LEADING AND COMMUNICATING CHANGE IN AN ENGINEERING FACULTY MERGER

Krista Holopainen

Turku University of Applied Sciences, Turku, Finland; University of Turku, Turku, Finland

Timo Holopainen, Jaana Kallio-Gerlander,
Anne Norström, Janne Roslöf

Turku University of Applied Sciences, Turku, Finland

ABSTRACT

Higher education institutions (HEIs) have been exposed to several change drivers during the past few decades. The global expansion of higher education together with the financial cuts in several countries have caused structural and organisational changes on different levels. In addition, the general requirements on the efficiency of public organisations, so-called New Public Management, are connected to the trends of developing the organisations and management policies in HEIs more towards entrepreneurial or corporate cultures. Successful implementation of these change processes challenge the change management and communication skills of the managers and leaders of the institutions. Communication is a vital element of leading a change successfully towards the defined vision. This concerns also the change and development processes facilitated by the CDIO Initiative. Similarly, Turku University of Applied Sciences (TUAS) has undergone a number of changes in the recent years and the change is still ongoing. One of the central elements of the most current change was to merge two faculties to form a new Faculty of Engineering and Business. This case study analyses how this organisational change process of TUAS was actualised and communicated in the internal documentation and presentations during 2016–2018 in relation to the so-called eight-step change management model presented by Kotter (1995/2007). The analysis found elements of the first six steps in the data, however the last two steps need a longer timespan to realise. As a conclusion, it seems that the Kotter model is a viable tool to assess leading change also in the HEI context.

KEYWORDS

Change management, leading change, organisational change, higher education institution, CDIO Standard: 12.

INTRODUCTION

”The only thing that is constant is change.” (Heraclitus, c. 500 BC.)

TUAS is a multidisciplinary higher education institution with three faculties and a community of 10,000 members, of which about 670 are staff members. The context of this study is the series of the most recent organisational changes at TUAS that have started in 2015, with special focus on the process and timespan during which two faculties were merged into a new Faculty of Engineering and Business. At the same time, a new Dean started in the Faculty of Health and Well-being; thus Arts Academy is the only faculty that has not met any substantial changes in recent years. The changes in terms of the merger are still ongoing.

This case study explores how the ongoing organisational change process of TUAS was actualised in relation to the so-called eight-step model of leading change presented by John P. Kotter (1995/2007). We chose Kotter's model because it is one of the most well-known of its kind, and we were interested in testing its applicability also in the HEI context. The Kotter model outlines the following steps when leading change: 1) Establishing a Sense of Urgency, 2) Creating the Guiding Coalition, 3) Developing a Vision and Strategy, 4) Communicating the Change Vision, 5) Empowering Employees for Broad-Based Action, 6) Generating Short-Term Wins, 7) Consolidating Gains and Producing More Change, and 8) Anchoring New Approaches in the Culture (ibid. 96–103). The data consists of the top management's documentation and presentations from 2016–2017, which have been analysed and categorised according to the eight steps of the Kotter model. As a result, we can trace which steps have been taken and to what extent, and see how this process has been communicated internally. The authors of this article are not part of the top management of TUAS.

The research questions were: How is the change process constructed in the top management documentation in relation to Kotter's eight-step model? Has the change process followed the Kotter model and to what extent?

BACKGROUND

From ivory towers towards entrepreneurial universities

The higher education institutions have globally faced numerous change requirements, expectations and processes during the past few decades. The expansion of higher education in general and the significant cuts in government funding in Finland, in particular, have caused structural changes in several levels of educational organisations and programmes. The development also includes requirements of effective and efficient management of public institutions. This so-called New Public Management paradigm aims at changing the management and administration practices of higher education towards an entrepreneurial culture, which has often replaced the traditional collegial structures at least to some extent (Blaschke, Forst & Hattke, 2014). Bleiklie (2014) categorises the change drivers in European higher education institutions starting from the 1980s as follows: 1) European and national policy programmes, administrative structures and governance practices, 2) administration of the higher education institutions and its relation to academic work, disciplines and communities, and 3) development and differentiation of higher education systems.

