

The Selection and Training Framework for Managers in Business Innovation and Transformation Projects

Overview of the development of the empirical model

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Abstract—The riskiest factor in transforming a traditional Business Environment (BE) into an innovative and business lean oriented BE is the role of the business and (e-)Business Transformation Manager (BTM). The basic profile of such a BTM has not been sufficiently investigated in a holistic and educational manner.

The characteristics of a suitable BTM profile is the main goal of the author's selection and training framework (STF) research project; that started in the year 2010. In this research paper, the author tries to prove that the STF research methodology, design and prototype (STF_RMDP) can be applied in a "real world case"; that is in fact the final phase. This final phase is labelled the "STF research empirical model". This whole research is a part of the author's doctorate in business administration.

The STF_RMDP results define the optimal BTM profile who has to cope with complex business transformation projects (BTP). These BTPs need a specific set of skills, especially for the final and the very difficult implementation phase (Trad, Kalpic, IMRA, 2013-an award winning paper). The BTP's implementation phase is the major cause of high failure rates. The BTMs' needed hands-on skills; these skills should encompass: 1) knowledge of business process and services (BPs) technologies, 2) automated real-time business environments, 3) project management, 4) knowledge integration, 5) organizational behaviour, 6) management sciences methodologies 7) enterprise application integration and other concrete BTP implementation phase know-how artefacts. Therefore the researcher recommends the technocrats profile (Fahroomand, 2004) as a "base profile" for such BTPs; that need to be complemented with cross-functional skills (Trad, Kalpic, ITI, 2013).

More specifically, this research focuses on the influence of the BTMs' hands-on business architecture experience, background and education, on managing complex BTP implementations. Where such transformations integrate avant-garde innovation, knowledge and technology. "We know that those organizations that are consistently successful at managing innovation-related changes outperform their peers in terms of growth and financial performance" (Tidd, 2006).

The author has based his research model on the main fact that only around 12% of business organizations successfully manage innovation-related business transformations initiatives. Therefore, there is an important need for a dynamic and automated way of selecting and training future BTMs. BTMs who would be capable of implementing such complex BP based systems (Tidd, Bessant, 2009).

Where STF_RMDP is the empirical model with which the author wants to prove that future BTMs can be selected to successfully build or reengineer various electronic and lean BE (ELBE) components. The empirical model will contain a real world prototype and surveys that will generate the need data sets the qualitative research approach.

Keywords— business transformations, business transformation manager's profile, transformation project implementation, business processes integration, innovation, failure rates, (e-)business processes, empirical research phase and service oriented architecture.

I. INTRODUCTION

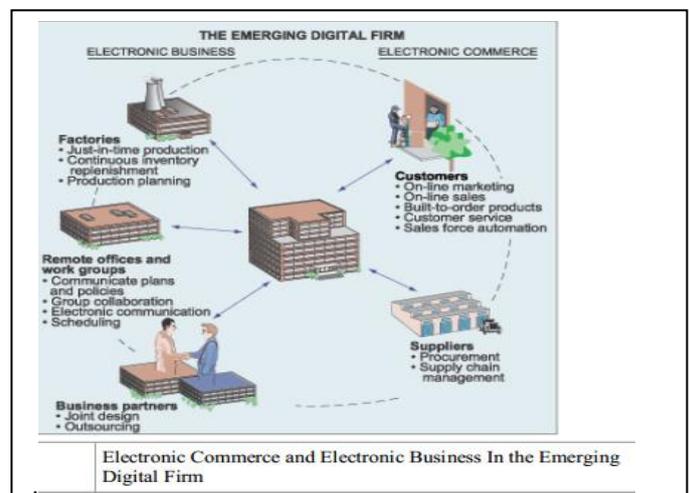


Fig. 1. Interaction in a digital firm or enterprise 2.0 (Laudon, Laudon, 2010)

The research article's main purpose, is to offer a generic overview of the STF_RMDP. As the research aims to qualify the BTMs' profile capacities, background and skills; which are fundamental for the coordination of the BTP of the BE within the global business enterprise (and eventually transformed it into an Enterprise 2.0), as shown in Fig. 1.

