curricula, as an entrepreneurial practice, however not promoting it as a distinct field in curricula.

Private institutions in the field of Business Management and Entrepreneurship move along similar lines.

Indicative higher education institutions of the public sector and operating business management departments where 'intrapreneurship' has been spotted as part of the educational material include the:

- Athens University of Economics and Business
- Democritus University of Thrace
- National and Kapodistrian University of Athens
- University of Ioannina
- University of Piraeus

Offer by companies of any in house training. No information found.

5. Best Practices of Intrapreneurship in ICT Sector in Greece

Case 1: Corallia - Hellenic Technology Clusters Initiative (2006) - www.corallia.org

Corallia is an example of a so-called 'inborn entrepreneurial innovation' exploiting 'knowledge capital' as an asset, that is, the shared, managed, sought-after information and skills of the human factor per se, rather than labour, land, (economic) capital, the traditional (physical/tangible/generic) factors of production. In turn, the initiative is heavily relying on knowledge-intensive innovation and production principles, extroversion, and transnational synergies. Not being a 'best practice' for intrapreneurship in strict terms, this initiative is not a 'company' having introduced intrapreneurial practices in an existing 'organisational culture', but rather, it has been structured on the underlying principles of intrapreneurship in a way. Its own essence seems to be about what intrapreneurship stands for.

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- Startup Greece (Information, networking and collaboration space, aimed at creating a new generation of entrepreneurs in Greece) *http://www.startupgreece.gov.gr*
- WorldBusinessCulture portal *http://www.worldbusinessculture.com/Greek-Management-Style.html*

Online news pages and aggregators (mass and special media)

- *awaygr*, Online media property (special media) http://www.away.gr/2014/03/20/greek-startup-scene-infographic/
- *Eleftherotypia (I)*, Online newspaper (mass media), http://www.enet.gr/?i=news.el.article&id=209160
- *Kathimerini (I)*, Online newspaper (mass media) http://www.kathimerini.gr/782859/article/oikonomia/ellhnikh-oikonomia/poia-epaggelmata-exoyn-zhthsh http://www.kathimerini.gr/63426/article/epikairothta/ellada/axartografhth-h-thlergasia-sthn-ellada
- *Nea (Ta)*, Online newspaper (mass media), *http://www.tanea.gr/news/economy/article/5096292/elstat-sta-181-1-dis-eyrw-anhlthe-to-aep-ths-elladas-to-2013/*
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Italy

Population: 59 685 227
(projection at 2013)

1. Overview of the ICT sector in ITALY

- ***Statistics information***

The Gross domestic product (GDP) in ITALY for 2014 amounts to **Euro 1 616 047,6 MIL**. The information on GDP in ICT sector is not available.

The employment rate in ITALY in 2011 (Eurostat) amounted to **56.9%** while the National statistical agency (ISTAT) refers to a value of **86,6%** for 2014. The employment in ICT sector accounts for **2,66%** in the year 2010[24]. According to Eurostat (values for 2012), the **hourly rates for *labour cost, wages and salaries, and direct remuneration in ICT sector,*** expressed in unit "*Per employee in full-time units, per month*", are the following:

- Total labour costs (excluding apprentices) – **Euro 4,857**
- Wages and salaries (excluding apprentices) – **Euro 3,491**
- Direct remuneration, incl. bonuses & allowances (excl. apprentices) – **Euro 3,044**

In addition, additional information was collected from the National Statistics Office. In 2012, the labour cost per employee in enterprises and institutions of the private and public sectors with at least 10 employees was euro 41,330 per year. Wages and salaries per employee were euro 29,895 per year, accounting for 72.3% of the total labour cost. Social contributions accounted for 27.3% of the labour cost with statutory contributions at 20.4%, those collectively agreed, contractual and voluntary at 0.4% and provision for the end-of-service- pay-out (Tfr-Trattamento di fine rapporto) at 3.9%. The ratio of vocational training costs over the labour cost was 0.2%. In the private sector, on average, 28.8% of the Tfr was paid to supplementary pension funds. In the enterprises with more than 1,000 employees, this share was 43.5%; therefore, the wages and salaries per hour worked were euro 20.20. The difference between enterprises and institutions with over 1,000 employees and those with 10-49 employees was 7.00 euro.
In the North-west and in the Centre areas of Italy, hourly wage and salaries were higher than the national average (+3.8% and +2.4%, respectively) while in North-East, South and Islands areas it was lower (-3.6%, -4.7% and -2.3%). The average number of hours worked per employee was 1,480, accounting for 83% of the hours paid (1,784). The average number of hours worked for a part-time employee was 990, on average 63.3% of the number for a full time employee (1,565 hours). Excluding the sectors of Public administration, defence and compulsory social security, the hourly labour cost was euro 23.60 in Eu28 and 28.4 in the Euro area. Italy's position was below the Euro area either for the hourly labour cost (euro 27.5) or for the wages and salaries (19.90 euro vs 21.20). In the same sectors the share of social contributions over the labour costs in Italy (27.7%) was above those of Eu28 (23%) and of Euro area (25.4%).
With regard to ICT sector, this is hardly identifiable by means of official statistics, as tables give the amount per code (code J as below described), and in any case general statistics for Industry and Services are available up to 2012. Secondary sources (e.g. ICT enterprises associations as ASSINTEL) reports for 2013, gross total salaries: Directors € 98,803; Managers/supervisors € 52,468; Employee € 27,333.

[24] ISTAT (Italian National statistics Agency)

NOTE: This amount is provided according to National Collective Agreements, but the labour market in Italy is very uneven, and the practice of having independent in-house staff is rather common. They are not formally employees, but self-employees or freelancer, having only one employer.

Business R&D expenditures (BERD) in ICT sector as a percentage of the total R&D expenditure (EUROSTAT) indicated as last available data the value of 0,64% (2006). According to European ICT BERD distribution by Member State (Digital Agenda, 2009), in Italy this value accounts for 8,53%

- ***Profile of ICT companies in ITALY***

Number and size[25]**.** ICT companies currently present in ITALY are **97,280 enterprises (2013), 6,033 of which have more than 10 employees.** The scenario of companies classified by size into small (>10 people), medium and large is the following:

- Small (11-50): **5,100** (2013)
- Medium (50-250): **765 (**2013)
- Large (>250): **168** (2013)

Type of business. According to BUSINESS REGISTER 2013[26], the main sector of ICT companies in ITALY is **Software production, IT consultancy and related activities** where there are present 2885 enterprises.

Other sectors are:

- Publishing activities (509)
- Motion picture, video and television programme production, sound recording and music publishing activities (507)
- Programming and broadcasting activities (224)
- Telecommunications (230)
- Information service activities (1,678)

- ***Start-up companies.***

Number in ITALY: According to the *Registro Imprese* ("Enterprises Record"), which is national based and managed by the Chambers of Commerce, at the beginning of 2015 (19/01/2015) the number of "Innovative start-ups" were 3,185. However, official data do not take into consideration all the types of existent start-ups, but only those referred to Certificate Incubators defined by Law (Decree Crescita 2.0, "Growth 2.0", 2012). A general database which includes on all start-ups is managed by EconomyUp, which is a private company working on the editorial sector (http://www.economyup.it/startup), however this not includes statistics. Another reputed source of information, which includes several types of start-ups, is the *Osservatorio Italia Startup*, by the Politecnico di Milano(Polytechnic University in Milan), focused on high-tech start-ups.
ICT start-up companies in ITALY: According to the report published by Osservatorio Italia Startup for 2014[27], the number of ICT companies accounts for **3,427.**

2. Organizational Culture of ICT sector in ITALY

- ***Common organizational culture in ICT sector in ITALY***

The organisational culture in the Italian ICT sector largely depends on the size of the enterprises,

[25] http://www.mof.gov.cy/mof/cystat/statistics.nsf/labour_33main_en/labour_33main_en?OpenForm&sub=3&sel=4
BUSINESS REGISTER 2013. Number of Enterprises by Economic Activity NACE (Rev. 2) and Size Group (2013)
[26] ISTAT, Movimprese
[27] www.italiastartup.it

which are mostly micro or small enterprises. In addition, ICT companies also deal with the Italian scenario with regard to organisational culture and management, which – as literature suggests – is characterised by three main elements, namely (Masino 2008):

- the State's influence, since for many decades Italy had a protectionist economic policy;
- the family character of many enterprises (both small and large);
- the relevance of the territory, in other words, all those social and cultural elements that characterise Italy as a community of communities, the aggregate of a number of different specific local (and very diverse) environments.

