

Project-ending competence in premature project closures

Virpi Havila ^a, Christopher J. Medlin ^b, Asta Salmi ^{c,*}

^a *Uppsala University, Department of Business Studies, P.O. Box 513, SE-751 20 Uppsala, Sweden*

^b *University of Adelaide, Business School, South Australia 5005, Australia*

^c *Aalto University, School of Economics, P.O. Box 21230, FI-000076 Aalto, Helsinki, Finland*

Received 3 March 2011; received in revised form 5 April 2012; accepted 1 May 2012

Abstract

Project management literature tends to focus on the early phases of a project and on the associated generic project management competences, such as planning, scheduling, budgeting, resourcing and motivating. Only a small fraction of the discussion is devoted to project closure and to the competences needed when a project fails to reach the goals and so needs to be closed prematurely. The purpose of this paper is to develop an understanding of project-ending competences needed in premature project closures. Two cases of premature project closure are analysed in different contexts: in the car industry and the aircraft manufacturing industry. The key findings concern the managerial challenges that are present in premature project closures: the need for involvement of senior and also project managers, the need to understand the often changed role of internal and external project stakeholders, and the need to understand that the ‘future matters’ in premature project closure.

© 2012 Elsevier Ltd. APM and IPMA. All rights reserved.

Keywords: Project-ending competence; Premature project closure; Termination phase; Car industry; Aircraft manufacturing industry

1. Introduction

Projects are often seen to follow a life cycle, including phases such as initiation, development, implementation and termination of the project (see, e.g., Meredith and Mantel, 2000; Turner, 1999). Thus, all projects are by definition limited in time and planned to be brought to a close on a specific date or at a time period set in advance (Lundin and Söderholm, 1995; PMBOK guide, 2004). While project management literature covers the entire life cycle, the front end, i.e., the initiation, development and implementation of the project still tends to be stressed. Only a small fraction of the discussion in the literature is devoted to the termination phase of a project. For example, in a typical project management textbook, fewer than 5% of pages discuss project closure. To close a project successfully, the advice given in the textbooks is to follow standard administrative procedures (see, e.g., Meredith and Mantel, 2000; Turner, 1999) that include, for

instance, evaluation of the project, recording all descriptions of the project design and technical data, and writing a final report. The project management literature normally gives the picture that project closure is something natural and uncomplicated.

However, closure of some projects is problematic, especially of those that need to be closed before they have achieved the goals set in the beginning. The reason for the closure may be found within the project or in the external environment (Meredith and Mantel, 2000: 541). This type of premature project closure can be problematic, as it may cause a feeling of disappointment among the project participants that were expecting the project to continue until the goals were reached. According to Meredith and Mantel (ibid.) in this type of project closure, the decision to close the project leads to the termination of all activities in the substance of the project on the closure date. However, there are other types of activities that still require completion. For example, project team members may need to be placed into new employment, and equipment and materials will need re-deployment. The situation is even more challenging if external stakeholders, such as suppliers, are considered during a premature project closure process. The supplier’s employees, equipment and materials also require re-

* Corresponding author. Tel.: +358 50 3832476.

E-mail addresses: virpi.havila@fek.uu.se (V. Havila),
chris.medlin@adelaide.edu.au (C.J. Medlin), asta.salmi@aalto.fi (A. Salmi).

deployment and in a circumstance where compensation for damages may be sought from the project leader firm.

Recently, project management scholars have shown more interest in project closures (Atkinson et al., 2006; De, 2001; Havila and Salmi, 2009). However, there is little guidance in the literature on how to deal with premature project closure, which often may be sudden and unexpected. Therefore, this paper aims to develop an understanding regarding premature project closures in general, and especially regarding project-ending competences that are needed in premature project closures.

An example of required competences is negotiation skills, as closure of a project may involve closing contracts with different types of stakeholders, such as employees, clients and suppliers. This, in turn, means that the negotiators need to have a good knowledge of the relations to these stakeholders. Skills to deal with the media may also be needed. In general it seems that re-use of earlier knowledge and organisational learning in the context of projects is still underdeveloped: reflections and reviews are given little attention, and organisational learning is not necessarily taking place (Atkinson et al., 2006). Despite the general advice to write final reports, in practice managers and companies tend to fail in delivering and using these later on: ‘the results, for example project reports, were not used as efficiently as possible. New knowledge was clearly created, but its accumulation and storage was unsystematic.’ (Kasvi et al., 2003: 579). Therefore, there is a need for explicating the challenges of premature project closures and for drawing managerial implications for such situations. The paper contributes to the project management literature by illustrating that in premature project closures it is essential to understand stakeholder connectedness and to take immediate actions vis-à-vis the stakeholders.

The discussion in this paper is based on two case studies: one from the car manufacturing industry and the other from the aircraft manufacturing industry. The first case study deals with the production of the Mitsubishi 380 model, a family sedan that was manufactured by Mitsubishi Motors Australia Ltd (MMAL) in Adelaide, South Australia. Production of this six-cylinder model was ended two and a half years after production started, just as petrol prices climbed steeply. In the car industry each car model has a life of up to 5 or 10 years, which was the goal also regarding the Mitsubishi 380 model. The second case study looks at production of a civil aircraft model in Sweden, the Saab 2000. All parties involved in the development and production of the aircraft model expected it to be a similar sales success as its predecessor, the Saab 340. However, the production of the Saab 2000 was halted after 5 years. Both cases deal with a project closure that was premature, i.e. the projects were closed before break-even was reached.

The two industries are both of the type where the availability of spare parts and maintenance is regulated. Within the car industry, the manufacturer is responsible for spare parts during the 10 years after a new model has reached the customers. The car manufacturer is also likely to extend the sales period by re-developing the model. Within the aircraft manufacturing industry the manufacturer delivers spare parts and maintenance as long as an aircraft is flying, which may be 25–30 years. During this time the manufacturer may also need to re-develop the aircraft.