The coordination of the integration in the BTP, is extremely difficult. The notions of business processes integration is fundamental for this STF_RMDP research model. Therefore, the literature and resources related to BTM's business processes integration capacities, are fundamental. In addition, it is essential to make the transformation business system feasible and to make it accessible to eventual end business users. Where the end business users can easily model business processes and integrate their tacit business knowledge in the newly built ELBE. The STF_RMDP research model integrates research factors and dependant variables; which are used in the process of selection of BTMs; who are a members of the middle management. BTMs who are also basically technocrats and knowledge workers, support and design the transformation of the (e-) business environment in a hands-on manner; and is the goal of the actual empirical phase (Trad, Kalpic, IMRA, 2013).

II. THE RESEARCH DESIGN OVERVIEW

The STF's most important characteristic is to manage the risk "factors" for the selection of the future BTM for the BTPs. The STF research's empirical outcomes, which is the current research phase, should help BTM selectors (like the human resources) avoid failures through the cross-functional assessment and the right selection of the optimal BTM. This assessment and selection will be insured by the evaluation and monitoring of the BTM's ability to integrate innovative BPs technologies into the existing BE (David, Linthicum, 2000). At this point in time, the STF_RMDP research process hammered the research question (RQ) and finalized the literature review (LTR) phase. The STF_RMDP research has decided to select "Analytical Applicative Research" (AAR), for the STF research project (Chanaron, 2010). The STF_RMDP uses a heuristics model based on categories of factors, that where extracted from the LTR. In this concrete empirical model phase, the factors will be also deduced from a chosen BTP initiative. The STF's AAR is a spiral model which structures implement the action-research steps. Because the spiral model matches perfectly with the AAR's iterative approach. That type of reasoning algorithm will fit the STF's empirical prototype real world implementation (Whitten, Bentley, 2011).

As this research project is based on AAR and on a positivist qualitative approach, the author designed a factors tree-based reasoning model. This model should help to define the BTMs' optimal profile, thru the selection of factors that are deduced from a selected "empirical phase" case study. These factors are then tuned and processed, thru the STF's heuristics model. The prototype's processing outcomes are presented to various transformation specialists in the form of a questionnaire. The results of the questionnaires are correlated and at the end the STF research project, makes a list of qualitative recommendations. Besides the recommendations the

STF_RMDP delivers a concrete framework to be used in BTPs by various types of specialists.

III. EMPIRICAL EXPERIENCES AND BACKGROUND

This STF research project is a distillation of the author's experiences during the last 27 years as a lecturer, senior software consultant, system designer, project manager and auditor. He worked for many international institutions and academic organizations, like SwissAir, Philips Semiconductors, SITA, SwissRe and many others. As a senior consultant and auditor, the author often encounter projects with serious problems and a very high rate of unsuccessfully terminated projects. That is the author's main motivation to peruse the STF research to contribute to this endemic problem related to complex business environments and to promote an effective BTM selection concepts.

Understanding the BEs and the factors that affect their survival, it is only the first step towards a successful BTP. In addition to mastering the ELBE environment and factors management, business people understanding, project managers and computer scientists, the STF_RMDP will offer the relationships between the different factors and build an adequate algorithm to "rate & weight" these factors. Accordingly, this research project unifies resources from two distinct but related areas: BPs technologies and BTPs, it develops concepts for the BTM's selection management and proposes a method to weight and inter-relate his various skills thru the use of factors.

Estimating BTM skills requires a profound understanding of the BPs technologies and business project management issues. This research project presents an original set of fundamentals and fulfils the need for a comprehensive set of rules, in the form of recommendations, that affects the BTM's selection techniques. BTM selectors, BTMs, Professional analysts, project managers, auditors and advanced computer science students as well, will benefit from this research project.