All this leads to a predominant fidelity model in recruiting managers, while performance models are still less developed than in other European countries (Bandiera et al 2008): the consequence is often a less defined management style, except of the "ownership style" (a type of corporate governance model which is basically based on the control from owners/family members in case of family firms). A corporate culture based on explicit long-term planning and focused on human capital development is not yet totally mainstreamed in Italy (Ceccarini 2011, Bandiera et al 2008) and policies addressed to favour shift are rather recent.

As there is no study or data source on organizational culture and management style addressing the ICT sector, we can only assume that most of the ICT firms are aligned with the general Italian scenario. We acknowledge however that this is a not verified statement.

- ***Companies with in-house R&D division***

There is no specific information on this issue. In past years, several OECD reports pointed out a low innovation capacity of Italian SMEs, which can also be a consequence of the short term orientation of organisational culture, where R&D requires a long-term perspective. In the past few years, policies and public financial support has been focused on investments on R&D for SMEs, and some advancement have been made with respect to this. However, given the size of most ICT companies in Italy, it is unlikely that in-house R&D divisions are common.

- ***Organizational structure among ICT sector***

Besides the logical difference between large and small companies, it was not possible to identify specific elements in organisational structures. Recruitment and staff wages (Assintel report, 2014) suggest that large firms count on more permanent workers than SMEs, which have a higher number of independent staff. This, of course, affects a lot organisational structures; however, it can depend by the current evolving situation of the Italian labour market, characterised by a number of independent workers who work in-house.

- ***Focus on intrapreneurship in general in ITALY***

No examples have been identified. Intrapreneurship is mentioned in some academic environments and top management courses (see below), but according to results of this desk research, it is not widespread.

- ***Focus on intrapreneurship in ICT companies in ITALY***

No evidence of this has been identified. An example, however, can be Engineering Informatica S.p.A.[28] declaring: "*Creating a company requires responsibilities at all levels. Engineering prefers the culture of doing, our employees strive for goals in a welcoming environment with young, motivated colleagues. Our internal organization, based on merit, leaves room for widespread managerial abilities, autonomous choices, the horizontal principle of delegation and subsidiarity. We have organized our thirty years of expansion and growth around these values. Our way of doing business is a success model that has been explained in three volumes of books published by Il Sole 24 Ore and*

[28] www.eng.it

Guerini e Associati."

3. Management practice of ICT sector in ITALY

- ***Management practice in general in ITALY***

Management style in Italian firms is mostly authoritative than participative. However, this can dramatically change in micro-companies, that usually have a very participative approach.

- ***Management practice in ICT companies in ITALY***

There no information available on managerial practice in ICT sector being different to the ones in general.

- ***Using outsourcing and crowdsourcing in ICT companies in ITALY***

No precise sources of information could be found on this issue, but secondary data (e.g. statistics on start-ups, staff surveys, etc.) lead to believe that ICT companies usually don't rely on outsourcing, unless their statute includes other organisations delegated to some activities (as the case of university spin offs).

- ***Providing outsourcing services for the ICT sector in ITALY***

ICT companies in Italy do provide outsourcing services extensively, both to public bodies and private firms. No precise data is available to this respect; considering, however, that classes (62) and (63) above mentioned both refer to consultancy services, it could be assumed that the most part of the companies provide outsourcing (although not specified). With regard to internationalisation of services, for the period 2008/2011 the import/export of IT services highlighted a loss ratio (Celata 2013): the 87% of the Italian export has European countries as destination, and the 86% of import is with EU countries as well. The first export partner is Ireland, followed by Germany and UK.

- ***Remote work practices/telecommuting***

"Smart Work" has been promoted in Italy since 2004, through national legislation, and has been also recently promoted through laws related to job contracts. However the potential of such practice has not been fully exploited by enterprises so far. Although it is not possible to estimate the extent of telecommuting in the ICY sector in Italy, the Observatory on Smart Work report 2014 points out that 8% of the companies (large and medium companies) have already applied smart work plans (in food sector, ICT, telecommunications and manufacturing).

- ***The main identified obstacles for intrapreneurship in the existing management/organizational structure in ICT sector in ITALY***

The main barrier seems to be the size of the company. To some extent this weakness is also an opportunity, as particularly micro-companies are based on strong team-groups, where each of the members is implicitly an intrapreneur.

4. Educational offer of Intrapreneurship courses in ITALY

Offer of educational organizations. *Intrapreneurship is generally included as a study topic in courses of business, economics, human resources management. In particular, a course identified is:*

- ***University of Pisa***

A module of a not-curricular PhD plus (post graduate level). Duration and credits not specified, costs are included in the PhD fee.

Offer by companies of any in-house training. No in-house training was identified by this desk

research. However, a couple of learning events offered by other organizations were found:

- ***ISTUD (independent business school)***

"Intrapreneurship" | 2 days (seminar) | Cost Euro 1,200 | No accreditation mentioned.

- ***Innovitis (no profit company working in facilitating relations between start-ups and managers)***

"Obiettivo Intrapreneurship" (no details mentioned)

5. Best Practices of Intrapreneurship in ICT Sector in ITALY

Case 1. **Engineering** (http://www.eng.it/) ICT company (software and IT services) which has been studied as good practice for original HR management and organisational culture, based on the promotion of intrapreneurship (in Italian *"intraprenditorialità"*).

Case 2. **Gruppo Loccioni** (www.loccioni.com) This is a service company that includes ICT and technological transfer, known as good practice for its openness and its insertion program, where students are trained to learn "how to improve as persons and as entrepreneurs". Their approach is definitely based on intrapreneurship.

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Romania

Population: 20,020,074
(projection at 2013)

1. Overview of the ICT sector in ROMANIA

- ***Statistics information***

The Gross domestic product (GDP) in ROMANIA for 2014 amounts to **Euro 150 018,5 MIL**, while GDP in ICT sector accounts 5% of the GDP for 2014[29].

The employment rate in ROMANIA in 2011 (Eurostat) amounted to **58.5%** while partner's source indicates **63.1%** in 2013. The information regarding employment in ICT sector is not available. According to Eurostat (values for 2012), the **hourly rates for *labour cost, wages and salaries, and direct remuneration in ICT sector,*** expressed in unit "*Per employee in full-time units, per month*", are the following:

Total labour costs (excluding apprentices) – **Euro 1,237**
Wages and salaries (excluding apprentices) – **Euro 963**
Direct remuneration, incl. bonuses & allowances (excl. apprentices) – **Euro 881**

The investment in Research and Development in ROMANIA accounts for **0,49%** of GDP.[30]

- ***Profile of ICT companies in ROMANIA***

Number and size. No structured information on number, size or type of business for Romanian ICT companies was found available by this research.

- ***Start-up companies.***

According to the RomanianStartups[31] the number of this kind of companies is **261**.