Thus, the availability of spare parts and maintenance is a key question during the whole life time of the products. This is important because in these industries the project life cycle contains also the operations phase. Jugdev and Müller (2005) argue that the length of project life cycle is industry specific. They saw that within the construction industry the project life cycle ended at the handover, whereas within the defence acquisition and also software development projects the life cycle covered also the operations phase. In these cases, a premature project ending would mean that the product’s life cycle is shorter than planned, as the production is ended before planned profit is reached.

Our choice of this type of project, which also covers the operations phase, for analysis means that both internal stakeholders, such as employees, as well as external stakeholders, such as customers and suppliers, will be influenced by the project closure. For example in the car industry, Corswant and Fredriksson (2002) report that car manufacturers let suppliers take considerable responsibility for product development. The same type of situation can be seen in the aircraft industry. For example, one manager at Saab Aircraft AB expressed this issue as follows: ‘‘It is not easy to change a supplier. The supplier is familiar with [...] the construction [...] and it is small series [...]. This means that you have [...] a project-long relationship with the suppliers.’’ (Havila and Salmi, 2009: 25).

The paper is organised as follows. First, the literature on projects and project closure is reviewed, focusing on specific project competence required in complex and long-term projects that are going through premature termination. In the two sections that follow, two case studies of premature project closures are presented. Third, an analysis of the cases leads to new theoretical insights on project closures, and finally, we conclude with a discussion on the type of project-ending competence that is needed in premature project closures.

2. Premature project closure

The project life cycle normally includes the following four phases: initiation, development, implementation and termination (Meredith and Mantel, 2000; Turner, 1999). The project management literature tends to pay most attention to the early phases and to the associated generic project management competences, such as planning, scheduling, budgeting, resourcing and motivating. So far, little attention has been paid to the fact that the termination phase differs from the other project phases.

According to project management literature (e.g., Meredith and Mantel, 2000) project closure should be planned, budgeted and scheduled in the same way as the earlier phases in the project life cycle. Several textbooks recommend a project termination checklist (Lock, 2003; Meredith and Mantel, 2000; Turner, 1999) where the suggested ending steps include transfer from project manager to operations manager, evaluation, recording of descriptions (e.g., design, technical data), and writing a final report. Thus, the textbooks’ view on the tasks in project closure is mainly administrative in nature. However, this view of project closures can be challenged in three ways.

First, the managerial skills and competences needed during a project closure may be significantly different to the skills and competences needed during the project implementation phase. This variation in managerial competences by project phase is commented on by Turner (1999: 330), who points out that ‘the skills required to finish a project can be different to those required to start it up and run it’. Turner (ibid.: 329) also points to the fact that an ineffective closure may have consequences for the involved parties over a long time period, as ‘... everyone remembers ineffective close-out’. Therefore, the closure is a critical phase of a project, and ‘...it may be appropriate to change managers’ when closing a project (ibid.: 329–330).

Second, not all projects are closed at the time when originally planned. When a project is closed according to plan, the project managers can follow the standard procedures decided on during the initiation stage. However, when projects are closed later or earlier than planned there is necessarily some re-negotiation of the timeline, a rearrangement of resources and a redefinition of the project goals. Thus, the view that closure is mainly administrative by nature is challenged by the fact that totally new types of skills and competences may be needed. For example, Royer (2005: 86) argues for a separate ‘exit champion’ with the task to ‘... push [...] the organisation to admit when enough is enough’.

The third challenge to project closure being mainly an administrative process follows from the fact that some projects are relatively long term and require major commitments from internal and external stakeholders. This type of longer-term projects with external stakeholders (such as suppliers) cannot be closed without involving the senior management. For example, Davis (2005) argues that senior management should close the project if the costs heavily exceed budget. Thus, the tasks during the project closure are not only operative, but also strategic.

A premature project closure can occur during any phase of the project life: in the initiation, development or implementation phase. The project management literature recognises that premature project closure sometimes must take place. Lock (2003), for example, points out that a premature project closure may take place when the project has been completed earlier than planned. Other reasons may be that a project owner has run out of funds, changed the project’s purpose and expected output, or that the project owner’s situation has changed owing to economic or political changes. Thus, it is the project owner that needs to make the closure decision. This, in turn, influences the working situation of project members and also the project manager. ‘Premature project closure’ refers here to endings that fall clearly short of the set time (and consequently, short of the set project targets) and that therefore cause considerable changes to project management, as well as a need for reorganisation that affects both internal and/or external stakeholders of the project.

2.1. Project-ending competence in premature project closure

Writings on project management have raised the need for developing project management competences (Suikki et al., 2006; Söderlund et al., 2008). Project competence, as defined by Söderlund (2005), covers four sub-processes: project generation, project organising, project management, and project teamwork.

Thus, the definition puts emphasis on the early phases of projects (ibid.: 455). When a project moves to the closure phase, these sub-processes are likely to change in importance. So far, project-ending competences have not been addressed (for an exception, see Havila and Salmi, 2009). This is not surprising, given the relative lack of attention by scholars on project closure. Ending situations are not likely to be discussed or stressed by managers either. Enthusiasm, action and experiences all tend to relate to the launching of new projects. As Atkinson et al. (2006: 696) note, “the excitement of a new project contains energy to get it started while at the end of a project that energy is reduced”.

A premature project closure can be seen as an unexpected event that needs to be handled in a different way than a ‘normal’ project closure. For example, Geraldi et al. (2010) identify three pillars supporting successful responses to unexpected events: (1) responsive and functioning structure at the organisational level, (2) good interpersonal relationship at the group level and (3) competent people at the individual level. This shows that both individuals and the organisation need to be tuned into tackling (incremental or radical) events to ensure successful project management. On the other hand, as Vaaland (2004) shows, it is not only the conflict events that matter for relationship development, but how they are perceived and handled: openness seems to play a key role in reducing relationship tensions. More specifically for project management, holistic change management frameworks have been proposed. For instance, Steffens et al. (2007) stress both operative and strategic change management, suggest a contingency view to change management, and advocate a screening team (in comparison with the project team), for successful change management of projects. However, these frameworks are not specific to the termination phase of projects.

