Driving Strategic Transformation: 
Case of Service Delivery in Telecom Industry

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ABSTRACT

The aim of this paper is to sketch out a proposal for master thesis in the area management control. This thesis focuses on how managers should use the management control systems to enforce strategic transformation. These ideas are currently subject of academic and industrial research.

As theoretical and practical foundation, this thesis will be inspiring for project oriented corporate specializing in service delivery especially in the field of Telecom sector. Considering today’s global rivalry, with continuous emerging complex projects, relating matrix organizations and customers, alongside with human factors drawn in; makes Service Delivery companies particularly unstable. In the era of information technology the service delivery companies are subject to continuous strategic transformation to be able to create sustainable competitive advantages and stay in the business.

[1] framework is used as starting point of this paper. This framework proposes two excessive points of reference to categorize management control systems i.e. interactive versus analytical systems and level of management control.

This thesis intends developing two novel ideas; firstly, that the framework of interpretation could be dragged out to cover parameters such as control system, and incentive system, management tool, and organizational structure; secondly, it investigates how these parameters would link up rationally in a combined manner.

The organizational factor arises from the literature on project management that bringing together the issues for driving new product lines and related service deliveries. Management literature on control systems has inspired the idea of the tool for supporting a smooth strategic transformation. Among other things, it stresses the importance of matrix coordination for the service delivery organizations. Furthermore incentive factor could take part in enforcing transformation on strategic level even healthier.
As a foundation for empirical study, a case study has been performed to explore the significance of above mentioned management control method. The studies represent several years of research with focus of strategic transformations. The studies suggested how these transformations were setup and interpreted in a framework of above mentioned parameters. A more efficient arrangement would contribute to a better interactive and analytical features. This approach, which is characterized for service delivery organizations, tenders an gripping idea to be explored in future researches.

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THE PROPOSAL

Background

The aim of this thesis is to investigate managers’ ability for deployment of the managerial control systems to achieve strategic transformation. The theoretical and practical aspects of this research might be gripping for further study.
Nowadays, firms operate in an increasingly turbulent environment caused by technological, social, political, and ethical changes. [3] called for studying management of transformation which relates to methods of planning and developing flexibility to cope with transformation. “Earlier research on the role of management control systems in implementing strategic transformation pays little attention on how management control systems are used in organization undergoing strategic transformation”. [3:22]

A case study on strategic transformation in similar companies appears as a compelling area that builds up new insights on the role managerial control systems to realize strategic transformation.

**Problem discussions**

Below are the three main discussions for the control systems that could impose strategic transformation in combination with management involvement that apparently could have the furthermost weight or impacts on certain parameters that will be discussed in details in this paper.

The case study has taken place at Karmania Holding a company that specializes in providing Information Technology (henceforth called IT), Computer networking and telecommunication solutions with full service delivery portfolio. The specificities of this sector are service delivery, diverse competences and customer involvement that make their environment particularly unstable at the same time, the information technology era forces service companies to continually carry out strategic transformation to create sustainable competitive advantages.

Service delivery companies might face following challenges such as:

- Combining key parameters that impact the lever of management control.
- Managing multiple projects of diverse size and scope in a proficient manner.
- Bringing together mixed competences belonging to different line organizations with lowest amount of top management involvement.
Combined control systems

According to [35], a number of authors have investigated the actual use of interactive control system in strategy materialization, strategy implementation, innovation, organizational learning, and company performance e.g. [4] and [5,3-6]. However, some drawbacks have also been identified. [6:17] points out that: “without due care, participants in the synergistic control process may feel threatened by the active interest and participation of senior managers; hence the threat of embarrassment can ruin learning”. It is obvious such involvement requires high investment in cost and time.

However it would meaningful to note that most empirical studies follow [1]’s framework on the separate use of control systems are either synergistic control or analytical control. If any of these control functions are used in a combined manner, they may provide a potential solution in reducing the drawbacks of synergistic control.

A combined usage of synergistic and analytical control systems tends to have a positive impact on company’s performance in strategic transformation [12].

[12:8] proposed following hypotheses: “A combined utilization could create a dynamic stress which would guarantee and strengthen positive effects of synergistic control on abilities of such innovativeness, organizational learning, entrepreneurship, market orientation. Such a utilization ... develops into an central lever of strategic transformation”. However [12] did not provide a blueprint of a combined use of control system in strategic transformation.

To move forward to a more meaningful definition of combined utilization, the literature on project management should also be explored. Project management, and in particular the management of project portfolio, has gone throw an internal revolution that shares the same starting point of the management control literature i.e. the inadequacy of conventional accounting systems [15].

The specificities of the service delivery sector make this deviation look quite striking. It will provide substance for the roles of organizational dimensioning and how the managers and
interface actor involve themselves into the process. The case study of this paper will exhibits the validity of an enhanced proposed framework.

**Functional role of different actors**

In this section the focus will be on clarifying the role of the different actors in the use of Management Control Systems according to the type of utilization and type of concern at risk when the system would be used interactively.

According to [1], [7] and [8] for a analytical utilization of control system, the main actors are for instance accountants, sales people, engineers and management controllers, who focus on the line managers. On the other hand for an synergistic usage, the main actors are operational managers. Although it is stressed the important roles the middle managers, but still not much indication about the patterns of motivation for middle managers to fulfill these expectations. The recent research project management literature exhibits a new function called project management office (henceforth called PMO) when there is a call for of coordination between diverse projects and various organizations’ entities. In the case study, a new position was created in a context where the main stakes were to organize different entities to implement strategic transformation.