2. Organizational Culture of ICT sector in ROMANIA

- ***Common organizational culture in ICT sector in ROMANIA***

According to a recent empirical study in northwest Romania, 80% of the investigated companies say that the communication between managers and employees exists within the Romanian companies, and over 60% of them are focused on teamwork. Although about 65% of the investigated companies offer employees the freedom to use their skills, only 34% of them offer them the freedom to use their own judgment, which to some extent limits the freedom of employees to come up with new and innovative ideas at their workplace. Research indicates that the companies from the northwest region of Romania have an organizational culture that is able to support and sustain intrapreneurship (Borza, Maier, Bordean 2012).

- ***Companies with in-house R&D division***

Although the exact percentage of companies that have in-house R&D in Romania could not be retrieved from a valid source, important information about what is perceived as R&D in Romania

[29] *RomanianNationalNewAgency (2014), retrieved at http://www.agerpres.ro/english/2014/12/03/industry-agriculture-communications-have-greatest-contribution-to-gdp-growth-11-57-11*
[30] *Deloitte (2014)*
[31] *http://www.romanianstartups.com/*

could be derived. More specifically, according to the Romanian companies participating in the 2014 Corporate R&D survey, while R&D is perceived as the development of new products, processes and services (68%), it is seen even more as making significant changes or improvements to existing ones (79%). Almost half of the firms involved consider that R&D includes the joint realisation of research projects aimed at improving or developing new products and services in collaboration with other group entities/companies (46%). However, according to the report, a percentage of 19% of respondents indicated that their companies didn't have an R&D policy whereas a 29% of the companies surveyed in Romania are said to be familiar with and make use of R&D grant programmes. Finally, according to the same report, only 3% of Romanian respondents denoted that they spend nothing at all on R&D (Deloitte, 2014).

- ***Organizational structure among ICT sector***

No information found.

- ***Focus on intrapreneurship in general in ROMANIA***

Although entrepreneurship initiatives and related activities in Romania are recorded to a large extend and seem to be supported, according to recent studies comparing entrepreneurs and intraprenereus in Romania, the intraprenership activity rate in Romania is foreseen to be approximately 3-4% (Benyovsizki, A., Nagy, A., Petru, T.P., 2013).

- ***Focus on intrapreneurship in ICT companies in ROMANIA***

According to recent research results and indications, Romanian companies, irrespective of their size can be Intrapreneurial (Borza, Maier, Bordean, 2012).

3. Management practice of ICT sector in ROMANIA

- ***Management practice in general in ROMANIA***

Romanian organisations have a low uncertainty avoidance ranking, which means a ready acceptance of change and greater tolerance for risk-taking. According to recent research results, there seems to be absence of a balance of power within society short-term orientation and a higher power distance. This could be an indication that individualism is more prevalent than collectivism in Romania. This conclusion is helpful in understanding how managers and employees approach their work in this culture. In general, Romanian firms have a greater number of hierarchical levels than their international counterparts. To this end, an autocratic management style and culture is typical and participative management is seldom to be seen or practised. Furthermore, due to this structure of hierarchy, communication at the same level is slight or minimum, depended if information is required to fulfil each employee's own tasks. Everybody is focused on accomplishing their objectives and tasks and less interested in how decisions, outputs affects a peer's tasks or the company's performance" (Aiello, M., Borres, A., Bucor, M., 2008).

- ***Management practice in ICT companies in ROMANIA***

No additional information found on ICT sector in particular.

- ***Using outsourcing and crowdsourcing in ICT companies in ROMANIA***

This seems not to be very applicable in Romania although specific information about the extent at which ICT companies in Romania outsourced could not be retrieved. However, several applications indicate that Romania seems to be one of the emerging countries on providing IT outsourcing services for other countries (Flinders, K. 2013; Székely T., 2014).

- ***Providing outsourcing services for the ICT sector in ROMANIA***

Romanian companies do provide IT outsourcing services for other countries and Romania seems to

be one of the emerging countries in this domain. In fact, it is referenced as one of 'India's competitors on IT outsourcing' and it is illustrated in the top 10 countries on IT outsourcing globally.

- ***Remote work practices/telecommuting***

About 2.5% of workers are involved in telework for about a quarter of their working time. A 0.7% of workers are working involved in teleworking fulltime (Eurofound, 2010).

- ***The main identified obstacles for intrapreneurship in the existing management/organizational structure in ICT sector in ROMANIA***

Employee attachment to a corporation is low. Managers seem not to involve the employees in the strategic and tactical planning of processes of the company. So they do not have the chance to speak-up and make their suggestions or take initiatives. To become more intraprenarial and more innovative, Romanian companies need to deconstruct management orthodoxies and embrace new principles (Aiello, M., Borres, A., Bucor, M., 2008).

4. Educational offer of Intrapreneurship courses in ROMANIA

Offer of educational organizations. No relevant course or workshop that draws its solid focus on intraprenership has been identified by this research. However, forthcoming courses intend to include 'corporate entrepreneurship' as part of their syllabus. More specifically:

- **Bucharest Business School of the Bucharest University of Economic Studies**[32]

A module on interprenership will be introduced within its INDE Romanian-French MBA. The degree will be offered on full-time and part-time bases so as professionals can also attend and will be introduced in academic year 2016-2017. The module will be taught for 3 hours per week and has duration of 14 weeks. The module on 'corporate entrepreneurship' will be associated to 125 ECTS and topics to be covered include: basics of interpreneurship, how to develop interpreneurship behaviours and strategies, how to manage intrerpreneurship projects and how to assess and foster change in organisational culture so as to promote intrerpreneurship.

It is to be mentioned that Bucharest University of Economic Studies hosts UNESCO chair of training and research applied to business development in countries in economic transition.

Offer by companies of any in house training. No information on a relevant activity retrieved.

5. Best Practices of Intrapreneurship in ICT Sector in ROMANIA

Case 1. **The Impact Hub** (http://www.impacthub.ro/about-us/) is a hub for supporting innovation and innovative ideas, providing training etc. It is mainly targeting mainly entrepreneurs but in the about us section, it mentions also that they have corporate intrepreneurs as members (note that impact hub is based in several countries and not only Romania).

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Spain

Population 46,727,890
(projection at 2013)

1. Overview of the ICT sector in Spain

- ***Statistics information***[33]

The Gross domestic product (GDP) in Spain for 2014 amounts to **Euro 1 058 469 MIL** while GDP in ICT sector accounts for Euro **€ 83.171.951** (for 2012)[34] .
The employment rate in Spain in 2011 (Eurostat) amounted to **57.7%** while **7.6%**[35] accounts for employment in ICT sector in the year 2013. According to Eurostat (values for 2012), the ***labour cost, wages and salaries, and direct remuneration in ICT sector,*** expressed in unit "*Per employee in full-time units, per month*", are the following:

Total labour costs (excluding apprentices) – **Euro 3,976**
Wages and salaries (excluding apprentices) – **Euro 2,964**
Direct remuneration, bonuses and allowances – **Euro 2,616**

The investment in research in ICT sector in Spain accounts ***for Euro €995,833*** (as of 2012).

- ***Profile of ICT companies in Spain***

Number and size[36]**.** ICT companies currently present in Spain are **29277.** The scenario of companies classified by size into small (>10 people), medium and large is the following:
Small (11-50): **86,64%**
Medium (50-250): **12,67%**
Large (>250): **0,68%**

Type of business. According to the statistical segmentation for the ICT sector, there are four main sectors of ICT companies in Spain determined:

- Computer programming, consultancy and other computer related activities
- Telecommunications
- Websites, data processing, hosting
- Editing of software (gaming and other software)

Start-up companies. In 2012 the total of start-up companies in Spain was **287.311**, of which 3920 i.e. almost **13.38%,** were ICT companies. This number amounts for the 1.36% of the overall number of the ICT companies on Spain (previous section).

