Project leadership in multi-project settings: Findings from a critical incident study

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Abstract

This paper identifies and analyzes critical incidents that project leaders – working in multi-project settings – encounter in their daily work. The empirical base for the paper is data on 48 critical incidents collected using a version of the critical incident technique. Results show that the most frequent issues with which project leaders deal are: technical difficulties, dyadic leadership and group dynamics, followed by consultant, client, and peer relations. Moreover, on the basis of a categorisation of project leader roles, in terms of management/leadership and external/internal roles, a framework that is referred to as the Overall-Project-Leader-Role framework, has been developed and related to the empirical findings.

Keywords: Managing projects; Managing and leading; Processes; Critical incidents; Multi-project setting

1. Introduction

Project management is one of the most important organisational activities in modern organisations as the momentum of an organisation’s aggregated projects shapes the future of the organisation. Consequently, projects have gained great attention from researchers since the mid 1940s [1]. Recently, also the environment or setting of the project, and then in particular the multi-project setting, has gained increased attention for researchers [2–4]. The reason for this is that companies within a number of areas (automotive, construction, med-tech, etc.) organise work, to a large extent with strong project and program organisations. These organisations are in extreme cases also referred to as projectified organisation [5], the project-based organisation [6], or the project-oriented organisation [7]. The organisational context of multi-project setting is described as an organisational unit that executes a substantial share of its operations as projects [2]. From a managerial perspective, the setting is characterized by a competition of resources as several projects are accomplished side-by-side, while drawing at least some resources from a common pool of resources [2]. In contrast, from a co-worker perspective, work has been described as disruptive and fragmented, with time-sharing between different projects, often in combinations with elevated levels of time pressure and few opportunities for recuperation between periods of intense work [4]. Using this specific organisational context as a starting-point, this paper aims to give a contribution to the field of project leadership with a particular focus on leadership in multi-project settings. On the basis of a review of selected literature, paired with and empirical investigation using a version of the critical incident technique (CIT), this paper addresses the following two research questions:

(1) What are the most common critical incidents project leaders faces in multi-project settings?
(2) What are the resulting implications for project leadership in multi-project environments?
An understanding of project leadership in multi-project settings is important for two reasons. First, the context of multi-project settings is increasing in industrial importance as projectified, or project-based organisations today have been more or less a de facto standard for organising complex development work and complex high value service offerings. Second, within the project management literature, there is a lack of studies with a leadership perspective in general and the multi-project setting in particular. The contextually anchoring is important. The reason for that is that leadership in multi-project settings can be assumed to be more dynamic. This can also be assumed to hold more activities of navigating the project through changing organisational preconditions and priorities. Therefore, it poses new and other requirements on the leader than project management in more stable environments.

In the next section, selected research on project leadership is presented with a particular focus on overall leadership roles. This section concludes in a suggested framework referred to as the Overall-Project-Leadership-Role framework. What follows is description of the methodology used, a modified version the critical incident technique. Thereafter, the results are presented in terms of an analysis of frequency of occurrence of incidents, as well as an analysis based on the framework developed. In conclusion, the discussion, conclusion, and suggestions for future research follows.