Due to the peculiar nature of the termination phase, Havila and Salmi (2009: 63) have suggested a separate concept termed project-ending competence, which they define as follows: ‘the ability and skills of the organization and its employees to terminate the project so that internal and external project stakeholders and company relations incur as little harm as possible’. Accordingly, project-ending competence is composed of two elements: first, the organisational capacity and commitment to support the operational managers affecting the closure, and secondly the quality and capacity of the employees. This is consistent with the argument by Kasvi et al. (2003: 571) that ‘Successful project management is based, on the one hand on accumulated knowledge, and, on the other hand, on individual and collective competences.’ There is also a strong resonance with the views of Geraldi et al. (2010) on reacting to unexpected events. Thus, both individuals as well as an organisation’s ability to store and re-use earlier knowledge are important.

However, in a premature project closure, the management not only needs to make a deliberate decision to close the project, but also needs to deal with the, often disappointed, project stakeholders. In the case of a premature project closure, this may become a critical issue to deal with, as closure is usually linked with negative feelings both within and beyond the firm. The original project members may have great difficulty accepting that the project is closed. As noted by a manager involved in a premature closure, “no one wants any part of the funeral” (Havila

and Salmi 2009: 72). Also, company-external stakeholders, such as supplier firms, customer firms and end-customers, can be seen to compose a network of connections (Johanson and Mattsson, 1985) that the management needs to handle during the closure process.

Stakeholder management has received considerable interest in the project management literature (Aaltonen, 2011; Achterkamp and Vos, 2008; Jepsen and Eskerod, 2009). Also, the importance of considering the different stakeholders has been recognised for periods when the project undergoes fundamental changes (Olsson, 2006; Söderholm, 2008). Thus, one important skill needed during the premature project closure is the ability of managers to understand the stakeholder relations, and in particular the connections between the stakeholders.

To sum up, a premature project closure often is an unexpected situation, which means that a company and its managers may be unprepared to deal with it. Normally it is the project owner who can make the closure decision, which means that the senior management level becomes involved even before the closure decision. However, it is the project managers who need to deal with implementing the closing plans. Thus, both senior and project managers are needed when dealing with different types of project stakeholders. A critical issue is how to deal with the sometimes disappointed project stakeholders, such as employees, customers and suppliers, who now face a situation that may have severe consequences for their situation. We will continue the discussion of project-ending competences needed in premature project closure on the basis of the two case studies, which are presented next.

3. Method

For our study, a multiple-case design (Yin, 1994) was chosen so that it was possible to cover as many different aspects of project-ending competence in premature project closures as possible. The two cases, the ‘Mitsubishi 380 project’ and the ‘Saab 2000 project’, represent situations where premature project closure became the only possible alternative for the company management. Both projects were ended before they reached their goals. Fig. 1 illustrates the planned and realized project life cycles for the ‘Mitsubishi 380 project’ and the ‘Saab 2000 project’.

In the case of the Mitsubishi 380, the goal was to produce about 30,000 cars per year over 10 years, i.e. totally 300,000 cars. This goal was never reached, as the production was ended after two and a half years and a total of 32,000 cars, long before development costs and investments were recouped. In the case of the Saab 2000, the goal was to develop an aircraft like its

predecessor, the Saab 340 aircraft, but larger and better in several aspects. The Saab 340 was a sales success, and this was the goal also regarding the new Saab 2000. However, the project was ended after 5 years, when only 63 planes had been produced. To recoup all the development and investment costs made by Saab Aircraft AB, the suppliers and the launching customer would have required the production of at least 200 aircraft. Thus, both situations deal with a market failure as the investments made by the companies never could be recouped.

In both cases the decision to close the project also meant that many different types of company-external stakeholders were influenced. As both projects were closed earlier than planned, the project stakeholders suddenly faced a new and unplanned situation. In both cases the project life cycle contained also manufacturing and continual development of the products as well as delivery of maintenance and spare parts. For example, during the short production time of the Mitsubishi 380 the model was modified several times. The two cases were chosen to be able to cover different types of situations where company-external stakeholders, such as suppliers and customers, became a critical concern for the management and needed to be handled in a different way than in a ‘normal’ ending situation.

The case studies are based on in-depth interviews and a wide range of secondary material, such as information from the different companies’ web sites and news articles. Both cases involved closure of a production plant, which raised the interest of (local) media. The consequences of the closure for the employees and for the companies that were suppliers to the production plants were therefore widely reported. The secondary data enabled us to cross-validate data and integrate contextual and temporal observation with the more perceptual and attitudinal data gathered from interviews (Dawson, 1997).

The decision to close the ‘Mitsubishi 380 project’ was taken in February 2008, and the production of Mitsubishi 380 cars ended on 31st March 2008. At Mitsubishi Motors Australia Ltd. the five persons who had the main responsibility during the ending process were interviewed (one person was interviewed three times and one twice) between May 2008 and December 2009. Furthermore, nine persons who were responsible for contact with Mitsubishi Motors Australia Ltd. at seven different supplier companies were interviewed. The interviewed supplier companies were chosen to be able to cover different types of business relationships. Also one end-customer was interviewed. No retailers were interviewed as the project closure did not influence this type of stakeholders. All the interviews were personal interviews conducted together by two of the researchers. They were recorded and transcribed, and used to write a case description.