2. Organizational Culture of ICT sector in Spain

Common organizational culture in ICT sector in Spain[37]**.** The Spanish ICT sector is highly fragmented since more than 80% of ICT sector companies are SMEs. The capabilities and resources at the disposal of these companies to implement and maintain management policies are very limited compared to large companies.

Although there are certain responsibility profiles in most companies, CTO, marketing and human

[33] *Instituto Nacional de Estadística (INE). Indicadores del sector TIC (CNAE-2009)*
[34] *Instituto Nacional de Estadística*
[35] EL PAIS Newspaper (2012)
[36] http://www.ontsi.red.es/ontsi/sites/default/files/informe_del_sector_ticc_2013_edicion_2014.pdf
[37] *CONETIC, 2012. Informe del estudio retributivo del Sector TOC Español.*

resources director, project managers and area managers in general, the structures are mixed and very horizontal. As stated policy, there seems to be no differentiated structure. There are some profiles with multiple roles: project-oriented, services, etc. so to establish a tree structure in the company. Moreover, the views of these companies and professionals indicate a clear future trend pointing to a pyramidal structure under a defined career plan; currently, this seems to be an expectation for the future. There no significant differences with organisational structure among ICT sector.

***Research and Development*[38].** The percentage of ICT companies that have in-house R&D division amounts to 16,3% of ICT companies.

Focus on intrapreneurship in general in Spain. This is a new term for companies (in general). For example, it can be stated that if inserted in popular research engines, the term "Intrapreneurship" (in Spanish Intraemprendimiento) produces 50,900 results while the term "Intrapreneur" (in Spanish Intraemprender) produces 3,580 results. Hence, the general feeling of this research is that the term is spreading but there is no further data that can confirm that all companies in Spain have a focus on Intrapreneurship.

***Focus on intrapreneurship in ICT companies in Spain*[39].** This concept is a mainstream in the ICT sector based on the commitment to innovation, involving the employee, improving quality and providing services or products with higher added value is emerging in Spain. The commitment to innovation in ICT companies generally allows a major involvement of the professionals, improving aspects of the company. There are innovation-oriented SMEs promoting the involvement of its employees with the aim of promoting eventual spin-offs from innovative technological ideas through Innovation contests with prizes related to the sector (mobile, consoles, electronic devices in general).

3. Management practice of ICT sector in Spain[40,41]

Management practice in general in Spain is permissive autocratic.
Management practice in ICT companies in Spain is participative/democratic. A deeply rooted concept for SMEs does not seem to be clearly structured. SMEs do not normally hold on a clear organizational structure, with employers and employees having close links between them.

Using outsourcing and crowdsourcing in ICT companies in Spain. This phenomenon does not occur specifically often among companies in Spain.

Providing outsourcing services for the ICT sector in Spain. The consolidation of cloud computing services and technologies are generating new business opportunities for the sector, while generating a reduction in IT departments. Increasingly, companies see a viable opportunity to reduce their ICT capital costs and opt for outsourcing services in specialized companies which, in many cases, are located in other countries.

Remote work practices/telecommuting seems to be a growing practice but it is not very common yet.

The main identified obstacles for intrapreneurship in the existing management/organizational structure in ICT sector in Spain seems to be current economic crisis. The national ICT sector seems to be very permeable in terms of new management/organizational structures/cultures to promote intrapreneurship. However, the current economic situation will increasingly complicate the retention and attraction of talent.

[38] *Instituto Nacional de Estadística*
[39] *CONETIC, 2012. Informe del estudio retributivo del Sector TOC Español.*
[40] *Grupo de Responsables de Formación de Entidades Financieras (GREF)*
[41] *CONETIC, 2012. Informe del estudio retributivo del Sector TOC Español.*

4. Educational offer of Intrapreneurship courses in Spain

***Offer of educational organizations*.**

A specific course in Spanish language is identified at:

- **European University Miguel de Cervantes[42]**

Course title: **University Expert for Entrepreneurs and Intrapreneurs**, *"Experto Universitario para Emprendedores e Intraemprendedores"*
Duration: 700 hours
Cost: € 2,900
Credits: 28 credits

Offer by companies of any in house training. No information found.

5. Best Practices of Intrapreneurship in ICT Sector in Spain

Case 1 – ALTRAN (http://www.altran.es/)

National award for Innovation and Design in 2011 (Innovative Human Resources).

95% of the jobs Altran has created in the last two years have a high technological profile. Additionally, the number of contracts reached 294. This represents an interesting figure compared with the total workforce of the company reaching 2,000 employees, which places the company as one of the main technology companies generating sustainable employment in Spain.

In addition, Altran has created an innovative training and staff development model based on Innovative learning activities implemented internally focused on creativity and Innovation Techniques and the promotion of a center of Excellence: Intelligence, Technology Radar, Intelligence Seminars or workshops to foster team creativity and innovation.

Case 2 – Telefónica

Telefonica is one of the major telecom in Spain and also has an international profile as it is present in 21 countries and employs an average of 120,000 professionals. Its consolidated revenues as in 2014 were 37,978 million euros in January-September 2014 and more than 316.1 million customers in September. It also has various initiatives to promote entrepreneurship among its employees, such as the Idealab (a blog for ideas from employees, i.e. http://www.aunclicdelastic.com/la-era-de-la-innovacion/), canal de emprendedores (entrepreneuship channel) and Optima (corporate efficiency). More than 10% of the workforce of Telefónica Spain is approaching to participate in these initiatives; such initiatives affect over 3,000 people who are leading the development of new initiatives within Telefónica. The logic behind these initiatives is to promote projects and initiatives within the company with average duration of four months and if they achieve the objectives pursued, they may have the opportunity to compete for prizes within the company.

Case 3 – A blog INTRAEMPRENDER (Intrapreneur)
http://intraemprender.blogspot.com.es/

[42]http://www.uemc.es/posgrados/experto-universitario-para-emprendedores-e-intraemprendedores

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EU FRAMEWORK

Policy framework

The European market is a very dense business network in which small medium enterprises (SMEs) account for 99% of all businesses in the EU. Moreover, as stated by DG Growth (Internal Market, Industry, Entrepreneurship and SMEs), over the past five years SMEs have created around 85% of new jobs and provided two-thirds of the total private sector employment in the Europe. SMEs and entrepreneurship are considered the backbone of the economic growth, innovation, job creation, and social integration in the EU.

Some concrete actions taken to promote entrepreneurship by the EC include (a) the Small Business Act for Europe (SBA) that illustrates the SME policy for EU institutions and countries and (b) Entrepreneurship Action Plan on "Reigniting the entrepreneurial spirit in Europe". In particular, the Action plan identifies three main areas of intervention: entrepreneurial education and training to support growth and business creation; removing existing administrative barriers and reigniting the culture of entrepreneurship and nurturing the new generation of entrepreneurs.

In particular, the emphasis is given for the need of awareness rising of entrepreneurship concept in education and knowledge transfer. "Budapest Agenda", a document issued 2011, is an attempt to provide "*a catalogue of measures to be drawn upon by stakeholders at all levels "within the world of education, business and the wider community in order to take forward the development of teacher education in entrepreneurship*".

The EC has made an effort in several directions to support and put emphasise on entrapreneurship. A summary of some important initiatives would include:

- Recommendation of the European Parliament and the Council: entrepreneurship a key competence for all (2006)
- Commission Communication on "Fostering entrepreneurial mindsets" (2006)
- Oslo Agenda on Entrepreneurship Education in Europe (2007): a detailed menu of actions
- Small Business Act for Europe (2008)
- EU 2020 strategy: focus school curricula on creativity, innovation and entrepreneurship (2010)
- Budapest Agenda (2011)

Another interesting initiative that fosters innovative way of thinking is Watify[43] - a not-for-profit initiative supported by the EC and DG growth, based on several sessions of serial entrepreneurs explaining how they have overcome their doubts while starting or digitizing their own business. As stated by the EC website, Whatify "supports digital start-ups by mentoring young entrepreneurs, empowering them to succeed".

