

The Selection and Training Framework (STF) for Managers in (e-)Business Innovation Transformation Projects - The Background

Antoine Trad¹, Damir Kalpić², and Hiam Trad³

¹*Antoine Trad Webster University (Switzerland) – Geneva*

²*Damir Kalpić, University of Zagreb Faculty of electrical engineering and computing Unska 3, 10000 Zagreb, Croatia*

³*Hiam Trad IBISM (Switzerland) – Chemin des clairieres 20, 1066 Epalinges, Switzerland
E-mail(s): Antoine.e.trad@gmail.com, damir.kalpic@fer.h, hiam.trad@gmail.com*

Abstract. *Although a lot has been already written and developed on the theme of business and e-business transformations failures, there still is a very high rate of failures. These failures are very high because of the problems encountered in the implementation phase of a business transformation project. Traditional business managers often lack the skills necessary for the implementation of innovation and technology; these skills are needed to complete successfully the strategically important innovation and technologies related projects. One of the most risky factors in transforming a traditional Business Environment (BE) into an innovative and dynamic BE is the role of the business and e-business Transformation Manager (BTM). The role of such managers has not been sufficiently investigated in a holistic and educational manner. The current authors' research main goal is to define the business transformation managers' optimal profiles. The focus is on the influence of BTM's hands-on capacities, experiences, background, knowledge management and education. The BTM has to intervene in the complex process of integrating innovation in a business transformation project. The research outcomes can be applied to select and/or train BTMs in e-business environments. This industry is living highly turbulent times and transformations happen frequently, more than in any other traditional industry. In this first article of a planned series, the research background is presented.*

Keywords. transformation business manager, innovation, failure rate, evaluation, e-business.

1. Introduction

Currently, business transformations have to take into account the integration of knowledge management oriented technologies in

organizational business processes. That is assured through a good business communication infrastructure. That is the major factor assuring that the "real time" (like in the transportation industry) enterprises deliver real business performance and sustainable benefits [15].

This article presents the background of the "Design Research Pattern" on how to fill the gap between the management and the integration of innovation in the implementation phase in a hands-on manner [29]. For such tasks, there is a need for a specific type of managers; who must be specifically selected [17].

More specifically, the research focuses on the influence of experience, background and education in managing complex business transformations that integrate avant-garde innovation. It is known that organisations, consistently successful at managing innovation-related changes, outperform their peers in terms of growth and financial performance [18].

A lot has been written on the complexity and the important failure rates of (e-)business transformation projects integrating innovation. Nevertheless, studies confirm that only around 12% of organizations successfully manage innovation related transformation changes [19]. The market actually needs such concrete BTMs profile selection frameworks, especially on the middle and executive management levels; in order to integrate complex BEs [26].

Highly complex integrated business environments that use innovation extensively have become hard to manage, what results in very high failure rates. The Selection and Training Framework measures and defines the BTM profile [22][23]. It also helps BTMs mainly in strategic business transformation projects, in the decision making processes and to monitor their efficiency in real-time. This insures the enhancement of management skills [6].

1.2. This research process structure

This research presents a series of articles [29]:

- ◆ The Research Model Overview
- ◆ The Background (The current article)
- ◆ The BTM's Profile [26]
- ◆ The Research Question
- ◆ The Literature Review [27]
- ◆ The Literature Review Categories
- ◆ The Research Methodology and Design
- ◆ The Research Model Artefacts
- ◆ The Prototype
- ◆ The Research Outcomes

2. The business STF

In the pre-research phase, this article's authors worked on the selection, training, evaluation and follow framework (STF); and that phase was concluded with two publications (IEEE, 2011):

- ◆ The “Selection, Training, Evaluation and Follow Framework (STF) for Managers in Business Innovation Transformation Projects” - The Holistic View [24].
- ◆ The “Selection and Training Framework (STF) for Managers in Business Innovation Transformation Projects” - The Human Factor [25].

The STF project seemed to be too ambitious. The research scope was selection and training of business transformation managers.

2.1. The STF

The future STF is the framework that will contain a set of rules that will help project managers and human resources managers in selecting the right BTM. Besides the selection, the STF will help in coaching, training and evaluation of such BTMs.