IV. HOLISTICS, MANAGING COMPLEXITY

It is important to mention, that to understand the conceptual material on the STF_RMDP, readers should be familiar with the fundamentals of BTM selection, BPs, heuristics, project management and various information technology disciplines. That is why, researching such complex fields might generate a complex research pattern and paradigm like the STF_RMDP; that maybe is difficult to understand; added to that the STF has a holistic and cross-functional approach to change. Unfortunately that is the nature of the researched topic, that cannot be atomized and the researchers think that, that is the origin of the problem (the cause of high failure rates). How can we solve a complex problem with a simplistic specialized approach? Probably we can not ...

Companies and BTMs need more than basic information technologies to exploit the internet in order to successfully achieve the BTP. Such BTMs and companies need holistic management methodologies like the BTM2, for (e-)business process integration and BTPs (Uhl, Gollenia, 2012). For that goal, the BTM must be skilful in the implementation of

business processes modeling (BPM) based BTPs; he needs also to be: 1) knowledgeable, 2) flexible and 3) self-confident BTM (The Economist, E-management, 2000).

V. PRE-RESEARCH WORK AND PROPOSAL

A. Pre-proposal work (1992-2002)

The STF_RMDP uses some of the author's previous "Information System Risk Qualification Check Coefficient" (ISRQCC) framework's components. The ISRQCC framework was developed for Information Technology (IT) and Information System (IS) control, audit and transformation risk management (Trad, Kalpic, 1999)(Trad, Kalpic, 2002). More specifically, the STF_RMDP uses an enhanced version of the "Risk Quality Coefficient Check" (RQRC) component; that is the reasoning part of the ISRQCC (Trad, Kalpic, RQRC, 1999).

B. Research proposal (2010-2013)

During this phase the author defined the initial proposal for the research proposal (Trad, 2010) and made a final proposal in the forms of a research report and articles (Trad, Kalpic, IEEE, 2011) (Trad, GEM, 2011); as shown in Fig 2.

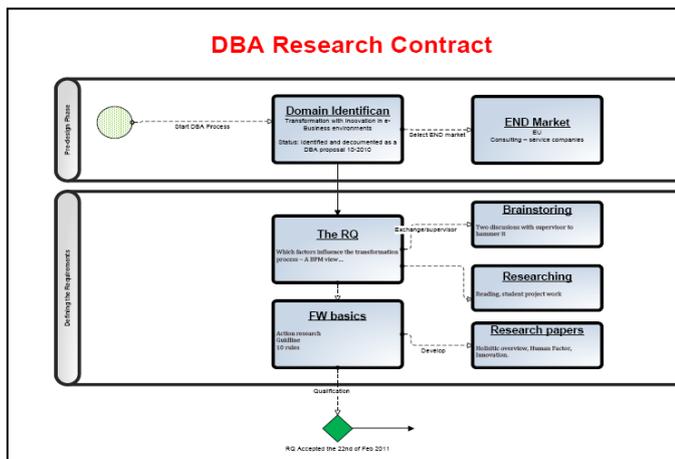


Fig. 2. The STF research pattern (Trad, Proposal, 2011)

VI. THE RESEARCH TOPIC AND QUESTION

As already mentioned in this article, the research topic's "research question" (RQ) was hammered (Trad, GEM, 2011) and the final research question is: **“Which business transformation manager profile(s) are suited for the implementation phase of a (e)business transformation project?”** (Trad, GEM, 2011) (Trad, Kalpic, IEEE, 2011)

VII. THE LITERATURE REVIEW

During the the research's literature review and exploration phase, the author favored mainly the resources on, just-in-time (JIT), hands-on holistic approach to the implementation of tacit knowledge in the ELBE. This dynamic knowledge is

compulsory for the BTM's training, especially in the project's cross-functional implementation phase.