This thesis distinguishes between following scenarios:

- A analytical utilization, where the main actor has a role of identifying the key parameters for the implementation of planned strategy. According to [1], [7] and [8] this role is usually fulfilled by a gatekeepers.

- An synergistic utilization, when the main issue is a vertical dialogue on strategic uncertainties. In this case, the main actor has a role of communicating and interpreting the results on one main strategic uncertainty. According to [1], [7] and [8], this role is fulfilled by line managers.

- A combined utilization, when the main issues are coordination and strategic governance. In this case, the main actor has a role to coordinate some key decisions between operational entities and interpret strategy and search for strategy implementation. According to the project management literature, this role must be fulfilled by a specific function of PMO actors. Let’s call this an interface actor, who manages the interfaces
between top management and operational management, and among functional services, or among different entities. The recent research on PMO actors in the project management literature illustrates the new roles of these interface actors [15]. It suggests giving the interface actors a function of strategic governance (through a legitimate power) to make them become a facilitator. Actually, most researches consider an interface actor at best as only a coordinator who does not have a function of strategic governance.

The actual researches on interface actors stress on their administrative functions and mostly ignore their functions relating to the strategic governance. The positions of interface actors, i.e. playing a role similar to the one that was defined in this paper, are often so fragile that their implementation often temporary or fails completely.

PMO’s often situated at middle management level, consequently they can exercise their advantages to have positive strength which can have a great say in strategic transformation. [17] pointed out some strengths of middle managers such as having value-adding entrepreneurial ideas, leveraging the informal networks, and managing the tension between continuity and transformation, which helps to avoid confusion.

In view of this paper, interface actors may have value-creating ideas about how to develop and transform a business. As they are near daily operations, customers and subordinates, and at the sometime they far away from frontline work that they can often see the broader outlook, which allows them to perceive new opportunities, solve problems and promote growth. Interface actors take advantage of the informal networks at a company that makes long lasting transformation possible. In addition to their well-built webs of relationships, they can explain essential transformations in the language of employees, and thereby promote the idea of transformation in a pleasant and friendly manner. It is not unusual that transformation could get stuck at higher management level and doesn’t make its way down to employees.

Interface actors could influence the deployment of the combined approach of management control system. In addition to the administrative tasks, they also interpret strategy, contribute implementing it. They have the ideal position which is closed to both top management and operational management. The interface actors can analyze the daily issues in both viewpoints,
thus boosts up mutual interests. The question of whether these roles of strategic governance, coordination, and administrative tasks must be fulfilled by different actors or whether a single actor can have matrix and cross organizational responsibility remains to be better studied.

**Problem Formulation and the Purpose**

This thesis focuses on giving insight into a range of possible control systems that can be utilized by top managers to impose strategic transformation in dynamic service delivery organizations.

Framework described in [1] is the result of ten-year research after a stream of several case studies which includes almost couple of hundreds interviews and quantitative surveys of more than hundred fifty companies in different US and Canadian industries. The control systems communicate senior management’s orientations to subordinates and as a result they facilitate learning. Their roles are also extended to coordinate efforts, rather than only measure performance.

[1] provides two benchmarks to classify the use of management control systems; synergistic versus analytical in combination with degree of involvement of top management. In interactive benchmark, top managers deeply involve themselves into the process e.g. personally analyzing data, regularly challenging their subordinates, while in the analytical benchmark they remain at a distance e.g. responsibilities of subordinates.

This thesis develops two new views: firstly, that the framework of analysis of management control system should not be restricted to the use of control system and the incentive system, but could also be extended to cover two other parameters i.e. the organizational structure and the management tool. Secondly, it explores how all parameters interact in practice. In this manner an interaction will establish a combined approach linking up both synergistic and analytical features.

**Thesis Composition and Structure**

The “Proposal” Chapter, is a brief description of the problems and focuses mainly on three main elements that play a vital role control systems in combination with management role in strategy transformation. Finally this chapter has a brief discussion about range of possible controls that
are based on a specific framework proposed by [1], and developing a new benchmarks for two novel ideas for most advantageous results.

The “Theory and Literature Review” chapter reviews the relationship between management control systems and strategy following the model proposed by of [22], the authors indeed recommended that the strategy process would be placed at the heart of management control to be highly effective.

The “Metrology” chapter outlines a mixture of the previous chapters in terms of framework to explore management control systems for a proposal related to this research subject.

The “Case Study” chapter is based on a study done on Karmania Telecom branch which is a service delivery company which is one of the subsidiaries of Karmania Holding which experienced strategic transformation following top manager shifts. It works on projects with different sizes and complexity which are highly competence dependent. The case study exemplify how the company makes strategic transformation to expand from a small firm to a medium size one managing a large projects. Furthermore focuses on some key issues for efficiently manage a service company that its potential rely primarily on technical excellence and the ability for solid customer satisfaction.

The “Analysis” chapter is about a detailed analysis of Karmania Telecom branch which has grown from a small service delivery company to a major player in this field. This chapter tries figure out key parameters that were had greatest impact in Karmania’s strategy transformations. As part of first evolution the company has gained a substantial reputation and has strengthen its position, but as time goes by it is obvious that the company need recurrent restructuring to stay in business competitively, these restructurings are discussed separately as two evolutions.