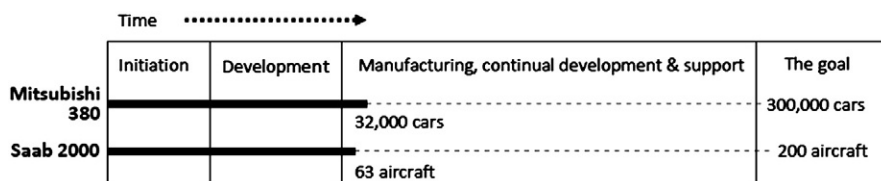


Fig. 1. The planned vs. realized project life cycles for Mitsubishi 380 and Saab 2000.

The final decision to close the ‘Saab 2000 project’ was taken in December 1997 by the Board of Directors of Saab AB, and production ended one and a half year later, in June 1999. Thus, this case differs from the Mitsubishi case in which the time between the decision and the closure was only about seven weeks. For the Saab case study, 13 persons at different levels and in different involved companies in four countries were interviewed. These included Saab Aircraft AB, some of its key suppliers and one of its customers. The interviews were conducted between April 1999 and March 2000 by one of the researchers. All the interviews were recorded and transcribed. The case description that was written was sent to all the interviewed persons for approval.

One of the researchers was involved in data collection in both cases, which provided a solid basis for collecting comparative data. On the other hand, having a team of researchers working on the topic enabled a rich dialogue between the data, concepts and researcher perceptions when the analysis was carried out.

A comparative analysis was done to investigate the differences and similarities regarding project-ending competences in the two cases of premature project closure. Our data analysis consisted of a number of iterative steps. First, we developed case narratives describing the key features of the two projects and their ending processes. For this we used information from the different project stakeholders. Second, we continued with a more detailed analysis, by investigating what kind of challenges arose from ending and how the managers had tackled these. After in-depth case analysis we continued by comparing in more detail the issue of ending competences. Our analytical approach involved constant iteration and movement back and forth between our empirical data and existing theory (van Maanen et al., 2007), and after a number of iteration rounds our key findings converged into points of ending competences that best fit with our theoretical pre-understanding and data (Miles and Huberman, 1994).

4. The two cases of premature project closure

In this section the two cases are presented separately. First, the case study dealing with the premature closure of the Mitsubishi 380 project is presented, and thereafter the case study of the premature ending of the Saab 2000 project.

4.1. Ending of Mitsubishi 380 Project

In 2002, Mitsubishi Motors Corporation of Japan (MMC) decided to begin production of the Mitsubishi 380 model at Mitsubishi Motors Australia Ltd.’s (MMAL) production facility, the Tonsley plant, in Adelaide, South Australia. The new 380 model was a large family car that targeted only the Australian market. At the same time when the production of the new Mitsubishi 380 model started in September 2005, the production of the long-running Magna model ceased.

However, demand for the new model never grew strong, and only two and a half years after production started, MMC announced that its production facility in Australia was to be closed. This meant that no more Mitsubishi cars would be manufactured in Australia after the closure of the Adelaide

plant on the 31st of March 2008. One reason for the closure was that the new 380 model was launched at the same time that petrol prices began to rise, which made car buyers reluctant to buy a large car with considerable petrol consumption.

4.1.1. Dealing with stakeholders

The closure was made public through a press release from MMC on the 5th February 2008, the same day that the final decision to close the plant was taken. The message was that the plant was to be closed about seven weeks later. Immediately after the official announcement, media channels in South Australia started to report on the closure and its possible consequences for the local companies. Thus, the management of MMAL needed to act immediately after the official announcement.

First, the 900 employees got information directly from the CEO of MMAL. Employees were considered as one important stakeholder group, as the goal was to avoid all types of bad-will that could damage future sales. Over one thousand cars were still scheduled for manufacture after the closure announcement. Also Mitsubishi was selling many imported vehicles and management feared that the announcement could lead to lost market share in Australia. Nissan had suffered such an experience some years earlier when they had closed their production of cars in Australia. The question now was how to convince the potential customers that Mitsubishi cars have a future in Australia. Thus, the critical issue for MMAL to deal with was how to ‘protect the Mitsubishi brand in Australia’.

Within the car manufacturing industry there is an agreement that a manufacturer will ensure supply of spare parts for 10 years. For Mitsubishi this meant that the company needed to supply spare parts for the 380 model until March 2018 and the Magna model to earlier dates. Thus, one important stakeholder group was the existing customers, so that they would continue to trust the company’s ability to supply spare parts.

Immediately after the official announcement of the closure, all the employees were sent home for the remainder of the week. Only the management group stayed at the plant to plan for the activities to come. The key issue during these days were how to time and also how to coordinate the activities vis-à-vis employees. Another important issue was how to deal with the potential and existing customers. The Supply Division at MMAL was assigned the specific project of dealing with the 137 suppliers. One central goal for the Supply Division was to avoid 10 years of stockholding of spare parts, if possible. Some suppliers would not be able to recoup their investments, as production ceased several years and several hundred thousand cars earlier than planned. For this reason the Supply Division needed to negotiate with each of the suppliers.

Some of the key suppliers were informed about the closure via a telephone call already before the public announcement. These suppliers were asked not to disclose anything. As one of the managers at a supplier company expressed it: ‘We were told, until the official document came out there was an embargo on it.’ The next step was to send a letter to the suppliers about the decision to close the plant and the reasons for it. After that, the operational managers in the Supply Division of MMAL made on-site visits to each of the Australian suppliers: ‘...

initially we went out to all of the suppliers, the buyers went, [...] to every supplier here in Australia. We went and knocked on the door and gave an introduction, going through our process about what we were going to do.’

