Application of social media and ICT-tools in new and small business ventures

Master’s Thesis in Information Systems

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Abstract
The current research emphasizes on various questions raised and deliberated upon by different entrepreneurs. It provides a valuable contribution to comprehend the importance of social media and ICT-applications. Furthermore, it demonstrates how to support and implement the management consulting and business coaching start-ups with the help of social media and ICT-tools.

The thesis presents a literary review from different information systems science, SME and e-business journals, web articles, as well as, survey analysis reports on social media applications.

The methodology incorporated into a qualitative research method in which social anthropological approaches were used to oversee the case study activities in order to collect data. The collaborative social research approach was used to shelter the action research method.

The research discovered that new business start-ups, as well as small businesses do not use social media and ICT-tools, unlike most of the large corporations use. At present, the current open-source ICT-technologies and social media applications are equally available for new and small businesses as they are available for larger companies. Successful implementation of social media and ICT-applications can easily enhance start-up performance and overcome business hassles. The thesis sheds some light on effective and innovative implementation of social media and ICT-applications for new business risk takers and small business birds.

Keywords | Social Media, Information Systems, ICT, Entrepreneurial Start-ups, New Businesses, Small Enterprises, Information Technology & Management Consulting.
ACKNOWLEDGEMENT

This research is dedicated to the Author’s parents, especially to his mother who gave her life and who sacrificed her time, effort and money for his education. Likewise, the author acknowledges Turku School of Economics, its professors, teachers and especially coordinator Eija Koskivaara, who facilitated and believed in his capabilities and guided him on every single step during the entire program and research work. Finally, a deep gratitude to Mr. David C. Roberts who supported motivated and encouraged the Author for this start-up case and guided him in every possible and practical aspects of running a start-up venture.
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<th>Description</th>
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<tbody>
<tr>
<td>ATL</td>
<td>Above the bottom line Approach</td>
</tr>
<tr>
<td>BLC 2010</td>
<td>Business Learning Cruise 2010</td>
</tr>
<tr>
<td>BTL</td>
<td>Below the bottom line Approach</td>
</tr>
<tr>
<td>CBIS</td>
<td>Cooperation based Information System</td>
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<tr>
<td>CRS</td>
<td>Customer Registration System</td>
</tr>
<tr>
<td>CSF’s</td>
<td>Critical Success Factor Approach</td>
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<tr>
<td>E³</td>
<td>Enterprise Engine</td>
</tr>
<tr>
<td>ERP</td>
<td>Enterprise Resource Planning System (Eventbrite Software)</td>
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<tr>
<td>HR</td>
<td>Human Resource</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<td>IS</td>
<td>Information Systems</td>
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<td>PIS</td>
<td>Payment Information System</td>
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<tr>
<td>SME</td>
<td>Small and Medium-sized Enterprises</td>
</tr>
<tr>
<td>SMS</td>
<td>Short Message Service</td>
</tr>
<tr>
<td>STM</td>
<td>Solent Technical Mouldings LTD</td>
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</table>
1 INTRODUCTION

1.1 Importance of the research

Starting a new business or managing an established business can be an arduous task for any entrepreneur. Social media and Information and Communication Technologies (ICT) applications offer a variety of solutions to support improved interaction between both individuals and businesses. Some of these applications are often highly affordable, or based on open-source platforms, catering for regular communication in companies, both internally and externally (Church, 2011). The feedback generated through these applications helps in advancing business credibility as well as improving services. Combining social media with best practices within ICT-applications can provide businesses with competitive advantage as well as an opportunity to meet business objectives.

The following are the main motivational factors behind this research.

- Support young entrepreneurs to start new venture in an innovative way.
- Demonstrate the huge potential in the field of entrepreneurship where most business individuals or groups are not familiar with the effectiveness of social media and ICT-tools for their businesses.
- Most of the business start-ups still focus on large initial investments and tend to ignore the importance of open-source ICT-tools and social media in their business needs.
- Overcome fears and challenges faced by business individuals.

1.2 Aim of the research

The main objective of the research is to raise different questions for new entrepreneurs and small business owners. Moreover, it gives an explanation to those questions by using different methods and models. It covers different initial business functions that are important and needed in venture start-ups, especially in management consulting and coaching business. The topic further focuses on different aspects and draws an outline for individuals who are interested in starting a new business. It also gives direction to different existing small businesses. It, likewise, answers how social media and ICT-tools implement effectively in their businesses to improve business functions and reduce operational cost.
The four main *research questions* deeply examined and justified through intensive literary review and case study are:

1. Why it is important for new and small business ventures to use social media?
2. Why it is essential for new and small business ventures to apply ICT-tools in their businesses?
3. How can social media support and be utilized in new and small size businesses, especially in management consulting and business coaching industry?
4. How can ICT-tools be implemented in new and small size businesses, especially in management consulting and business coaching industry?

### 1.3 Research approach

Every research project generally starts with an idea which provides a good beginning to a research project. In some situations, ideas move from information you hear about but may not experience by yourself (Bruce, 2004). However, current research case is apparently an opposite example where author was also a part of the research case study.

![Research-Before-Theory-Approach](cf. Bruce, 2004, p19)

The research approach used in this research work was a top-down-process which was developed with the help of Research-Before-Theory-Approach (Bruce, 2004). The coming chapters elucidate, how each step of this research was examined and justified through existing literature, methods and findings. How the researcher comes up with an
idea of the case study? How he planned and designed strategies for the implementation of research case? How the theory relates with the case study? How the analysis of the data has been done? And in the end what were the outcomes and findings of the whole research work?

1.4 Research overview

The research overview helps the reader in a way that he or she does not have to read linearly. Reader can easily skim, jump or hunt for the topic that he or she may be interested in (cf. Erran & Paul, 2005). The whole research is divided into four main chapters.

![Research Overview Diagram]

Figure 2 Research overview

Chapter 1 Introduction: Describes the significance of the research and explains to the reader the importance of ICT-tools and social media networks for new business ventures. Furthermore, it defines the motivation behind the research. The second subchapter describes the main objective of the research. How the research answers to dif-
ferent questions raised by entrepreneurs or business birds? It also recognizes the research questions examined and proved in the next chapters. The third sub-chapter illustrates introduction of the “Research-Before-Theory” approach used in the research as a main approach.

Chapter 2 Business world and IT revolution: Covers the empirical findings and literary review of the research. This chapter is divided into further sub-chapters that examine relationship of ICT, social media networks and cloud computing in businesses and their importance. Also, description of critical success factor approach and importance of IS architecture and its usage in businesses are covered. It also defines which IS architecture has been used in the case study and how it can be possibly administered during technology implementation process in businesses.

Chapter 3 Case Study: Carries a comprehensive picture of design research approach and data collection covering 12 further sub-chapters of the case study. Sub-chapters 3.1, 3.2 explain the methodology layout used in the research. Start-up process cycle, introduction of the case study, Critical Success Factor approach (CSF’s) of Enterprise Engine (E²), Cooperation Based Information System architecture (CBIS) of E², different marketing strategies and models used by the company were briefly discussed in sub-chapters. How the company carries out and manages the Customer Registration System (CRS) during the implementation of the start-up? How the company took benefit from open-source technology as pointed out in sub-chapter 3.9? Payment Information System (PIS), internal and external communication issues and project outcomes are raised in sub-chapter 3.10, 3.11 and 3.12.