2. Frame of reference: overall project leader roles

Since Gaddis’ seminal article about the emergence of a new professional, referred to as the project manager, there has been a continuous discourse about what a project manager (or leader) does. An indirect answer to this question has been given by the classical body of project management, which focuses on planning methods and tools. This stream of research has been what Engwall referred to as the normative school of project management research, or by Kolltveit as the task perspective. The theoretical basis for this stream of research, as well as the idea of rational choice (i.e. that project work should be based on rationality [10]) is found in Taylor’s Scientific Management. In a recent review of project management literature, Kolltveit argues that a shift from a task perspective towards a leadership perspective has been made within the project literature. This shift, for example, is manifested in the increased number of articles addressing leadership issues of projects. Typically, such articles follow one of two main logics: either they focus on leadership in specific industries or situations, such as clinical research, information technology, or design consultants; or they make their starting-point in existing leadership concepts and/or theory, such as charismatic leadership or transformational leadership; hence applying these concepts/theories to the project context. Additionally, although not always explicitly stated, most leadership studies do also include a dimension of national culture as result of the selected sample, i.e. [16]. An interesting observation is that, although calls have been made for more project leadership research within the field of project management for more than a decade [17], research on project leadership is still limited. Significant for research on project leadership is that it is the field of project management that incorporates leadership theories and models, not vice versa. A pragmatic conclusion, therefore, is that it is the field of project management that must take responsibility for the development of appropriate theories of project leadership. Within this process, two strategies are possible. Either a deductive approach can be used where existing theories, models, and concepts from (general) leadership research is transferred, applied, and tested in the project context; or a deductive approach can be used where the specific aspects of project leadership is described, and theory is built on grounded theory inspired approaches. This paper follows the logic of an inductive approach, as a means for developing project leadership theories.

2.1. Overall project leader roles – a framework

On the most general level of analysis, leadership can be demarcated into the two roles of management and leadership [17–20]. Typically, management deals with planning, budgeting, controlling, and structuring (i.e. to manage complexity). In contrast, leadership refers to a process of directing, visioning, and motivating; including visioning, coordinating, motivating, and the development of individuals (i.e. to manage change) [18]. The relationship between these roles is under debate. For pedagogical reason, these two roles are often separated and polarized as described above. However, a consensus exists among researchers regarding the complementary relationship between these two roles [17–20]. In the context of projects, the relative balance between management and leadership can be said to favour to management. The reason is that, in the case of general leadership, the vision plays a significant role. However, the goal of a project is generally well-defined. As consequence, the role of a project manager has focussed much on managerial activities such as planning, monitoring, and controlling, rather than on creating a vision. In addition to management and leadership roles, another important distinction worth noticing is the distinction between the internal role and the external role. The classical body of project management has had a strong focus on the internal role of the project leader, mainly as a planner and monitor. The reason for this is that the project leader (by definition) has the responsibility of managing a time-limited and goal-directed administrative and organisational unit (i.e. the project). Most often, this role of the planner is also complemented by team leadership roles, such as managing the team and managing team entrances and withdrawals. Other researchers have stressed the importance of managing the organisational environment. Examples of such external activities are: networking, lobbying, resource gathering,**
and ambassadorial activities [22], as well as organisational politics [23,24].

Alternatively said, the work of project leaders can be described as a combination of managerial roles and leadership roles, as well as internal and external roles – all with complex relationships. Accordingly, to categorise the roles of a project leader on an overall level, a practical, although primitive, framework is suggested below. The first dimension that of management and leadership, is based upon the distinction suggested by Kotter [18]: where management refers to a perspective with a focus on an economic transaction between leader and follower. In contrast, leadership refers to a process of directing, visioning, and motivating: including visioning, coordinating, motivating, and the development of individuals (i.e. to manage change). The second dimension of the framework; internal role vs. external role, is a distinction that follows the managed organisational unit. Internal focus refers to issues that take part within the project; external focus refers to issues that take part outside the project, yet (may) affect the project. Combining these dimensions, the framework in Fig. 1 emerges.

The first quadrant in the Overall-Project-Leader-Role framework is entitled internal management which refers to planning activities of internal issues (i.e. project management). As mentioned, the majority of research within the normative school of project management research, i.e. [9] planning tools and techniques (such as project management planning tools and techniques, Gantt charts, and Work-Breakdown-Structures) falls into this quadrant. The second quadrant is entitled internal leadership, which refers to leadership activities inside the project. Team integration is one example of an activity that would fall into this quadrant. Typically, research from a group dynamic perspective [i.e. 21] would fall into this quadrant. The third quadrant, entitled external management, refers to formal planning activities outside the project, such as project portfolio planning, resource planning, project re-definition, and project termination (i.e. activities typically managed by a steering committee). Managing the aggregated project plan [25] and the decision groups around this activity falls into this quadrant. Finally, the fourth quadrant, entitled external leadership, refers to the leadership of unplanned and informal activities outside the project. Examples of such activities are: networking, lobbying, resource gathering, and ambassadorial activities [22], as well as organisational politics [23,24].