Higher education institutions need to regularly provide evidence on the efficient use of government funding and the societal impact of their results. Accordingly, HEIs are often considered as entrepreneurial actors that provide educational and research services to their students, customers and different organisations. Meeting these expectations requires efficient and dynamic administrative structures and processes that are able to function in the network of strategic goals, financial constraints, rapid technological development and complex operational environments (Mainardes, Alves & Raposo, 2011). The ability of the traditional collegial university organisations to respond to these challenges is often questioned. Balbridge (as cited in Mainardes, Alves & Raposo, 2011) describes universities and their faculties as complex institutions in which isolated disciplinary groups use lots of energy to complete routine tasks. The characteristic features of a traditional university organisation have been described for example as follows (Van Vught & Maassen, as cited in Mainardes, Alves & Raposo, 2011):

- The main structures and positions are based on knowledge/competences.
- The departments are isolated due to a discipline-based structure, knowledge management and methodological choices.
- Decision processes are unclear; the different departments focus on driving their own goals regardless to their connection to the HEI's strategy.
- The activities within a competence area can be innovative and adaptive to changes, yet most of the innovations are incremental. There is strong change resistance concerning the structures.
- The operational environment of a HEI has a significant effect also on the HEI's organisation.

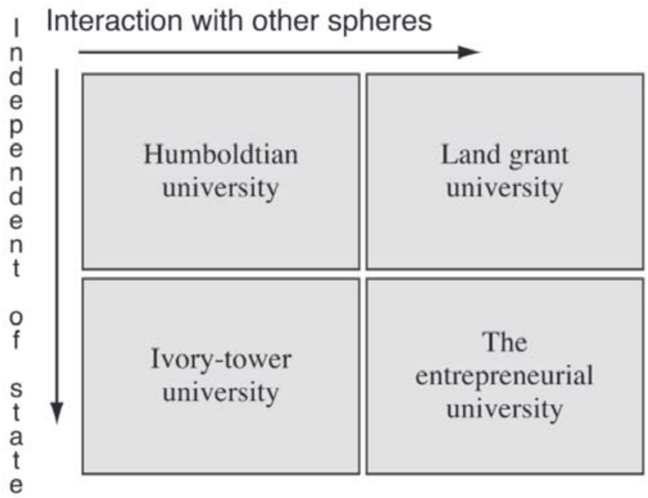

Figure 2: Classification of different types of HEIs ("The Second Academic Revolution") (Etzkowitx, 2003)

Different types of HEIs are illustrated in Figure 2 (Etzkowitx, 2003). The traditional Humboldtian university reflects an organisation that is tightly controlled by the state and that is very loosely coupled to the other sectors of society. Even the Land Grant HEIs are strictly controlled by the state, but they cooperate widely and get funding especially from large corporations. Instead, the ivory tower universities are rather independent actors when it comes to governmental steering and they typically keep a distance to other organisations and enterprises as well. The desired direction of the development of higher education is considered the entrepreneurial university that is able to produce new knowledge and competencies efficiently to be utilised widely in different parts of society. (Mainardes, Alves & Raposo, 2011.)

HEIs need to find models and practices in order to succeed both in national and international competition. Ramirez & Tiplic (2014) summarise this as follows: "Throughout the world higher education is in a state of flux, seeking the holy grail of excellence and invoking world standards and "best practices" as road maps in this quest of excellence". Assumptions behind this development are the HEIs' ability to become the engines of national progress, the impact of better organisation and leadership as enablers of this ability, as well as sharing and benchmarking good practices between the HEIs, also concerning organisation and management (Ramirez & Tiplic, 2014).

Also, the development of Turku University of Applied Sciences can be considered as part of the global change of higher education, and the implementation of the features of New Public

Management in the context of Finnish higher education. For example, the change of the administrative model of Finnish universities of applied sciences to limited companies is a characteristic step towards an entrepreneurial university structure. In the background of this development similar goals that Shepstone & Currie (2013) report can be seen, connected to the change process of Prairie West University (PWU). PWU had previously been a Bachelor-level teaching-oriented institution that had gained a stable position and good reputation in its domain. In the PWU's case, its research activities were systematically developed aiming at creating new opportunities for activities as well as external funding. As one of the development actions, PWU created a so-called tenure track system that stressed not only pedagogical merits but also, especially, success in research work and gaining research funding.