Chapter 4 Conclusions: Shells out the complete summary and the enlightenment of the research questions. Furthermore, it discussed benefits, results and findings of the research. Sub-chapter 4.4 and 4.5 indicate limitations, boundaries and the future research areas in the field.
2 BUSINESS WORLD AND IT REVOLUTION

2.1 Economy’s backbone

New start-up ventures and small or medium-size enterprises (SMEs) are the backbone of any economy. They play a vital role in generating new jobs and business structure (Papastathopoulos & Benkeli, 2010). According to the OECD report (OECD, 2000, 2002) on SMEs, around 95% of the businesses are SME level and generate 60% - 70% of jobs in the market. Firms normally start at micro or small level, and then after a long journey, effort, struggle and success they become SME or large enterprises (Kevin & Yukika, 2006). However, the consistent change in global business world makes survival and growth more difficult than ever, especially, if businesses fail to follow the current competitive business environment. To track down such changes, employees of the company need skills and knowledge to improve services and product innovations. However, to gain such knowledge and skills, organizations require a flexible and modifiable business approach and the use of ICT technologies (Antlova, 2009).

Different small and medium-size businesses took advantage of ICT in the traditional areas of the business such as warehouse management, payment procedures administrations, sales and services. Nevertheless, due to a lack of knowledge and skills, the use of ICT and social media networks is still far behind in marketing, purchasing and managing relations with customers (Antlova, 2009).

Under such circumstances introducing a new firm or setting up a company is not an easy job for any individual or team. Early legal and financial problems are far more complex than routine issues. Finding the right place and people for the businesses is also a problem (Roberts & Wood, 1997). Aside from these, it is extremely difficult for new start-ups and small firms to enter into the market, where large-scale businesses or big fishes already exist. Somehow, new start-ups and small firms are able to achieve their initial goals to enter in such market; survival is another major issue for them (Roberts & Wood, 1997). The UK government’s study (DTI, 1995) shows, there are almost 20 000 new start-ups born every year but after ten years only 30% of them can survive.
2.2 ICT as a motivational tool for businesses

ICT changes the entire entrepreneurial game and it modifies the company's different business systems wherein the innovative trade may be possible among different buyers, suppliers and customers. According to the global information technological report 2006 – 2007 (Dutta & Mia, 2007), ICT motivates different innovations and it provides an opportunity to creative thinkers in enormous ways for finding different and better business solutions (Papastathopoulos & Benkeli, 2010). The expansion of ICT becomes more, day by day, in all kind of businesses notwithstanding whether the businesses are big or small. Then again, in the case of computer technology, the study showed that small businesses and start-ups are quite slower than the large one’s in adopting new ICT-tools (OECD, 2004: 4).

ICT is more than a computer or internet. ICT not only shelters the information that most of the businesses created and use, but it also includes such technologies that help process such information (Virginia, Maria Del Pilar, Ana Isabel, 2007). We must say that ICT covers a broad range of software, hardware, web-based applications, telecommunications, information management techniques, analysis, processes, etc., which enhance the productivity and effectiveness of different business functions (Virginia, Maria Del Pilar, Ana Isabel, 2007).

2.3 Revolution in business world through social media networks

Social media networks are progressively important for entrepreneurs, if they want to enter and achieve their business goals to access the market, information technology and other resources (Robinson & Stubberud, 2010). Innovative user interaction and technology-oriented networks like Facebook, Twitter, YouTube, LinkedIn, blogs, etc., participate equally in this new business knowledge race and global business change.

‘Social Media networks are a good place to start. While sites such as LinkedIn and Twitter may seem daunting at first, they are useful for meeting and maintaining business contacts. Another avenue to look at is starting your own blog. With time and dedication, this can be a great way to connect with customers, draw attention to your services offerings and highlight your green credentials - Ellen Heinrich, Social Media Manager, UPS Europe’ (Institute of Directors, 2010, p.02)

According to the survey report (Infographic, 2010) on 100 global companies across four major social networks, Twitter is on the top of the scale with 65% of the companies
have profiles in Twitter or Twitter accounts, Facebook is on second with 54% of the companies have Facebook fan pages, YouTube 50% and blogs 33%.

![Chart 1 Social media in businesses (Infographic, 2010, p.2)](chart)

The report also examines the insight overview of the usage of social media platforms by businesses, according to survey report around 20% of the global businesses use all these four platforms and 79% of the firms use at least one of them. The report covers only large enterprises.

<table>
<thead>
<tr>
<th></th>
<th>Facebook</th>
<th>Twitter</th>
<th>YouTube</th>
<th>Blogs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asia Pacific</strong></td>
<td>40%</td>
<td>40%</td>
<td>35%</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Latin America</strong></td>
<td>33%</td>
<td>67%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td>69%</td>
<td>72%</td>
<td>59%</td>
<td>34%</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td>52%</td>
<td>71%</td>
<td>52%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Table 1 Regional report on social media networks (Infographic, 2010, p.2)
Table 1 further describes the overview of the usage of social media platforms by businesses region wise. According to the survey around 35% to 50% of firms use the above four social network platforms in Asia Pacific. In Latin America 33% of the businesses use Facebook, YouTube and blogs for their businesses and 65% uses Twitter to take a part in web-based activities. The use of social media networks in businesses is apparently high in United States than all other regions. About 69% of firms participate in Facebook activities for business purpose and 72% of firms use Twitter services only for business deeds. Europe is quite similar and about 71% European firms participate in Twitter activities. Similarly 52% European firms use Facebook and YouTube for marketing and promotional objectives (Infographic, 2010).

Social Media as a Marketing Tool

`![Chart 2 Social media as a marketing tool](Amiando survey report, 2011, p.3)`

According to survey report on social media and event in 2011 (Amiando survey report, 2011), about 42% of the participants said that social media is a very important instrument for marketing in their business. The survey covered almost 1 000 German and English speaking event-hosting companies. Moreover, around 36% designate social media as an important marketing channel, 16% has partly accepted the social media and illustrated it as less important in their businesses, 6% do not agree and according to them, social media is not at all important for their businesses.

Social media platforms support different new and small businesses to reach their initial target audience immediately without investing expenses through blogs and different
discussion forums. Businesses can improve their reputation through social media and the regular participation can help them to achieve quick growth (Institute of Directors, 2010).

2.4 Businesses focusing on cloud computing technology

Many traditional information systems are comparatively similar and IT needs are usually the same in different new, small or medium size businesses. They are costly, time consuming and hard to manage for entrepreneurs or business owners. Several companies consider to moving or switching their systems towards cloud computing applications. These applications are easy to use; require just an internet service, low cost oriented and easy to maintain (Institute of Directors, 2010).

Cloud computing applications help decision makers to focus more on core business issues rather than running after solutions for regular operational software or tools. These web-based applications do not only provide them the appropriate solution for their business needs, but also hold the capacity to integrate or collaborate with social media applications like Facebook, Twitter, Blogger and many more.

2.5 ERP system and its recognition by the business industry

Due to a massive change in the industry, businesses face more and more challenges every day. Customers’ expectations become high and market competition increases. Such pressure forced companies to reduce the product cost and improve their service and product quality (Umble, E.J. et al, 2003). Most of the managers and small business owners do not want to take any financial risk. This is why the financial capabilities of small and medium size businesses are very limited (Antlova, 2009).

In this situation Enterprise Resource Planning (ERP) systems appear to be a dream come true for companies, especially commercially available or open-source software packages and solutions. Such applications are freely accessible for everyone and users do not need to invest and bother about licensing issues. Open-source applications have a capacity to integrate with all departments that provide services and information for finance, Human Resource (HR), sales, purchase and customer services departments (Umble, E.J. et al, 2003).
The Table 2 describes some of the main functions of ERP applications package (Umble, E.J. et al, 2003).