After these first visits the negotiations with each supplier were started. As the period from announcement to closure was short, several suppliers already had more stock than required by MMAL. As a result the negotiators from the Supply Division went to suppliers on the basis that they would need to re-pay suppliers for parts produced beyond the number required. The management also faced a new situation during the negotiation process, as they continuously needed to seek advice from the company lawyers: ‘...you also have legal obligations. [...] And that’s totally changed my world as well, because we basically have to seek advice constantly from lawyers.’ For some of the suppliers the closure was not a matter of strategic importance. One reason was that the volume of manufactured cars had been declining over a longer time period, so that the relative effect was low. This also made future expectations more realistic. So, as the business shrank gradually over time, the suppliers had time to adjust their business at least to a certain extent.

4.1.2. Epilogue

The premature closure of the production of the Mitsubishi 380 model does not appear to have influenced sales of MMAL imported cars. Instead, in the year of the closure, Mitsubishi increased its share of imported new cars in the South Australian and Australian markets.

4.2. Ending the Saab 2000 project

The Saab 2000 is a propeller aircraft that can carry up to 50 passengers. It was planned to be another successful product for the Swedish company Saab Aircraft AB, following on their sales success with the Saab 340. The new aircraft was planned to be the fastest turboprop airplane on the market with slow-turning propellers that would guarantee a low noise level in the cabin.

The first customer, the regional operator Crossair, began to operate the Saab 2000 in August 1994. The sixty-third, and last, Saab 2000 was delivered 5 years later, in April 1999. The premature closure was an unexpected event and a disappointment for all the involved companies. As one of Saab Aircraft AB’s managers stated: ‘*Everyone [...] had expected to be able to produce at least a few hundred of the aircraft*’.

There were two key reasons for the premature closure of production of the new Saab 2000 aircraft. First, the regional aircraft market, in which both the Saab 340 and the Saab 2000 operated, accounted for only 5% of the total aircraft market. Due to overcapacity in this segment, competition between the companies was fierce. Second, several competitors introduced jet aircraft that had started to gain more market share. As both the Saab 340 and the Saab 2000 were propeller aircraft, they were deemed ‘old-fashioned’. Therefore, in December 1997 the Board of Directors of Saab AB made the decision to terminate production of the Saab 340 as well as the Saab 2000.

4.2.1. Dealing with stakeholders

The company had arrived at a decision to terminate production of regional aircraft as early as August 1997, based on an analysis completed in spring 1997. The time between August and December was used for internal discussions on when and how the message to external parties should be formulated and for informing key stakeholders before the official announcement of the closure. As noted by one of Saab Aircraft AB’s managers: ‘... it was very delicate [...] to find the overall strategy and the message that would then be channelled out to the supplier market and customer market.’

An aircraft is a product that has a long life, around 25–30 years. Throughout its life, each individual airplane must be in a perfect shape, equipped with modern technical equipment. This means that even though the production of new aircraft would end in the summer of 1999, the need to produce spare parts and to provide maintenance did not. Thus, it was important that Saab Aircraft AB maintained a good relationship with most of the 230 suppliers. Considerable increases in spare part prices would make it dramatically more expensive for the operators of the Saab 340 and the Saab 2000. At the same time when Saab Aircraft AB planned to close production, they also had negotiations with potential customers regarding sales of new aircraft.

The Purchasing Department of Saab Aircraft AB took care of renegotiating the contracts with the suppliers. The time between the decision in 1997 to terminate production and closure in 1999 was used to renegotiate the contracts and to produce the last aircraft. During the whole closure period personnel from the Purchasing Department met weekly to discuss problems and also to spread experiences, as no one had prior experiences of this kind of closure.

In October, the 60–70 strategically important suppliers, accounting for about 80% of the value of an aircraft, were visited. They were given information about what would happen, and they were asked to start planning for the termination of production. One of the managers at a supplier company spoke about the contacting: ‘They came, they told us what was going to happen, they had written a letter to us, which they asked us to sign. So it was, if you like, proof that we had indeed been told [...] and we had understood what they had told us [...] And I think we signed it and we [added] some words to it.’ The less important suppliers received a letter with the same information that had been delivered personally to the first supplier category. The suppliers were asked to sign and return the letter, thus confirming that they had understood the situation and would not have any demands in the future. Any demands were to be presented immediately. During the negotiations it became obvious for the negotiators from the Purchasing Department that some of the suppliers had been in direct contact with each other. This made the negotiators aware of the importance of being consistent in all the negotiations.

The Managing Director visited all the main customers in mid-October 1997 and told them that the production of regional aircraft was threatened. He also informed the customers that this was the time to act if they wanted to have more Saab aircraft. The outcome was 35 new orders during autumn 1997. During this period, Saab Aircraft AB also notified and negotiated with

the Swedish government, which had invested SEK 1.5 billion in risk capital.

4.2.2. Epilogue

Many customers were leasing their aircraft, so continuing trust in Saab and its ability to maintain the existing aircraft was important. Had Saab been unable to convince customers that the company would provide service, the operators would probably have returned the aircraft as soon as possible. For Saab this would have resulted in additional loss. The Managing Director expressed the severity of the situation, as follows: 'If we had not been able to convince customers that we would continue to take care of the aircraft so that they could continue to fly with them, we would have received them back. And in the worst case, that would have cost 11 billion.' The company succeeded in maintaining trust, as shown also in the new orders received in 1997.

Next, we discuss the two premature project closures and compare the managerial actions taken towards the stakeholders. This will provide us with a more general understanding of the project-ending competences called for by premature project closures.

5. Discussion

The two cases are similar regarding the need for a complete reconsideration and a decision to prematurely close the projects. In both cases the situation facing the case companies' managers was not 'business as usual'. Instead, the unexpected closure of the projects meant that the senior and project managers needed to rapidly gain and apply new types of managerial competences. They also needed to deal with different and new types of project stakeholders during the closure process. Furthermore, in both cases the projects as such were closed, but indeed, not all stakeholder relationships came to an end. For example, some supplier relationships continued so that spare parts would be available, while for other suppliers a one-time supply allowed closure of the relationship.