The literature review and research process have localized an important set of books and methodologies that are related to BTPs; that resulted in the STF's set of factors that are (or more precisely, can be) used in the STF_RMDP's heuristics model. That literature review process also helped in the development of the hypothesis as well as the dependant variables. During this phase the researcher wanted to offer an overview of a major problem endemic to BTPs and also to present the most important was to find the "gap" and register the resources related it to the RQ. The successfully terminated literature review phase (Trad, Kalpic, Centeris, 2013), with the help of a large number of related doctoral theses (Willaert, 2001); which have proved the existence of a "knowledge gap" to be researched, and that justifies the necessity of the actual STF research project. The STF_RMDP model, abstracts the research question, and as described in the previous sections, the outcome is an AAR heuristics based selection framework.

To justify the essence of the researched subject, the author relied on a significant number of sources, which confirm the need or justification for the STF. This research's literature review proved the high failure rates in (e-)business transformations initiatives (Trad, Kalpic, IEEE, 2013):

The literature review formed a large building block in the STF research design and methodology. What mostly struck the author was that after so many years and efforts, the failure rates are still extremely high and are even constantly increasing; probably due to the complexity of the implementation phase.

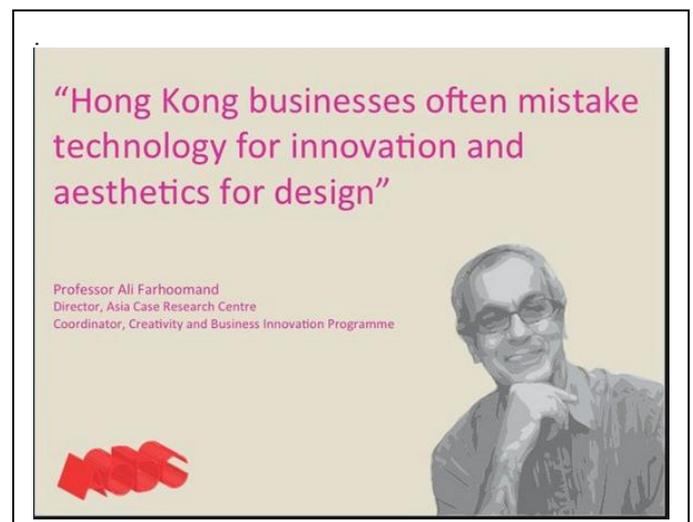


Fig. 3. Businesses have a superficial view of the businss transformation process (Farhoomand, 2010).

The literature review's main purpose was to provide the background and justification for the research topic and the research question; it also served to extract the needed factors and dependant variables, which would comply to most case studies related to BTP initiatives. Therefore, the resultant set of factors can be used in the STF's reasoning engine, for any

empirical model study. The review of the relevant literature and resources covered various categories of resources; and the researcher decided to scope only one category, that is the BTM category. The researcher proved the existence of a knowledge gap, as well as the necessity of the STF research project (Santa Cruz University, 2011) (Trad, Kalpic, Centeris, 2013).

What struck the author during the literature review process was the superficial approach of businesses towards the innovation and business transformation processes; as shown in Fig 3.

The literature review concrete outcomes, components and observations were (Trad, Kalpic, Centeris, 2013):

- A. *The STF "Knowledge Management System" (KMS), is a system organized to store the discovered relevant research works in a structured manner.*
- B. *The BTM literature review category, is the category with which the author has concluded the literature review process.*
- C. *BTPs failure rates are extremely high (Tidd, Bessant, 2009) and this article's author estimates that the previous approaches were too traditional, specialized and managed from a high level. He estimates that the BTP management is detached from the implementation reality.*
- D. *The BTP complexity is mainly due to the implementation phase that causes the BTMs to fail; they especially fail in the management of the BPs implementation phase. This complex cross-functional phase in which the BTM has to manage: 1) various business requirements, 2) BPs and 3) enterprise methodologies. The technology factor (BTM_TCH) can be for example, used in the STF heuristics motor (Trad, BPM, 2013).*
- E. *Adoption of a holistic approach of change and transformation, like the one proposed in BTM2 (Uhl, Gollenia, 2012). This research focuses on the influence of the BTM's capacities, experiences, background, knowledge and education, on the BTP environments. These skills are crucial for the complex process of integration of innovative technologies in BTPs. Especially in the project's implementation phase (Capgemini, 2007)(Capgemini, 2009).*