Table 2 ERP package functions (Umble, E.J. et al, 2003, p.243)

<table>
<thead>
<tr>
<th>Financials</th>
<th>Human Resource</th>
<th>Operations and Logistics</th>
<th>Sales and Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Receivables and Payable</td>
<td>Human Resource Time Accounting</td>
<td>Inventory Management</td>
<td>Order Management</td>
</tr>
<tr>
<td>Assets Accounting</td>
<td>Payroll</td>
<td>Material Management</td>
<td>Pricing</td>
</tr>
<tr>
<td>Cash Marketing and Forecasting</td>
<td>Personnel Planning</td>
<td>Plant Maintenance</td>
<td>Sales Management</td>
</tr>
<tr>
<td>Executive Information System</td>
<td>Travel Expenses</td>
<td>Production Planning</td>
<td>Sales Planning</td>
</tr>
<tr>
<td>General Ledger Reports</td>
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<td>Project Management</td>
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<td>Product Cost Analysis</td>
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<td>Purchasing</td>
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<td>Profit Center Accounting</td>
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<td>Quality Management</td>
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<td>Routing Management</td>
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<tr>
<td>Profitability Analysis</td>
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<td>Shipping</td>
<td></td>
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<tr>
<td>Cost Analysis and Cost Center Accounting</td>
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<td>Vendor Evaluation</td>
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<td>Standard and Period Related Costing</td>
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</table>

Sub-chapters 3.8, 3.9, 3.10 and 3.11 define a detail overview of the selected case study ERP system functions and implementation process.

2.6 Business and IT prerequisites

2.6.1 CSF’s approach

The research resolved one of the major problems for new start-ups and small businesses, and that is to identify the business and IT needs. Companies use different kinds of
approaches to identify such needs. One of them is a Critical Success Factors (CSF’s) approach, normally used to spot out the business and information system (IS) needs. Business experts generally start with a particular approach which help those risk takers to achieve their milestones in a calculated way. The term CSF’s first came out in late 1970s (Rockart, 1979) and availed of by several professionals in starting their business processes. Combination of different conditions and characteristics that support several managers and professionals in their decisions can affect the company's performance and position in the industry. If such identified characteristics and conditions were conferred and managed, then it will cause the success of the company or industry. Such factors vary from company to company and industry to industry (Roberts & Wood, 1997).

“Critical success factor approach are the things that must be done if a company is to be successful” (Hassan, 2005, p.397).

There are three different levels of analysis in CSF’s approach: 1) Firm level; 2) Industry Level; and 3) Economic socio-political environment level. CSF’s analysis helps in strategy formulation model based on several processes i.e. strategy identification, resource analysis, gap analysis, information gathering, strategy alternatives and many more depending on the level of analysis. The analysis essentially quantified at macro and industrial level. The information that is retrieved from such analysis assists professionals in the identification of opportunities, competencies, resources and skills, which are necessary for the firm or industry (Leidecker & Bruno, 1984).

![Figure 3 CSF’s approach](Roberts & Wood, 1997, p.179)
Figure 3 shows the integration of CSF's approach and strategy formulation model used by Solent Technical Moulding Ltd (STM) (Roberts & Wood, 1997). In chapter 3, sub-chapter 3.5 discusses the CSF’s approach of selected case study which is also known as CSF’s of E² which is derived through by CSF’s approach of STM (Roberts & Wood, 1997).

2.6.2 IS and CBIS architecture for small businesses

IS contributes to help various new, small and medium-size enterprises. New, small and medium-size enterprises are capable enough to provide international quality products and services. However, they were not successful to receive sufficient economic returns (Bhagwat & Sharma 2007). The main reason for such results is the share in profit by third party service providers such as marketing consultants and agents, etc. Lack of proper IT resources, improper IS architecture and an inaccessible IT infrastructure helped these third party agents such as different IT service providers to take all the economic advantages. All new, small and medium-size companies should realize the importance of IS architecture. The IS architecture performs a strategic role which helps to provide a proper and required infrastructure to such enterprises by providing accurate information at the right time (Bhagwat & Sharma 2007).

Small-scale and large-scale enterprises can also be differentiated by their information system needs, IT infrastructure resources, personalized management, with little devolution of authority and high inventory potential (Bhagwat & Sharma 2007). Most of the large-scale companies can invest sufficient amount on IT needs and on IT infrastructure than small firms. Due to enough IT resources large companies utilize most of the required information for their business needs and used its advantage for the company’s growth. On the other hand, small-scale companies suffer due to inadequate IT infrastructure. Companies could not mobilize all the information they have. They cannot routinely update their IT infrastructure and IS needs as the large-scale firms precisely do (Bhagwat & Sharma 2007).

Despite the fact that small-scale enterprises perceive the significance of a reliable IS infrastructure and architecture in the business industry, in this context, Cooperation Based Information System (CBIS) architecture, as depicted in Figure 4 and proposed by (Bhagwat & Sharma 2007), can sensibly help small and medium-size enterprises. CBIS support different businesses to interact with each other and share information and services. Small businesses cooperate with each other and run a cooperation-based cycle on mutual benefit bases.
Bhagwat & Sharma’s (2007) CBIS architecture helps SMEs not only to operate inside the firm but it also provides the information from external resources, to survive in international market.

Figure 4 shows CBIS architecture for SMEs. In chapter 3, sub-chapter 3.6 discusses the CBIS architecture of E² which is the selected case study of the thesis.
3 CASE STUDY

3.1 Introduction of the start-up case

The case study draws a brief sketch of the start-up called E² and a very first successful project known as Project Business Learning Cruise (BLC) 2010, the E² started in September 2010. Originally, the company offered management consulting and professional coaching and training. Organizing various types of workshops, seminars and professional training sessions were the initial ideas of the co-founder who is also the author of this thesis. Later on, it turned into a different type of services especially after having motivation and success in the first project. The co-founder with the help of project team decided to include outsourcing and web-based applications in their offered services. The idea generated by three individuals in a very small bar of Turku, Finland. However, the main role to motivate the co-founder was the very professional enterprising expert David C. Roberts, a leading international presenter and coach from Salford University, Manchester, United Kingdom, who had knowledge, skills and experience in his field. He was confident enough that the rest of the individuals in the team had plenty of capabilities to run their own business. After having a short discussion, they decided to run a project called project BLC 2010 and the project team banked on one presenter Mr. David C. Roberts and two Master degree students, one is author who was acting as a project leader and the other student as a technical expert. The discussion concluded in another web-meeting date to discuss some further possibilities for the implementation process and strategies.

During the first few web-meetings, one of the students was very clear to start working in a much long-term mindset and run these projects under one company name for long-term business. After much deliberation, they registered the company under the name of E² legally, and project BLC 2010 was the first official project of E². The rest of the members decided to work with E² as project partners of the company. The project BLC 2010 was designed for individuals, new and existing business owners who faced problems in their businesses. Sub-chapter 3.11 describes more about E² first customers group.

The project team define some initial objectives:

- Quick entry into the service providers industry.
- Low cost business start-ups.
- Successful enterprising.
- Efficient IT Tools.
• Survival.
• Credibility.
• Long term growth.