The “Conclusion” chapter summarizing the development of the mentioned two novel ideas suggested by this paper. Firstly the suggestion is to widen Simons’ original framework, for utilization of managerial control systems, to include three other parameters, i.e. the organizational structure; the management tool, and the incentive system to be able to enforce a potentially smooth strategic transformation. Secondly idea suggest a reasonable interaction of all these four parameters together. Finally it is concluded that rather a combined approach could
unite the two approaches in a more efficient manner. And it is believed that this study generally have some common value that could be used in similar cases.

In conclusion, these analyses confirm the relevance of so called the four-parameter analysis grid proposed by this thesis which makes clear a guide for a combined approach.

**THEORY AND LITERATURE REVIEW**

**Introduction**

This chapter reviews the relationship between managerial control systems and strategy following the model proposed by [22], the authors indeed recommended that the strategy process would be placed at the center of management control to be greatly successful.

The two important objective for this chapter are synergistic or analytical controls and the way they can be implemented i.e. separately or combined. A system can be only considered as synergistic or analytical if it owns and controls major parameters. Such a definition aims to avoid the confusion of system identification and enable to have a better distinction between the synergistic control system and analytical control system. Another aspect is how to exhibits the significant roles of the combined utilization of analytical and synergistic control systems, especially in strategic transformation.

The constructive property of the combined utilization are only exposed recently by [13]. The objective of this thesis is to study how the synergistic control systems and analytical control systems mutually dependent.

Firstly this chapter briefly reviews the notion of strategic transformation. The strategy concept will be studied through three viewpoints of strategy content, strategy making process, and strategy implementation. Secondly it analyzes in details of [1] framework of synergistic control and analytical control. It reviews the differentiation between synergistic and analytical control systems. In particular, relative to the characteristics of the tools the incentive schemes support each system and [1] suggests a separate use whereas some authors suggest a combined utilization.
**Strategic transformation**

As strategic transformation is the focus of this paper, below are some of definitions strategic transformation.

Strategic transformation is usually defined as change in strategy [23]. Strategic transformation consists of the transformation in strategy content or strategy-making process at the corporate level. [17] extended [23]’s initial definition on strategic transformation and included the changes in structure, systems, and personnel, which are nominated as “the implementation of strategy”. “Management control systems play an essential role to drive organizational transformations” [24:5].

**Synergistic vs. analytical control systems**

[1] puts his center of attention on how senior managers can utilize control systems to develop and put into practice a corporate strategy.

On the basis of [1] and [8], the synergistic control systems may be distinguished in following extent:

- Attention on strategic uncertainties.
- Recurrent participation of top managers and awareness of top managers about subordinates’ responsibilities.
- Head to head dialogue to cope with confronts.

On the contrary, the analytical control systems comprises of:

- Keeping attention by top managers on distance, i.e. subordinates are accountable for results.
- No straight and regular discussions.
- Focus on critical performance variable.

**Combined utilization of control system**

According to [35], a management control system, in [1]’s standpoint, is used either analytically or interactively, but not both. The research literature is more open on this standpoint.
Most of researchers focus on a separate use of analytical control and synergistic control e.g. [7], [27] and [3], only some researchers stress a combined utilization of analytical control and synergistic control e.g. [12] and [13].

According to [1], [7] and [8], the separate usage, of synergistic control systems, allow facilitating strategy emergence and organizational learning, while the analytical control systems help to communicate and then implement intended strategy.

[1] illustrates how analytical and synergistic control systems complement each other to implement a strategic transformation over time. Strategic transformation, mostly emerging in combination with new CEO appointment, i.e. strategic turnaround. Furthermore if a CEO is under major pressure to make improvements and promote performance, a strategic evolution would most likely take place.

In a strategic turnaround, the CEO may openly declare the failure of past strategies; and sequentially implement new strategies, analytical control and synergistic control systems. The first system enables to overcome the organizational inactivity, while the analytical systems allow creating credibility. The synergistic control systems help the CEO to gain the organizational attention and loyalty.

However, in a strategic evolution, as the CEOs are not supposed to openly criticize past strategies, analytical control is used as an initial step to promote change, then synergistic control is introduced to implement the change although the organization beliefs systems and boundary systems are barely used.

[13] argues that a combined use of both analytical and synergistic control systems allows magnifying the positive effects of both systems while reducing their negative effects. The key issue is to create a combined use. What is the nature of such a use? The actual researches, in particular above-mentioned case studies, have not yet provided the response. This will be one of the research objectives of this paper.
Implementation of Strategic Transformation

In general, this paper studying strategy by the mean of: content of strategy, the strategy-making process, and strategy implementation.

The strategic transformation implies the change in strategy content or strategy making process at the corporate or business level. According to [17] initial definition on strategic transformation is adding structure, systems, and personnel. Personnel is selected as the way behind strategy implementation.

What is the boundary between strategic transformation and strategic fine-tuning? [28:14] has points out that “One person’s strategies are another’s tactics - what is strategic depends on where you sit” and when you sit: “what seems tactical today may prove strategic tomorrow”.