Our case findings suggest three particular challenges in premature closure: involvement of all managerial levels, handling stakeholders under an unanticipated (crisis) situation, and changing focus from the planned and on-going project activities to the future ramifications of closure. Our analysis of the two cases and of the relevant literature leads us to propose factors that are integral elements of 'project-ending competences', thus contributing to the literature on the more general project management competences (Suikki et al., 2006; Söderlund et al., 2008).

5.1. Premature project closure: several managerial levels need to be involved

The cases highlight that senior management took a strategic view of the situation, and decided to close the project. In such cases the project management literature typically only advises (project) managers to follow standard administrative procedures (e.g. following the check lists) (Lock, 2003; Meredith and Mantel, 2000; Turner, 1999), which emphasises tasks that are largely operative in nature. In our cases, the senior management

had to take a strategic approach to the issue at hand. The premature-ending called for senior management to be involved and realize the full loss in the present accounting period, rather than continue a slow and steady loss over an extended period. Their willingness to take the responsibility of 'killing the project' illustrates a key ending competence: an ability to make the fundamental and in no way easy strategic decision to close the project.

In addition, senior and project managers worked together in planning how to deal with the new situation. In neither case did the managers have experience of completely closing production lines at short notice. In the Mitsubishi case, the company and managers had some experience of closing projects, as car models have a planned life of 5 or 10 years. These experiences concerned, however, handling the end phase of a normal product life cycle (e.g., Anderson and Zeithaml, 1984). To end the production of cars was new for all managers involved in the Mitsubishi case. In the Saab case, the situation was totally new for the company and its managers, as aircraft models normally have a lifetime of 25–30 years. All of the involved parties with Saab expected that the production would 'fizzle out' one day, but not before they had been able to recoup their investments. Thus, in both cases the premature closure was an unexpected event that meant that little prior management experiences could be found to help in the planning how to deal with the situation. Thus, senior and project managers had to work quickly together to plan and implement the unexpected closure.

During the closure process, the senior management of both companies gave the required support to the project managers, who, in turn, were concerned with the operative aspects of closing the project, i.e., re-directing resources and re-negotiating with suppliers. Support from the senior management and organisation was important because the purpose of these negotiations was contrary to all previous agreements, and the project managers needed to deal with sometimes critical issues. The conflicting situation was thus successfully handled by resorting to open information sharing and support, as also suggested by literature (Vaaland, 2004). Moreover, both operative and strategic change management (Steffens et al., 2007) was resorted to, which leads us to suggest that both strategic and operative project-ending competences are required in premature project closures.

5.2. Premature project closure: new ways to deal with external and internal stakeholders

In both cases, not only the companies themselves, but also the project stakeholders had expected the projects to continue. Therefore, a critical issue during the closure process became how to deal with the external and internal project stakeholders. In line with the project management literature on stakeholder analysis (Aaltonen, 2011; Jepsen and Eskerod, 2009), the cases presented here suggest that companies should be proactive towards the project stakeholders in premature project closures.

As both cases were large inter-organisational projects, the managers put much effort into planning how to deal with their many external parties. This was especially important as both closures attracted considerable media and government interest.

Therefore, the management needed to deal with the various external stakeholders quickly and in a way that minimised further ramifications.

Both case companies were active and early in informing key external stakeholders about the closure. On-site visits and personal communication were used to deliver the message to the key external stakeholders, and the communication covered both the reasons for the closure and the companies' plans for future actions. The new situation called for intensive negotiations, in particular when dealing with the suppliers. There also was a need to pay attention to the connections (Johanson and Mattsson, 1985) between the external stakeholders. In both cases, the Supply Division/Purchasing Department became responsible for dealing with the suppliers. Both active information sharing and negotiation skills are heightened elements during a closure. While one might argue that these activities and the required skills are typical for managers, the context adds a completely different meaning to information sharing and negotiation skills. The unexpected closure creates uncertainties at multiple levels, so that the negotiations are fraught with unexpected and hidden tensions. Thus, the required level of expertise in information sharing and negotiation reflect deeper and new competences for the project managers.

The managers also needed to deal with new types of internal stakeholders, such as company lawyers who became important internal actors during the negotiations with the suppliers.

Thus, compared to planned terminations, the competences needed from the managers changed both vis-à-vis the external stakeholders as well as the internal stakeholders in both of the premature closure cases. In planned terminations managerial project-ending competences focus on the handover (Turner, 1999), whereas with premature closure there is normally no handover; instead the focus is on closing with as little damage as possible. The tight timeline and need for immediate reactions is a particular feature of premature closures, which calls for heightened negotiation skills and an ability to react quickly to the changing situation.

5.3. *Premature project closure: future-orientation needed*

The two industries presented varied regarding the capital and human investment that firms must undertake to participate successfully. The project time horizon for the aircraft industry is five to six times longer than for the car industry. Thus, the capital and human investments, and the commitments between firms are much greater in the aircraft industry. As a result of this difference, the project closure process is elongated in the aircraft industry, in comparison with the car industry. However, it is noteworthy that both cases suggest essentially the same project-ending competences for organizations and managers regardless of industry.

Nevertheless, there were differences related to the origin of the competence requirements. In the aircraft industry the need for senior management to support operational managers came from the higher economic stakes between firms in that industry and the more elongated closure time provided a different negotiation dynamic. By comparison, in the car industry the need for senior

managers to support operational managers was driven more by the shorter closure periods, which led to a more intense workload and shorter negotiation periods.

Even though the projects were closed, in both cases the closing firms had obligations to current and future users and customers of their products. In the Mitsubishi case the cars must be supported for 10 years and in the Saab case the support period is two to three decades. The cases show that the long customer support period places particular demands on the sourcing and purchasing function of the companies. The premature closures involved a complete, and unexpected, change in the logic of how spare parts and product maintenance would be provided in the future. Thus, it was suppliers that constituted a key stakeholder group. This is not surprising, given that suppliers often are deeply integrated in projects (Martinsuo and Ahola, 2009).