VIII. THE RESEARCH MODEL AND THE KNOWLEDGE "GAP"

It has been already mentioned that in the previous research phases the knowledge "gap" was acknowledged. That is mainly because, the literature and methodologies treating BTMs' characteristics in BTP's implementation phase is practically inexistent. With the fact that the knowledge "gap" was defined, the author will proceed with the STF_RMDP, that defines the empirical phase and a real world implementation.

IX. THE RESEARCH DESIGN AND METHODOLOGY

This phase's goal is to design and implement the empirical phase and to present a real world implementation concept; that has the following requirements and characteristics:

A. *The research's dependent variables (based on factors)*

The BTM's category, factors and dependant variables will be used as parameters for the configuration of the STF_RMDP process. This processing will deliver the needed set of possible solutions; in the form of BTM profiles. The STF's goal is select the optimal BTM who can implement the BTP successfully, for that reason the BTM needs a set of skills that are represented in the form of the STF_RMDP factors (which have the format: BTM_xxx, where xxx is adapted to the type of the needed skill. For example, xxx that stands for "ARC" (or BTM_ARC), represents the BTM's factor for "business architecture skills", that is selected, has to be considered in the selection process. These factors will be fed in the STF's AAR heuristics motor in order to bring up the optimal BTM profile. This research's AAR model, is based on a heuristics motor, that can be configured, weighted and tuned using the BTM's factors. In this article the author, has defined the STF's factors in the researcher's previous phase (Trad, BPM, 2013).

B. *The research has designed a minimal set of hypothesis, which resulted from the literature review phase:*

- 1) *H1: The BTM must know BPs stack related technologies.*
- 2) *H2: The BTM must know and be capable to implement the STF_RMDP related model for training.*
- 3) *H3: The BTM must be of an engineering background with substantial ICT experience (a technocrat).*
- 4) *H4: The BTM is a business and enterprise architect.*
- 5) *H5: The BTM is a member of the middle management.*

C. *The AAR for STF*

AAR is a type of research that is mostly applied in education research, which fits right the STF, because it inspects the BTMs skills and educational background (ECS, 2004). In this research the author wants to prove that the BTM's profile is very much influenced by his business education and background.

1) *The AAR is certainly not the only qualitative research method that would fit the STF research; but, it defines exactly how the STF works, and also because it makes possible to insure the change thru: a) "actions" and b) understanding (= to the "research" or implementation). These two steps can happen at the same time (Dick, 2002).*

2) *The BTM selector, who can be; a) a human resources specialist, b) executive management or c) other type of personel; selects the initial set of STF factors that corresponds to the BTM's initial profile. In this empirical model the researcher will select a case study (Farhoomand, 2004) that corresponds to the STF's empirical model.*

3) *Tuning the set of factors, gives the possibility for the implementation of a new iteration (=executing an action)*

4) *The BTM selector and the business transformation team are concerned by the implication of high frequencies changes; and are involved in the configuration of the action(s), that are to be taken and to be linked, so an adequate set of solution can be found. As it is a cross-functional approach and is widely shared between all the the BTP's staff, that is why the STF prototype (or system) should be carefully planned and configured.*

5) *The "action research = action and research" artifact, that corresponds to the STF's tree nodes process and a call to a service like the Knowledge as a Service (KaaS) (Birudavolu, Nag, 2011), is an optimal solution for the STF's research topic and prototype. The STF AAR implementation is cyclic (and spiral) where each cycle corresponds to a creation or modification of a decision tree node (Trad, Swissair, 1996).*