[18] pioneered a straightforward but powerful tool to evaluate the mission of strategic positioning, to be precise as cost leadership, differentiation, and focus. They are defined along two axis i.e. strategic scope and strategic strength. Strategic scope looks at the size and composition of the market the firm intends to target; while strategic strength looks at the strength or core competency of the firm. The three below paragraphs are summarized form [18] and [19].

In the standpoint of [35], the differentiation strategy involves creating a product perceived as unique by its customers. The unique feature is supposed to provide superior value for the customers, thus the firm can increase the price, incur addition cost in development, and have better margin. To sustain this strategy, the firm should have: strong development skill, strong engineering skills, incentives based on subjective measures, and clear and strong communication on the differentiating product characteristics.

The focus strategy is used when a company focuses its efforts and resources on a narrow, defined segment of a market. A company can use either a cost focus or a differentiation focus.

There is little awareness about the key role of middle managers in strategic transformation [17]. The role of top management in strategic transformation is unquestionable, but middle management plays also an essential role.
In the traditional literature, middle managers proactively contribute to organizational innovation mainly in incremental change contexts [28]. They can mediate both vertically between the strategic and operational levels and straightly by facilitating integration of knowledge across organization. However, in planned strategic transformation, middle management’s roles and contributions are seen as much weaker [29].

Below we are going to take a look at [2]’s levers of control which are essential for further discussions of this thesis. This lever-of-control was introduced as synergistic control systems and analytical control systems which encouraged a number of researchers’ attention. In this section two viewpoints will be assessed:

- Lever-of control framework’s structure.
- Selection of only synergistic and analytical control factors but not other aspects.

The evolution of this framework will presented briefly in combination with Synergistic and Analytical control.

[2] lever-of-control framework is a result of several case studies and surveys in different US industries, so a study on the evolution of this which is performed via interviews with sixteen senior managers of Johnson & Johnson together with direct observation of the planning and control process in action and the examination of internal provided documents. The findings of this research indicate a critical role of formal planning and control systems in large companies operating in unsure situation, hence distinguish two types of control use and synergistic control. The latter was only on the first stage of conceptualization in which “managers’ attention” was used as research object, but its relationship with strategy was not explicit.

[10] performed quantitative research, studying the link between strategy and control, by focusing on Canadian manufacturing firms and confirmed that high performing prospector firms seem to stress on quantitative and analytic management in control systems, frequent reporting and setting tight budgeted goals. Using survey method with a sample of 86 Canadian firms from 19 industries, the result showed a positive relationship between tight budget and firm performance, but a non-significant relationship between budget participation and firm performance.
Furthermore [27], conducting several interviews with top managers of different corporate, to conclude effects of management levels utilization. He found out that: “Complex organizations have similar types of management control systems...there are distinct differences in the way that management control systems are used at top management levels in different firms” [27: 135].

[27] proposed an synergistic management control process model, for enforcing strategic transformation.

[26] explored top managers behavior in competitive environments to establish what control systems to be utilized in interactive manner. Furthermore it was concluded that management apparition could be a fundamental element for synergistic control systems.

With regards to Synergistic Control Systems [11] anticipated: “Synergistic Control Systems are formal information systems managers use to involve themselves regularly and personally in the decision activities of subordinates...Synergistic Control Systems focus attention and force dialogue throughout the organization” [11:95-96]. These systems strengthen and harmonize one another. While beliefs and synergistic control systems inspire opportunity and novelty seeking spirit, they also help to support planning of new strategies, boundary and analytical control systems for reinforcing implementation of intended strategies. Using levers of controls appropriately, they would, according to [11] help top managers combine the conflicting forces in managing a company, principally by implementing new strategic initiatives.

**The upshot of separate utilization**

The approach on a separate use of analytical and synergistic control systems is somewhat prosperous, the two control levers are complementary unlike [1]’s viewpoint, which is promotes either analytically or interactively, not both. In the case study done in [7], it is explained that top managers, in the context of strategic transformation, used analytical control systems in the first year to implement intended strategies. From the case study in this paper, it was revealed that synergistic control systems were mobilized after first year of emergent strategies.
Innovation and performance imposes strategic transformation

The concepts on analytical and synergistic control systems have attracted interests of other researchers. [4:189] proposes synergistic and analytical classification of management control systems to investigate: “how accounting can be used as learning machine in the formulation and implementation of strategic transformations”. [4] makes an analysis of his research findings to evaluate synergistic style could tone down the troublesome effects of the strategic transformation process. Furthermore it is shown by [4] highest results are achieved in combination with strategic transformation when it is matched with financial factors.

[30:384] study states: “the design of management control systems to understand how companies adapt their systems to particular characteristics of new product development”. For evaluating the effect of control systems on project management [30] conducted research in combination with meetings with project, marketing and development managers, the results were then cross verified by receiving feedbacks from respective managers. Consequently the effects of management control were revealed in combination with project management.

Why selecting combined control systems

The risks of analytical control systems are: “measuring the wrong variables, ... building slack into targets, or even ... gaming the systems by altering the timing ... or by reporting only good news or hiding or downplaying bad news ... or violating laws or organizational policies” [8:214].

According to [8-11] The synergistic use of control systems, may supposedly incite following threats:

- Functionally speaking, the synergistic control systems are costly because they require frequent attention and personal involvement of top managers and their subordinates.
- The decision makers suffer from information overload leading to the superficial analysis, i.e. lack of perspective, and potential paralysis.