3. Empirical research

The empirical part of this study is based upon a modified version of the Critical Incident Technique [26] with a focus upon an investigation of critical incidents industrial project leaders faced in their work of leading projects (i.e. an event that deviates from the expectation of the actor). The logic behind the investigation was to identify critical incidents, cluster those incidents into commonalities in themes, and on the basis of those themes, unfold overall project leader roles. In the following section, the research approach will be presented more in detail.

3.1. The critical incident technique

The critical incident technique (CIT) was first developed by Flanagan [26] for the U.S. Air Force as a means of analyzing man–machine interface in fighter jets and the suitability of pilots to continue service. Originally, its conception consisted of “…a set of procedures for collecting direct observations of human behaviour in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles” [26]. In contrast to the original conception of the method, which was mainly quantitatively focussed, the method is used today both for quantitative and qualitative analyses [27]. The areas of applications have also grown form the original focus on man–machine interaction to motivation research [28], entrepreneurship [29,30], alliances [31], and service management [32,33].

CIT data can be used and analyzed according to two main principles. Either a multi-site approach is used where incidents are collected at different sites and generalizations are made across the sample; or a longitudinal approach is used, where data is collected within the same project or organisation, and the evolution of a process (i.e. a temporal analysis) is the focus. The advantage of the former approach is that it increases the generalizability of the study as the researcher can look for commonalities in themes across different settings [27]. The advantage of the latter approach is that it is especially suitable for unfolding sequences of events that could be assumed to be decisive for the outcome of the process. In addition, these approaches can also be combined. In both of these cases, another advantage of the method is that it can generate both quantitative and qualitative data [27], thereby, giving a depended insight of the phenomenon studied. This is in terms of frequency of occurrence of identified phenomenon in combination with qualitative description of the context and process underlying the incident. Nevertheless, the disadvantage is that

![Fig. 1. Overall project leader roles.](image-url)
CIT generates a retrospective perspective since the respondents are asked to recall events. However, as the focus is on critical events, respondents usually have a good recall [27].

3.2. Respondents and identified incidents

In this paper, a broad, multi-site approach has been used. All in all, 48 critical incidents have been collected from 48 respondents working in 48 different projects within a variety of organisations. Table 1 gives an overview of the type of project in which the respondents worked. All respondents were project managers who had taken part in a project management programme in Sweden. The respondents where selected for representing project leaders working in multi-project organisations. Of the total (48 respondent) sample, of 30 were men (62%), and 18 women (38%). The respondents worked in companies within: IT, Telecom, Manufacturing & Automotive, Med-tech, and System Delivery industry. System Delivery companies refer here to companies that deliver customized systems for industrial buyers – typically energy equipment companies. All incidents were collected during the period of 2002–2003. In addition, the sample represents project leaders responsible for projects ranging from 40,000 EUR, up to a project size of 40 Million EUR. The sample represents both mass-production products and customized deliveries, however, not construction projects.