Leading Change

Leading change is one of the most difficult tasks to give a leader – also in the context of HEIs. According to research studies, two out of three change management processes fail (Langstrand & Lundqvist, 2015). The need for change is often related to a situation in which the present situation and actions/operations do not lead to a desired future mission (Lanning, Roiha & Salminen, 1999). The change process should be led according to a process that is goal-directed and systematic progressing towards the ideal state (Pettigrew & Whipp 1991).

The change process can be described by different angles/perspectives. Jones (2007) defines the change as a process, in which the main goal is in increasing the effectiveness. The transmission to a chosen volition can be in the form of slight improvement or a radical change. Nadler and Tusham (1990) indicate that the change can be described as an occurrence, which happens in the certain period of time and changes processes, structures and personnel in a way that they are suitable for the purpose. The change can be proactive or reactive, and it can be described as a kind of reform that possesses features such as sustained and controlled.

The change processes of an organisation can be hard and complex to describe. They have been studied and documented widely. In the 1950s, Kurt Lewin introduced a model of a change process, which is widely known and used. This process has three phases: melting, changing and icing. In the first phase, the focus lies on breaking the tradition and identifying the possible new organisational models. In the second phase, the change will be implemented according to a plan and in the third phase, procedures are locked and new routines and standards are created and followed. (Lewin 1951.)

Kotter developed his own model of organisational change and emulated Lewin's model. Kotter's (1995/2007) model of eight steps describes how the change process should be implemented in a successful way. The Kotter model is internationally known and used as a road map of change. However, the model is based on Kotter's personal experience and, therefore, criticized.

Kotter's model of leading change

John P. Kotter published his article "Leading Change – Why Transformation Efforts Fail" originally in 1995 in Harvard Business Review. In this article, Kotter outlines the eight steps to transform your organisation: 1) Establishing a Sense of Urgency, 2) Creating the Guiding Coalition, 3) Developing a Vision and Strategy, 4) Communicating the Change Vision, 5) Empowering Employees for Broad-Based Action, 6) Generating Short-Term Wins, 7) Consolidating Gains and Producing More Change, and 8) Anchoring New Approaches in the Culture (Kotter, 1995/2007, 99).

In the first step of the model, the current state, crisis or need of the organisation is identified. This is followed by the establishment of a group or team leading the change. This team and its members should have enough authority and organisational status to be able to execute the change. From the beginning, the team should be encouraged to work and act uniformly. After the second step the vision is formed, and the strategic choices by which the vision can be achieved made. The first three steps are creating the right climate for the change. (Kotter, 1995/2007.)

After creating the vision, the vision and the change strategy should be communicated in all possible ways. The change is also led by example. In step five, the personnel is empowered and authorised to take actions towards the objective. The empowerment includes encouraging to take risks, to innovate new ideas and procedures simultaneously removing obstacles identified on the way towards the vision. Short-term wins should be planned ahead and ensured by acknowledging and rewarding the personnel executing actions promoting the change. The aims of the steps from four to six are engaging and enabling the organisation to change. (Kotter, 1995/2007.)

In the seventh step, where consolidating gains and producing more change should take place, the systems and structures that are recognized as incompatible are further modified, keeping in mind the personnel working towards the vision. In addition, the process should be reinvigorated with e.g. new projects and themes. Implementing new ways of action into the organisation is ensured by presenting the positive impacts of the new behaviour for the organisation and by providing systems for sharing new information. During the last two steps, the focus is on producing more change and anchoring new approaches in the culture. (Kotter, 1995/2007.)

Criticism of the n-step models

Several n-step models based on the Kotter model have been created. The criticism towards these models includes the argument that the models are too simplified and they give too straightforward a picture of the change process (Langstrand & Lundqvist, 2015). In 2012, Appelbaum et al. published an article where the Kotter eight-step model was compared with literature published on change management during the past fifteen years. In the study, the whole model, as well as its steps, were individually evaluated. The results indicated that the Kotter model can with certain additions be utilised as a tool for change implementation. However, in future research, the Kotter model should be considered as a whole, because no research including the entire model has yet been published. (Appelbaum et al., 2012.)

METHOD AND DATA

The data of this study consisted of TUAS board documents and memos, TUAS top management team memos, top management blog posts, staff meeting materials, and intranet news postings that commented on the ongoing organisational change. The analysed data is from the beginning of 2016 until the end of March 2018. The data was collected and analysed in April 2018. Before the autumn of 2016, there were no mentions about the organisational or management system change, so there was no need to collect material before the year 2016. The data is represented in Table 2.