3.2 Methodology layout

The research shield different areas that not only ponder on the effectiveness of the function of social media and ICT-applications, but also analyze the outcomes and results. The main methodology in the research is qualitative research method in which social anthropological approaches (Bruce, 2004) are used to scan the case study activities to gather data. The collaborative social research approach is used to shelters the action research method. Furthermore, the Pattern-Matching Technique was used in the case study activities and Photo-Voice Technique (Bruce, 2004) from action research approach was used for collecting and analyzing the empirical material.
Figure 5 Research methodology layout (cf. Fareedi, 2010, p.34)

Figure 5 describes the detailed overview and layout of the research methodology including a very brief specification of approaches, research types and techniques employed in the thesis. The next sub-chapter describes the both qualitative research approaches which are used in the thesis, namely: 1) Action research, 2) Case study method.
3.3 Qualitative research approach

3.3.1 Action research

One of the most valuable methods in collecting empirical materials in information system science is action research. There are several definitions of action research cited by researchers and one of them is:

‘’Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework’’ (Rapoport, 1979, p.499)

The emancipating enhancing critical science mode is a type of action research (Berg, 2004) which has two main aims (Bruce, 2004). 1) To find a closeness and connection between different problems or issues faced by practitioners and relate the theory and book knowledge to solve those problems. 2) To assist researchers or practitioners to better understand the real situation of the problem. In the research case, the author was a part of project team. He was involved in every single phase of the start-up case. He tries to incorporate his theory and book knowledge with the real situation.

Procedures in various activities which include plan, act, observe and reflect can also be action research (Bruce, 2004). During the implementation phase of research case, the author acted and observed all the processes very closely (Kemmis & McTaggart, 1988) and he used Photo-Voice Technique (Bruce, 2004) to reflect his observations of the phenomena. Different screen shots and pictures have been used to augment comprehension of actual situation and complications. In like manner, the detail description of all used screen shots and pictures helps to convey the knowledge and information among participants and readers. There were three different stages followed during the implementation of Photo-Voice Technique (Bruce, 2004).

- **Stage 1 Selecting Photographs:** The researcher used the best and the most accurate screen shots and images to reflect his observation in more understandable and easy manner.

- **Stage 2 Contextual Stories:** Explanation of all selected images and screenshots into story and description form is used to provide a better picture of the situation.

- **Stage 3 Codifying:** During this stage the researcher highlighted the most prominent part of his observation and research.
3.3.2 **Case study**

In addition, the most common qualitative research approach is a case study approach. The information regarding a particular person, social setting, event or group gathered through any systematic method to supports the researchers for understanding the subject, can be a case study (Bruce, 2004).

‘The case study is an empirical inquiry that investigates a contemporary phenomenon within its real context, especially when the boundaries between phenomenon and context are not evident’ (Yin, 2002, p.3).

Based on the collected empirical material, the individual case study used in the research where exploratory and explanatory case studies design types were implemented. The reason for using exploratory design type was that the practical fieldwork and data collection has been taken before the research questions and Pattern-Matching Technique (Yin & Moore, 1988) from explanatory case studies used to related several pieces of information from same case to some theoretical propositions (Bruce, 2004).

1. **Close Observations**
   One of the main tools of pattern matching technique (Yin & Moore, 1988) is close observation or field observation of the activity or problem. Empirical material collected through an extremely closed observation from project planning phase to execution of all designed strategies and phases were done during the implementation of the project.

2. **Analysis of the company’s IS**
   Empirical material also collected through the detail analysis of company’s internal information system that includes system functionality, features, customers’ details, internal communication record etc. Coming sections describe detail analysis report.

3. **Web-based contents review and analysis**
   Extensive understanding and analysis of all web-based activities including all social media pages, user activities, web advertisers’ contribution, and partners web promotions and communications were another major source of data collection.

4. **Analysis and review of internal documents and communication**
   The subsequent section also reviews the detail analysis report of company’s internal documents that covers plan, strategy and technology used by the project team. It also scrutinizes the tools and communication methods used by the project team during the communication and implementation processes.
3.4 Start-up process cycle

The idea of proposed start-up process cycle composed from Mahesh’s (1994) process model of entrepreneurial venture creation. Different firms and their selected processes vastly depend on the nature of the business idea and characteristics of entrepreneurs (Mahesh, 1994). The start-up process and analysis cycle of the proposed case study divided into eight different processes. They are as follows:

1. Process of idea generation.
2. Strategy designing and decision making process.
4. Selection and implementation of marketing strategy process.
5. Process of selection and implementation of ERP.
6. Selection and implementation of communication channels.

The proposed process cycle will serve as a road-map that supports business individuals or groups to the strategic and functional issues at each process during newborn start-up creation.
Normally, novice enterprises begin with a basic idea for the business and ends when the product or services that based upon such idea patronized in the market (Mahesh, 1994). In the sub-chapters 3.5, 3.6 illuminated the process of identification and implementation of business needs. Sub-chapters 3.7, 3.8, 3.9, 3.10, and 3.11 examine the rest of the processes in a very detailed manner.

3.5 CSF’s approach of E²

The project team realized that the use of ICT-tools and different IS going to play a vigorous part in the success of their running project and company’s future needs. Furthermore, the project team opted to use the top-down, business-running method also known as a strategy formulation model to determine the overall IS and business necessities.

The concept derived from CSF’s approach (Roberts & Wood, 1997) as shown in Figure 3 was used by STM Ltd. for the formulation of their IS strategy. In the case of STM
Ltd., they used very general variables as they focus more on computerized business requirements.

On the other hand, CSF’s approach or strategy formulation model of E², as shown in the Figure 7, covers the company’s three major variables. Those variables were the different departments of the firm, namely: 1) Communication & Operations, 2) Marketing & Promotion and 3) Purchase & Sales. It also clarifies the details and relations of computer-based and non-computer-based needs among different variables.

![Figure 7 CSF’s approach of E²](cf. Roberts & Wood, 1997, p.179)

If individuals or groups want to achieve some variables in their businesses within a specific time span, that variables had to be divulge as their business objectives. Those variables can identify business opportunities, gaining customers, and earn profit depending on the nature of the business (Oxford University Press, p. 169-175). Same as other companies, E² also had their initial business objectives based on very simple facts.
1) Quick entry into the services providing industry; 2) Minimum start-ups cost; 3) Successful enterprising; 4) Efficient and effective IT tools; 5) Survival; 6) Credibility and 7) Long term growth.

After recognizing the main objectives of the company, another major function was to define a viable business strategy that facilitates all the business needs and objectives during its system implementation process. A clear definition of different methods, selection of an intelligent web-based system, differentiating between computer-based and non-computer-based needs will help the project team to run the company in order to satisfy various department's need, such as marketing, sales, purchase, communication etc. How to satisfy customers? How to manage suppliers? How to promote start-up brand name in the market? How to overcome initial expenses? How to sell the services? All the possible and best solutions for these questions should be the primary strategy of the company.

Deep concentration on start-up objectives and strategies assists the project members identify all initial business needs including: communication, operational, marketing and promotion department's needs, and sales and purchase areas. As the entire start-up venture commenced with the help of ICT-applications, and the company was based on virtual office, it was quite clear to all project members that Information Technology (IT) will contribute in every single task of their business. Even though there were some non-computer-based operations involved, they also highly rely on IT. The project team elegantly differentiates all of their technical and non-technical requirements and relations in their strategy formulation model.