3.3. Data collecting and analytical procedures

The critical incidents were collected using an instrument developed with the purpose of eliciting unplanned issues with importance for the outcome of projects. Therefore, the approach that was used differs from a traditional CIT approach as it employs a questionnaire instead of being based on interviewing. The intention of the approach was to focus upon conflicts that industrial project leaders face, or have faced, in their daily work. On the basis of this data, an analysis was then done on existing frictions in the execution of their projects. The instrument consisted of a questionnaire with three main questions:

1. Describe your position and role, your task assignment, and the context.

2. Formulate an incident as a question or decision, and describe it.

3. Describe the outcome/solution of the incident.

The definition of a critical incident as an event that deviates from the expectation of the actor [32] was communicated to the respondents. Such an incident can either be negative, such as an incident that could have resulted in a negative, or positive outcome (i.e. an incident that can be characterized as an opportunity and caused, or could have caused, a positive outcome). These outcomes of a critical incident were also communicated to the respondent. In order to choose incidents, an additional criterion was added and communicated to the respondents: the incident should have been of such quality that it kept the respondent awake during the night. Each participant described one incident. Each description of an incident covered approximately two pages of written text following the structure: context, critical incident, and outcome/solution. The overall results (i.e. the frequency of occurrence shown in Fig. 2) were then discussed with a smaller group of the respondents.

In the analysis, the descriptions of the incidents were categorised into commonalities in themes by the researcher. The criterion for clustering incidents together was that they should address the same problem, identified through item 2 in the instrument.

The final themes were then discussed with a colleague with the purpose of cross-checking the categorisation. This process resulted in a first analysis referred to as Analysis I: frequency of occurrence. In order to uncover the overall roles of the project leader and the relative weight between internal management, internal leadership, external management, and external leadership, a second analysis was conducted – referred to as Analysis II: qualitative findings. By using this two-step analytical process, a richer picture of the key issues and behaviour project leaders (in terms of activities) could then be highlighted.

4. Findings

In this section, the empirical findings of the study will be presented. First, the overall findings are presented in an analysis of frequency of occurrence of the critical incidents. What follows is an analysis based on the developed framework.

4.1. Analysis I: frequency of occurrence

The frequency distribution of the identified critical incidents is shown in Fig. 2. In all, 48 incidents were analyzed and clustered into 13 themes, based upon similarities of the problem. These themes can be seen as areas of activities, which illustrate key activities of every-day project leadership in multi-project settings.

The management of themes, with technical difficulties together with dyadic leadership were found to be the most frequent themes with group dynamics in third place. then, what followed were themes related to external activities
such as consultant relations, client relations and peer relations, project adjustments and re-prioritization referred to changes in the environment forcing the project leader to adapt the project. Project adjustment refers to changes in project specifications and/or human resources. In contrast, re-prioritization is a specific type of project adjustment where a formal decision is made to withdraw resources from one project, and allocate them in another. Linked dyadic and group processes refers to complex incidents in which a personal conflict between the project leader and an individual simultaneously affects the project group. Court decisions refer to the role steering committees play in solving disputes.

4.2. Analysis II: qualitative findings

All incidents, categorised into the 13 themes, were in the second analysis related to the framework, as presented in Fig. 1. As expected, the majority of these incidents fell into the leadership column of the framework; however, a few incidents that have been identified fell into the management column. The reason for this bias toward the leadership column is that the CIT method is designed to identity emerging incidents (i.e. incidents that are not planned). An overview of the results is presented in Fig. 3, and in the following section each quadrant will be discussed in detail.

4.3. Internal management

The first quadrant – internal management – included only one incident in one theme. In this case, it was a matter of requirements specification, and whether the project leader should add a negotiation zone into the specification or should define the requirements exactly.

4.4. Internal leadership

In contrast to this, the second quadrant – internal leadership – was the dominant one containing five themes and almost 50% of all the incidents. The themes in this quadrant were: dyadic leadership, group dynamics, linked dyadic-group processes, technical difficulties, and re-prioritization.
The theme of Dyadic Leadership was compiled of critical incidents dealing with leadership issues between the leader and a subordinate. Examples of such incidents were: how to motivate a person; how to convince a person with a negative attitude to support a working method; how to coach a competent person to focus on important (but boring) parts of the work; or how to work with a socially incompetent, but technically brilliant, team member. All incidents in this theme started, and ended, as dyadic incidents. In the majority of these incidents, leadership of subordinates, through dyadic incidents, mirrored a situation where the project leader was assigned personnel, which s/he did not have any opportunity of choosing. Furthermore, the frequency of occurrence \( N = 7 \) of this sub-category indicates that dyadic leadership activities are an important part of project leadership.