Table 2. Research data: type, timespan and number of documents.

Data type	Timespan	(n)
Top management team memos	2016/11/1 – 2018/3/27	29
Top management seminars	2017/5/9 – 2018/1/10	2
Middle management forum memos	2016/1/14 – 2018/1/11	13
Top management blog	2016/1/15 – 2018/3/28	74
Staff meeting materials	2016/12/2 – 2017/12/12	5
TUAS board memos	2016 – 2017	22
Intranet news postings	2016 – 2017	3
Total		148

All this material is available to the staff in the intranet of the organisation. The staff is also informed when new memos and materials are available and encouraged to read them. Thus, the collected data can also be considered as a part of internal communication, which is extremely important when leading an organisational change.

The data were analysed with respect to the Kotter model: Which steps have actualised from the basis of the internal communication and how? The main research method was theory-based content analysis. The data were categorized according to the eight steps in the Kotter model.

APPLYING KOTTER MODEL TO THE DATA, AND THE RESULTS

The aim of this study was to categorise and analyse the data on the basis of Kotter's eight-step model to trace, which steps have actualised during the organisational change process of TUAS and how these steps are represented in the internal communication.

In practice, it was possible to analyse only the first six steps of the model, because the change process is still ongoing. In the following subchapters, the implications of Kotter's steps in the data are further explained and explored. Table 3 represents the number of data sources and references identified in the data per each step.

Table 3. The number of sources and references per steps in the Kotter model.

Kotter's step	Data sources (n)	References (n)
1. Establishing a sense of urgency	11	14
2. Creating the guiding coalition	6	12
3. Developing a vision and strategy	10	19
4. Communicating the change vision	7	13
5. Empowering employees for broad-based action	10	15
6. Generating short-term wins	7	10
7. Consolidating gains and producing more Change	0	0
8. Anchoring new approaches in the culture	0	0
Total	51	83

Step 1: Establishing a sense of urgency

The first step in the Kotter model is to communicate the urgency of the change: why the change is necessary and what is the problem that needs to be solved. Communication is also needed to motivate the staff to the change. The first references to the reform of the management and organisational system are from autumn 2016. The preliminary debate with the TUAS Board was in December 2016.

In the oldest data from the first six months of the studied timespan, the necessity of the change is justified with the centralisation of the operations to the new campus area, and with the end of the term of the middle management (i.e. heads of education and research):

> The current organisation is functional but is under pressure to change because of the future centralisation of actions to the Kupittaa campus. Until now, faculties have operated on different premises and also their modes of operation have been slightly different. There is more pressure to unify procedures on the common campus. There is also pressure for change because the four-year term of the heads of education and research is ending by the end of 2018. (TUAS Board minutes, January 2017)

In the next phase of the change process during the first quarter of 2017, the top management e.g. collected feedback from the stakeholders, and the summary of the feedback as well as suggestions on how to proceed with the change was presented to the TUAS board. After the board meeting, the same presentation was given to the TUAS top management team, and in the general staff meeting.

In the presentation material from May 2017, the number of justifications for the change has increased and got more focused as well. There were now three justifications for change: focusing the operations according to the strategy, moving to the new campus, and the ending of the term of the middle managers. In addition, the need for change was complemented by representing the principles drafted by the TUAS board, and with the views of the stakeholders about the strengths and weaknesses of the current organisation and management system. In the conclusions, also the facts and steps that need to be taken to make improvements were presented, bringing the change to a more concrete level. After a year since the change process had started, the justifications for the change started shifting towards and focusing more on the strategy, and the change in the number of the faculties:

> TUAS has started an internal organisational change to strengthen its strategic focus as the technical innovation university. (TUAS board minutes, October 2017)
>
> In the heart of the development of the management system is the change [from four] to three faculties starting from January 1, 2018 […] Operations have been planned based on the strategy that is valid until 2025. Thus, the four strategic focus areas will strongly steer the actions of TUAS also in the future. [...] (TUAS Board minutes, December 2017)

Thus, the ongoing development processes such as the new campus and the reorganisation of the management system were explicitly constructed as a means to support the strategic goals.

