JOINING EURO COMMUNITY - BUSINESS AND INFORMATION TECHNOLOGY PARTNERSHIP: LESSONS LEARNED IN LATVIA

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Abstract

The impact of Information and Communication Technology (ICT) to business operations is crucial and unavoidable especially considering introduction of new Information Systems (IS) or implementation of modern Information Technology (IT) platforms and solutions. Migration to euro and appropriate customisation of Enterprises' Information Systems was the main challenge for Latvian companies in previous year for enabling operation in EURO currency from the 1-st of January 2014. In this paper the author presents the research, which was the final stage of long-term research done in 2013-2014. The finishing of the research was set of structured interviews with companies' top management just after euro introduction for comparing the expectations of Latvian companies with the real life.

Keywords: EURO Introduction, IT and business collaboration, empirical study, readiness self-assessment coefficient.

1. INTRODUCTION

With the advent of new technological era in Information and Communication technology one of the main issue facing organisations is globalisation that introduces a lot of changes. To be able meet these changes organisations should become very innovative, introduce new ideas and adjust there IS according to new business requirements. Many companies depend on their own resources or external resources to meet their objectives and be better prepared for changes in their surrounding environment (Karadsheh, et al., 2008).

The forecasted estimation of organizations' readiness for the introduction of essential changes on country level in their information systems (IS) is extremely important ensuring understanding to what extent information technology (IT) could impact on economic growth and bring new business values for the company.

This study addresses this issue by investigating the process of new currency EURO introduction in Latvia in Y2014, assessing set of various aspects of adjusting IS at the organisations and comparing the expectations of companies readiness to EURO currency with operation results in real practice.

The author suggested an approach, which could be valuable when the country faces an essential general change either in legislation or in other common area that have to be introduced in all organisations strongly according to required conditions related to time schedule and content of the change.

The research objective: to analyse data about the situation of business and IT collaboration in the period of considerable country-level changes; identify the most important risks and influential factors, calculate expected self-assessment readiness coefficient for analysed companies before migration to EURO and compare it with live run parameters after migration to EURO.

The first research question was to investigate to what extent companies in Latvia believe are ready for migration to new common European currency; what factors and managerial activities are considered as the main drivers and what stages of IS customisation are assessed as the most risky and propose the model for assessment the self-readiness level for company.

The second research question was to compare forecasted self-assessment readiness coefficient with real life for understanding how well the companies assessed themselves in front of coming event.

The research methods: critical analysis of literature sources, framework of Project Management, quantitative analysis of the data gathered by the survey of respondents from

corporative environment and qualitative analysis of the interviews with main stakeholders of finance and IT companies in Latvia before and after EURO introduction in the country.

The following hypotheses were defined:

H1 – It is possible to evaluate companies' readiness for essential national level changes in business operation when appropriate changes in Information Systems are necessary by using self-assessment coefficient.

H2 – The level of readiness for EURO Introduction in Latvia was fully sufficient for successful result.

2. THEORETICAL FRAMEWORK

Every Project definitely is facing the whole set of challenges and a lot of various kinds of risks. Higuera and Haimes (1996) point out that risk management becomes an integral and vital part of project management, influencing a project's infrastructure and culture. Very often new projects that are initiated for some business problem solving are conducted with restricted resources available but asking for delivering Project outputs in time and with required quality. One of the most challenging issue for Top Management of the company and the question "what project management really comprises: is it primarily about delivering something 'on schedule, in budget, to scope' or is it a much broader discipline concerned with the whole business of defining, promoting, and executing projects" (Morris, 2006). Scientists and practitioners reasonably suppose that one of key success factors for Project conducting in agreed schedule and with quality needed is proper estimation of forecasted finance and human resource consuming. "Improving estimation techniques so that sophisticated organizations can achieve project results within +-5% of estimated results instead of +-10%" (McConnell, 2006). The research 74% of IT projects failed to deliver expected value (Shpilberg, et al., 2007), study made by British Computer Society (BCS (British Computer Society), 2004) stated that "only around 16 percent of IT projects can be considered truly successful". At the same time business practitioners are concerned about IT activities and Projects to ensure proactively leveraging value from IT investments (Doherty, 2014; Silvius and Gilbert, 2009). Vast majority of the authors who are analysing organisations' agility and concept of strategic business and IT partnership state that only "a successful alignment of Business and IT increases an organization's competitive advantage, profit margins and growth" (Silvius, et al., 2013). Even more, "strategic alignment refers to the degree to which the business strategy and plans, and the IT strategy and plans, complement each other" (Yolande, and Chan, 2007). The business and IT performance impact of alignment and strategic performance of the organisation have been approved by variety of academical and empirical studies (Cragg, et al, 2013; Saetang and Haider, 2012; Mussa, et al, 2013). Both alignment and agility are recognized as critical and concurrent organizational goals in a strategic perspective (Tallon, Pinsonneault, 2011; Hugoson, Pessi, 2011).