The theme of group dynamic referred to those incidents that concerned the integration of the project team. Examples of such incidents were: how to focus and motivate the group; how to take charge of a team that has been floating for a while, and, how to improve information sharing among team members in a team. The incidents mirrored quasi-integrated teams where the goal and/or the working method were not fully agreed upon among the members. The incidents highlighted the important skill of a project leader to read the needs of the project team. Also, this sub-category had a high frequency of occurrence \( N = 6 \), indicating that team integration is yet another key task for project leaders.

A special case of the two previous themes formed the next theme referred to as linked dyadic-group processes. This theme dealt with such incidents that began as a dyadic relationship and developed into group dynamic processes. One example was that of a subordinate who publicly criticized, and tried to discredit, the project leader. As a consequence, the project leader had to fight a two front battle and deal both with the subordinate, as well as with his own credibility within the group. Common for the incidents in this theme was that they were negative because the project group was affected by the dynamics of the (infected) dyadic relationship. These incidents describe a process where one type of incident triggers another incident, and where a chain-of-events phenomenon starts, which the project leader must then control.

Yet another theme under this quadrant was that of technical difficulties. Examples of incidents in this category were: demo system breakdown; delay in development in combination with pressured timetables; weak planning in combination with commercially important projects; unclear contracts that allow the client to make late and repeated changes; and substandard specifications of parts sourced from external suppliers. Two major causes for these incidents could be identified as: tight timetables with fixed delivery dates often defined by customer or external actors, and weak product and project specifications and plans. To further increase the pressure on the project, aspects could be added to the picture: such as the commercial importance of the project for the firm, or burnout of key personal. The incidents included in this theme were of a chain-of-events nature, meaning that one incident precipitated another incident, which precipitated yet another incident, thus leading to a domino-effect. Indicated by the frequency of occurrence \( N = 7 \), the ability to manage technical difficulties seemed to be another key area for project managers. In this process, the specification of both the product and the project was shown to be integral, as well as having an organisation in place that could handle emergent issues.

The final theme in this quadrant, re-prioritization, dealt with re-prioritization between projects. The effects of re-prioritization affected project leaders primarily as a decrease of assigned resources in their project (i.e. personnel) and a transfer of these resources to other projects. While these incidents were planned and sanctioned by a steering committee (i.e. an external management issue), they were not decisive for the project outcome; however, they resulted in a domino effect, such as project delays and/or lower commitment among remaining project members.

4.5. External management

The incidents in the third quadrant – external management – were related to the work in steering committees, as illustrated by this data through the lens of project leaders with business responsibility assigned to such committees. A common denominator was that the incidents dealt with decision-making between the triad of top management, the business/marketing unit, and the development unit. Two themes were identified: project adjustments and court decisions. The incidents in the first theme project adjustments showed different degrees of complexity from one-dimensional decisions, such as the replacement of a project leader, to complex decisions regarding the re-definition of a product's performances, quality, and time to market. The theme of court decisions compiled incidents where the steering committee had a court role, and had to make statements and decisions about conflicts in a project. Examples of such court decisions dealt with which specific unit had to be economically responsible for mal-specifications and re-engineering work.

4.6. External leadership

The final quadrant – external leadership – comprised themes outside the project, such as consultant, client, and peer relations, as well as dependencies to other (related) projects and project formation. In all, 13 out of the 48 critical incidents dealt with client, consultant, and peers relations, which rendered these relational incidents among the most frequent, resulting in more than 25%.

Incidents arranged in the theme of consultant relations involved: how to get a specific (specialist) consultant assigned to the project, whom the project leaders already know and with whom they have worked before; how to manage and monitor consultants doing major work packages in
the project; and, how to manage knowledge transfer from consultants to their own project team. The occurrence of these incidents indicates that consultants today are a normal part of projects, and that the project leader must devote time to managing this specific relationship.

