CHANGE MANAGEMENT IN E-TRANSFORMATION PROJECTS CASE STUDY FROM TURKEY

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─Abstract─
National and international experiences suggest that well-planned institutional approach plays key role in the success of e-government projects, and large part of these projects involves transformation agenda. In this paper, we highlight and elaborate the key role of change management with a holistic approach. We show through examples of a case study that successful change management application is as important as successful project management for e-transformation projects. Our findings suggest that awareness, motivation and involvement of all levels of stakeholders in e-transformation process should be regarded at fullest extent.

Key Words: *Change Management, E-transformation, E-government, Public Procurement, State Supply Office, Public Administration Reform*

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1. INTRODUCTION

Due to the advantages of efficiency, transparency and productiveness provided by e-government services, more and more public administrations are moving their services to the electronic environment. In contrast to a wide misunderstanding, the process of "e-transformation" is not just a technical process. In fact, the "e-" in the "transformation" only corresponds to the visible side of the iceberg; the major part of e-transformation is changing the business processes, the mindset of people and management. The electronic transformation emerges change in the work culture.

E-transformation process is usually a ground shaking process, especially for institutionalized organizations with very traditional backgrounds like public administrations. It requires a clear understanding of current status of the organization, clearly defined prioritized goals and strategies, and a dedicated leadership. And as in many widespread organizational changes, this process will face resistant forces.

According to statistics of Heeks (Heeks,2003), 85% of e-government projects have partially or fully failed. To broaden the picture, only 30% of all organizational changes are at success (Keller et. al., 2008). The main reason of these high failure rates are related to mistakes in the change management processes of organizations.

In this paper, we provide a case study on an example e-transformation project for a public administration in Turkey. We have shared our experiences on change management throughout the e-transformation project realized for the central public procurement authority of Turkey, the State Supply Office (SSO). The remaining of the paper is structured as follows: section 2 provides a background on e-transformation process, change management (Change Management Learning Center, 2013) approaches and the basis of our change management approaches. In section 3, the public procurement process, SSO, and the E-transformation Roadmap Project of SSO are presented. The change management experiences are shared, and results are discussed in Section 4 and Section 5 includes the conclusion.

2. BACKGROUND AND BASIC APPROACH

E-transformation is the process of redefining and re-organizing an institution according to infrastructure that can be provided by current and predictable future technologies. The technical part of the process forms only small part of the whole process. The majority of the process involves redefining business processes, organizational structure, legislation, definition of standards, re-consideration of the mission and vision, but mostly changing of work habits and mindsets of both the employees and organization management in e-transformation process. Consequently, this transformation depends very much on the human factor.

Controlling the human factor and the management of change in organizations has been discussed by the academia and professionals for over two decades. Some of the most popular models can be listed as the Kotter's 8-Step Model (Kotter International,2012), ADKAR model by Prosci Company (Prosci Company, 1998) and 4 basic conditions presented by Emily Lawson and Colin Price (Lawson el. al., 2003). Many more models and approaches have been presented, yet the change management success rate still is not over 30%.

When analyzed, it can be seen that most of the models instruct principles with different approaches. Taking this into consideration the known model steps can be summarized as follows: awareness, motivation, involvement, realization and reinforcement. Our change management activities can be categorized under these categories.

3. E-TRANSFORMATION IN STATE SUPPLY OFFICE (SSO)

3.1. Public Procurement and State Supply Office

Public Procurement is the process where public administrations purchase goods and services, which are needed to carry out their operations. There are different models of public procurement throughout the world. In these different models, the procurement is usually performed at both national and regional levels, as well as in some cases at international levels.

The public procurement model of Turkey is illustrated in Figure - 1. Public Administrations can procure goods and services directly from Private Sector Suppliers, or for a predefined set of goods and services, they can procure via the Central Public Procurement Authority of Turkey, namely State Supply Office (SSO).

Generally, the total amount of public procurement accounts for an average of 10-25 % within the Gross Domestic Product (GDP) of a country (European Commission, 2013). Because it has a large portion within a country's economy, Public Procurement can be used as a tool for leveraging economy. Despite its key place within both national and global economy, only in recent years the importance of public procurement was better understood and strategies about public procurement have been added to national strategic agendas.