**Combined utilization suitable for service delivery industry**

[12] studied how task uncertainty would impact with the analytical and synergistic. Survey results obtained from several managers indicate that: “the service sector, with a variety of tasks, would require a combination of analytical and synergistic use of management accounting systems to cope with different demands ... in the competitive environment” [12:16].

[13] studies another perspective i.e. the relationship between the use of different management control levers in combination with organizational potential. According to [13] the effects of Management Control System on strategy ended up with contradictory results due to the absence of a theoretical framework. The author postulated that “together, analytical and synergistic uses create a dynamic tension ... ensuring that positive effects of synergistic use on capabilities will be achieved; and ... expanding these positive effects of synergistic use. The positive effects of synergistic use may vanish due to: insufficient analytical use to set boundaries and to highlight effectiveness issues, which may lead to a loss of direction, wasted energy and a disruption of continuity or excessive analytical use, which constrains innovation and risk taking. Positive effects of synergistic use are amplified by the combination of analytical and synergistic use” [13:537].

**Management Planning Tool**

In the stand point of [35], to facilitate for planning and implementation of change, usage of an customized tool could allow selecting a proper strategy. Different actors’ plan, would justify the choices of crucial parameters for the environment. This in its turn which would work as reference for each tender and its related services. It could also help defining general direction for anticipation on structures which help making governance control. Such tool can be easily adopted by operational and top manager which could justify the use of this tool in strategic planning.

Such tool could be used by the top management in two ways:

- General director may involve in the strategy planning, and decides the objectives of the managers and subordinates. This tool could also be used to financially validate his/her
strategy, then justify their strategy, and assure organizing each service by the having control over global objective and decision-making process throughout the organization.

- General director allows managers and subordinates to put forward their proposition. The simple structure of this tool could help the top manager to anticipate, thus aligning their operational managers to be able of formulating a consistent strategy.

METHODOLOGY

Introduction

This chapter outlines a mixture of the previous chapters in terms of framework to explore management control systems for a proposal related to this research subject. It also rationalizes details of the methodology. The relevance of this framework, has been explored in the empirical case study.

In literature review chapter; it is shown that the analysis of management control system should include: use of control systems, type of management tool, and incentive systems. Furthermore it was shown that the interactions between the top management and operation teams are not only structured by the management control system, but also by specific organizational structures that arise from the control systems. As a result, this paper suggest analyzing management systems using a multi-parameter framework i.e. organizational structure, use of control systems, management tool, and incentive systems.

Methodology

The aim of this paper is to carry out a case study for the open questions regarding deployment of management control. This is constituting with [22] and [3] which are in their turn based on broad case studies.

With regards to [31]’s suggestion, this paper will focus on management control to carry out the research, and the concluding section is kept for discussions with regards to the findings from case study.
The definition of a research question within a broad topic enables this paper to approach an
specific and appropriate data gathering in line with [31].

One of the aims of this paper is to work on the question of "How do managers use their
management control systems as levers of strategic transformations?". This is mainly because of
the work carried on by of [7] and [8] on the use of management control systems in strategic
transformation seemed to be motivating from academic point of view. Secondly the question is
in line with the methodology of this paper which according to [32], puts forward the potential
study for dynamic interactions between management control and strategy transformation.

In order to ensure a good sense of balance between practical and academic subjects and at the
same time reassure the validity of the research, the intention was to make cross referencing
between academic and enterprise worlds.

**Selecting the case**

[33] pointed out that there are two main types of sample selection: purposive or non-purposive.
The purposive selection means that "field researchers often look for companies that would
appear to be "outliers" in a large database study, and hope to learn something new from them..."
[33:13].

Karmania selection for this thesis was motivating as in 2007, Karmania searched for external
help for setting up an internal management control department, then it was decided to conduct a
study on management control systems for strategic transformation to cross verify it with their
recent experiences in strategic transformation. Indeed, the case was chosen as it could fit this
papers question as in reality a real strategic transformation took place at this company which
fundamentally changed its strategy implementation that had impacts on organizational structure,
values, and human resources which more importantly it was in line with this thesis question.
Furthermore the case foundation was based on few interviews and when additional details were
needed some meetings were set up. Furthermore access to some corporate database helped
gathering more facts.
Analyzing reporting data

The research has developed with the results of field observations by interactions between two worlds: practical and academic. The description of company contexts and practices plays an important role in our presentation of data.

According to [31], data analysis is one of the most important process, which is quite undeveloped and often involves a difficult process. Date collected from interviews, meetings and corporate database was analyzed to be able to make conclusions at the final stage.

A regular relation with different actors i.e. researchers and company’s actors helps to sort out the frequent gaps to be filled to realize efficient management control. And a comprehension on company’s structure and its objectives is an efficient way on analyzing the gathered corporate data.