6) *Every new iteration; processes the collection of data about the current BTM's capacities and the ongoing practice or program. Then, it presents the reasoning outcomes and checks if there were improvements or regressions.*

7) *If the results are satisfying, then the BTM can develop a set of conclusions about the improvement(s) on his ongoing transformation project management performances.*

8) *For further tuning, otherwise the framework proposes another iteration, otherwise the transformation project is stopped; which means that the BTP and its BTM have failed.*

9) *This AAR based framework setup and execution, can be coordinated by the: a) human resources, b) executive (e-)business managers, c) auditors, d) senior business designers, e) senior enterprise architects and groups of business analysts.*

10) *The heuristics model as the reasoning engine, is a positivist AAR model, that is designed on a heuristics model. And is currently being redeveloped. This heuristics model is based on a pseudo beam (tree) search method (Jaszkiewicz, Sowiński, 1999). The STF's prototype and system alternates between "action" and (reasoning & business) processing these two types of behavior constitute the STF's decision making process (DMP). The DMP delivers the set of possible solutions, that is called the set of "STF recommendations for the selection of BTMs". That will be the outcome of the research.*

11) *. The DMP starts with the critical processing (or research) of the selected STF factors and defines a root node and links it to the possible set of actions. That is enabled by the mapped configuration of the next (node's or state's) set of "research action's" to be taken.*

12) *It is a spiral approach because there are cycles within iterations, where the number iterations are defined by the BTM's selector.*

13) *These iterations will extend across the STF's processing; where each cycle (or new node) defines the set of problems (related to factors) to be solved. These problems are processed by a related set of actions to be taken. That mapping concept defines "analytical action research inter-related" steps.*

D. The research's DMP and dependent variables are based on factors

The STF's DMP data management interfaces, have the following features (ECS, 2004):

1) *Has a continuous collection and archiving of data about the current BTM's skills and STF_MDP results, in the form of DMP outcomes.*

2) *BTMs' profiles are saved as historic for future selection processes.*

3) *Reflection or reasoning on the acquired state or tree-node (data) is delivered thru a tree presentation.*

X. THE STF_RMDP, THE DMP SOLUTIONS

STF's set of possible solutions that results from the STF's heuristics decision model (based on the AAR and STF factors), helps the BTM selectors in the selection of the future BTM profile. The STF starts with the initial set of selected requirements that define the BTM's profile. Then the STF's system DMP is launched to find the set of possible solutions (in the form of profiles or possible improvements to the current BTM skills).

The STF is also used also to define future innovation and training recommendations for the management of change. With that approach the company avoids the blind and risky traditional business transformation methods such as "let's re-transform" the whole ELBE, without taking into consideration the BTM's profile (and his implementation capacities); that kind of archaic business transformation approach can create resistance and failure.

For this research's empirical phase, there is a crucial and justified need for long planning activities, and for investing efforts in various fields to prepare the prototype (Bourner, 1996). The empirical phase is the jumpstart for this holistic research process (Bruce, Deakin University, 2010).

XI. THE STF PROTOTYPE OF THE EMPIRICAL MODEL

The STF's empirical model will be based on a prove of concept (POC) or prototype, which is being developed using the Microsoft Visual Studio 2012 environment. The POC will use the MVC4 architectural pattern, that collects the model's data (=for "M" in MVC).

The POC will contain the STF's major components, and what will be primarily tested is the reasoning engine, which is based on the AAR heuristics model. Added to that, the author will use some surveys to confirm the POC's outcomes; which means that the STF_RMDP is a mixed method based prototype.

These surveys will be used to interview executive managers' on: 1) the research's topic; and 2) the POC's outcomes. For the surveys' processing, the author will implement a quantitative processing module, that uses an experimental quantitative method, that measures the hypothetical "generalizations", sourced from the surveys' outputs. (Quantitative, 2010) (Hoepft, 1997).

This research's POC will serve to confirm the research's hypothesis and the STF_RMDP model. And the results will be presented as a in the form of a set of recommendations.