2.2. Transformations and types of change

The STF is based on the idea: “You can't manage what you can't measure or control” [5].

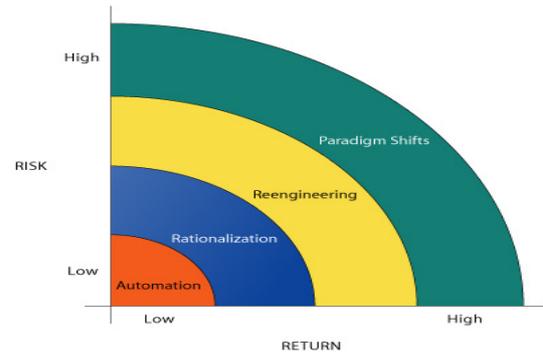


Figure 1. The risk spectrum [13]

In Fig. 1, Laudon presents the risk factor that is dependent on the type of the transformation process that has to be executed. In this research, the paradigm shift is the type of change to be considered and as we show in Fig. 1, it is the riskiest type of business transformation. The authors share a viewpoint that one cannot manage what s/he does not understand and cannot implement him/herself. That is the reality gap between the project management and the real-world implementation. The person, who is managing the transformation project, should be capable to participate actively in the implementation phase. This participation is done in a hands-on manner. “Hands-on” is the framework’s general philosophy to support the BTM in the implementation phase.

The STF framework helps to select the right profiles that are experienced and qualified to integrate the enterprise's components: *1) Technological/Innovation*, *2) Market* and *3) Organization*. These components undergo major changes during the transformation process.

The business information system (BIS) works as its engine, as shown in Fig. 2, and the BTM is supposed to have a good working understanding of such an environment [19][13][3].

This framework will prepare future transformation managers and change designers in diagnosing (a) some of the problems endemic to transformation processes and be more efficient in the implementation phase (b). It can likewise be used to train (c) and thus to improve the transformed project's success rate [4][8]. In general, the risk rises with the type of change to be introduced as shown in Fig. 1. In (e-)business related transformations, as already mentioned, the paradigm shift is the riskiest type of change. That paradigm shift concerns all the enterprise's components; not only the business information system. This automatically implies that the BTM's cross-functional hands-on knowledge

must be up to date; especially in the avant-garde (e-)business related environments.

3. The STF research design concept

This research avoids to reinvent the wheel and tries to find its added-value to existing works; hence it researches to fill the gap to the existing major works, concerning (e-)business transformations in the implementation phase.

The STF's most important characteristic will be to manage the risk factor that helps to avoid failures through the cross-functional assessment and selection of the optimal BTM. This assessment and selection will be done by the evolution and monitoring of the BTM's ability to integrate innovation into the existing BE [7].

This actual research work will be based on the Analytical Applicative Research (AAR) [6]. This is a heuristics model that uses technology, innovation and organisational factors.

3.1. The research question

The research question is: "Which manager profiles are suited for the implementation of an (e-)business transformation project in the airline industry ?" [22][27]

4. The Business Transformation Process

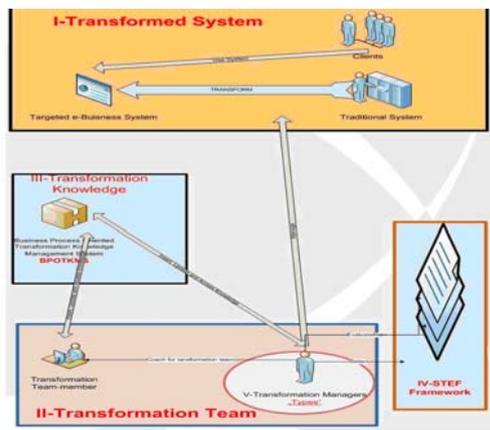


Figure 2. The Transformation Overview [23].

Fig. 2, presents the main components of the transformation process. That is where the BTM plays a central role. The STF recommends a BTM profile with a holistic hands-on approach to the transformation project. These characteristics will provide that the implementation phase [13] should have better chances to succeed, as shown in Fig. 2.