The next theme was that of client relations, which involved the co-operation with engineers from the client company. Although it was not always easy, the management of this type of relationship was considered a key issue by the respondents. Examples of this were how to retrieve information from the client’s project leader (who was suspicious about the co-operation) and how to involve the client’s project team in the project. Other incidents dealt with payment linked to sub-deliveries, and how to ultimately obtain an endorsement from those technically responsible for the client.

Peer relations were the next theme. A dominating topic in this theme was that of power, specifically the power struggles between peers. Identified incidents were: fights for resources (personnel), and processes to (informally) forbid and hinder these people from working on others projects. Fights for power in consortium projects, as well as bid and hinder these people from working on others Projects. Findings also describe that project leaders try to re-shape the preconditions for their projects. This behaviour stretches from a simple adding of a negotiation zone

5. Discussion

While the project challenge of yesterday was to plan and execute a large project, the challenge of today is managing a project in an environment where several parallel projects are all competing for a limited resource base. To begin the discussion and summarize the overall findings of leading project in multi-project settings, a metaphor can be used. Project leaders, living their lives in multi-project organisations, hold similarities with a middle-mafia boss who, not only executes specific tasks (i.e. projects), but who also must ensure the group’s cohesion and stability while protecting it and its territory (i.e. scope and resources) from competing gangs. The leadership challenge is: to stay alive (cases of burnout were identified in the empirical part of the study); to please stakeholder and co-suppliers (i.e. clients, steering committees, and consultants); to keep motivation high in the group; and, to initiate action. Although the empirical base is limited the findings in combination with the framework developed provide some indication of how projects are lead in multi-project settings. In the following section the findings of the study will be discussed.

5.1. Toward a project leader perspective on leadership in multi-project settings

Recently, a growing stream of research has highlighted what has been referred to as the projectified organisation [5], the project-based organisation [6] or the multi-project setting [2,4]. All of these concepts refer to an organisation in which the substantial share of the organisations’ operations is run as projects. Two perspectives on the study of this type of organisation have emerged: the organisational perspective and the co-worker perspective. Research from the organisational perspective focuses on resource allocation issues [2], such as the competition of resources when several projects are accomplished side-by-side [2]. As human resources are the main resource in projects, HRM issues have received the most attention [7]. In contrast, the co-workers’ perspective has stressed the characteristics of work form project members and project leaders in this type of organisation. A particular focus in this research stream has been to investigate how project members manage to take part in several parallel projects simultaneously [4]. In relation to these two perspectives, this study provides a complementary perspective: the project leader’s perspective. Therefore, a first contribution from this paper is the elaboration of the project leader’s perspective on the management of projects in multi-projects settings. Findings from this study show that project leaders are actively engaged, worried, and concerned about activities that threaten the scope, the goal, and the resource-base of their project. Findings also describe that project leaders try to re-shape the preconditions for their projects. This behaviour stretches from a simple adding of a negotiation zone in a project specification, to activities of pure resource competition between projects.

In addition to the empirical contribution, a theoretical contribution for describing project leadership is the suggested framework based on a distinction between management and leadership, and internal versus external roles. The distinction between management and leadership is if interest for project management scholars as this highlights the question posed by Kangis and Lee-Kelley [11]: – Is a project manager also a leader? Based on the findings from this study, the answer to this question is definitely affirmative. By separating managerial roles and leadership roles, as has been done in the framework, preventive actions as well as fire-fighting activities in which project leaders are engaged are made visible – and viability is usually the first step to the improvement of organisational effectiveness. By highlighting internal and external roles, the framework is
also consistent with earlier research. This research has stressed the importance of linking projects to the context [9], as well as investigated boundary-spanning as an important activity of the project leader [24]. By focussing on these roles of project leadership, the presented framework captures tasks beyond the organisational unit of the project – or, by using Buchanan and Badham’s [23] terminology, it extends the turf of project leadership to also include the environment of the project. The management of client, peer, and consultant relations, as well as engagement in formal steering committees activities, are important parts of project leadership in multi-project settings. Accordingly, as project leaders use unauthorized methods and approaches, a key question for the organisation is one that concerns rules and acceptable behaviours for project leaders, on their quest for favourable conditions.