Taking into consideration that project members were living in different countries and engaged in numerous business activities, they designed a communication and operational strategies grounded on facts and needs. They required a unique way of communication channels that helps them successfully complete the entire project on time without interrupting other activities and projects. A wide range of the usage of ICT-tools such as different voice and video conferencing platforms, Short Message Services (SMS), emails, offline messages, etc., help them not only in internal communication with team members, but also in interacting with suppliers, partners, and customers. On the other hand, most of the plans and implantation processes done by using web services saved a great number of resources in term of time and money. Sub-chapters 3.10 and 3.11 provide more detail in the implementation process of the communication and operational strategy.

One of the main and critical areas was to find a complete solution for selling their services and buying different facilities to provide good customer services. The project
team used open-source services to achieved selling and purchasing objectives. Subchapter 3.9 explains a detail implementation work of sales and purchase strategy.

Series of activities through which pricing, distributions and promotion of different products and services that satisfy customer satisfaction and market needs and helps to achieve organizational objectives known as marketing concepts (Chaston, 2004). To define and design an effective and long-term marketing strategy is also a part of the approach and major variable in CSF’s method. Project team can successfully implement their marketing and promotional strategy while using Above the Bottom Line (ATL) and Below the Bottom Line (BTL) mediums to gain their start-up objectives. Subchapter 3.8 discusses the implementation of marketing and promotional strategy.

3.6 CBIS architecture of E²

The CBIS architecture of E² as appearing in Figure 8 is a simplified form of Bhagwat & Sharma’s (2007) CBIS architecture. The architecture categorizes on four main variables 1) Start-up Company; 2) Customer; 3) Partners; 4) Suppliers.

The start-up firm E² plays a key role in above architecture that cooperates and collaborates with other variables such as Suppliers, Partners and Customers on certain common business objectives to gain mutual benefits and competitive advantages in the market. E² directly connected with their partners, suppliers and customers through internet service, and indirectly connected and retrieved all the services and information provided by all of the above variables. Such indirect information and services offered a complete solution to fulfill E² business objectives and satisfy all departments’ needs.
**Suppliers** worked as strategic partners in the architecture that delivers different information and services directly to start-ups and their success depends on firm’s dawning success. In E² case, the major direct suppliers of E² avails of different Social Media Networks, banks online services, PayPal Service, Eventbrite Service, Yahoo, Google, Skype and other Web-Service providers which support the start-up firm in setting up a complete virtual office. Through the support of all these suppliers, E² was able to provide further direct services to their customers. E² catered their services directly to their
customers. Customers can retrieve information, book services, and communicate with customer services within and through the above-described architecture.

*Partners* in the architecture although indirectly connected with all suppliers and customers and directly connected with E². They can access all the relevant information through suppliers’ information channels and provide such information to their customers that were initial indirect customers. Indirect customers retrieved all the required information through partners and were able to connect directly with E². The indirect customers became direct customers of the start-up by the support of media partners including Potkuri, Silja Line Cruise Company and Federation of Finnish Enterprises.

Different social media providers such as Facebook, Twitter, LinkedIn, different blogs and web advertising firms directly supplied the *marketing & promotional services* in the architecture. E² used such services to provide project information and brand awareness to their customers and customers used all channels to retrieve information about project updates.

Different indirect *partners*, including Yahoo mail and messenger services, Google mail and Online Document Management services i.e. Google Doc, Skype Live Conferencing services and different mobile phone operators for emergency calling provide *communication services* in the architecture. Communication with suppliers, partners and customers would not be possible without such services. Supporting partners including Nordea bank and PayPal services were also the main service provider in the architecture and they connect directly with E². Customers connected and used such channels, directly, for the purchase of E² services. Eventbrite services similarly played an important role in E² virtual office set-up. A complete business management solution of E² and all customer services, sales point issues, and other internal accounts management work can be possible with the support of Eventbrite services. Customers indirectly connected with Eventbrite service to retrieve the project information and payment services.

### 3.7 Strategy designing and decision making process

Strategy designing and decision making process was one of the main phase for the project team. To identify an intelligent system that would resolve the company’s initial business issues, i.e. PIS, CRM, event handling and management, electronic marketing tools, communication both internally, and externally. Other software as well as hardware requirements, initially at a much affordable cost or even free offers were the main necessities, goal and decisions of the project team. The company's initial business strategy was to fulfill the objectives by achieving all these goals.
To find a suitable information system is not a big deal in this fast growing technology era. The main reason to use all the open-source tools was that most of them were free, effective, quick and available in a complete package form. Social media and other web-marketing channels cover the main marketing needs. Emailing, voice and video platform like Skype, Yahoo or Msn voice and video chats solve the company’s internal as well as external communication problems. As far as credibility issues, successful utilization of all these ICT-tools become the reason of good credibility in the market.

3.8 Marketing strategies and models

The project team recognized the importance of trust in the relationship between company and their customers. Therefore, they used Below the Bottom Line (BTL) technique to develop the initial trust in customers. Face-to-face marketing, direct meetings, direct communication with target audience, test marketing, posters display were the main tools of BTL technique (Chicago Tribune, 1989).

![BTL technique of BLC 2010](image)

Above the Bottom Line (ATL) activities are normally expensive. Awareness techniques that are normally use to cover a mass market, TV advertisements, radio announcements, web-banners; web search engines are the main example of ATL activities
(Op-papers, 2011). For this reason, project team decided to focus more on web and social media, which happens to be one of the stronger and long-term tools for modern marketing. This strategy worked for them. The project team took advantage of web applications and social media to build credibility before and after executing the project.

Table 3 User activity and tracking details of BLC 2010

<table>
<thead>
<tr>
<th>CODE</th>
<th>TRACKING LINK</th>
<th>VISITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>connect</td>
<td>Facebook Connect</td>
<td>10</td>
</tr>
<tr>
<td>efblike</td>
<td>Facebook News Feed From Liking Event</td>
<td>65</td>
</tr>
<tr>
<td>efbnon</td>
<td>Facebook Newsfeed Event Name Link</td>
<td>46</td>
</tr>
<tr>
<td>evFrend</td>
<td>Invite Friend Link</td>
<td>9</td>
</tr>
<tr>
<td>eorg</td>
<td>Eventbrite Organizer Pages</td>
<td>4</td>
</tr>
<tr>
<td>erec</td>
<td>Eventbrite Recommendation Placement</td>
<td>2</td>
</tr>
<tr>
<td>estwbrog</td>
<td>Twitter Tweet Button Link</td>
<td>1</td>
</tr>
<tr>
<td>eweb</td>
<td>Eventbrite Website Integration</td>
<td>2</td>
</tr>
<tr>
<td>linkedin</td>
<td>LinkedIn Events Auto Listing</td>
<td>14</td>
</tr>
<tr>
<td>rss</td>
<td>Eventbrite RSS Feeds</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>162</td>
</tr>
</tbody>
</table>

Table 3 shows the total number of visitors who visited the main web marketing and social media pages which includes Facebook, Twitter, Eventbrite RSS Feeds, Eventbrite organizer pages through firm’s internal CRM system. According to the table, 65 people visited and liked the event through customer interface page. Around 46 people visited the page through CRM Facebook news feeds. Nine visitors were from invite friend link option. Two visitors were from CRM recommendation placement and one visitor from Twitter link. The table also shows two people visited the event page through CRM integration page and 14 people visited CRM customer interface page through LinkedIn auto listing channel. Nine were from CRM and RSS feeds.
According to Figure 10, invitations were sent to 188 people. 17 out of those were interested to participate, 16 were in the maybe attending list and 76 people were not interested or in the not attending list in the event. Facebook not only covers the event social media-marketing channel. However, it also plays a big role in generating web credibility.
Figure 11 shows how Twitter service supported in achieving marketing objectives of $E^2$. The best part of all the previously discussed social media tools was that they interconnected with internal CRM helping them update the customers not only about the ongoing project, but also about future activities and news updates on $E^2$. They comfort to show all the projects activities, globally, without investing capital.
Figure 12 Web-based marketing of BLC 2010