About Karmania

Formed in 2001 through the merger of three long-established former competitors, Karmania Holding becomes one of the leading service delivery groups in IT, Computer networking and telecommunication industry. Karmania describe its visions as:

- Conduct with integrity and live Company Values
- Deliver superior program performance
- Foster an internal environment of innovation, collaboration, and trust

And its values as:

- Quality delivery Assurance
- Customer satisfaction
- Integrity
- Valuing People

Each entity has its own strategy.
EMPERICAL STUDIES

The context

As already mentioned the case study is done on Karmania which is specialized in service delivery on Computer networking, IT and telecoms solutions. These systems of different sizes and complexity require specialized workforce in Computer networks, IT and telecommunications. The case study illustrates how a company organizes itself to expand from a small firm managing a handful of projects to a medium size managing moderately large and complex projects. The changes that occurred are suggestive of some key issues that need to be solved to efficiently manage a service delivery company in which its capabilities rely more and more on its technical excellence and customer satisfaction.

Initially, this market was fragmented locally and the projects were outsourced to small firms that had developed good contacts with the IT and Telecom operator companies. In the beginning of 2000, this sector became more specialized and private companies decided to consolidate their decision making process and IT and Telecom operators companies decided to outsource their service operations to vendors and national service delivery firms rather than local entrepreneurs. Karmania was one of the companies that had these criteria apart from good contacts.

Method of Case selection

Scientifically, the selection of Karmania was purposive with regards to [33] as mentioned previously. As the board of Karmania was interested in a research on management control system, and was motivated to kick off the case study to take place. To facilitate the investigation, it was recommended to carry on a research that was in line with their recently experienced strategic transformation, which also happened to be in line with this research objective.

The result of interviews has been carried out with different directors i.e. Holding and Telecom unit level in combination with meetings which motivated that Telecom unit satisfied the selection criteria which was appealing for this research.
Data collection

Interviews are the first source of case study carried on with middle and top managers which all had important roles in strategic transformation of Karmania.

Other sources of data gathering were the meeting and observations which were carries out between the strategy and delegation directors.

As mentioned earlier, apart from interviews, historic record, documents in combination with direct observations were gathered. They include the analysis of Karmania history at the moment of strategic transformation, organizational charts, its budgets, medium term planning, presentation of annual meetings, financial results of realized or realizing projects and description of functional departments. The analyses of these sources helped to have the first round grasp on Karmania’s overall structure.

Strategic transformation interpretation

The top management of Karmania consist of Technical, Sales and Production director. The operational departments consist of sales, production, technical and project management departments. Sales department; including salesmen and supervisors which are in charge of finding and contacting customers and making and replying tenders respectively. The tasks Production of this department consists in finalizing the initial studies, developing computer programs, ensuring the equipment installation, and guaranteeing the system maintenance. Project management Department is composed of project managers, engineers and technicians. Technical department, including staff which of developing modular products to be used in the projects.

Use of control systems

From gathered data, the company strategy, the objectives of the company, and the critical problems of the company are not clearly obvious. Based on the development of the company, it was assumed that the main strategic orientation is to grab market share and focusing on its core products.
The top management normally gets engaged in critical steps e.g. validation of tender price, selection of a project manager, budgeting together with project managers and review of off-track situation.

Let’s focus on the functions and responsibilities of salespeople, project managers, and technical supervisors. At tender stage, the salespeople and tender supervisors study the tenders to establish the technical description, production cost budgeting and the sales prices within a month. Off the record they require Technical department’s evaluation and technical description of the tender but normally the Technical department doesn’t get involved in this process. The sales price is approved by the top management. The tender supervisors support the salespeople.

Once the tender is complete, the production director, selects the project manager based on project complexity to be presented to other top managers. The sales department transfers all related documents to the project manager. There should be an official meeting for this transfer but is often disregarded. The project manager has couple of months to study the tender and to elaborate the initial budget. He is one of the main interfaces towards the customers and uses this to alter his proposal. He has to estimate parameters such as; working hours, risk analysis, complete project cost estimation.

During the realization phase, the project manager is responsible for overall project progress. That is to say, the project manager dimensions his project team and present it to the production director which can recruit new permanent members according to the project demands. The project manager sizes his team optimally rather predicting for unexpected issues. The decision to of staff dedication to various projects is made by department head. The production director intends to keep up with the right competences and necessary tools of the project teams.

Consequently, more or less no resource pooling is done among projects, it is to say project manager may recruit temporary manpower if necessary. Finally, the project manager is responsible for the initial budgeting. The project manager has the best overall view on the project advancement, deadlines and cost tracking. Weekly meetings on these issues are held by project managers.
The Technical department is in charge of modular development and doesn’t contribute with staff on project realization. The project manager decides directly which technical resources should be allocated to the project realization directly. The technical supervisor has a support role for the project manager.

**Control tools**

At that beginning, Karmania comprised of a small organization in which project managers control the very few projects they manage through direct supervision which know the real advancement of their projects. As discussed in the previous section, the top management was not directly involved in the projects. They controls the projects at some key points of time i.e. validation of tender price, selection of project manager, budget, and review of some out of the ordinary situations. The overall performance of Karmania is assessed globally through financial indicators mainly gross and net margins. The financial indicators are quarterly reported.