Figure - 1:   Public Procurement Realization Options in Turkey

Turkey is still one of the many countries that have not yet given the well-deserved importance to developing strategies in public procurement. In 2010, the total amount of Public Procurement in Turkey was approximately 38.5 Billion USD[†] which corresponded to 7% of GDP (SSO Official Website, 2012a). In the same year, the potential procurement via State Supply Office (SSO), was expected to be 15% of total procurement but the actual 0,6 Billion USD which was only 1,6% of total the Public Procurement (SSO Official Website, 2012a).

3.2. Necessity of the E-transformation and Change Management in SSO

The radical difference between the potential and actual procurement percentages for SSO had long called for attention. In the beginning of 2011, the General Management of SSO made a strategic move and decided to boost SSO's performance by using the advantages of state-of-the-art technology. But this was not going to be a simple task of buying big machines and expensive software; a transformation was required.

Thus, in 2011 SSO initiated an e-transformation process. The initial step for such process, required a clear understanding of the current needs and issues of the organization and a strategic action plan addressing these issues had to be

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[†] 1 USD ≈ ₺ 1.8 (April 2nd, 2013)

prepared. For this purpose, SSO realized an E-transformation Roadmap Project with The Scientific and Technological Research Council of Turkey (TÜBITAK) that provides services to public administrations about e-Government.

The main objective of this project was first to analyze the current state of the organization; then, according to this analysis, to describe an e-transformation roadmap for SSO. The roadmap was going to provide a list of short, mid, and long term projects and activities that when carried out, would lead SSO to be a more productive, efficient and effective organization in public procurement. In addition to this, TÜBITAK e-transformation project team also provided consultancy on organizational transformation for SSO.

During the current state analysis of SSO, it was seen that the needs of the organization could be categorized under 4 different axes: operational, managerial, legislative and technical. When the distribution of these needs within the listed groups was analyzed, it was seen that the majority of needs were at the operational level, and the least amount of needs were at the technical level.

Consequently, it can be said that the e-transformation requires high-impact organizational, legislative and operational change in the institution. The anticipated changes vary from re-arranging the organizational structure, to the redefinition of the business processes and responsibilities of departments.

It is widely known that these kinds of radical changes will always result in resistance from both internal and external forces within the ecosystem of the organization. Consequently, in order to realize the transformation in SSO, change needed to be managed affectively.

4. CHANGE MANAGEMENT IN STATE SUPPLY OFFICE (SSO)

In order to effectively manage a transformation, it was seen that it is very important to understand the nature, source and reasons of resistance. In this section, first the reasons of resistance specific to the SSO case are described, then the change management tools that have been used throughout the process are discussed.

4.1. Understanding the Resistance

Throughout the detailed analysis performed in the current state analysis phase of the project, the team had a good opportunity to get to know the organization from inside out. Initially the team was seen as passive observers analyzing the

organization. But with the help of awareness meetings, discussed in the following section, the group was recognized as an active e-transformation team.

During the current state analysis, it was observed that there was a significant amount of tacit knowledge in SSO. As objective outsiders, coming from a respected organization in Turkey, both internal and external stakeholders have been more inclined on sharing facts with the e-transformation team. This gave an advantage of better understanding the reasons of resistance.

It has not been easy to make the SSO stakeholders accept the new phase of e-transformation. The SSO staff, customers and suppliers all had their own varying reasons for resistance to change. While some of these reasons are frequently encountered in the literature, some are specific to the SSO case. The following list summarizes the main reasons of resistance.

- SSO employees' average age is around 45-50. Due to the lack of their personal skills on the adaption to technology, these employees prefer the existing system.
- There is a lack of trust to management among SSO staff. In the past, good ideas of sub-ordinates were not accepted by management and the staff was generally not consulted about any decision about future plans. The staff had a general perception of not being respected and valued.
- Wrong human resources policies were conducted. Circulation of staff among departments was high. Employees were not asked in which field they wanted to specialize in. Staff distribution was not performed effectively. For instance, engineers were employed in archive department instead of information technology department.
- Employees were unsatisfied with their employee rights in the organization.
- Changes in the organizational structured triggered fear of losing power, especially for staff with management responsibilities. Structural change would induce change in power distribution.
- Software projects that have failed in the past have had negative impact on employees. Because of problems they have encountered before, employees were not positive about using new software systems.
- Due to the poor image of SSO and performance in public procurement, staffs fear of closing-down of organization. In addition to the internal stakeholders, external stakeholders resisted to change, due to the unsatisfactory and cumbersome procurement services provided by SSO.