The overall objective of the firm was to start a project using different ICT-tools and information system with very low investment. To fulfill that objective, the project team identified different marketing channels and they were almost succeeding in their objective. They found an IT event publisher and other event promoters, as depicted in Figure 12, who publish not only the event details, but also advertise company services. The IT Event engaged a massive database that covers several events globally. It is a very good platform for web advertisements. Due to time constraint, the project team was able to use very few web based marketing channels. The main benefits of overall use of social media and web advertisement are:

- Help to achieve the main objective of the project team.
- Free global advertisement.
- Quick message delivery.
- Long term and extendable target group for marketing.
- Time effectiveness.
- Easy to manage.
- Regular updates.
• Record keeping for future results and projects.

3.9 Management of customer registration system

It was quite a challenge for the project team to decide whether to buy ready-made software or produce in-house developed software. In-house developed software requires time, huge cost, and experts for regular maintenance. On the other hand, the market was full of convenient and handy packed software that were very user friendly, manageable, cheap, less time consuming and with no regular maintenance requirements. Even the open-source applications help to finalize the decision to use an open-source ERP system that shields all projects and future business needs.

After finalizing the decision to use an open-source system, the project team found a very intelligent system developed by San Francisco company called Eventbrite. This young and innovative company allows their customers to use such online system at a low price that is around 2.5% of the cost of each ticket plus 99 cents, plus credit card charges of about 3% (New York Times, 2011). The Eventbrite service offers completely free service in entry free events.

Figure 13 User interface of ERP system of BLC 2010
Figure 13 is the user interface of the particular ERP system. The system is specially designed for different companies as well as individuals to manage their events, training sessions, conferences etc. The users need to create a complete profile in the system and manage it, accordingly. Such intelligent system delivers an opportunity to view all countries’ upcoming events in an easy to understand user-friendly interface that any individual can use without the worries of maintenance issues. It also provides a blog and social media connectivity facility to promote an event.

![Figure 13](image1.png)

**Figure 14 Project creation and display list interface of BLC 2010**

Figure 14 shows project creation and display list interface of project BLC 2010. This internal user interface gives assistance to their user to create a list of different projects and manage them according to their project needs. User can easily create a new project and edit the same, whenever it is necessary. The system can also offer the users to view the project anytime. In reference to Figure 14, project BLC 2010 team created an event for the 2nd day of December 2010 and their maximum capacity for the event was 35 participants.
Figure 15 Project detail overview interface of BLC 2010

In Figure 15, the detail overview of the project BLC 2010 shows the overall calculated sales of the project. Details of customers’ order number, their names, ticket purchasing date, number of purchased tickets, total number of amount paid, which discount code was used and which payment method was availed of. Most of them use the PayPal payment services. One of them required invoice for bank to back transfer.
Collect information about your attendees

![Save Changes]

**What type of information do you want to collect?**

- Collect only basic information (email, name)
- Collect information below for the ticket buyer only
- Collect information below for each attendee

---

**Figure 16 Customer information management panel of BLC 2010**

In Figure 16, Customer information collection management panel provides different settings to collect the customer data. The user can collect basic customer’s information, which comprises their names and email addresses. This setting system allows their customers to update their information even after their registration process. Users can further set options, through which they can collect specific information of the customer i.e., customer full name, age, gender, address, email, mobile number, home and office phone number, work details or any information they want. There is a check on this option, but only ticket buyer can use this option. Furthermore, user can also collect information on specific ticket or discount types that are useful to collect data for a certain target group, this option helps for future customer and market analysis.

The customer information management panel provides an opportunity to their users to set four different languages for specific target group, which also carries regular news and updates for customers in the similar language.
Figure 17 ticket information management of BLC 2010

Figure 17 shows brief details of ticket information of all customers and management panel for users. One part of the system covers sales by each ticket type. The panel helps to oversee the following options: each ticket type title, price, commission fee, sold ticket details of each type, availability status and sales ending duration. Additionally, system provides individual ticket buyer details which covers buyer name, quantity, price, date and payment method. Through Ticket Information Management Option, project team collected a total of nine customer’s data.
According to Chart 3, the project online activity started on October 20, 2010. Approximately 50 to 60 users viewed the published page daily during the first week. The second half was little bit slowly; the number of daily page views was reduced to 5 to 15 users for next two weeks. On the last two weeks, with the aid of a massive promotion through web and social media, the daily user activity again increased up to 50 users every day. Almost 731 users visited the published page until December 2, 2010.

3.10 Management of PIS

3.10.1 Discount and price management interface

Figure 18 exhibits discount and price management user interface of project BLC, 2010. Through this interface, user can set any price and discount code for a specific target group or even individual customer. The system helps the user to calculate percentages automatically.
It also allows the user to set discounts, start and expiry date and different type of ticketing features which includes late booking special offers, student special offers and limited number of places for group tickets.
The given discount code details can be gleaned in Table 4. According to Table 4, the project team generated around ten types of discount codes for different target audiences including different universities of Turku region, entrepreneurship society BoostTurku, Turku Science Park, Nordea bank, Potkuri and others. All discount offers start from 65% to 77%. The table also shows details of discount offers and percentage of each discount code type, starting and ending status and availability.
Chart 4 indicates total sales through discount codes. A total of nine customers participated in the event out of six customers used 60% discount code and they were from Potkuri (also an official co-partners of the project BLC 2010), and three from BoostTurku entrepreneurship society, who used 77% discount. There were no sales on any other offered discount code.

3.10.2 Email preview of received ticket

The electronic ticket service solves the company’s sale point issue. Figure 19 shows that the customer received an email generated by the system. It held the customer's name, order number, ticket type, quantity and payment as well as the registration confirmation.

Figure 19 Email confirmation and e-ticket preview of BLC 2010
Figure 19 also, depicts the electronic preview of the confirmed ticket that described all the required details of the event. The same, also, contains event time, date, day, venue, customer's name, and payment status. This electronic ticket helps the project team to cover the ticket-issuing problem.

3.10.3 Graphical representation of sold tickets

Chart 5 illustrates the geographical overview of project BLC 2010. The information retrieved through geographical overview helps the project team to find out their customers’ geographical location. The system does not only assist in identifying the customer's country, but also helps to categorize them in different cities and areas.

According to the Chart 5, almost all of the customers belong to Finland four customers were from Turku three were from Naantali area, one from Piikkiö and one from Kouvola area.
3.11 Communication

As seen in Table 5, project team sent 39 emails through customer communication panel of IS. The total numbers of recipients were 39, and the emails cover about 12 different topics. Few of them were regarding updates, notifications; a couple of them appropriate to general customer inquiries and some of them were concerning payment method confirmations and invoice requests.