**Incentive systems**

The incentive systems of Karmania are purely objective and based on formula. The bonus is individual and concerns only salesmen, project managers and direction members. The incentive system for the three categories of managers will be discussed. Firstly, the salespeople get a bonus based on degree of annual sales growth. Until two tired of objective, no bonus is given. Beyond this target, the bonus can achieve up to half of the annual wage. Secondly, the performance indicator used to determine the bonus of a project manager is based on gross margin of projects as he is responsible project financial aspect. This bonus can be up to ten percent of the annual wage. Thirdly, the project manager decides how the bonus is paid to the project team. At project initiation phase, the project manager creates his own reserve account, which is typically few percent of total budget. If the project achieves its budget, then reserve to will be awarded to the project team. The bonus criteria can vary within different projects. However, this incentive system, according to Karmania Telecom directors, could create some misinterpretation and a lack of equality feeling among project teams.
ANALYSIS

Karmania control systems seemed quite adequate as long as the firm handled only a few simultaneous projects. Most of these projects were profitable and Karmania succeeded to take new market shares. In fact, the Karmania control system before 2009 can be characterized as an analytical organization. The top manager got involved in only critical issues normally form distance only operational managers were held accountable for the results. The critical performance variables such as ordered booked, gross margins, net margins were dominant. In comparison to 2007, the sales of 2008 significantly dropped by one third, and the net profit was negative.

Analyzing the in-house records it was revealed, a small proportion of projects ended up over the planned budget. Without regular financial control in place, Karmania ran into more losses more often. Additionally, sales directors could not anticipate the loss in early stage because of lack of knowledge about the financial status of the project. The projects’ cost could not be fully controlled as the monetary issues were not revealed on time. Furthermore without common strategic guidelines, various actors were not aligned in their actions. As a result, the company strategy and its profit could be subject to conflicting actions. In addition, it appeared that human resources were not utilized efficiently as there were no resource pooling among projects. As a result the projects which were conducted independently, temporary overload in one project could not be compensated by temporary slack in another project. Indeed a project manager facing an overload situation would recruit interim manpower. Consequently the overall productivity of Karmania was poor, these problems triggered a strategic transformation and the implementation of new management control systems.

In 2009, a new Director was appointed for Karmania telecom sector with the mission to improve Karmania Telecom’s performance and develop a long-term strategy based on value-added services.

The organizational structure

The new organization comprises of matrix structure. Besides the two existing line departments sales and production, two horizontal departments are created:
The Technical department, now comprising more than hundred staff, to be in charge of the conception and installation of the software systems,

The Installation department, comprising forty technicians, field staff and assistants, to be in charge of the conception and in site implementation of the Telecom systems. A new line department is also created, the Maintenance department with about thirty staff in charge of all operations and maintenance. The Production department is considerably reduced in size, to the benefit of the newly created departments. Its manpower has been reduced from by 80-90%, consisting now only of project managers. All engineers, technicians, field engineers and assistants who had been attached to the Production department before 2009 were reallocated in the line departments. The advancement of the projects is now controlled by the Production departments and by the technical and Installation departments. The top management now consists of the delegation directors. The operational level comprises of project managers, technical supervisors, installation supervisors, and maintenance supervisors.

Involvement of top management

The implication of the top management in the formulation and implementation of the strategy is more active and more frequent than prior to 2009. The succeeding director sets a new direction that company strategy and its business objectives should be clearly communicated to all employees in annual meetings. Furthermore regular project progress report should be communicated to each employee. The report included the performance indicators on finical statements, project status and customers satisfaction. Top managements’ focus is now much more on project management. The top management has weekly meetings to discuss on the general advancement of all projects in Karmania. The primary objective of top management is to reinforce overall alignment and transparency in the organization.

Involvement of operational management

During the period of 2007 to 2010 the Technical department’s authority was decided to be in both tendering and project realization. The top management decided to strengthen the roles of technicians and which as a consequence weakened project managers and salespeople, which yet could not align the involved stakeholders.
At tendering stage, salespeople and tender supervisor have to officially derive the baseline cost from the Technical department. Sales department is no longer responsible for making the technical description. In actual fact, a detailed procedure is used to estimate service cost which is then approved by the department head, which makes the total service and human resource costs. There are regular meetings between tendering and technical supervisors to discuss prices, mutual responsibilities, costs, and contract terms. Once the tender is awarded, the production director proposes a project manager to be approved by the company board. The technical supervisor is designed by Technical director which previously was done by project manager and it is validated by the top management. With the new organization, the technical supervisor is at peer level with the project manager. The project manager is always in charge of budget, but the most the budget estimation has been defined and committed in the tendering phase. The project manager now works with two parameters, instead of six as before 2009. These two parameters are: firstly, the project work hours, and secondly risk mitigation. During the realization phase, the project manager mainly responsible for: firstly communication with different stakeholders, secondly matrix coordination between line departments, and finally monthly financial project control and reporting with the production manager and the director of Karmania. The Technical department is in charge of the allocation of its workforce for different software projects and this responsibility is offloaded from the project manager, and then similarly Installation department allocates its workforce for hardware implementation related projects. The line departments are responsible for the recruitment of their employees, which formerly belonged to the production director prior to 2009. The production director is now in charge of identifying and analyzing the causes and the responsibility of project’s finical status. The Technical department is also in charge of establishing the general product prescription for each project; which in turn would be pinned down by Installation department. Prior to 2005, the coordination between Technical department and Installation department was done by the project manager. No direct and formal communication has ever existed between two line departments. as a result, the Installation department may receive the Technical department’s prescription incomplete or late. Most of the authority of the project manager over the project team is shifted to the technical supervisor. His counterparts in the Technical department and the Installation department must report their decisions on workforce allocation of a project to the project manager. The information relating to project progress, resource allocation, or workload is now theoretically shared and jointly
controlled by the project manager and the technical supervisor and installation supervisor. Prior to 2009 these information were held only by the project manager.