In conclusion, the sense of urgency in the data was first established by stressing the concrete and inevitable changes ahead, such as moving to the new campus and the organisational reform needs deriving from it, and also by the ending of the term of the middle managers. However, the importance of the change in relation to the strategy was brought up as well. After collecting the stakeholder feedback, the urgency was rising from even more concrete and precise needs but later the arguments for the change were more strategy driven.

In Kotter's view, the more convincingly it can be represented that following the current path will only lead to a serious crisis, the stronger the management and staff will commit to change (Kotter, 1995/2007, 97–98). In this material, the change of the management system is not justified with a potential crisis: quite the contrary, the existing system was concluded to be functional as it is (TUAS Board minutes, January 2017). Thus, there is a risk that the staff may not consider the new campus and the need to unify procedures as adequate arguments to reorganise the whole system. Furthermore, justifying changes simply with the strategy can be experienced as too abstract or vague to motivate the staff for change.

Step 2: Creating the guiding coalition

The second step in the Kotter model is the creation of the guiding coalition to promote the change. In addition, to have an impact and make progress, the coalition has to expand outside the top management. If the coalition is not strong or impactful enough, the progress of the change will eventually stop when the resistance increases (Kotter, 1995/2007, 98). The data of this study shows that there has been interest to engage extensively both internal and external stakeholders and that this goal has also been achieved. At first, the stakeholders mentioned in the data were mostly internal:

> Both projects [changes in the management system and middle management] will be carried out as a collaborative process with top management, staff and students. (TUAS Board minutes, January 2017)
>
> An open discussion will be a part of the planning process – the feedback from the staff and students will be taken into account in the preparations. To support the plan, there will be a survey and the results will be published in the [intranet]. (Top management team memo, January 2017)

The more precise list of the stakeholders was given at a Board meeting in May 2017 after most of the feedback had been collected. In addition, when accepting the proposal for the new organisational model at the very same meeting, the Board emphasised the need to engage the staff, the students and external stakeholders also in the future:

> According to the guidelines given by the TUAS board, the model has been discussed with staff during the staff development days on all five faculties, [student association] representatives, employee cooperation advisory board, middle management meeting forum and top management team. From the basis of the discussions, a preliminary proposition about the management system was formulated. [...] The TUAS board emphasized the need to engage the staff, students and external stakeholders in the further preparations [...]. (TUAS Board minutes, May 2017)

The data suggest that the engagement of the different stakeholders has been extensive and a strong part of the preliminary planning process. The coalition was expanded outside the top and middle management and the stakeholders were consulted in multiple ways: face to face in staff and other meetings, and they were also encouraged to give feedback either personally by email or in the intranet workspace dedicated for the change process.

Step 3. Developing a vision and strategy

The third step in the Kotter model is the development of the vision and the strategy in collaboration with the created coalition. The purpose of the vision is to bind together all the separate change projects, to motivate, and help to understand the connection between actions and their necessity (Kotter, 1995/2007, 98–99). In this data, the focus is on the vision and strategy of the new organisational and management model and the reorganisation process, not on the vision and the strategy of the whole of the organisation. However, the latter was also used to justify the need for the change.

As was stated in the previous subchapter, both internal and external stakeholders were extensively engaged to plan the change and its implementation e.g. by email, face-to-face discussions, and project workspace. The progress of the process was presented to the staff for the first time in the top management blog at the end of March 2017. At the same time, the staff was informed that the preliminary model will be available for final comments and change suggestions in April:

> I have now visited all the faculties and met [the student association] and we have discussed about the ideas of how to develop the management system. As you may expect, there has been feedback and ideas of all sorts. During the weekend, I will once more study the comments in the [intranet] workspace, to find commonalities and try to form an overall view. [...] The [preliminary model] will be available in intranet in April thus it is possible for all interested to make some suggestions before the model will be presented in the employee cooperation advisory board and further in the university board in May. (Top management blog, March 2017)

The opportunity to make suggestions was also taken:

> The preliminary development plan for the management system evoked good conversation. Thank you for all those who commented either by intranet or e-mail. It was a pleasure to read and contemplate well defined questions that promoted at least my own thinking. (Top management blog, May 2017)

According to both the Board and top management team memos in January 2017, a goal was set that the basic principles of the new management structure should be defined during the spring of 2017. In the Board meeting that took place in April 2017, it was reported that by that time the proposal for the new management system had been discussed in e.g. unit staff meetings, workshops led by the Rector, and in other forums. The schedule was defined and thus the vision about the new model and the strategy was represented both to the Board and staff during the same day in May 2017.