5.2. Leadership dilemmas

One other contribution of this study is that of highlighting the dilemmas project managers face. A first dilemma is one that can be labelled the stable definition versus flexible projects dilemma. On one hand, a well-known truth is that a sharp and stable project definition is crucial for project success, and that this definition should marshal work throughout the project. On the other hand, there is the need for flexibility and room to manoeuvre with an ability to adjust to the project to changing circumstances. The argument for the first position is found in the idea of doing things right-from-the-beginning. In contrast, the argument for the latter position is that a project cannot be planned completely, and that stakeholders: such as clients and steering committees, want to alter functionalities and/or available resources, and that learning takes place during project execution. This dilemma was mainly illustrated by the critical incidents related to technical difficulties. Technical difficulties often emerged as deviations in technical progress, which had to be managed (such as the lack of quality or lack of readiness, or both). However, the sources to these events could often be traced to poor planning, poor specification, and/or a diffuse decision structure. Better up-front work and planning could eliminate, or at least reduce, some of these critical incidents. However, for many incidents, this had probably not been enough and adaptive actions were needed. In the leadership of projects in multi-project settings, adaptation to changing conditions seems to be the normal case rather than the exception. Continuous contingency planning seems to, therefore, be a key issue for leaders in this type of setting.

Cross-functional empowered team versus coordinated specialists as the (key) vehicle for successful project success is the second identified dilemma. Project leaders in multi-project settings have, in this study, been found to face more critical incidents related to person-to-person leadership issues than to team related issues. This finding challenges the idea of the empowered, co-located team as a main factor for project success. In this setting, practical constraints, in terms of staffing and human resource allocation, where team members work at a distance seem to limit the possibilities of a fully applied team approach. Relating these findings to other studies such as Eskerod’s and Blichfeldt’s [21] analysis of team entrées and withdrawals during the project life cycle, an implication is that the (sub)area of leading the project team needs to be revisited. This must be broadened and approached as a problem of leadership of flexible dispersed team, instead of seen as a problem of simply team dynamics.

5.3. Implications for risk management

The findings from this study can also be used as implications for risk management. From the practitioner’s point of view, the identified themes of critical incidents, organized according to frequency of occurrence (see Fig. 2), can be seen as a prioritized list of potential risk areas. Additionally, the suggested framework, as seen in Fig. 3, can be seen a template for risk management; in this case, various areas to which project leaders must pay attention to are highlighted. A specific interpretation of this analysis is that it could be seen as a reminder for project leaders to establish routines and plans for contingency planning. An additional implication for risk management is related to the risks on an organisational level of analysis. As the multi-project environment is an environment characterized by changes, it seems important to establish an organisational infrastructure that can rapidly deal with emerging issues and resolve conflicts (typically this is the work for the steering committee). Findings from this study indicate that one key issue for defining these rules and behaviours is to have a strong steering committee with quick response times and the power to make decisions.

5.4. Limitations of the study

The study presented in this paper has been based on an investigation where 48 critical incidents have been identified and analyzed. These incidents originated from the respondent’s subjective identification of a critical incident that: deviated from the expected, had influence on the project process and was emotionally engaging. The respondents were 48 project leaders working in a variety of sectors: IT, telecom, Manufacturing and Automotive, Med-Tech, and System Delivery projects. The sample represents a broad picture of critical incidents faced by project leaders who work with engineering teams and with development activities in multi-project settings with a variety of technologies.