In order to overcome reasons of resistance defined above, different techniques, which will be described in detailed in next section, were applied during the SSO E-transformation Roadmap Project.

4.2. Realizing the Change Management

As it was described in section 2, change management steps can be summarized by the awareness, motivation, involvement, realization and reinforcement steps. In this project, 4 different types of activities were conducted for change management; which were meetings, face to face interviews, surveys and workshops. It was seen that these performed activities during the project lifecycle mapped to at least one the summary steps.

4.2.1. Awareness, Motivation, Involvement

The initial 4 months of the project was dedicated to awareness activities about the SSO E-transformation Roadmap Project. Interactive meetings were held with attendance of SSO employees. The purpose of the project and the procedure to be followed during the project was introduced to the employees.

Moreover, 164 meetings were conducted throughout the project, with 427 internal and external stakeholder participants to increase the awareness, motivation and involvement (TÜBİTAK-BİLGEM-YTE, 2012a).

The fundamental activities to make the impact on stakeholder awareness, motivation and involvement were workshops. The target groups of the workshops are public administration representatives who are referred as SSO Customers and purchase goods and services from SSO, private sector representatives who are referred as SSO Suppliers and supply demanded goods and services and the internal stakeholders who are SSO employees. The established workshops and the number of the participants are listed as below (TÜBİTAK-BİLGEM-YTE, 2012a):

- 7 Common Mind Platform® Workshops with contribution of 357 Public Agency Representatives
- 3 Common Mind Platform® with contribution of 124 Private Sector Representatives
- 3 Common Mind Platform® with contribution of 235 SSO Employees
- 2 SWOT Workshops contribution of 28 SSO Employees and 25 SSO Top Executives

Common Mind Platform® Workshop (TÜBİTAK TÜSSİDE, 2013) which is a registered trademark of TÜBITAK Turkish Institute for Industrial Management (TÜSSİDE) ensured the participants to work efficiently in a 3 days long period of time by sharing ideas, making an assessment about the current situation of SSO and developing suggestions for the future enhancement in SSO. In these workshops; initially, participants were informed about the purpose of the study and the reason why they are participating. Thus, attendants became aware of the change process. In the next step, the participant was motivated with team games and where the registered techniques were applied. Moreover, within the scope of adult education, mental and physical practices were performed by participants to warm up the study. After this motivation phase, participants performed brain storming activities. During these brain storm activities, problems of SSO were discussed and the participants developed ideas and suggestive solutions for these problems. As a result of these workshops, the stakeholder involvement was assured with an average participant satisfaction of 3.78 over 4.00 points.

In addition to the Common Mind Platform® Workshops, 2 Strength-Weakness-Opportunity-Threat (SWOT) workshops were conducted with the contribution of 28 SSO employees and 25 top executives where stakeholder involvement was assured. With the motivation of participants whose ideas were taken into consideration by SSO senior management, the existing problems were brought up to agenda and the suggestions were discussed (TÜBİTAK-BİLGEM-YTE, 2012a).

In order to improve the stakeholder involvement, surveys and face to face interviews were performed with both internal and external stakeholder. The questionnaire for internal stakeholders was applied on 441 SSO employees where the staff satisfaction for SSO internal operations was measured. On the other hand, the questionnaire for external stakeholders was conducted with the contribution of 3334 public agency purchasing officers. In this survey, the SSO procurement services delivered by public administrations were evaluated. In addition, the interactive face to face interviews were among 47 SSO top executives, 20 procurement officers and 24 sales representatives (TÜBİTAK-BİLGEM-YTE, 2012a).

4.2.2. Realization and Reinforcement

As a result of the involvement activities performed for change management, problems and their priorities for the stakeholders were obtained. These data helped the management throughout the realization process of SSO.

For instance, right after the first two Common Mind Platform Workshops, SSO quickly responded to one of the most addressed issues about the high profit margin of the organization by applying up to 7% (SSO Official Website, 2012b) of discount in goods and services in February 2012.

Another important enhancement was made to reduce the complaints on purchasing order tracking problems. SSO installed a process tracking system on their website where the status of purchasing orders could be easily followed (SSO Official Website, 2012c).

During the involvement process, SSO noticed that most of its stakeholders were not familiar with the organization. Thus, a new promotion branch under marketing department was established. This unit prepared materials such as public procurement bulletin, SSO promotion brochures, public spot video, and introductory films to increase the visibility of SSO. Moreover, in order to increase the international recognition and knowledge sharing, SSO started the process of signing Memorandum of Understanding with Public Procurement Service of South Korea.