According to the data, both the model (vision) and the means to implement it (strategy) has been constructed in collaboration with different stakeholders. The vision and strategy are further described in the following subchapter.

Step 4. Communication of the change vision

According to Kotter (1995/2007), the communication of the change vision is typically problematic in change management. Typical problems are lack of communication, clarity, or the commitment of some visible and influential figures in the organisation. Change is only possible when people understand its necessity and are willing to commit to it. In successful changes, the vision is communicated vividly, inspiringly and via multiple channels. This also means that in every opportunity and form of interaction there is a connection made to the big picture and the change. (Ibid., 99–100.)

The data discloses that the reorganisation and its details have been communicated especially in the top management blog, top management team memos, staff meetings (both general and faculty-level meetings) and in the workspace set up for the discussion about the change. Thus, communication has been mostly in the hands of the top management. However, there are no mentions in the data that there was any specific communication plan made for the change project already at the beginning of the project.

Probably the biggest individual investment in the communication of the vision was in May 2017 when the preliminary model was introduced to the staff in the staff meeting. The presentation material was the same that was introduced to the Board before the staff meeting and later in faculty staff meetings. The material included justifications, preconditions, principles constructed by the Board, analysis of the current model (strengths and development needs according to stakeholders) and what needs to be considered in the new model. Finally, as a conclusion the following “general guidelines”, that seem to have vision-like qualities, were listed for the new management system:

> Evolution, not revolution; Expanding the opportunities for students; Increasing collaboration and community spirit; Emphasizing the opportunities and responsibilities of the experts; Improving the efficiency and clarity of services. (General staff meeting, May 2017)

The vision in regards of the new faculty was clarified in the top management blog a few weeks later at the beginning of June. In the same posting, the next steps were also described:

> The new faculty [...] will be a significant cluster of technology and business economics. There is next to six thousand students in the new faculty, which will exceed even some universities. The six million euros of external funding indicate the immense potential of the new faculty. [...] The new faculty offers education extensively both when it comes to bachelor and master levels of education. This faculty responds particularly well to the current need for professionals in the [local] trade and industry.” [...] Combining two active faculties is a fine opportunity that should not be missed. Both faculties have several innovative and functioning solutions and practises. By finding and recognising these, we could build the [locally] lacking technical (innovation) university. All the measures indicate that we have the right building blocks, right direction, and right people both in the personnel and as students. So let´s start building this strategically emphasized technical innovation university of the future together.” (Top management blog, June 2017)

The challenges in the change management communication were realized at the latest in the beginning of 2018: the communication services represented a plan to support the change communication in the top management team meeting in March 2018, obviously by request. According to the memo, the top management team assessed that the staff had a good idea about the necessity of the changes, however it was acknowledged that communicating the vision and what it means in a concrete level can be a challenge to the change communication. Thus, it was agreed that the Communications Services of TUAS will provide supporting material for the managers, communicate the success stories in our community, and also the concrete improvements that will realise in a couple of years.

In the data, there are more mentions about the justifications and concrete actions than about the actual vision of the new management system. It could be that the reorganisation of the management system was seen more as a part of the organisational strategy and vision, and not so much as an individual process that has its own ideal state. On the other hand, the memos that form most of the data are probably not considered as means to communicate the vision, but to inform about decisions and actions. The communication that has happened face-to-face might very well have had a different approach in comparison to the documents when it comes to the inspirationality and vividness of the message.

Kotter also emphasizes the importance of the clarity of the constructed vision. Unfortunately, from the basis of the data, it is impossible to say how clearly the vision about the reorganisation came across to the stakeholders. However, when change projects fail, it is typical that there is a lack of a clear and inspiring goal that justifies all the new directions and change projects.

Step 5. Empowering Employees for Broad-Based Action

Successful change management calls for engaging and encouraging the staff to develop new approaches, new ideas, and to provide leadership within the parameters of the vision. However, there might be some organisational structures or system-based obstacles in the way, such as inflexible job categories, compensation systems that steer the efforts, or key personnel that refuse to change and thus undermine the efforts to change. (Kotter, 1995/2007, 101–102.)