As one of key factors many authors point out the leading role of top management, stating that "proactive IT leaders that lead in innovation with IT in relatively stable environments are found to consistently outperform reactive IT leaders in overall performance" (Lu, Ramamurthy, 2010). As essential internal driver influencing IT and business alignment a lot of authors consider organisation's culture stating that "strong shared culture at an organisation may be able to bridge the gulf between holders of IT and business stakeholder roles" (Haigh, 2010; Silvius, et al, 2009).

The research model for given study takes into consideration the external environment influence to the research object and internal interacting components of the enterprise: management, business and information technology. These components collaborating on daily basic define the performance outputs of the enterprise and determine the result of every project accomplishing within the organisation (see Figure 1).

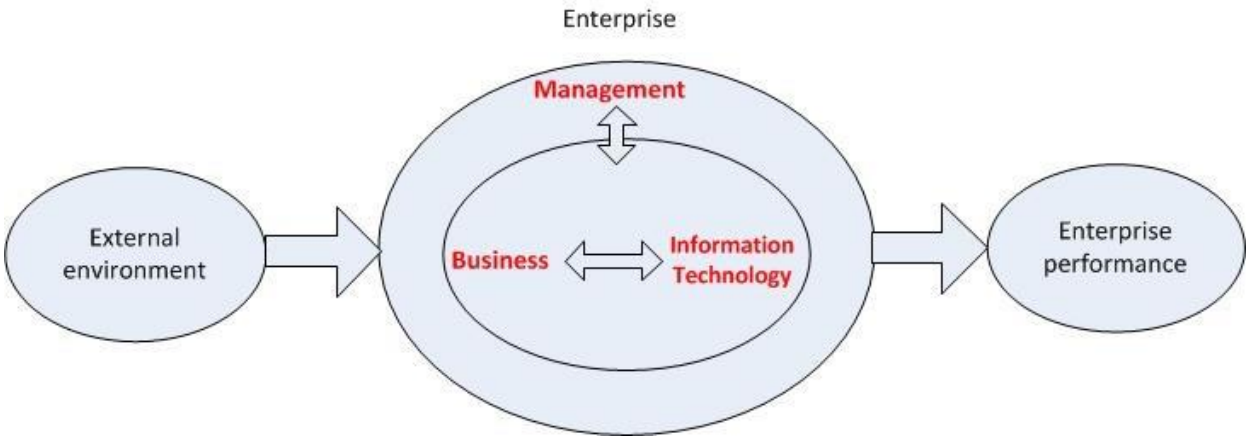

Figure 1. Research model

3. RESEARCH METHODOLOGY AND RESEARCH CONDITIONS

For understanding the situation in Latvia while waiting for migration to EURO, on the first stage of the research an exploratory study with 49 organisations was conducted. Two methods for gathering primary data were used.

The first method was an interview for qualitative research approach (Robson, 2011) taking into account such kind of approach could allow focusing on information depth and investigating complex data gained during the discussions with main stakeholders of the companies. Semi-structured interviews were used; all questions were elaborated based on Pre-defined policy for interview ensuring the research questions are answered. The interview' questions were considered as starting moment for further discussion, allowing the interviewer apply high level flexibility to each person and his individual circumstances as well as his business area's peculiarities.

The top managers from 13 companies located in Latvia were interviewed for identifying most important factors impacting EURO introduction process. The interview structure practically matches with the survey structure that was chosen as the second method for gathering the data from organisations in finance and Information Technology areas. The respondents represented CFO – responsible for organisation' finances , CEO as strategic manager responsible for IT benefits introduction and realisation within the business processes and general strategy, CIO as the main IT Manager responsible for company-wide IT deployment, offering IT services and Information System adoption.

The second method for collecting primary data was conducting strongly structured survey with set of questions and pre-defined set of options for each question.

Design of the survey.

In accordance with the research questions the surveys questions were designed to investigate various aspects of company's profile.