On the other side, there is not specific distinction between "entrepreneurship" and "intrapreneurship" in official EC communications. The documents often refer to creativity, innovation and risk taking, as well as the ability to plan and manage projects. As highlighted by the project "Intrapreneurship – the new aim of vocational education and training", in particular countries of Europe, the term "Intrapreneurship" is not included in the official documents, the strategies and national programmes refer more to entrepreneurship or business competences. Furthermore, entrepreneurship is included in the national curricula of general secondary schools in only a minority of European countries. In higher education, the entrepreneurship courses are offered mostly in business and economic studies, as illustrated by this report.

[43] http://ec.europa.eu/enterprise/dem/watify

Social networks, conferences and relevant initiatives

An international event worth of mentioning in this section is the Intrapreneurship conference organised on annual bases since 2011 across Europe[44]. In addition to the promotion of the event itself, the community supports intrapreneurship concept through a blog dedicated to creative colleagues tackling issues such as intrapreneurship, innovation and leadership and a selection of studied webinars around intrapreneurship and corporate innovation.

Social networks and media are also crucial instruments to ensure communication and awareness rising of the intrapreneurship concept as they are the "agoras" of today for young and creative minds. For example, a linked-in group of Intrapreneurs was established in 2009 as a private group while an ICT intrapreneurs exists since 2013 .

For example, the European Business Network for Corporate Social Responsibility has launched a European Social Intrapreneurship Programme create awareness about intrapreneurship and recognise leading companies that offer an enabling environment for innovation and entrepreneurship as well as to support the efforts of individuals who are leading new social-business innovations from within companies.
It could therefore be suggested that the concept of entrepreneurship is a basis for the Intraprenuership culture in the organisation and that it should be majorly fostered and educated within the sector of vocational education and training.

Another significant initiative on EU level is a project **Innosupport** co-funded under the Lifelong Learning programme. The project regards an extended and updated practical Guide to Support Innovation in Small and Medium Enterprises that was released in May 2009. Its content covers subjects which are part of the innovation process. The guide provides reach information to support intracompany innovation in SMEs, closely related with intrapreneurial cultures.

EUCIO experience

European Chief Information Officer (EuroCIO), a not-for-profit representative for the large IT-users (demand side of IT), both private and public, is one of the partners of INTRAPRISE project. In order to have a first insight on the state of awareness of intrapreneurship concept among companies an initial short survey was conducted on following aspects:

What are the current initiatives for the ICT sector that promote intrapreneurship? (Digital Agenda for Europe, Future Internet PPP etc.)

EuroCIO is a partner in the Secretariat of the Grand Coalition project (previously called the Thematic Network) which has the objective of disseminating the results of the digital agenda initiatives. The 13 goals of the Digital Agenda were primarily concerned with internet availability and usage. Pillar V Research and innovation specifically refers to research and innovation. However, there was very little knowledge or recognition or experience across the members of these initiatives.

Specific mention was made of the 'les poles de compétitivité' initiative in France and the competitiveness clusters they have created. A competitiveness cluster brings together large and small firms, research laboratories and educational establishments, all working together in a specific region to develop synergies and cooperative efforts. Other partners may be brought in, such as public authorities, either local or national, as well as firms providing business services. Some of these clusters include 'promoting innovation' as an objective and it was agreed that local initiatives such as this could yield benefits.

[44]http://www.intrapreneurshipconference.com/

As one of the best practices involving EuroCIO is the GUIDE project, which addresses e-Leadership skills requirements. As part of this project, it was clearly identified by EuroCIO that one of the barriers to innovation is a shortage of appropriate skills. ICT skills were referenced specifically, but it was agreed that many of the skills and capabilities that promote innovation and entrepreneurial behaviours within organisations are in short supply.

Are there any directives or norms that add value to this process?

EuroCIO members could not identify any external policies, directives or norms that facilitate entrepreneurial activity within their organisations.

Do you use any incentives (financial, learning and education, networking, P2P experiences) to encourage intrapreneurship within your organization?

Some companies provide financial incentives, such as bonus payments, to reward good ideas. If the idea is considered to be of commercial significance, it will get funding for pilot projects or additional market research to validate the proposition. One of EuroCIO members, a media company, organises yearly innovation awards where 20 to 30 projects are submitted and 2 to 3 receive approval. Experience sharing events are conducted to promote communication and collaboration within the organisation. This again reflects the fact that the member organisations are more likely to rely on internal mechanisms to promote 'intrepreneurship' at this time.

Do you have any best practices that you can share?

Some of the member organisations have internal schemes that reward entrepreneurial behaviour and activity. It was generally felt that internally generated schemes were the most common approach to fostering innovation within organisations.

One such example is a business innovation group (implemented by a European car manufacturer) where ideas are collected and supported up to the point that the employees get funds and are fully freed up from their normal duties. Two commercially successful ventures began in this way.

Another organisation has implemented a lab of approximately 10 people who are co-located in a fresh environment and have the following objectives: (a) capture external innovation (open innovation with start-ups, market watch, partner with venture capitalist funds); (b) Promote internal innovation (support the Bus organic growth, support intrapreneurs, launch and incubate projects) and (c) Investigate breakthrough ideas (contribute to the corporate strategic planning).

Other member organisations use similar 'incubation' schemes to both identify and validate new innovative business concepts.

EuroCIO members conclude that the vast majority of schemes and processes to encourage entrepreneurial behaviour within the member organisations are internal in nature. The experiences are hence very self-contained rather than collaborative but members are definitely very available and interested to the concept. It is acknowledged that staff can be an engine but the concept is still not fully embraced. The EuroCIO members agreed there is a demand for educational programmes that would 'train and develop' entrepreneurial capabilities and are available to respond to future recommendations in this direction.

SOME FIRST FINDINGS OF INTRAPRISE PROJECT

Main user needs

- ***Awareness rising on intrapreneurship***. Need to better understand the concept in general and the benefits that could derive on economic and social level
- ***Cross cultural management***. For example, in Belgium the work seems to be more effective when it is clear among colleagues that Belgians generally like working in teams and collaborate well across hierarchical lines. Role allocation within the team is generally quite clearly defined and people will take greater responsibility for their specific task than for the group as a whole.

A tentative list of interesting inputs on contents for the course and modules

Both for employers and employees: ***better understanding and getting acquainted with the concept of "intrapreneurship".***

Company level:

- Awareness of the organisational culture of a company and comprehension of the 'big picture';
- Linking the business horizon of a company with personal entrepreneurial aspirations;
- **Belgian tax law provides the opportunity to benefit from a special investment deduction for investments in research and development of new products and forward-looking technologies that are environment friendly** (not harming the environment). This innovative law has encouraged the formation of R&D divisions. The investment deduction creates the possibility for taxpayers to claim a tax deduction - in addition to the normal tax depreciations - when making qualifying R&D investments. Awareness rising could be made on this and similar initiatives across EU/countries of the consortium;
- Focus on steering **complex projects within a business**, i.e., multi-faceted strategic projects, in various domains (finance, information systems, human resources, marketing, supply chain, etc.);
- Recognising the 'valuables' within a company;
- Rethinking the 'department philosophy', letting knowledge and ideas circulate;
- Bio-technology and telecommunications, among medium to large companies, have a greater focus on intrapreneurship than other sectors;
- **Outsourcing:** better insight of the phenomenon in general.