However in contrast to the project management literature, there is one important new competence to add: the ability to handle future consequences before closure. This means that the project ending phase is different as with premature project closures the internal and external relationships are either broken or changed, so that the opportunity to deal with problems is lost after closure. Thus, for premature project closing all the existing and also possible future problems must be solved before the closure.

Thus, the cases show that the “future matters” in a particular way in a premature project closure: the managers need to carefully specify the future when prematurely closing an existing project. However, this lengthened time perspective, which coincides with the very short time for making decisions and taking actions, is not presently evident in the project management literature. In comparison with planned project termination, premature closure of long-term projects is more heavily future loaded, and more heavily constrained to the closure period, with many repercussions extending across many stakeholders.

5.4. *Premature project closure: timing*

Our discussion so far has elaborated on the actions that managers at different levels took at different stages of the ending process, and shows how both the organizations and individuals had to adjust their timing of actions. Just like unexpected events (Gerald et al., 2010), premature closures call for organizational and individual competences to ensure successful responses.

As the cases illustrate, a key issue was the managers' ability to *time* the activities in connection to the closure decision. As discussed by Rämö (2002: 569), it is sometimes important to do ‘the right things at the right moment, irrespective of clock-time’. The two cases clearly show that without the right timing of announcements and negotiations, future trust of customers and potential customers would be at stake. Besides the timing of activities, the cases show that there were three more key timing issues: firstly, the senior management needed to develop a vision and a plan on how to deal with each stakeholder group as well as with each specific stakeholder before the closure was announced; secondly, the senior management needed to understand the timing connections that may exist between the stakeholders and include this understanding into the premature

ending plan; and thirdly, the project managers and organisation needed to have heightened abilities and skills to follow the timing plan in practice.

To sum up, analysis of the cases identified several competences that are needed in premature project closures. These are the (1) ability of the senior and project managers to co-operate in closing the project, (2) ability of understanding of the connections between the stakeholders and so have new ways to deal with internal and external stakeholder, (3) ability to develop a future oriented ending plan vis-à-vis each stakeholder group as well as each individual stakeholder, and (4) ability to follow the plan with (right) timing of the activities in connection to the closure decision.

6. Conclusions

This paper addresses an important phase of project lifecycle: project termination, which often is given little attention in project management literature. Furthermore, there is a focus on premature project closures. Given the continuous restructuring processes in today's business environment, it is evident that more and more companies are meeting with premature closures of complex projects. This makes our discussion both relevant and timely.

Our study of premature project closures contributes to the project management literature in two ways. First, we develop an understanding regarding premature project closures in general, showing that for successful closures, there is a need to understand stakeholder connectedness and to take immediate actions vis-à-vis the stakeholders after the closure decision. Second, on this basis, we elaborate on the managerial implications of premature project closures and suggest that special project-ending competences be developed. The identified competences in the closure situation concern managerial cooperation, connections between project stakeholders, a future oriented ending plan, and right timing of actions. So far, little attention has been given to the competences needed in project terminations. Our two case studies of premature project ending indicate managerial challenges that are not only operative in nature. Relevant competences therefore revolve around an approach that is proactive, holistic and strategic.

The role of managers in premature project closure is paramount, as is the flexibility and resolution of the organisation to support the responsible managers. These two abilities are essential elements of project-ending competence. This special competence calls on managers to act with respect, as they make changes to contracts of employment, supply and warranty support, as well as implied contracts based on moral grounds. All of these agreements are changed when a premature closure occurs, and each presents a means to place external stakeholders offside. The flow-back effect of poor closure practices from external stakeholders can be delayed and powerful. Further, the terminating firm may have little opportunity to redress the situation at a later stage, especially if the firm has completely terminated business in that specific industry.

The cases presented here suggest that companies should be proactive towards the project stakeholders in premature and unanticipated project closures. Further, the change in stakeholder

importance relative to the terminating firm creates issues. For example, some stakeholders became more important in project ending, especially given the ramifications external stakeholders can have on a firm's future ability to create a profit. Therefore, it is not "history that matters", rather "the future that matters". Companies should quickly engage in dialogue with their stakeholders to take on board stakeholder thoughts and actions regarding the project closure. This dialogue should start on a broad front immediately after making the public decision to terminate the project, and, regarding the key stakeholders, the dialogue should start even before the decision is made public.

Earlier literature shows that companies in general do poorly in re-using knowledge and learning from earlier projects (Atkinson et al., 2006; Kasvi et al., 2003). The argument presented here is that companies and managers need to prepare better also for premature and unplanned closures. Firms with multiple business units have increased probability of facing events that lead to premature project closure. The CEO and board of directors of these firms need to carefully consider the firm's state of preparedness for managing premature closures. The two cases show that proactive, holistic and strategic moves can indeed produce good results despite the challenging ending situation. Reflections on a company's own and others' experiences of premature closures can help managers to ensure that project-ending competences are developed both in their organisation and among their personnel.

6.1. Implications for practitioners

The key findings are managerially oriented and revolve around the critical tasks in project closure. This study illustrates that a premature closure poses several challenges. First, it is not enough for the company to understand the stakeholders of the project, but their changing role in closure, in order to anticipate and prepare for the reactions to the closure. Second, there is high time pressure—big decisions need to be made fast. Third, the managers need to overcome negative feelings of all parties and to motivate their own personnel and those of the stakeholders. To cope with these challenges, the company needs to deliver needed information, on time and to all relevant parties. A successful closure, causing as few harmful effects for future business as possible, therefore requires strategic-level decision-making and closure plans, strategic support to project managers, as well as quick actions in the operative side, including negotiations and information-sharing with both existing and new stakeholders. Finally, our cases show that timing of the activities in connection to the closure decision is a key challenge for the managers.