Table 1

Survey Questions

A	***Organisational aspect***
A1	*Business direction*
A2	*Number of Employees*
A3	*Number of Top Managers*
A4	*Respondent position at the company*
B	***Project scope and Quality (Organisational aspect)***
B1	*In what way the company is planning carry out migration to EURO*
B2	*Whether appropriate Project for EURO migration is established*
B3	*When appropriate Project for EURO migration is established*
B4	*Whether appropriate detailed Plan for EURO migration is established*
B5	*When appropriate detailed Plan for EURO migration is established*
B6	*What Information Systems are included in the Project Scope (by types of Information System) (detailed questions B6.1 – till B6.6)*
C	***Resources***
C1	*Whether particular financial resources are assigned for EURO migration*
C2	*Whether assigned financial resources are sufficient for successful migration*
C3	*Whether particular human resources are assigned for EURO migration*
C4	*Whether assigned human resources are sufficient for successful migration*
D	***IT Maturity***
	Assessment of the proportion of each stage of software development life cycle:
D1	*Business requirements analysis and modelling*
D2	*Functional specification development*
D3	*Software development*
D4	*Software testing including User Acceptance Test*
D5	*Modified Information System Live Run support*
	Assessment of the risk probability for each stage software development life cycle:
D6	*Business requirements were incorrectly defined and modelled*
D7	*Functional specification was incorrectly developed*
D8	*Software developed with bugs*
D9	*Software was improperly tested, User Acceptance Test was not done or done casually*
D10	*End users of modified Information System were trained insufficiently*
D11	*Backup (emergency) plan for EURO migration was not developed and/or not tested*
	Assessment of the proportion of human resources consumed for each type of software development task:
D12	*Data input screens*
D13	*Reports*
D14	*Modification of algorithms*
D15	*Interfaces and integration with external Information Systems*
D16	*Other software development tasks*
E	***Business and IT collaboration culture***
E1	*How you estimate the involvement of business departments in the process of migration to EURO*
E2	*How you estimate the involvement of IT department in the process of migration to EURO*
E3	*How you estimate the collaboration of business departments and IT department in the process of migration to EURO*

For adequacy and accuracy of responses, avoiding non-structured answers and for simplifying the coding of the respondents' responses, the options for answers in the survey were formalised so the respondent could only choose one of possible option for each question. The author understands that to some extent such approach restricts detailed reflection of the real situation but on the same time it can ensure all responses in formalised way and possibility for processing the survey results. Structured survey was submitted to 50 companies, as a result primary data about its 36 companies were analysed. These 36 organisations have been operating in finance area, mostly banking, insurance business, or are the companies engaged in IT development. Selected organisations from finance area were mainly large Latvian banks or branches of foreign banks in Latvia; other companies represented either large insurance companies or branches of foreign insurance firms in Latvia; or they were new innovative companies, doing business in finance.

Selected organisations from IT area represented either young advanced innovative IT companies or large IT software development firms. Taking into account these companies are serving tens of enterprises providing the migration of enterprise's Information System to EURO, their response could be considered as the opinion of the majority of Latvian IT companies corresponding to at least three times more number of respondents.

All respondent companies have been working in Latvia more than three years, are active in providing a lot of appropriate services for customers and could be considered as characteristic representative of the branch.

On the second stage of the research the top managers from 13 companies who were interviewed during the beginning of the research, after migration to EURO were introduced with self-assessment readiness coefficient calculated for their own company. Top managers were interviewed repeatedly with the same structured interview questions, asking to identify to what extent expectation of particular aspect matches with the situation in live operation.

Governmental regulations in Latvia for migration to EURO were clearly defined in early 2012, but even during 2013 summer there still were a lot of political and societal speculations about possibility to revoke EURO introduction from year 2014 up to eventual possibility of cancelling migration to EURO. Political parties and various social organisations were arguing a lot for arranging a referendum for clarifying the situation in the country. As a result business enterprises were forced for operating in particularly unclear circumstances not knowing the legislation requirements practically till the 2013 autumn.

According to classical framework of Project management each Project is combination of three competing parts: 1)project scope and quality; 2)project time, schedule of activities 3)dedicated resources and finance. All kinds of resources were distributed by four components like managerial and organisational aspects, financial resource, human resource and IT resources in terms of IT maturity and culture of an organisation – see the Figure 2. The interview and survey structure was developed fully according to figure below trying to assess every type or resource and level of readiness to EURO adoption within the company.