Individual level:

- 'I have an innovative idea': development of personal ideas and how to implement them, people to talk to within the institution, steps to follow;
- Risk taking within a company: way to evaluate the risk, what are the limits; way to treat/reward/promote such behaviour;
- Taking initiative: perceiving a bigger context around a single task;
- Awareness of own and others' strengths: identify the proper strengths and those of others; building teams with complementary strengths;
- Practical exercise: a successfully complete a concrete project, **acquiring competencies related to personal development (*soft skills*)**: taking initiative, teamwork, better self-knowledge (personal development).

CONCLUSIONS

The traditional management structure of most organizations simply focuses on performing old tasks more efficiently, instead of creating new tasks or new ideas to address new challenges. However, as suggested by Fig 4., the attitude towards entrepreneurship across EU countries is quite relevant. If organisations would realize the competitive advantage innovation provides, they could learn to stimulate, support, and protect their intrapreneurs as part of their corporate strategies. In this sense, companies and organisations should become more creative and responsive in recognizing and preserving the strengths and skills of employees to promote individual and overall growth in performance and efficiency. Top managers should combine reactiveness, risk-taking, innovativeness, competitive aggressiveness, and autonomy.

The literature strongly suggests that any foreseen training in this sense should target two directions: (1) ***intrapreneurial mind-set*** and (2) ***knowledge of processes and factors for building this action plan***. Hence, the target communities of such trainings could be both **employees but also managers and employers**. In this manner the entire value chain of service providers would be covered and more exposed to awareness rising of intrapreneurship concept and it benefits, economic as well as cultural and social.

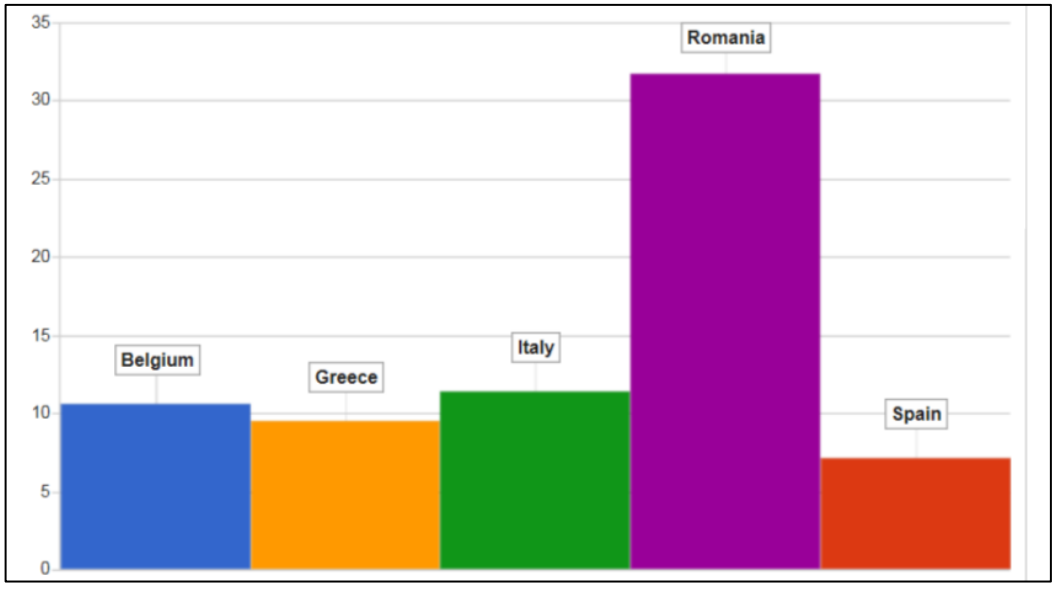

Fig. 4 Entrepreneurial intention across INTRAPRISE partner countries in 2014 (data for Cyprus missing)

Source: Global Entrepreneurship Monitor (GEM), data from Global Entrepreneurship Research Association (GERA)

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ANNEX I: O1-A1 – Defining research and survey methodology, guidelines and tools

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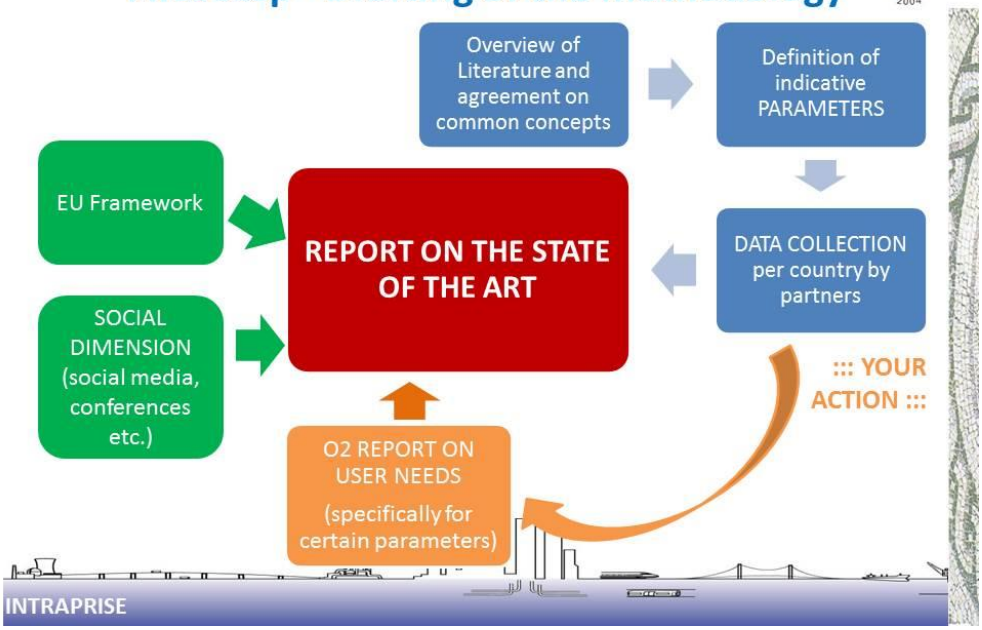
First step - Drafting of the methodology



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COUNTRY PARAMETERS (1/4)

P.1 Overview of the ICT sector in your country

P.1.2 Statistic information

- Population
- GDP of the area at last census
- GDP in ICT sector
- Employment rate
- Employment rate in ICT
- Labour cost, wages and salaries, and direct remuneration
- Investment in research in ICT sector


intra•pre•neur
(in'trə prə noor') *n.* a person within a corporation who is given the freedom and resources to initiate projects, business ventures, etc.

P.1.2 Profile of ICT companies in your country

- Number
- Size
- Type (sector i.e. creative, gaming, hardware, software?)
- Ratio (percentage):

start-up companies in ICT sector/overall number of companies in ICT

start-up companies in ICT sector/overall number of start-up companies in the country

NOTE: Pie charts and graphics will accompany this section

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COUNTRY PARAMETERS (2/4)

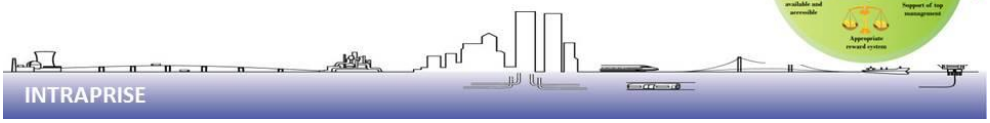
P.2 Organizational Culture of ICT sector in your country

What is the common organizational structure in ICT sector in your country?
For example, do all ICT companies have divisions such as: Management, Commercial, Research&Development, Implementation&Assistance?

What is the percentage of companies that have in-house R&D division? Consider also the aspect of "openness": in what way is the company open to innovative ideas from outside?

Can you identify any differences in organizational structure among ICT sector? If yes, what are these differences?