As it highlights different aspects as for example traditional interview or survey studies, this research approach is interesting in that it can shed new light on existing phenomena. Nevertheless, this approach also has its limitations. A first limitation is related to the method. The CIT method has a bias toward emerging incidents (i.e. incidents that deviated from the expected). A consequence of this is
that the leadership column dominated in the second analysis (Analysis II). Therefore, important issues in the planning of the projects could have been foreseen by the respondents. A second limitation of the study is related to the sample of respondents. As the respondents worked in engineering projects (although in various types of companies) the findings can be considered representative for this type of project; yet the cannot be representative for other types of projects, such as change projects or construction projects. A third limitation of the study is related to the interpretation of the Pareto diagram, showing the distribution of the critical incidents (Fig. 2). This diagram is based on an analysis of frequency of occurrence. Although frequency of occurrence is one important aspect in, for example for risk management, it does not tell us anything about the decisiveness of the individual incident in relation to other incidents within the same project. In the longitudinal approach using the CIT methodology, it is possible to rank or make comparisons between different incidents (within the same project) in order to elicit the most important incidents. A second measurement on importance could, therefore, be generated. The second analysis, using the developed framework, partly counter-balances this weakness by providing a second picture of the data. Finally, the approach used is a broad multi-site approach, where incidents have been collected from a large variety of projects. A longitudinal approach, where critical incidents would have been collected along the project life cycle could generate a complementary picture of how for example, certain incidents are linked to others.

6. Conclusions and future research

To further develop the field of project leadership, what is needed is a balance between grounded empirical investigations of leadership in the specific context of project and theory-driven research utilizing existing leadership concepts. In order to generate insights into the every-day leadership issues that project leaders, who are working in multi-project settings face, an empirical investigation of 48 critical incidents has been made. Results from this investigation shows that the most frequent issues are identified: technical difficulties, dyadic leadership, and group dynamics, as well as external relations to consultant, client, and peer relations.

For researchers, the findings of this study may be used to direct further research. Recent studies have focussed upon the multi-project setting as a particular environment for project research. This study has contributed to that stream of research by elaborating upon the project leader’s perspective: as a contrasting perspective to the existing perspective the organisational and the co-worker perspective. A suggestion for future research is, therefore, that future studies that address the three perspectives of leadership, co-worker, and organisational setting, could be fruitful. In addition, on the basis of a distinction between management versus leadership, and on the external versus the internal focus, a framework has been developed. This framework has then been used as an analytical framework for the empirical investigation. The framework has been found to be useful as a model to frame overall project leadership roles. For further investigation into leadership practice in multi-project settings, project management – specifically, project leadership in multi-project settings – both the balance of, and the integration between management and leadership, and internal versus external roles are of interest.

This paper has also shed light upon some aspects related to planning and adaptation, namely how project leaders adapt and reshape the project according to emerging circumstances. Nevertheless, this question needs to be studied in much more detail with different data, methodologies, and theoretical approaches. One possible way would be to extend the scope of project studies to also include its environment as well as further exploration of the area of project politics. Another interesting question that begs further attention is the use of team-based approaches versus those that are coordinated specialist approaches for managing projects. The majority of best practice studies strongly suggest the use of empowered teams. However, as projects tend to be more disperse and/or virtual, this approach might lose in practical relevance as new managerial challenges emerge. Work in steering committees is yet another issue for future research to address. One additional area of interest for further study is how the CIT method can be used as a tool to further studies of potential risk areas.

The findings of this study have implications for the teaching project leadership as well. At present, courses in project management tend to have a bias toward the rational and planning perspective, comprising a number of techniques and tools. This study, however, indicated that there should be a re-balancing of the course content toward more leadership issues, such as dyadic leadership and organisational politics at least in the curriculum of advanced courses.

Finally, for practitioners, this research might be used as an overall framework of reference for reflection in order to identify areas in particular projects, as well as reflection over one’s own situation.

References