In this data, engaging and innovating have particularly been a part of designing the vision about the change. It is very probable that during the process, a lot of practical ideas and innovations were brought up by the staff. The ways the vision will be transformed into concrete actions and e.g. how the practices will be developed accordingly will mostly take part within faculties and units of education and research, which is implied in the top management blog in June 2017:

> I would ask you some patience, because presumably all the details are not yet defined or have not yet even emerged. We will probably also face some discrepancies with operations models and how they take place, however let us not get irritated or stressed over them but solve the unsolved things when needed one at a time. (Top management blog, June 2017)

The data does not clearly suggest what obstacles there might have been that had to be removed from the way of the reorganisation of the management system. However, a lot of other changes and reorganisations were necessary to support the management system change at the faculty level. Some of them were brought up in the top management blog post from June 2017 along with the next steps.

The preparations for the change continued in autumn 2017 when some practical questions were discussed in the top management team meeting in August, including the new marketing materials and renaming of the new faculties.

Step 6. Generating Short-Term Wins

According to Kotter (1995/2007), short-term wins are needed to keep the momentum going: most people expect to see some results in one to two years to stay motivated. These short-term wins need to be actively planned and created by the management. (Ibid. 102)

In the data, there is communication about the planned phases and schedules of the change process, about milestones, and progress of the management system change. At the end of 2017, some of these milestones were listed in the Board meeting. At the beginning of 2018, both the staff news and the top management blog brought up the merger of the two faculties:

> The faculties of TYT and LIKE have been officially buried now but, naturally, they will keep haunting in many of our information systems, reports and financial accounts. The faculty of Engineering and Business has replaced these two faculties and thanks to the quite massive preparations during last autumn, I am very confident about this launch. (Top management blog, January 2018)

During the studied timespan, the faculty merger was probably the most visible of all the changes and milestones in the organisational level. The changes continued during spring 2018 e.g. by the nominations of the new middle management. In the top management team meeting memos from March 2018, it was also stated that the successful internal communication about reaching the milestones needs to be ensured with the support from communications specialists.

Summary of the results

The aim of this study was to trace the progress of the management system change process from the internal documentation of TUAS, and to compare it to Kotter's eight-step model of leading change. It was possible to find only the first six steps from the data, which is explained by the fact that the change process has been officially going on for just a year and a half. The last two steps will be relevant only after the change has been going on for several years.

The change of the organisation and management system was justified with very concrete and inevitable changes in the near future, i.e. moving the operations to one campus and the reorganisation needs stemming from it, and the ending of the term of the middle managers. However, at the same time, it was stated that also the old system was quite functional, which may question the absolute need for the change. As Kotter has pointed out, the urgency of the change is very important to communicate right to ensure the engagement of the staff to the change.

On the other hand, the change has been supported by actively engaging the staff and other stakeholders to the creation of the vision and strategy for the new system. Then again, it seems that the communication about the created vision has been overtaken by more concrete actions. Thus, the vision and strategy may not have become so clear. However, the lack of vision in the data can be at least to some extent explained by the "official" nature of the material. It is also possible, that the vision has been communicated more face-to-face e.g. in the stakeholder meetings.

When it comes to empowering and removing obstacles from the way of the change, the data does not clearly suggest what obstacles there might have been. However, several other changes and reorganisations were necessary to support the management system change on a faculty level.

During the studied timespan, the merger of the two faculties has been the most visible milestone or "short-term win" of the change process in the organisational level. The change has been driven forward in the new faculty along with engaging and empowering the stakeholders.

CONCLUSIONS

Leading change is one of the most challenging tasks that a manager can execute. A change process is not necessarily linear, but it clearly has a process-like nature, when the change is constantly in progress simultaneously in different areas of management. In this study, the leadership within the organisational change currently being executed at Turku University of Applied Science was explored and reflected the well-known Kotter model of leading change. The research questions were: How is the change process constructed in the top management documentation in relation to Kotter's eight-step model? Has the change process followed Kotter model and to what extent?