Is there a specific branch that has a focus on Intrapreneurship (e.g. gaming industry, software development, creative industries, on-line and mobile banking and payment services, IT Security etc.?)



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COUNTRY PARAMETERS (2/4)

P.2 Organizational Culture of ICT Companies in your country

NOTE FOR O2 SURVEY

Constructive
Valuing members, self-actualizing, affiliative, and humanistic/encouraging normative beliefs (expected behavior or conduct)
Passive-defensive
Approval-oriented, traditional and bureaucratic, dependent and nonparticipative, punish mistakes but ignore success
Aggressive-defensive
Confrontation and negativism are rewarded, nonpar*ticipative, positional power, winning valued, competitiveness rewarded, perfectionistic*
(include reference)

Christophe suggestion: we should consider the aspect of "openness": in what way is the company open to innovative ideas from outside?

(this slide is a reminder of an internal discussion)

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COUNTRY PARAMETERS (3/4)

P.3 Management practice

What is the management practice in general in your country?
What is the management practice in ICT sector in your country? Is it in anyway different to general management practice? If yes, how?

Do ICT companies in your country rely on outsourcing or crowdsourcing?
If yes, what is this percentage of this action and in which countries?

Do ICT companies in your country provide outsourcing services? If yes, for which companies (countries)?

Do ICT companies in your country rely on working-from-home employers?
If yes, what is this percentage of this action?

What are the main obstacles for intrapreneurship in the existing management/organizational structure in ICT sector in your country?

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COUNTRY PARAMETERS (4/4)

P.4 Offer of Intrapreneurship courses in your country: Business/other schools, educational organizations and/or training courses?
Any specific courses (public/private)?
Any in house training in companies?

P.5 Best Practices of Intrapreneurship in your country in ICT Sector (1-5max)
Illustration of 1 to max 5 cases of best practices indicating aspects such as good practices (e.g. awards), related initiatives and local champions.

Link between Organizational Culture/Management practice and Performance could be considered:
Is there any study in your country done on this aspect?
Are ICT companies in your country familiar with the "Intrapreneurship"?
Have they implemented this concept and how?

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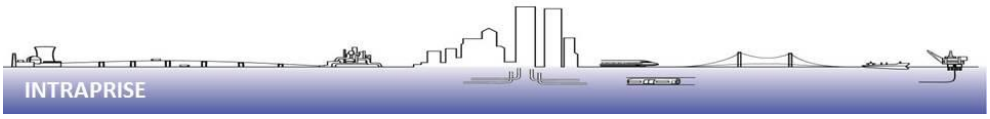
EU framework

- Policy: Overview on current initiatives relevant for ICT sector (e.g. Digital Agenda for Europe, Future Internet PPP, etc.)
- Directives&Norms
- Incentives (financial, learning and education, networking, P2P experiences)
- Best practices (EU projects/internal experiences among EU stakeholders, etc.)



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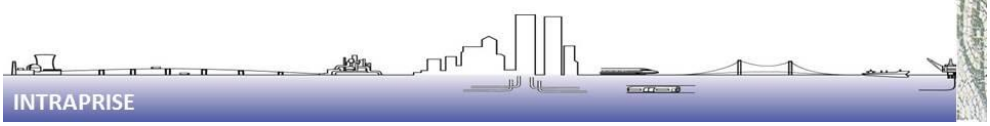
DATA COLLECTION

National as well as EU and international resources will be consulted (e.g. EUROSTAT)

For P.3, P.4 and P.5 specific questions should be inserted in the survey of O2 → to be discussed with O2 Leader

"Social dimension": some first inputs will be given by CUT, all partners welcome to contribute

Parameters will be collected and classified for each country following the template edited by CUT



HOMEWORK

CUT, R&Do (Cyprus)
Militos (Greece)
Scienter (Spain)
SINLO (Romania)
Melius (Italy)
MTC (Belgium)

EuroCIO (EU policy level and other countries)

Output → O1-A3

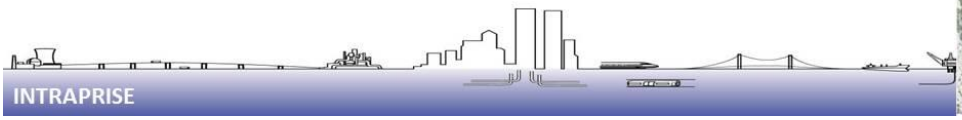
O1-A3 – REPORT ON CURRENT ORGANIZATIONAL STRUCTURES AND MANAGEMENT PRACTICES AND NEEDS

Erasmus+

TIP: 10 Dec 2014 in Eindhoven

Thank you for your attention

Erasmus+



ANNEX II: STATE OF THE ART ANALYSIS REPORT OF MANAGEMENT PRACTICES AND ORGANIZATIONAL CULTURE IN THE ICT SECTOR IN YOUR COUNTRY: GUIDELINES FOR DATA COLLECTION AND HOMEWORK FOR PARTNERS

Introduction

As stated by the INTRAPRISE project, "*companies today need to find that 'added extra' in order to stay competitive to their existing customers and attract new customers. One way to do this is to encourage innovative and creative behaviour within the organisation that is to say to* ***encourage intrapreneurs***".

Intrapreneurship as a term was conceived and first written in 1978 by Gifford Pinchot III, an American entrepreneur and his wife Elizabeth Pinchot. In 1992, The American Heritage Dictionary of English language has acknowledged the popular use of this new word and it included it in its 3rd 1992 Edition. "Intrapreneur", to mean "*A person within a large corporation who takes direct responsibility for turning an idea into a profitable finished product through assertive risk-taking and innovation*"[45]. In fact, Intrapreneurship is now known as the practice of a corporate management style that integrates risk-taking and innovation approaches, as well as the reward and motivational techniques, that are more traditionally thought of as being the province of entrepreneurship. An intrapreneur could thus enable businesses to expand into other areas of their market by identifying new products or services to existing or new customers. ***Intrapreneurship could therefore be defined as any entrepreneurial activity performed within an organization***.

For purposes of the INTRAPRISE project, all participating countries will firstly examine the management practices and organisational culture, in particular in ICT sector, in their country. This initial collection of information, data and references will give an overview not only of the state of the art in a single country, but also a picture of the possibilities for implementing intrapreneurship as a more common practice and for supporting it if /where already existent.

Methodology and guidelines for data collection

In order to access the state of the art of management practices and organisational culture across the countries of INTRAPRISE consortium, some specific issues will be examined by the partners. The information will be collected by the following partners: CUT and R&Do (Cyprus), Militos & Found.ation (Greece), Scienter (Spain), SINLO (Romania), Melius (Italy) and MTC (Belgium).

The issues are groupped into the following categories:

7. **Overview of the ICT in (country name)**
8. **Organizational Culture of ICT sector in your country**
9. **Management practice of ICT sector in your country**
10. **Offers of Intrapreneurship courses in your country: Business/other schools, educational organizations and/or training courses**
11. **Best Practices of Intrapreneurship in ICT Sector in your country**
12. **Feedback on this document**

[45] https://www.ahdictionary.com/word/search.html?q=intrapreneur&submit.x=38&submit.y=27

PARTNER ACTION - complete the following template for your country following these steps:

6. Read carefully the description of O1 in the Application form document (pp.46-49)
7. Read carefully the question of this document and perform desktop research following the TIPs indicated for each category.
8. Consult the Powerpoint working document discussed among partners (attached to this document)
9. Provide answers to all the questions of this document for your country and send the feedback to the coordinator of this action.

General remark:
There is a probability that many of the information requested will not be so straight forward to find in every country. For this reason, it is good practice to look into all sorts of documents and literature, both official ones and those that are less formal. Please, ***ALWAYS*** refer to the source of your information with citation (bibliography) or a web link. In case the information is simply missing, informal, dated or not well documented, it could still be very useful for the report but **specify this issue clearly** in your report.