Table 5 Email correspondences with customers using IS of BLC 2010

<table>
<thead>
<tr>
<th>SUBJECT OF EMAIL</th>
<th>RECEPIENTS</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message to attendees of Enterprise Engine - Start Your Own Business Master...</td>
<td>1</td>
<td>December 3, 2010 at 12:36 PM</td>
</tr>
<tr>
<td>Message to attendees of Enterprise Engine - Start Your Own Business Master...</td>
<td>1</td>
<td>December 3, 2010 at 12:12 PM</td>
</tr>
<tr>
<td>Hello</td>
<td>1</td>
<td>December 3, 2010 at 12:04 PM</td>
</tr>
<tr>
<td>Message to attendees of Enterprise Engine - Start Your Own Business Master...</td>
<td>6</td>
<td>December 3, 2010 at 12:02 PM</td>
</tr>
<tr>
<td>Message to attendees of Enterprise Engine - Start Your Own Business Master...</td>
<td>6</td>
<td>December 1, 2010 at 11:55 AM</td>
</tr>
<tr>
<td>Question Regarding Payment</td>
<td>1</td>
<td>November 29, 2010 at 10:07 AM</td>
</tr>
<tr>
<td>Message to attendees of Enterprise Engine - Start Your Own Business Master...</td>
<td>3</td>
<td>November 27, 2010 at 12:59 AM</td>
</tr>
<tr>
<td>Message to attendees of Enterprise Engine - Start Your Own Business Master...</td>
<td>6</td>
<td>November 26, 2010 at 4:24 PM</td>
</tr>
<tr>
<td>Message to attendees of Enterprise Engine - Start Your Own Business Master...</td>
<td>1</td>
<td>November 24, 2010 at 9:31 AM</td>
</tr>
<tr>
<td>Enterprise Engine - Start Your Own Business Master...</td>
<td>5</td>
<td>November 23, 2010 at 11:56 PM</td>
</tr>
<tr>
<td>Thank you for you booking.</td>
<td>1</td>
<td>November 16, 2010 at 11:02 PM</td>
</tr>
<tr>
<td>Reminder for Enterprise Engine - Start Your Own Business Master...</td>
<td>7</td>
<td>48 hr before event</td>
</tr>
</tbody>
</table>

They delivered first message on November 16, 2010 and the last message on December 3, 2010. The system helps to keep the information of all communication, which includes date, time, and original message for and from the customer.

The regular email communication also supports the project team for regular communication with customers, co-partners for some operational arrangements of project BLC.
2010. According to Figure 20, the total numbers of emails received from different networks were 29 internal team communication was not included in these 29 emails.

<table>
<thead>
<tr>
<th>FROM</th>
<th>SUBJECT</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer A</td>
<td>Re: Message to attendees of Enterprise Engine - Start Y...</td>
<td>Dec 8, 2010</td>
</tr>
<tr>
<td>Customer E</td>
<td>Re: Enterprise Engine Business Learning Cruise</td>
<td>Dec 3, 2010</td>
</tr>
<tr>
<td>Customer A</td>
<td>RE: Message to attendees of Enterprise Engine - Start ...</td>
<td>Dec 3, 2010</td>
</tr>
<tr>
<td>Follow up email</td>
<td>Message to attendees of Enterprise Engine - Start Your ...</td>
<td>Dec 3, 2010</td>
</tr>
<tr>
<td>The Register</td>
<td>Register Events - Event Expired</td>
<td>Dec 3, 2010</td>
</tr>
<tr>
<td>Eventbrite</td>
<td>Eventbrite adds attendee check-in</td>
<td>Dec 2, 2010</td>
</tr>
<tr>
<td>Eventbrite</td>
<td>Eventbrite invoice for Nov 2010</td>
<td>Dec 2, 2010</td>
</tr>
<tr>
<td><a href="mailto:orders@eventbrite.com">orders@eventbrite.com</a></td>
<td>Order Confirmation for Enterprise Engine - Start Your O...</td>
<td>Nov 26, 2010</td>
</tr>
<tr>
<td>Customer F</td>
<td>Re: Message to attendees of Enterprise Engine - Start Y...</td>
<td>Nov 26, 2010</td>
</tr>
<tr>
<td>Customer B</td>
<td>Ang.: Reminder about the &quot;Business Cruise&quot; - code: booo...</td>
<td>Nov 27, 2010</td>
</tr>
<tr>
<td>Enterprise Engine</td>
<td>Message to attendees of Enterprise Engine - Start Your ...</td>
<td>Nov 27, 2010</td>
</tr>
<tr>
<td>Customer D</td>
<td>Re: Message to attendees of Enterprise Engine - Start Y...</td>
<td>Nov 26, 2010</td>
</tr>
<tr>
<td>Customer B</td>
<td>Ang.: Reminder about the &quot;Business Cruise&quot; - code: booo...</td>
<td>Nov 26, 2010</td>
</tr>
<tr>
<td>Customer F</td>
<td>Re: Message to attendees of Enterprise Engine - Start Y...</td>
<td>Nov 26, 2010</td>
</tr>
<tr>
<td>Customer B</td>
<td>Reminder about the &quot;Business Cruise&quot; - code: boostturku</td>
<td>Nov 26, 2010</td>
</tr>
<tr>
<td>Customer B</td>
<td>Boost Turku - Business Intern for inspace.net</td>
<td>Nov 26, 2010</td>
</tr>
<tr>
<td>Customer B</td>
<td>Re: Business Learning Cruise Discount Code for Boost...</td>
<td>Nov 25, 2010</td>
</tr>
<tr>
<td>Enterprise Engine</td>
<td>Order Confirmation for Enterprise Engine - Start Your O...</td>
<td>Nov 25, 2010</td>
</tr>
<tr>
<td>Customer C</td>
<td>Re: Message to attendees of Enterprise Engine - Start Y...</td>
<td>Nov 24, 2010</td>
</tr>
<tr>
<td>Enterprise Engine</td>
<td>Message to attendees of Enterprise Engine - Start Your ...</td>
<td>Nov 24, 2010</td>
</tr>
<tr>
<td>Customer B</td>
<td>Re: Business Learning Cruise Discount Code for Boost...</td>
<td>Nov 23, 2010</td>
</tr>
<tr>
<td>Enterprise Engine</td>
<td>Order Confirmation for Enterprise Engine - Start Your O...</td>
<td>Nov 22, 2010</td>
</tr>
<tr>
<td>Customer B</td>
<td>Re: Business Learning Cruise Discount Code for Boost...</td>
<td>Nov 22, 2010</td>
</tr>
<tr>
<td>Enterprise Engine</td>
<td>Order Confirmation for Enterprise Engine - Start Your O...</td>
<td>Nov 22, 2010</td>
</tr>
<tr>
<td>Customer D</td>
<td>VS: Regarding Business Learning Cruise</td>
<td>Nov 19, 2010</td>
</tr>
<tr>
<td>Enterprise Engine</td>
<td>Order Confirmation for Enterprise Engine - Start Your O...</td>
<td>Nov 19, 2010</td>
</tr>
<tr>
<td>Enterprise Engine</td>
<td>Order Confirmation for Enterprise Engine - Start Your O...</td>
<td>Nov 18, 2010</td>
</tr>
<tr>
<td>Enterprise Engine</td>
<td>Order Confirmation for Enterprise Engine - Start Your O...</td>
<td>Nov 17, 2010</td>
</tr>
<tr>
<td><a href="mailto:hello@wentworthjones.com">hello@wentworthjones.com</a></td>
<td>You have been granted permission to an Eventbrite acc...</td>
<td>Nov 16, 2010</td>
</tr>
</tbody>
</table>

Figure 20 Regular email communication report of BLC 2010

Unrecorded numbers of telecommunication services, including Skype meetings, SMS service and emails have been exhaust upon, in the formation and execution of E² and Project BLC 2010.