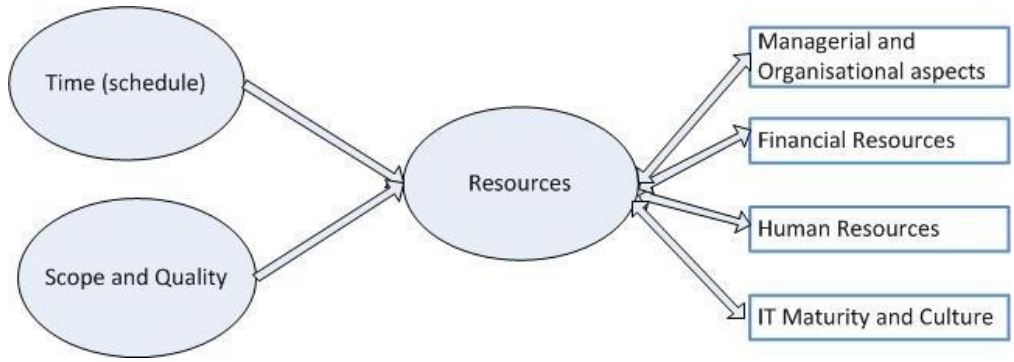

Figure 2. The aspects for the analysis

Considering the first component "Time Schedule" it should be mentioned that it is highly pre-determined factor due to dead-line for absolute readiness to EURO adoption as the 1-st of January 2014. Every company was asked for strong following this date so this component is to be designated as unchangeable parameter. Delay of the Project was unacceptable. Taking into account new currency EURO had to be introduced in Latvia from Y2014 unconditionally, the companies had no choice for project failure.

The second component "Scope and Quality" was highly pre-determined factor as every IS had to be fully ready for operating in new currency according to governmental requirements. Cutting of the quality or reducing some non-essential business requirements were not acceptable as companies were asked to ensure smooth running of every business function in new currency. The project goal for every enterprise was defined as ultimate overall goal so the scope of the project had to be defined as detailed as possible and made absolutely clear to all project' stakeholder either from business or from IT representatives.

As a result the enterprises had some frequency in operating with their resources like project finance budget, costs and human resources involved. Other parameter that could significantly impact project process and outcomes was the level of IT maturity and culture within the organisation in terms of following the best practice in IT area, policy and procedures for software development life cycle.

4. THE RESULTS OF THE RESEARCH

As mentioned above, the study covered two types of companies; both finance and Information technology, with respect to organisations' size investigated enterprises varied from small ones (under 50 employees) to very large, more than 1000 employees. Taking into account the relativeness of the definition small and medium enterprise across the Europe, in Latvia an enterprise with number of employees more than one thousand is considered as large one having considerable impact to country economy.

Data collection period and process

The link with survey was disseminated in the end of November 2013 with request for filling in not later than the 20-th of December 2013. Due to shortage of time and still some problems with Information systems migration to EURO some IT companies had answered to the survey questions only in early January 2014.

The semi-structured interviews at the first stage were conducted in early December 2013, the duration of the interview was up to 60 minutes, an average duration of 45 minutes. All the interviews were pre-agreed face-to-face discussions; the interviewers could afford bilateral meetings as the majority of the respondents are located in the capital of Latvia. The semi-structured interviews during the second stage were conducted in January – March 2014.

Interview and survey content validity

The authors the realised the eventual threads of validity the results achieved. With any empirical research it could be very complicated to resolve all the issues appearing and to draw appropriate accurate conclusions based on the research. For testing the interview and survey content and questions one of the author conducted preliminary non-formal interviews with two top managers: CFO and CIO of two different finance enterprises for identifying the trickiest questions that could be unclear for top management. The author conducted also three pilot surveys sending it to three IT managers for validation of question clarity and accordance to the research question. The authors guided by (Ebert, et al., 2005) in drawing up the questions relating to the software process resource measurement and evaluation. Sometimes, there were redundant questions for ensuring the consistence of the answers.

Scope of the Project for enterprise migration to EURO

For identifying the business needs while migrating to EURO semi-structured questions about the business functionality of the Information Systems (IS) were included in the survey. The analysis of

collected data shown that the vast majority of the enterprises have Enterprise Resources Planning System or Accounting IS (88%); Financial Information System (75%); Web-based customer servicing IS (80%); other Web-based IS (72%). During the interviews it turned out that even home page of an enterprise being extremely non-complicated from algorithmic aspect had to be included in the migration Project scope as having a lot of adjustments due to EURO introduction in the country; all of respondents had to adjust their home pages (97%).

5. KEY FINDINGS

The author apply the following approach: each question in the interview and in the survey belongs to one of the analysed components meant at the Figure 2 and reflects one particular parameter. For generalising the findings and due to space constraints some answers were grouped by components and the appropriate aggregation of gathered data was made.