Country Profiles

STATE OF THE ART IN NAME OF YOUR COUNTRY

Name of the Country:	
1. Overview of the ICT in NAME OF YOUR COUNTRY	
1.1 Statistics information	
QUESTIONS	**ANSWERS**
a. What is the population in your country at last census (2011)[46]?	
b. What is the Gross domestic product (GDP) of the area according to the last census?	
c. What is the GDP in ICT sector?	
d. What is the Employment rate in your country?	
e. What is the employment rate in ICT sector in your country?	
f. What are labour cost, wages and salaries, and direct remuneration in ICT sector in your country?	
g. What is the investment in research (if any) in ICT sector in your country? *Note: If necessary, express this amount in percentage of the national budget.*	
TIP: to answer questions from the section 1.1 please refer to (1) EUROSTAT website here: http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database and (2) to the website of the National Institute of Statistics in your country (e.g. ISTAT in Italy, INE in Spain, ELSTAT in Greece etc.). ***If case you are not familiar with your National Institute check here: http://www.wto.org/english/res_e/statis_e/natl_e.pdf***	
1.2 Profile of ICT companies in your country	
QUESTIONS	**ANSWERS**
a) Number: how many ICT companies are present in your country?	
b) Size: Classify ICT companies by size SMALL, MEDIUM AND LARGE *Note: consider small enterprises with 10 person and above*	
c) Type: What is the main business sector of ICT companies in your country? What are other sectors? *Note: Use sectors provided by your national source or use these categories: creative industry, gaming, hardware, software, IT security, tourism, other?*	
d) Start-up companies	
What is the number of start-up[47] companies in your country?	
What is the number of ICT start-up companies in your country?	
Calculate the ratio "Start-up ICT/all ICT" (use response from 1.2a)):	

[46] Year of the last Census in Europe

[47] In order to have the most updated information, the limit should be kept up to last 5 years.

start-up companies in ICT sector/overall number of companies in ICT	
Calculate the ratio "Start-up ICT/all Start-up": start-up companies in ICT sector/overall number of start-up companies in the country	
TIP: to answer questions from the section 1.2 consult the websites of following bodies and institutions in your country: ***Chamber of commerce, Cluster organizations of ICT companies, single ICT companies (small, medium or large).*** ***Please specify the source of your information.***	

Name of the Country:	
2. Organizational Culture of ICT sector in your country	
QUESTIONS	**ANSWERS**
a) What is the common organizational culture in ICT sector in your country? *For example:* • *Do all ICT companies have divisions such as: Management, Commercial, Research&Development, Implementation&Assistance?* • *How about the way of 'doing things' – what is the mission, vision, values of ICT companies?* • *What is the organisational 'paradigm' and power relations roles of company leaders?* • *If possible, illustrate how are the tasks are delegated and how conflicts are dealt with?* • *If possible, illustrate how ideas are circulating and exploited and how team work is facilitated?*	
b) What is the percentage of companies that have in-house R&D division? *Consider also the aspect of "openness": in what way is the company open to innovative inputs ideas from outside?*	
c) Can you identify any differences in organizational structure among ICT sector? If yes, what are these differences?	
d) Do companies (in general) in your country have a focus on Intrapreneurship? If yes, in which sector? If there are more branches state all of them.	
e) Do ICT companies in your country have a focus on Intrapreneurship? If yes, is there a specific branch in your country ICT sector that has a focus on Intrapreneurship (e.g. gaming industry, software development, creative industries, on-line and mobile banking and payment services, IT Security etc.?)	

Name of the Country:	
3. Management practice of ICT sector in your country	
QUESTIONS	**ANSWERS**
a) What is the management practice in general in your	

country? If possible, identify which management style[48] is mostly pursued among autocratic, consultative, participative, democratic etc.[49]? b) You can also consider some more recent management styles such as "chaotic style" or "lassez-fair"[50], too.	
c) What is the management practice in ICT sector in your country? Is it in anyway different to general management practice? If yes, how?	
d) Do ICT companies in your country *rely on outsourcing or crowdsourcing* i.e. do they shift some of their activities to an outside company, which can do them more cost-effectively? If yes, what is this percentage of this action and in which countries? (or what is the number of ICT companies that do it)	
e) On the contrary of 3c) do ICT companies in your country *provide outsourcing services* i.e. do ICT companies from your country perform activities of ICT companies established in other countries? If yes, for which companies (countries)?	
f) Do ICT companies in your country rely on remote work practices/telecommuting employees? If yes, what is this percentage of this action? (or what is the number of ICT companies that do it)	
g) From the information you gathered, what seem to be the main obstacles for intrapreneurship in the existing management/organizational structure in ICT sector in your country?	

Name of the Country:	
4. Offers of Intrapreneurship courses in your country: Business/other schools, educational organizations and/or training courses	
QUESTIONS	**ANSWERS**
Are there any specific courses (public/private) within University degrees in your country? If yes, please specify: - Name of the institution - Name of the course degree (Master in …, Bachelor in …) - Duration - Cost (free or upon payment) - Credits given to students (if any)	
Is there any in house training in companies?	

[48] The method of leadership that an administrator usually employs when running a business. Depending on business circumstances, a manager might need to employ more than one management style in a more or less formal way to achieve the highest degree of effectiveness in their role. A variety of management style types exist, such as autocratic, paternalistic, laissez-faire, democratic, informal, participatory, supervisory, etc. and a particular style might be more suitable for a certain type of business or employee group than another (as retrieved from: http://www.businessdictionary.com/definition/management-style.html#ixzz3MALpegfp).

[49] http://www.haygroup.com/downloads/fi/leadership_that_gets_results.pdf

[50] http://en.wikipedia.org/wiki/Management_styles

If yes, please specify: - Name of the company - Name of the course - Duration - Cost (free or upon payment) - Accreditation (if any) given to participants (e.g. Diploma or similar?)	
TIP: Have a look at the offers from Universities and companies. Also, try to look for publicly offered courses. In some countries, due to the recent economic crisis, the creative approach (and hence Intrapreneurship) was very much fostered by public institutions. Some of them have organized specific courses to help people looking for a job. Perhaps there are some good examples in your country.	

Name of the Country:	
5. Best Practices of Intrapreneurship in ICT Sector in your country	
Illustrate from 1 to max 5 cases of best practices indicating aspects such as good practices (e.g. awards, competitions, special publications, conferences, events, fairs etc.), other related initiatives and local champions (people that could inspire others with their story). ***TIP on Words Count: 200-250 words per case***	
Case 1	
Case 2	
Case 3	
Case 4	
Case 5	
TIP: use info from local and national newspaper and means of communications as well as chamber of Commerce and ICT Cluster organisations. Local dimension is very important in this segment. We should illustrate cases that have already inspired other people or that can inspire new ones.	

Overview in Europe (*only for EUROCIO*)

Name of the Country: EUROPE	
1. Policy: Overview on current initiatives relevant for ICT sector (e.g. Digital Agenda for Europe, Future Internet PPP, etc.)	

2. Directives&Norms
3. Incentives (financial, learning and education, networking, P2P experiences)
4. Best practices (EU projects/internal experiences among EU stakeholders, etc.)
Case 1 *Case 2* *Case 3* …..

Comments

Name of the Country:	
Feedback on this document	
Please provide any feedback or comments on this exercise. *For example, did you have any difficulties filling in this document? If yes, for which questions in particular?* *Did you find any interesting information that you did not know where to fill-in? Please state it here.* *Any other comments?* ***TIP: Your feedback in this section will be valuable inputs for O2 survey that will take place in the following phase of the project.***	