All of these improvements realized by SSO provided a positive feedback to stakeholders of SSO. As a result, the reinforcement provided by these feedbacks made a positive impact on the performance of SSO.

5. OBSERVED RESULTS OF E-TRANSFORMATION WITH THE HELP OF CHANGE MANAGEMENT IN SSO CASE

The implementation of e-transformation roadmap was started before the preparation of the roadmap was fully completed. The results obtained throughout both the current state analysis and the roadmap preparation phases in E-transformation Roadmap Project were shared with the management of SSO. This way, SSO management implemented some minor and independent projects suggested by the roadmap. It was seen that, with the help the change management activities, the implemented projects had a positive impact on the performance of SSO.

As illustrated in the graph on the left of Figure - 2, the amount of sales in 2011 was 50 % more that the sales in the previous year. In the graph on the right of Figure - 2, while the amount of sales performed in electronic environment in 2010 was nearly zero, this amount was increased to approximately 29 Million USD in 2012. As illustrated in Figure - 3, proportional to the amount of e-sales, there is an increase in number of e-orders and customers performed e-sales.

Figure - 2:   SSO Procurement / Year (Million USD) *(Left Figure)*, SSO Amount of E-sales/Year (Million USD) *(Right Figure)*
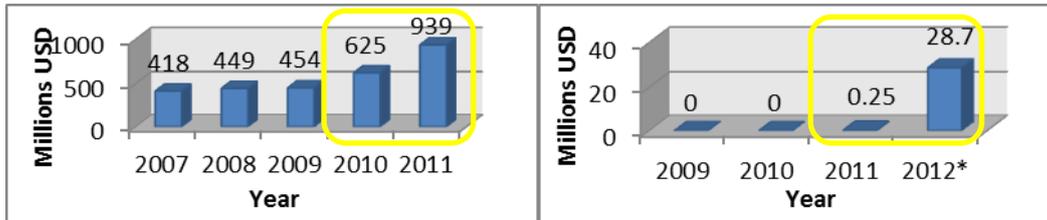

Figure - 3:   SSO Number of e-Orders/Year *(Left Figure)*, SSO Number of Customers in E-sales/Year *(Right Figure) (*January-August 2012)*
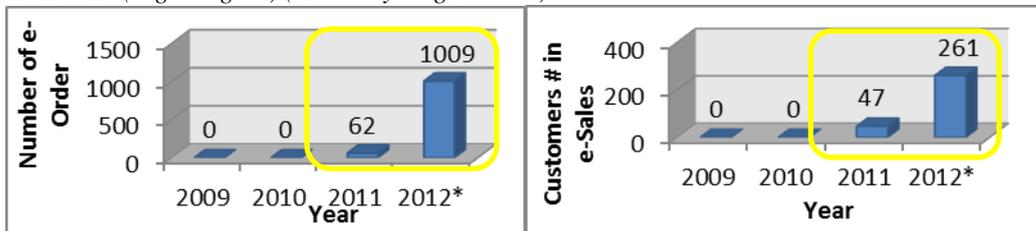
When e-transformation of SSO is completed, the portion of SSO in total public procurement is expected to increase up to 30% as it is seen in best practices such as Public Procurement Service in South Korea (TÜBİTAK-BİLGEM-YTE, 2012b). In order to realize e-transformation, SSO should continue to conduct change management in the implementation of its e-transformation roadmap.

6. CONCLUSION

As it was explained before, e-transformation should not be considered only with its technical aspects. Any kind of transformation in an institution causes both external and internal stakeholders to resist changing. Therefore, all stakeholders should be included in the change process and change management undertakes a key role in transformation. In SSO E-transformation case study; workshops, meetings, face-to-face interviews and surveys were conducted to increase the

awareness, motivation and involvement of all stakeholders in the scope of change management. We observed that awareness, motivation and involvement concepts are tightly bounded and all these three concepts can be achieved in one change management activity. After these conditions were assured, the change was started. As a result of change management, the positive feedbacks and outcomes on financial aspect and stakeholder satisfaction were calculated 3.78 over 4.00 in SSO case study. To sum up, in the light of our experiences in SSO E-transformation Project case study, the 90 % of project time was spent on communication management and 20-40 % of project time was spent on change management in SSO E-transformation Roadmap Project.

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