The Kotter model (1995/2007) has eight steps where the first three steps (establishing of urgency, creating the guiding coalition, and developing a vision and strategy) are about creating a climate for change. The next steps (communicating the change vision, empowering employees for broad-based action and generating short-term wins) are related to engaging and enabling the organisation. The last two steps are about producing more change and anchoring new approaches in the culture. The conducted study found that there was a sense of urgency. At first, the justifications for the management system change were drawing from other concrete, inevitable upcoming changes, such as the formation of the new campus, where all the faculties would be present, the need to unify procedures, ending of the middle management term and advancement of TUAS strategy. The justifications got even more concrete after stakeholder interaction, but in the end, they form a stronger link with TUAS strategy.

Also, Kotter's second step, creating the guiding coalition, was executed strongly by involving extensively both internal and external stakeholders in the planning of the change from the beginning. There was also evidence that Kotter's third step, developing vision and strategy, was executed in collaboration with the stakeholders. Based on this study, the fourth step, communicating the change vision, was conducted with various methods and channels. However, from the basis of the data, it is not possible to tell, how clearly this developed vision eventually came across to the stakeholders. In addition, there was no mention of a particular communication plan for the change process until 1.5 years after the beginning of the change. The communication was led and executed by the top management without any middlemen.

Kotter's fifth step, empowering employees for broad-based action, was implemented in the form of reorganisation of the support functions, rearrangement of the schools and realignment of the research groups. Kotter's sixth step, generating short-term wins, was executed by defining and reporting about the change process phases, milestones and advancement. This was followed by constant measuring and following of the deliverables. The most significant short-time win during the studied timespan was the official merge of the two faculties into one. However, the implementation of the organisational and management system change process still continues. The last two steps, producing more change and anchoring new approaches in the culture were not analysed in this study since they need a longer time span (several years) to become relevant.

In conclusion, it was possible to find evidence of the first six steps in the Kotter model in the studied organisational and management system change process at TUAS. Thus, in this sense, the change has been led with success. However, this study does not evaluate how effectively these steps have been taken or to what extent they may have been able to reach the intended results.

The Kotter model seems to be a viable framework to analyse leading change also in the higher education context. Even though the CDIO Initiative does not directly focus on topics in higher education change management, it has facilitated numerous change processes globally. Studying and understanding the different phenomena connected to change in higher education benefits the potential to reach the Initiative's intended goals of continuous improvement of education and the skill set of future professionals.

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BIOGRAPHICAL INFORMATION

Krista Holopainen is a Project Advisor in the Research, Development and Innovation Services at Turku University of Applied Sciences. She holds a M.Sc. in Sociology from the University of Turku. She is currently studying in the Doctoral Programme of Social and Behavioural Sciences at the University of Turku.

Timo Holopainen is a Principal Lecturer and Leader, Business Development, for the Faculty of Engineering and Business at Turku University of Applied Sciences. He holds a Ph.D. in Chemistry from the University of Joensuu and MBA from the University of Reading. His current focus is on Technical Sales, Sales Engineering and related competencies. He is Chairman of European Sales Competition Association (ESCA) and Vice-President of Academic Association of Sales Engineering (AASE).

Jaana Kallio-Gerlander is a Head of Education and Research in School of Entrepreneurship and Sales at Turku University of Applied Sciences. She holds a Lic.Econ. from Åbo Akademi University, Finland.

Anne Norström is a Head of Education and Research in School of Chemical Engineering at the Faculty of Engineering and Business at Turku University of Applied Sciences. She holds a Lic.Tech. in Physical Chemistry/Process Chemistry and a M.Sc. in Chemical Engineering from Åbo Akademi University, Finland.

Janne Roslöf is a Head of Education and Research of the Master School of Engineering and Business at Turku University of Applied Sciences. He holds a D.Sc. in Process Systems Engineering and a M.Sc. in Chemical Engineering from Åbo Akademi University, Finland, and a M.A. in Education Science from University of Turku, Finland. He has participated in several national and international educational development assignments. Currently, he is a member of the Technology Industry and Services anticipation expert group of the Finnish National Agency for Education.

Corresponding author

Krista Holopainen
Turku University of Applied Sciences
Joukahaisenkatu 3 A
FI-20520 Turku, Finland
+3582 263 35
krista.holopainen@tuas.fi
orcid.org/0000-0001-7416-3716