The following steps will be performed:

- A. *Build, prepare and configure the STF's prototype components:*
- 1) *The STF Knowledge Services/KaaS (STF_KWS)*
 - 2) *The STF KMS (STF_KMS)*
 - 3) *The STF Hypothesis project (STF_HYP)*
 - 4) *The STF Factors (dep variables) (STF_FAC)*
 - 5) *The STF Questions (STF_QUE)*
 - 6) *The STF Data Model (STF_DAT)*
 - 7) *The STF Reasoning Model (STF_ALG)*
 - 8) *The STF Application (STF_APP)*
 - 9) *The STF Results (STF_RES)*
- B. *The STF's implementation (or POC) main tasks are:*
- 1) *To Manage the research project's knowledge categories in KMS*
 - 2) *To Define the factors and dependant variables for the DMP.*
 - 3) *Establishing the initial BTM's basic profile from the selected case study. The factor will be used in the qualitative part of the POC.*
 - 4) *Establish the possible questions for the surveys (for the quantitative part). This step should confirm the previous step.*
 - 5) *Create the surveys' templates from the developed set of questions..*
 - 6) *Define and select a group of experienced (10-15) executive managers and TBMs who are willing to fill the surveys.*
- C. *Select a "case study" that corresponds to the research topic.*
- D. *"Return of the JEPI", from A. Farhoomand, will be used to define the research project case.*
- E. *A set of factors will be deduced from the selected case study, an example of a selected STF factor is, BTM_121... (Trad, BPM, 2013),*
- F. *The POC's implementation is being designed and developed. It will be used to collect and process the following sources of data: I) from the principal qualitative part, in the form of factors weightings and I) a marginal quantitative part, that comes from surveys' answers.*
- G. *Concerning the domain specialist interviews, a list of qualified persons will be selected to go thru the interviewing exercises and to fill the STF's surveys. The research process previews to interview domain specialists and generate the collect data sets to be used in the final quantitative process. The considered types of specialists, to be interviewed are:*
- 1) *Business schools professors and directors*

- 2) *Managers of information systems*
 - 3) *Senior project managers*
 - 4) *Human resources specialists*
 - 5) *Educational professionals*
 - 6) *Transformation managers*
 - 7) *Executive Managers*
 - 8) *Senior Business Analyst and Auditors (Trad, 1999)*
- H. *The POC's application data collection comes from the surveys and the processes of the DMP heuristics model. These data sets will be stored in the STF's KMS data base, that will have a query interface. This interface that will help the researchers to define data patterns to define future BTM profiles.*

XII. THE STF BUSINESS TRANSFORMATION PATTERN (STFBTP)

The research's goal is to create a concrete STF environment that is based on a business process oriented transformation pattern. This STF pattern will be in fact a "STF business transformation managers' project pattern" (STFBTP)(Trad, BPM, 2013).

XIII. STF'S NEXT RESEARCH PUBLICATIONS AND ITERATIONS

This article is an overview of the STF's empirical model, that will transform the experiences made during the proposal and literature review phases, into a concrete framework. For that goal the researcher has planned the following sets of next research activities:

- A. *The STF's empirical phase, future planned iterations are:*
- 1) *Develop a short summary on the STF empirical model, expected delivery date: 01082013.*
 - 2) *Develop a full research paper (IEEE 2013) on the STF's empirical model phase overview (which is this research paper), expected delivery date: 01082013.*
 - 3) *Develop a full research paper (IMRA 2014) on the STF's empirical model phase - business environment, expected delivery date: 01042014.*
 - 4) *Develop a full research paper (IEEE, ITI 2014) on the STF's empirical model phase - empirical heuristics model, expected delivery date: 01052014.*
 - 5) *Develop a full research paper (IEEE, ITI 2014) on the STF's empirical model phase - prototype/prove of concept, expected delivery date: 01052014.*
 - 6) *Develop a full research paper (IEEE, Centeris 2014) on the STF's empirical model phase - rel world case surveys completion, expected delivery date: 01072014.*
 - 7) *Develop a full research paper (IEEE, 2014) on the STF's empirical model phase - rel world case application, expected delivery date: 01092014.*
- B. *The final research phase will contain the following steps:*
- 1) *To define a real-life situation via the selected business case study (Farhoomand, 2004).*