Managerial and Organisational aspects

During the discussions with practitioners several managerial and organisational aspects focused on formal data about EURO adaptation were asked: about project plan, scope, detailed tasks schedule etc. Figure 3A shows the illustration: 58% of respondents had established the formal Project for EURO migration within the enterprise (blue colour); 22% had designed and approved the detailed Work schedule with detailed precise tasks, responsible persons and dead-line (red colour), while only 20% of respondents had no clear answer (green colour).

As particular issue was chosen the aspect to what extent the external vendors as IT service outsourcers were involved in the Project of EURO adaptation defining several options for an answer – see Figure 3B. Vast majority of enterprises stated exclusively usage of their own resources (55% - blue colour); own resources with low involvement of external outsourced resources (17% - violet colour); approximately equal workload for the external outsourcer and for the own resources (3% - light blue colour). Only to small extent the enterprises were using exclusively outsourced resources (8% - red colour) and mostly outsourced resources (17% - green colour). As a result more than 2/3 of the respondents (75%) prefer using of the internal enterprise's resources for migration. This could be explained that the enterprises are extremely concerned about confidentiality of data within migrated IS and are fully confident about own ability for getting successful adaptation.

Findings 1. In majority of enterprises Top management had paid the ultimate attention to the organisational aspect of the process by establishing either particular Project or detailed Work Schedule for ensuring smooth migration both of them supervised on regular basic. All respondents were concerned about the sufficiency of the resources available having the possibility for assigning additional forces like external outsourcers if needed.

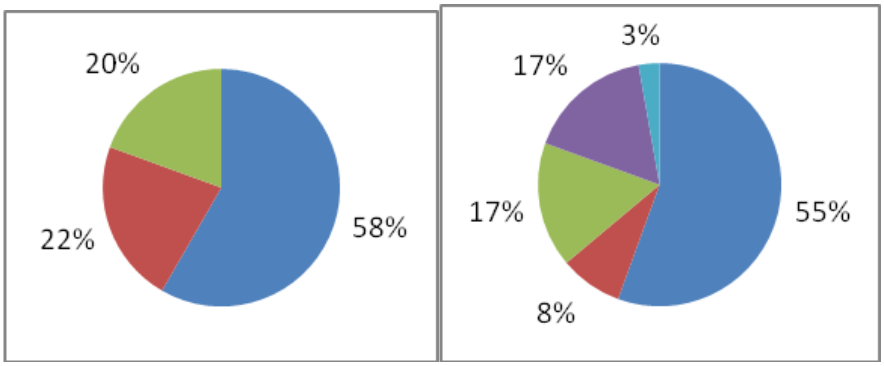

Figure 3. A and 3B – evidence of Findings 1.

The next aspect of analysis was clarifying when the enterprises started the Project for adoption of the EURO in there is and why it was done directly at this moment. In respect of particular time period for starting EURO migration it could reflect the comprehensive business attitude and concerns about the success of the Project result. On the other hand this aspect can gives clear

evidence of finding out how seriously the enterprises perceived the governmental regulations and statement for EURO introduction from the year 2014.

Due to the fact that migration to EURO should present several essential challenges to the enterprise it was supposed that the majority of companies would have started the project in early 2012. Taking into consideration that the variables "number of employees" and "starting time for EURO project" are not normally distributed, the author calculated Spearman's rank coefficient for assessing whether there is any statistical dependence between them.

Resulting rank correlation coefficient is 0,37 that testifies very weak positive but still positive correlation between two variables and shows that large companies with high employees number could be more concerned about EURO migration starting this project two years before 2014. It turned out however that only small part 17% (blue colour) started the project two years before 2014 while 44% (red colour) of companies started one year before EURO introduction date; 17% (green colour) started the project 6 months before 2014. As the most interesting discovery is the figure showing that practically one-fourth part (22% - violet colour) of enterprises have started EURO migration works only in three months before dead line for EURO in Latvia. Figure 4 depicts the general distribution of Latvian companies by the time for starting EURO migration project.

Findings 2. Considerable part of Latvian enterprises postponed adoption of EURO and appropriate adjustment of their IS to the very last moment when any delay was practically unacceptable. These findings could have extremely significant meaning testifying either insufficient trust to governmental regulations or unreasonable belief of companies' management for being in time with migration to EURO without taking huge efforts.