5. (e-)Business & transport industry

The research outcomes and recommendations can be applied to future managers in automated business, who are and will live highly turbulent times, and where business transformations happen in very high rates; more than in any other industry. The business environment changes happen more rapidly with globalization. Small and medium-sized companies also have frequent changes in their business environments. Today's enterprises have become global. The legacy business environments are not flexible enough to adapt to change. During such transformations, discordance between business and information systems actors may occur [1][28][10]. We can even talk about "an antagonism" between these two actors.

5.1. Context of business transformations

The goal is to examine the existing writings and resources on the research question. The main outcome should be to come from the empirical world and generate a set of rules or theories to support the STF. Using the fact that failure rates are still extremely high [19], the authors of this article estimate that previous approaches to training managers and students in business schools were too theoretical; and were perceived from a too high perspective.

Taking into account that (e-)business is a sub-category of what we refer to as innovation, then the rate of failure for (e-)business transformation projects is even higher. Such transformation projects need a holistic cross-functional way of management, a management that is at the same time of the "hands-on" type.

Business transformation management methodology (BTM2) is a new approach for the holistic management in business transformation projects. The methodology is developed by the Business Transformation Academy (BTA), a Business Consulting Division of SAP. An interdisciplinary think tank from psychology, information technology, strategic management, process management, and social sciences have joined together to create a '360-degree' view of what business transformation means [30].

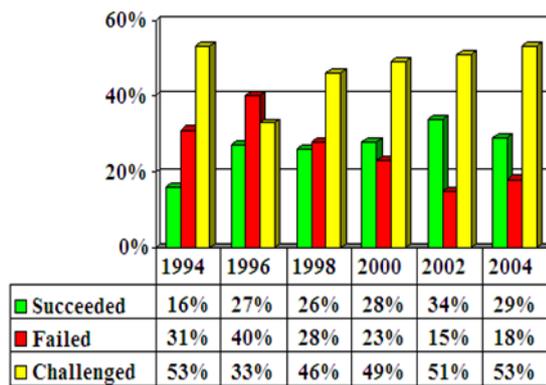


Figure 3. Project Failure estimations [19].

In Fig. 3, we see the evolution of the success factor for the transformation process, since the year 1994. We realize that the success rate has improved, but unfortunately, it is still too low.

The authors of this article admit the importance of the human factor but they will try to prove also the importance of other factors such as education and the related project hands-on knowledge. That all is connected to the complex phase of managing the implementation phase of the business transformation.

6. The failure rates

As mentioned before, the failure rates of (e-)business transformation projects are still extremely high [19], and this article's authors estimate that the previous approaches were too silo styled, specialized and managed from a very high level. This article's authors like to emphasize the total lack of hands-on approach. That causes the collapse of many (e-)business projects, especially in the implementation phase of the transformation project. To justify the importance of the researched subject, the authors relied on significant sources, which demonstrate the justification for it. At the same time, the importance was confirmed related to the failure rates in (e-)business transformations:

- ◆ One of the most famous quoted sources of metrics for transformation initiative failures are the Chaos Reports, produced by the *Standish Group* over the last fifteen years, which assert that only around 29% of transformations come in on time and budget, as shown in Fig. 3, [20][21][2].
- ◆ Transformation initiative for change is a critical subject for organizations. Research shows that the failure rate of such initiatives

is at 70-80%, while other organizations are struggling for survival of their projects [16].

- ◆ 2009 Standish Group Chaos Report describes the "Worst Transformation Failure Rate in a Decade" [2]. This one is interesting for two reasons: a) The phenomenon is escalating and 2) this article's authors consider the previous works to be technically ineffective.
- ◆ "The failure rate estimations represent a downtick in the success rates from the previous study, as well as a significant increase in the number of failures", says Jim Crear, Standish Group CIO: "They are low point in the last five study periods. This year's results represent the highest failure rate in over a decade"; [20][2].
- ◆ "70% of transformation project members express dissatisfaction with the communication of objectives to employees, and 75% express dissatisfaction with training, commitment and people management" [12].
- ◆ BTMs fail in the implementation phase of the business transformation project [3].
- ◆ Failure rates of business transformations integrating innovation are high. Studies confirm that only around 12% of organizations successfully manage innovation transformation changes [19].