- 2) *To Test the STF model in a real life situation.*
- 3) *Write the final research report and recommendations for concluding the research, expected delivery date: 01102014.*

XIV. CONCLUSION

In this article the focus is on the BTMs' profiles, hence their capabilities to holistically manage the design and manage the implementation of a BTP. More specifically the author gives an overview on the research's empirical phase, in which a real world framework should arise. This phase is planned in a set of tasks that should result in full research articles, the whole research is planned to terminate in twelve months.

The research's outcome will propose a framework on how to select, train and evaluate a BTM. The STF literature review proved the credibility of a knowledge "gap". The gap that exists between the traditional management skill building and the complex projects' realities. With the literature review's termination the authors presented the STF research design and model, that is based on factors.

The STF's empirical implementation will take into account the integration of just-in-time knowledge management technologies in organizational business processes; by using "KaaS". This empirical phase will complete the STF and make it capable of selecting a BTM that has the skills to integrate avant-garde technologies in the BTP. That is the major issue in insuring the good functioning of a real time enterprises 2.0, like for example the (e-)transportation industry that has to deliver real business performance (Markides, 2011).

The STF's research and more precisely this phase should convert STF's collected practices and experiences to a management knowledge pattern (STFBTP) on how to select and train a BTP.

The research will use the conventional academic model to create the initial BTM profile. The unfortunate schooling of business managers (standard business administration profiles) that is based on "limited" strict objectives and outcomes; where everything happens in well defined contexts, might not be an optimal BE for the development of cross-functional BTMs, who have to manage complexity and chaos. The empirical phase will try to show that these schooling environments, generate in general, specialized profiles that can hardly cope with heterogeneous complexity and fast changes. These high frequency changes are mainly due to the hyper-evolution of technology.

The empirical phase will try to prove what is the main reason for BTMs failures, and will try also to define an optimal profile who is capable of finalizing the implementation phase of a BTP. Until today, there has been a lot developed on enabling success, the author proposes to inspect why BTM fail in the implementation phase of the BTP. That is mainly due to the lack of knowledge in managing business integration and implementation, where there is an important use BPs technologies.

This is another article in a long series of research articles that represent the STF BTP pattern, that is based on AAR.

Where the factors are the result of the literature review and the real world case that is analyzed. These factors are the base of the AAR's heuristics model.

The STF POC recommends to improve the success rates, by selecting and training the right BTM profiles (Kelada, 2009). In this article is a jumpstart to the category of empirical research modules and articles, in which the authors will present the POC's prototype that is related achieved results. This prototype is based on an AAR reasoning engine (DMP) and a survey system that has to be filled by domain specialists.

The STF's DMP delivers a set of possible solutions that result from its heuristics decision model (that is based on the actions and nodes). These solutions help the BTM selectors in the selection of the right BTM profile. Then the STF's system DMP is launched to find the set of possible solutions (in the form of profiles and possible improvements). The STF can be also used to establish future innovation and transformation related training recommendations; and with that mean the enterprise avoids the risky traditional business transformation habits, such as "let's change" the whole BE, without taking seriously into account the BTM's profile; that can create major problems.

ACKNOWLEDGMENT

In a work as large as this research project, technical, typographical, grammatical, or other kinds of errors are bound to be missed. Ultimately all mistakes are the author's responsibility. Nevertheless, the author encourages feedback from readers identifying errors in addition to comments on the work in general.

It was his great pleasure to prepare this work. Now his greater hopes is for readers to receive some small measure of that pleasure. The author owes a special debt to Webster University who helped him develop this project.

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