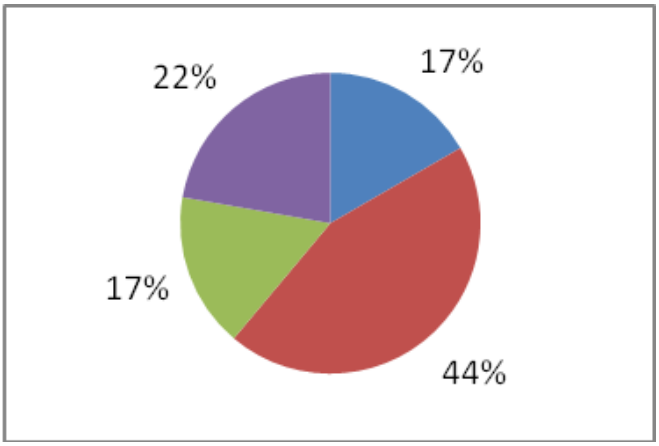

Figure 4. Distribution of companies by the time for EURO project.

Financial and Human resources aspect

The majority of respondents (72%) stated about particular financial resources assigned to the project; 78% of companies are fully confident that assigned financial resources will be sufficient for the project.

With regards to human resources the analysis of data generates entirely opposite picture giving clear evidence of human resources (HR) shortage to be designated to one particular project. Only 44% of companies have assigned particular HR to EURO introduction project when half of companies (50%) decided that employees could combine EORO migration tasks with other daily jobs not assigning special personnel to the project.

As discussed with several interviewees, "it is more easy assigning heavy financial investments and have the possibility of doing all necessary tasks rather than find out and hire additional human resources able to carry out a lot of sophisticated jobs of adjusting information technology applications to new environmental changes".

Findings 3. This management decision clearly confirmed widely known fact about the shortage of qualified HR resources in Latvia and gives firm evidence about easiness for assigning financial resources comparing with human resources.

Estimation of Risk Level for IS adjustment

For identifying the maturity level and culture of Information Technology' usage at the companies the series of questions were designed trying to investigate IT maturity level and appropriate level of following best practice of IT processes and procedures established.

The main goal of the research in this respect was to gain a comprehensive understanding on how the enterprises follow the best practice of Information System Development Life Cycle (SDLC) while adjusting IS for migration to EURO; what level of risk they forecast for each phase of SDLC; what proportion is expected for different types of software development tasks in terms of human resource consumption. It was proposed to assess the proportion of expected efforts for each of five phases: business requirements analysis; functional specification (FS) development; software development; software testing and IS launch in live environment.

Findings 4. Gathered data analysis testifies that 35% of expected efforts (blue colour) will be dedicated to business requirements identifying and modelling; large proportion of efforts (49% - red colour) is expected to be spent for software development and testing; some efforts (16% - green colour) are expected for IS launch. This result could be considered as very logical giving the clear evidence of considerable attention Latvian enterprises are ready to pay for software testing taking into account high importance of successful migration to EURO – as shown on the Figure 5 below.

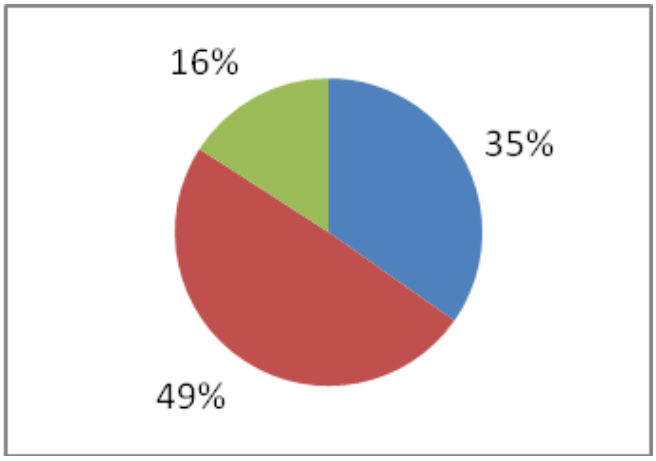

Figure 5. Distribution of companies by the forecasted efforts to IS development phases.

With regards to risk forecasted for each SDLC phase the results are given in the Table 1.

Majority of enterprises expected medium risk level for incorrect or incomplete understanding of business requirements and, hence, development of inadequate functional specification – 72% and 78% accordingly. A lot of companies – 83 % of the whole community forecasted that risk level for existence of some bugs and errors in developed software could be medium thus assessing the situation very deliberately. Practically nobody sees very high of extremely high risk for these three phases of software development when the main role belongs to pure IT professional (software analysts, designers and developers).