Face-to-face, meeting played a spirited role in the whole project, especially for the creation of co-partners. Most of the meetings were in between Potkuri and federations of Finnish enterprises. They were officially co-partners of BLC 2010 project.
3.12 Project outcomes and success factors

After an effective implementation of ICT and social media applications, the E² successfully facilitates their first customers group. The customers were from different business industries and they took benefits from E² training contents, and they appreciated and enjoyed E² services.

Figure 21 First customers group of E²

Figure 21 illustrates a snap-shot of the first customers group who carefully learn from E² trainer’s expertise. In the photograph, the customers were discussing on different business aspects and feasible solutions.
Figure 22 Project outcomes through Google search engine of BLC 2010

The project outcomes performed a key role in the credibility part of the organization. Some of the most popular search engines support the project team to fulfill their long-term objectives and Figure 22 depicts the same. Delegates’ reflections were available in few top searches that really help to attract new customers for future projects.
Figure 23 Customer feedback report through YouTube of BLC 2010

YouTube also backed the project team to cover the video contents of project BLC 2010 that were available for customers for viewing and comments on the project. These contents were the original assets of the firm and used for long-term credibility and marketing of the firm. All of these open-source media parties were also indirect cooperation partners of enterprise engine especially in project BLC 2010.
4 CONCLUSION

4.1 Summary

New start-up ventures and small or medium-size enterprises are the backbone of any economy. They play a vital role in generating new jobs and business opportunities. In this context, ICT changes the entire business game and modifies company's business models. Besides this, innovative user interaction and technology-oriented networks like Facebook, Twitter, YouTube, LinkedIn, blogs etc., participate equally in this global business change.

Several companies consider moving or switching their IT operations towards cloud computing applications to reduce their cost and time and enhance their efficiency and performance. ERP-systems support several companies especially open-source software packages and solutions. Such applications are freely accessible for everyone and there is no need for users to invest and bother about licensing issues.

Major problems for new start-ups and small enterprises are to identify their business and information technology needs. Companies use different kinds of approaches to identify their business and IT needs. The approach used in this research was CSF’s approach. Business professionals normally utilized it to spot out the business and information system needs of the organizations.

On the other hand, the IS architecture performs a strategic role which helps to provide a proper and required infrastructure to businesses by giving an information timely accurate. CBIS was examined in the thesis which supports different businesses to interact with each, as well as, share information and services.

The research uses two main and prominent types of qualitative research approaches 1) Action research approach; and 2) Case study method. The collaborative social research approach with Photo Voice Technique was used to shelter the action research method. Moreover, Pattern-Matching Technique was, likewise, used the in case study activities. Since the research covered an individual-type case study, there are, therefore, certain limitations on the research that require further investigation in the area.
4.2 Enlightenment of research questions

1. Why it is important for new and small business ventures to use social media?
2. Why it is essential for new and small business ventures to apply ICT-tools in their businesses?

Chapter 2 highlights first two research questions in a very detailed manner and provides the answer to the questions ‘why’. Existing reviewed literature helps the reader to deeply understand the importance of different social media applications e.g. Facebook, Twitter, YouTube etc. and ICT-tools e.g. easily available ERP-systems in new and small businesses. Literature also helps the reader to recognize the significance of approaches and IS architectures e.g. CSF’s approach and CBIS etc. for their businesses.

3. How can social media support and be utilized in new and small size businesses, especially in management consulting and business coaching industry?
4. How can ICT-tools be implemented in new and small size businesses, especially in management consulting and business coaching industry?

In the enlightenment of third and forth research question, the research case study shows and implement different models and methods with the help of social media applications e.g. Facebook, Twitter, YouTube etc. and ICT-tools e.g. easily available ERP-system. These applications and tools innovatively integrate with business functions, as well as satisfy business needs and generate customers. The case study provided useful and practical examples, and guides for businesses and explain, how these technologies can support and be implemented in businesses.

4.3 Benefits, results and findings

The research conveys different benefits and concludes various results and findings that motivate entrepreneurs and researchers to explore and use different social media and ICT-tools, approaches and methods according to their business and research needs.

- During the analysis of different social media network pages, the researcher discovered that the most interested participants on Facebook event page were young individuals, who use Facebook for causal activities e.g. entertainment, social networking etc. These Facebook audiences were helpful to fulfill the marketing objectives and they played a key role in spreading the brand name along with offered services. The actual attendees were in their 30s by that time and mostly belonging to the business industry. Most of them came in as a client through the project partners.
• During the literary review, the research discovered that new business start-ups and small businesses do not apply ICT and social media applications, unlike most of the large firms employ.

• The reviewed literature also showed that the current open-source ICT-technologies and social media applications are equally available for new and small businesses as for large companies.

• All through the analysis of case social media pages and survey reports in literature, the research revealed that the individuals must be very particular during the selection process of the social media and ICT-applications. They should choose the application according to their business needs.

• New ventures start-ups and small businesses can take benefit from the proposed start-up and IS case architecture to set up a complete business process model and infrastructure.

• The proposed IS case architecture helps businesses to manage properly the core business functions. It provides back-up to start-ups in transcending geographic restrictions to implement the marketing channels without investment.

• The CBIS architecture of E² also supports the start-up to managing a flexible operational platform. Start-ups can easily reduce or enhance their business functions with the help of IS case architecture.

• The proper implementation of CSF’s approach and CBIS architecture not only helps to increase the start-up communication capabilities, but also these both can support to manage a business network and customers.

• The survey reports in literature shows that understanding of social media applications in businesses is more popular in large organizations.

• Previous research examined in literature identifies that most of the start-ups fighting for survival and cannot focus on different theoretical research approaches and models.

• The proposed architecture may not fit in the regions where the technology resources are not available.

4.4 Limitations and boundaries of the research

The current research holds different limitations and boundaries, which indicates areas which have not been covered in this research, below is a list of them.
• The research covers a general layout of the entrepreneurial start-up, while using social media and ICT apparatuses. As the term entrepreneurship covers a huge area of expertise, there is still a room for further investigation in such field.
• The research largely focuses on the usage of web technologies in initial start-up processes. Hence, it does not cover any technology and social media adoption topics and research in businesses.
• The research does not cover any enterprising behaviors in the business topics.
• The research covers only management consulting and coaching industry, therefore the results and implementation processes, using social media networks and ICT-apparatuses may vary from industry to industry and start-up to start-up.
• The data has been collected and composed through a small market. Results may differ, if there is further approach on big or commercial markets, cities, and countries.
• The research covers about the limited problems of the initial start-up processes of each department of the company. The results may differ according to the circumstance, market situations, business culture and the availability of the technology during the implementation of ICT-tools in department of the company.
• The research does not cover challenges faced by the businesses and start-ups during the technology implementation processes.

4.5 Future research areas

Based on the reviewed literature and intensive research analysis of business start-ups and small companies the following areas are highly encouraged and needed for further research and investigation.

1. Adoption of open-source ICT and social media applications in business start-ups and small businesses covering; aspects of managerial challenges, operational, implementation issues, and cultural impacts within start-ups and small companies.
2. Understand the impact of research analysis of social media and ICT-applications, on collaborations and partnerships among business partners, employees and customers, to enhance the business growth.
3. Nurture development of designing methods, implementation models and evaluation tools of social media and ICT-applications to enhance the effectiveness to
managerial and functional aspects of multiple types of venture start-ups and small businesses.
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