(e-)Business transformation initiatives for change are a critical subject for real-time business organizations. Various researches show that the failure rate of such initiatives is very high, mainly due to problems in finalization of the implementation phase. The failure spectrum of such transformation projects enforces an empirical justification for exploring a gap. The efforts in this research concentrate on the transformation manager role and more specifically, his/her role during the implementation phase.

7. The Implementation, a critical phase

BTM must manage a team of system analysts in all the projects phases [31]. The implementation phase that follows the analysis and design phases of the (e-)business transformation project is seen as the riskiest stage [4][3]. Knowing that the implementation phase causes the (e-)business transformation projects to fail, the right BTM must be selected using the STF. These failures result from the BTM's: 1) wrong selection by the human

resources, 2) lack of training and experience, 3) inadequate system of capacities evaluation, and 4) lack of experience in the implementation phase. (e-)Business transformations generate a paradigm shift in the business environment and as shown in Fig. 3, it is a risky type of change.

7.1. BTM as a technologist - a technocrat

This research presents a framework for BTM's selection, which is based on a holistic and integrative project management approach. The main questions that arise in the business transformation process are [30][15]:

- ◆ Is it possible to build any business scenario without the use of automation and information technologies?
- ◆ As information technologies are the fundament for any business scenario, is it possible for a BTM not to have substantial knowledge in information technologies and integration techniques?

7.2. BTM as a business processes specialist

In this period of evolution, an intensifying focus on process-related skills, competencies and competitive differentiators will increasingly separate process excellence leaders from the laggards among the "Global 2000", according to Gartner Inc., who has identified some of its key predictions for business process management (BPM) in 2011 and beyond. These predictions imply that BTMs must have a good combination of business knowledge, business process competencies and integration skills. [9].

8. Conclusion

This is the first article in a series that presents the "Research Design Pattern" [29] of the STF. As mentioned, the failure rates are still extremely high, where only about 12% of the business transformation projects succeed [11][19]. Inadequate, too specialized and ineffective training has the potential to seriously limit the realization of the (e-)business systems; this explains the problems encountered in the implementation phase [14]. This article's authors estimate that the previous approaches were too "silo styled" and approached from a too high level; where the major weakness of the BTM shows in the implementation phase of the transformation. BTMs mainly tackle various

aspects of the human factor and the approach to innovation was/is mainly gadget/far-driven and theoretical. The authors propose a holistic, hands-on approach.

Up to this point, the research conducted by this article's authors, has shown that the traditional managers are (or were) strongly influenced by the conventional academic model that forges a "silo" based profile. In some sense, these managers are detached from reality, by not participating actively in the implementation phase, the phase in which transformation projects fail. The actual system of schooling and training is based on a very strict logic of achieving objectives and outcomes in well-defined contexts. That in general generates and forms a specialized profile of managers. These managers can hardly cope with heterogeneous complexity and manage chaos. Besides managing business complexity, this future or current manager must manage a coupled environment of business and e-business, and the underlying information technology infrastructure. This article opens the door to the second article in a series, in which this series authors will try to define the BTM's optimal profile [26].

9. References

- [1] Abdullah S, Al-Mudimigh B, Saleem F, Zahid Ullah Z, "Developing an Integrated Data Mining Environment in ERP-CRP Model- A Case Study of Madar," International Journal of Education and Information Technologies. 2009. vol.3.
- [2] Bishop M, Standish Group Chaos Report: Worst Project Failure Rate in a Decade", USA, 2009.
- [3] CapGemini, "Trends in Business Transformation - Survey of European Executives". Capgemini Consulting and The Economist Intelligence Unit, France. 2007.
- [4] Capgemini Consulting, "Business transformation: From crisis response to radical changes that will create tomorrow's business. A Capgemini Consulting survey". France. 2009.
- [5] Chaffey D, Ellis-Chadwick F, Johnston K, Mayer, Internet Marketing, Strategy, Implementation and Practice, 4th Edition, Pearson, USA. 2008.
- [6] Chanaron E, "DBA Workshop", GEM, France, 2010.