Findings 5. Considering risk level when business representatives as end users become an active part of IS adjusting process, relatively large per cent of respondents forecasted very high (19,5 %) or ever extremely high (11 %) risk level that newly developed software will not be tested properly or some essential bugs could remain non-discovered during testing process. This aspect should be of special attention while improving business and IT collaboration issues. Enterprises showed their concerns about IS launch in live environment assessing the risk level as medium in 58 % cases. But more exasperating seems the figure that almost 53 % of companies seeing medium risk of non-existence of well-considered advised back-up and recovery plan that should be activated in case of emergency with migration to EURO. Some enterprises (3 %) forecasted this risk even as high or very high as shown in the Table 2. Development and existence of well-designed deliberative backup plan approved by Top management of the company for each important IT related event like

migration to EURO currency should be mandatory activity for every company supporting successful introduction of any new technology.

Table 2

Risk level estimation' forecast related to each phase of IS customisation

Risk level estimation	Identification of business requirements; business needs analysis and modelling	System-analysis, functional specification development	Software development	Software testing including User Acceptance Test	IS launch in live environment	Emergency plan (Plan for Backup and recovery)
Low	13,89 %	16,67 %	11,11 %	11,11 %	38,89 %	44,44 %
Medium	72,22 %	77,78 %	83,33 %	58,33 %	58,33 %	52,78 %
High or very High	8,33 %	5,56 %	2,78 %	19,44 %	2,78 %	2,78 %
Extremely High	5,56 %	0	2,78 %	11,11 %	0	0

Findings 6. Analysis of expected proportion of consumed human resources efforts spent for different types of software development tasks showed slightly unpredictable results. Human resources consumption was forecasted as: 14% (blue colour) - for modification of input screens and 25% (red colour) for reports' modification; unexpectedly high proportion -22% (violet colour) is forecasted for changes in algorithms; equal part - 22% (green colour) for modification of various interfaces and 17% (light blue colour) for other tasks. It seems such high proportion for changes in algorithms is not reasonable while on the other hand considerably higher proportion was forecasted for modification of interfaces with other external IS. These findings could demonstrate not very good management' understanding of content of tasks to be done for EURO migration – see Figure 6.

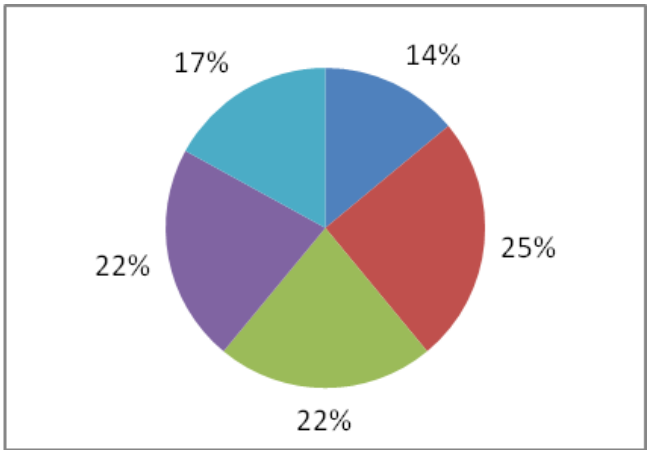

Figure 6. Distribution of forecasted efforts of human resources consumption

Analysis of business and IT collaboration during the process of migration to EURO included two main questions: the first question was designed for estimation how business representatives assess IT department' involvement and contribution to EURO introduction at an enterprise; the second question was designed for assessment of business and IT collaboration success.

Findings 6. Data analysis showed that business representatives estimate the involvement and contribution of IT department extremely high. 83% of respondents found it fully sufficient, 11% - not sufficient while only 6% were not able to assess.

14% of respondents estimated business and IT collaboration during the Project as extremely effective and successful; 58% - as successful enough; 22% - satisfactory; only 6% assessed it as non-satisfactory.

6. THE APPROACH FOR COMPANIES' SELF-ASSESSMENT

The research questions and the results of data analysis allowed elaborating the approach for companies' self-assessment in terms of readiness for essential changes in IT area. In the given research special composite coefficient was used for measuring an enterprise "Forecasted Readiness' Self-assessment". This coefficient could provide an enterprise management the possibility for estimating the internal readiness of an enterprise and its' resources availability in case an enterprise must carry out considerably IT changes due to governmental or other external regulations.