6.2. Future research

This study reports successful cases of project closure, and so is able to show how the process can be successfully managed and conducted. There are some limitations to the study, which can be tackled in future studies. To broaden the perspective, investigations of less successful cases of closure would help in understanding when and why project-ending competence may be problematic to maintain. Furthermore, the cases represent only two industries. Analyses of other industries may bring new

understanding of the time aspect, for instance—because the nature of the product and the production process affect the time perspective needed by managers in closure situations. Finally, this study has concentrated on premature project closures and related project-ending competences; while this study builds on earlier initial thoughts on project-ending competence (Havila and Salmi, 2009), clearly, more needs to be done to develop both the concept and its implications further.

References

- Aaltonen, K., 2011. Project stakeholder analysis as an environmental interpretation process. *International Journal of Project Management* 29 (2), 165–183.
- Achterkamp, M.C., Vos, J.F.J., 2008. Investigating the use of the stakeholder notion in project management literature, a meta-analysis. *International Journal of Project Management* 26 (7), 749–757.
- Anderson, C.R., Zeithaml, C.P., 1984. Stage of the product life cycle, business strategy, and business performance. *Academy of Management Journal* 27 (1), 5–24.
- Atkinson, R., Crawford, L., Ward, S., 2006. Fundamental uncertainties in projects and the scope of project management. *International Journal of Project Management* 24 (8), 687–698.
- Corswant, F., Fredriksson, P., 2002. Sourcing trends in the car industry: a survey of car manufacturers' and suppliers' strategies and relations. *International Journal of Operations & Production Management* 22 (7), 741–758.
- Davis, D., 2005. New Projects—Beware of False Economies. *Harvard Business Review on Managing Projects*. Harvard Business School Publishing Corporation, Boston, Massachusetts, pp. 19–39 (Originally published in *Harvard Business Review*, March–April, 1985).
- Dawson, P., 1997. In at the deep end: conducting processual research on organizational change. *Scandinavian Journal of Management* 13 (4), 389–405.
- De, P., 2001. Project termination practices in Indian industry: a statistical review. *International Journal of Project Management* 19 (2), 119–126.
- Geraldi, J.G., Lee-Kelley, L., Kutsch, E., 2010. The Titanic sunk, so what? Project manager response to unexpected events. *International Journal of Project Management* 28 (6), 547–558.
- Havila, V., Salmi, A., 2009. *Managing Project Ending*. Routledge, Oxon.
- Jepsen, A.L., Eskerod, P., 2009. Stakeholder analysis in projects: challenges in using current guidelines in the real world. *International Journal of Project Management* 27 (4), 335–343.
- Johanson, J., Mattsson, L.-G., 1985. Market investments and marketing investments in industrial networks. *International Journal of Research in Marketing* 3 (2), 185–195.
- Jugdev, K., Müller, R., 2005. A retrospective look at our evolving understanding of project success. *Project Management Journal* 36 (4), 19–31.
- Kasvi, J.J.J., Vartiainen, M., Hailikari, M., 2003. Managing knowledge and knowledge competences in projects and project organisations. *International Journal of Project Management* 21 (8), 571–582.
- Lock, D., 2003. *Project Management*, eighth ed. Gower Publishing, Aldershot.
- Lundin, R.A., Söderholm, A., 1995. A theory of the temporary organization. *Scandinavian Journal of Management* 11, 437–455.
- Martinsuo, M., Ahola, T., 2009. Supplier integration in complex delivery projects: comparison between different buyer–supplier relationships. *International Journal of Project Management* 28 (2), 107–116.
- Meredith, J.R., Mantel Jr., S.J., 2000. *Project Management. A Managerial Approach*, fourth edition. John Wiley & Sons, Inc.
- Miles, M., Huberman, M., 1994. *Qualitative Data Analysis*, Second edition. Sage Publications, Thousand Oaks, CA.
- Olsson, N., 2006. Management of flexibility in projects. *International Journal of Project Management* 24 (1), 66–74.
- PMBOK guide, 2004. Project Management Institute, A Guide to the Project Management Body of Knowledge: PMBOK guide, 3rd ed. Project Management Institute, Pennsylvania.
- Rämö, H., 2002. Doing things right and doing the right things—time and timing in projects. *International Journal of Project Management* 20 (7), 569–574.
- Royer, I., 2005. Why Bad Projects are so Hard to Kill. *Harvard Business Review on Managing Projects*. Harvard Business School Publishing Corporation, Boston, Massachusetts, pp. 85–108 (Originally published in *Harvard Business Review*, February, 2003).
- Söderholm, A., 2008. Project management of unexpected events. *International Journal of Project Management* 26 (1), 80–86.
- Söderlund, J., 2005. Developing project competence: empirical regularities in competitive project operations. *International Journal of Innovation Management* 9 (4), 451–480.
- Söderlund, J., Vaagaasar, A.L., Andersen, E.S., 2008. Relating, reflecting and routinizing: developing project competence in cooperation with others. *International Journal of Project Management* 26 (5), 517–526.
- Steffens, W., Martinsuo, M., Arto, K., 2007. Change decisions in product development projects. *International Journal of Project Management* 25 (7), 702–713.
- Suikki, R., Tromstedt, R., Haapasalo, H., 2006. Project management competence development framework in turbulent business environment. *Technovation* 26 (5–6), 723–738.
- Turner, J.R., 1999. *The Handbook of Project-Based Management*, second edition. McGraw-Hill, London.
- Vaaland, T.I., 2004. Improving project collaboration: start with the conflicts. *International Journal of Project Management* 22 (6), 447–454.
- Van Maanen, J., Soerensen, J., Mitchell, T., 2007. The interplay between theory and method. *Academy of Management Review* 32 (4), 1145–1154.
- Yin, R.K., 1994. *Case Study Research*, second ed. SAGE Publications.