- [7] David S. Linthicum, D, Enterprise Application Integration, Addison-Wesley Professional, USA. 2000.
- [8] Doyle ,M, "Organizational transformation and renewal: a case for reframing management development", Leicester Business School, De Montfort University, Leicester, UK. 1995.
- [9] Gartner, "Gartner Says Between Now and Year-End 2014, Overlooked but Easily Detectable Business Process Defects Will Topple 10 Global 2000 Companies". Gartner Business Process Summit, UK. 2011.
- [10] IJCSNS , Small and Medium-Size Companies Based on UML“, IJCSNS International Journal of Computer Science and Network Security, VOL.6 No.5A.
- [11] Kelada, J., (2009). Why do the majority of change initiatives fail and what to do about it - The example of TQM - DBA. GEM, Grenoble, France.
- [12] Kringsman M, Business change failures, 2008.
- [13] Laudon K, Laudon J, Management Information Systems, 11th Edition, Prentice Hall, USA. 2012.
- [14] Léger P-M., Charland P, Feldstein H, Robert J, Babin G, Lyle D, Business Simulation Training in Information Technology Education: Guidelines for New Approaches in IT Training. Journal of Information Technology Education Volume 10, Montréal, Canada. 2011.
- [15] Malhotra, y, Integrating knowledge management technologies in organizational business processes: getting real time enterprises to deliver real business performance. Emerald Group, Journal of Knowledge Management. USA. 2005.
- [16] RapidBI,. «Business Transformation – a change strategy”. 2007. <http://rapidbi.com/management/businesstransformation/> , 2013.
- [17] Rülling Ch., GEM DBA Workshop – Research Design, Workshop Manual. DBA Workshop , Grenoble Ecole de Managemen, France. 2011.
- [18] Tidd J, From Knowledge Management to Strategic Competence, 2nd Edition, Imperial College, London, 2006
- [19] Tidd J, Bessant J, Managing Innovation, Integrating Technological, Market and Organizational Change, Wiley. 2009.
- [20] The Chaos Reports, (2010). http://gtwebmarque.com/wikis/gtwm/index.php/Transformation_Failure, 6 FEB 2013
- [21] The Project Failure, http://gtwebmarque.com/wikis/gtwm/index.php/Transformation_Failure, 2013.
- [22] Trad A, The “Selection and Training Framework” (STF) for Manager’s in Business Innovation Transformation Projects - The Proposal”, GEM, France, 2011.
- [23] Trad A, The “Selection and Training Framework” (STF) for Manager’s in Business Innovation Transformation Projects - The Research Design”, GEM, France, 2011.
- [24] Trad A, Kalpic, D, The selection and Training Framework” (STF) for Manager’s in Business Innovation Transformation Projects”A Holistic Overview. IEEE, Conference on Information Technology Interfaces; Cavtat. Croatia. 2011.
- [25] Trad A., Kalpic, D., The “Selection and Training Framework” (STF) for Manager’s in Business Innovation Transformation Projects” The Human Factor. IEEE, Conference on Information Technology Interfaces; Cavtat; 2011.
- [26] Trad A, Kalpic, D, The “Selection and Training Framework” for Manager’s in (e)Business Innovation Transformation Projects - The Business Transformation Manager's Profile. IEEE, MIPRO. Croatia. 2013.
- [27] Trad A, Kalpic, D, The “Selection and Training Framework” (STF) for Manager’s in (e)Business Innovation Transformation Projects - The Business The Literature review. IEEE, ITI. Croatia. 2013.
- [28] Tučková Z, Tuček, D, Increasing knowledge by teaching of modern BPM systems. Education 10'. WSEAS Conference. 2010.
- [29] Quinlan, C, Business Research Methods. Dublin City University. Cengage Learning. Ireland. 2011.
- [30] Uhl, A, Gollenia, L,"A Handbook of Business Transformation Management Methodology", Gower. 2012.
- [31] Whitten J, Bentley L, 2011 'Systems Analysis and Design Methods". McGraw-Hill & Irvin, USA. 2011.