Each of the above-mentioned managerial and organisational aspects (components) was assigned the particular weight suitable to the importance of every component type. This weight was based on the theoretical investigation of factors influencing the success of project; on the interviews with top managers; on expects recommendations and partly on author assumption about components notability and defined as:

$\sum_{i=1}^{n} \alpha_j = 1$, where α_i - a weight associated with i-th component,

$\alpha_i > 0, i = 1,\ldots, n$.

In the given research i = 1, …, 8 and include:

- The existence of established particular Project for appropriate target;
- The existence of detailed Work Schedule with clearly defined tasks, assignments, dead-lines and responsible persons;
- The estimation of Financial Resources dedicated to the Project;
- The estimation of Human Resources dedicated to the Project;
- The assessment of the proportion of each stage of software development life cycle;
- The assessment of the risk probability for each stage software development life cycle;
- The assessment of the proportion of human resources consumed for each type of software development task
- The assessment of business and IT collaboration.

Coefficient "Forecasted Readiness' Self-assessment" R_k for every company was calculated as:

$$R_k = \left(\sum_{i=1}^{n} \alpha_i \cdot f_{i\,\max} - \sum_{i=1}^{n} \alpha_i \cdot f_i\right) / 100$$

where f_i is the value of the appropriate answer from the survey, $f_{i\,max}$ – maximum possible value for particular appropriate survey' question.

Finally, calculated self-assessment coefficients for Latvian enterprises are given in the Table 3.

Table 3

Forecasted Readiness Self-assessment coefficient

An enterprise	Self-assessment coefficient R_k
1	0,52
2	0,55
3	0,62
4	0,57
5	0,55
6	0,5
7	0,64
8	1
9	0,76
10	1
11	0,47
12	0,4
13	1
14	0,57
15	0,8
16	0,83
17	0,90
18	0,68
19	1
20	0,66
21	0,83
22	0,48
23	0,8
24	0,57
25	0,4
26	0,58
27	0,57
28	0,37
29	0,83
30	0,52
31	0,5
32	0,83
33	1
34	0,57
35	0,8
36	1

The results look very satisfactory clearly showing positive forecast from companies' management assessing the readiness of their enterprises as very high.

The algorithm of self-assessment coefficient supposes that in the ideal case an enterprise estimates a level of business and IT alignment and self-readiness for essential changes as the value that is very close to 1.0 showing all aspects and issues have been well prepared and are in place thus

considerably reducing the risks in project's process. The analysis of calculated self-assessment shows that vast majority of investigated Latvian enterprises has the assessment above 0.42 (92%); while 55% of total number of investigated enterprises have the coefficient above 0.60. As a result of research made it could be stated that the readiness of Latvian enterprises was sufficiently acceptable for EURO introduction in our country.

The same migration process and the set of interviews made with top management after migration to EURO approved that in reality EURO launch in Latvia happened in very smooth way and was practically free of serious faults. During thirteen post-migration discussions the respondents that were chosen by random mode from the same initial range of companies, clearly stated that pre-migration assessment was too reserved and low. It turned out that in reality readiness of enterprises for so serious changes was even higher than forecasted before.

7. CONCLUSIONS

In accordance with the research objective stated like identifying the most important risks and influential factors and assessing the readiness level of analysed companies for operating with EURO by using self-assessment readiness coefficient, the following conclusions were found out in the given research.

1. External environment influences an enterprise's behaviour to very large extent. Any governmental regulation related to changes in IT area as one of essential external environment parameter should be clearly stated and approved very strictly as soon as possible leaving no space for any speculations in this regard and reducing the level of uncertainty. In these circumstances an enterprise is able operate in predictable environment for following regulations and accordingly adjusting existing IT systems.

2. In case society is well-informed about changes expected, an enterprise is able to establish either particular Project or compose detailed Work Schedule and assign dedicated financial, human and other kind of recourses. One of the major impact factor that could significantly impact the results of IS adoption, adjustment and implementation process within the company is the strengthening the role of CFO and CIO at an enterprise who is responsible for timely establishing the Project.

3. One of remarkable factor that could essentially influence the risk level and Project success can be considered IT maturity and culture level at an enterprise. Detailed analysis of planned IT tasks and following the best practice, processes and procedures in software development area could seriously increase the enterprise' confidence to be in line with governmental regulations and appropriate changes expected.

4. It is recommended for enterprises using of Readiness Self-assessment coefficient for assessing and forecasting own readiness to changes expected. The calculated coefficient for investigated subset of Latvian enterprises as well as detailed interviews with Top management shows to some extent valuable results for estimating companies' self-assessment for changes expected.

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