The authority of project manager is weakened towards the customers because he does not receive adequate internal information from involved departments. No precise management control system is shaped to support the role of the project manager. The line departments have a tendency to keep information on workforce allocation and relating information on project advancement in private. If a problem occurs, they often try to solve it by themselves before delivering information to the corresponding project managers. Technical director develops a new tool enabling a detailed estimation of all technical costs represented in hours and in monetary value. The outputs of this tool are the main basis of the collective commitment of the Technical department. The actual outputs of this tool are confidential and not known to the sales people. For more efficient resource utilization, Technical department also developed a new tool to facilitate resource allocation between projects within own department. The technical supervisors control the monthly input of their direct subordinates. These inputs consist of the actual spent cost represented in hours. An initial standard is created and adjusted after monthly reviews. The Technical department intended to optimize the human resource utilizing and determine the priorities of projects, which then meant to established and adjusted the tool’s inputs. This tool was being exclusively used by the Technical department and its outputs were not known to outsiders, not even by the project managers. In fact, project managers develop their own tool to make a monthly cost control and production anticipation. The main inputs of this tool, essentially financial data, should in principle rely on the outputs of the tool used by the Technical department. Regardless of the mandatory meetings between project managers and technical supervisors, the technical supervisors appear quite reluctant to supply the relevant information, and the project managers did not have enough authorities to get these information. The following qualitative performance indicators were involved.

- One of the indicator was “Customers Satisfaction” measured along with the project realization phase. The customers received a survey by the project managers. As there were different customer participants with different responsibilities during this project phase, it made it practically difficult to create a survey that could fit all participant, hence the response rate became low and no good statistic could be made. Although the project could receive an
excellent satisfaction of customer at the configuration and development phase, the customer would not accept the final results.

- Technical department is responsible for developing and maintaining the core product. The measurable performance indicator was “Satisfaction of core product”.
- In combination with annual gathering, Karmania employees received an anonymous questionnaire about working conditions, working environment etc. The new indicator was “Employee Satisfaction”. And based on the result, the director would take proper measurements to develop the satisfaction of employees.

**Incentive systems**

One of the measurements to strengthen employees’ commitment was introduction of the incentive system. The bonus system comprised of individual, collective and global bonuses. The individual objectives were often based on the employee’s responsibility and were decided by direct superior.

The collective objectives were department dependent, for instance the collective objectives of the Technical department was related to the technical costs at tendering stage which could be based on the profit at the end of project. The payout could be up to ten percent of the annual wages.

The global objectives will be shared to all employees if overall objectives are achieved. The central performance indicators for the global objectives are profit dependent.

**Discussion**

Reviewing the financial performance of the company showed ground-breaking positive net margin for 2009. During 2009 Sales increased by one third and net margin doubled compared to those of 2001. But in 2010 there was a reduction of sales and gross margin by one third, this decrease gave a warning sign for new changes.

The organizational structure in some way could accommodating to smooth the progress of the internal coordination but was not optimized due to various reasons. The reforms carried out in the period 2007-2010 has positively impacted Karmania, but at the same time caused some volatile drawbacks.
At this time, Karmania is positioned well in the business community for its technological superiority, yet its overall sales dropped by one third in 2010. Karmania becomes a specialized and is awarded large projects with good contacts and reputation among customers.

Occasionally the technical design made by Technical department could not match customers’ requirements as it for instance could be complex or expensive, and consequently the focus of management was to eliminate these hitches by implementing control systems. Also the aim of top management was to improve human resource utilization. Mainly issues such as misalignment between departments, lack of an management tool for multi departmental coordination and the badly implemented incentive systems slowed down successful implementation of control systems.

The matrix coordination between projects has been facilitated by creation of multiple line departments which resulted in better efficiency for the management of the employees with improved timelines and product quality. In addition, the disadvantages of new systems were caused by lack of “project portfolio management” which resulted in inefficient handling of matrix coordination which in its turn reduced overall profitability.

Sales people became more inactive than before 2009 as they no longer were involved in the cost estimates process which now was made by Technical department, and this made the sales people to get more frustrated. The project manager lost his authority as he no longer receives all necessary information relating to overall project progress, cost and quality. Occasionally, the project manager discovers the bad bolt from the blue very late through the customers and sometimes through accounting data, rather than receiving it form involved departments. Generally different departments have the tendency to keep the basic information, particularly the resource allocation and other information. As a result, the project manager becomes less and less motivated, frustrated, even towards his own project. The new structure accidentally makes the project manager be a financial accountant rather than a project manager. The success of a project often stimulates the pride of technicians and their working motivation. The allocation of human resources to many different projects makes their contribution and involvement less visible and their work became less specialized, thus less motivation and less contribution towards more successful achievement.
It is far more smoother to involve project management in early stage for estimating technical cost prior to tendering phase and not relay entirely on the Technical department, by this both groups will make better commitment from beginning to the end. As a result, the cost issue could get more valued and more commitments would be given by involved parties. Better synergy between different departments has strengthen the incentive systems since 2009. Additionally, key performance indicators i.e. individual, collective, and global were explained and clearly communicated to all staff.

The already mentioned incentive system is tied to financial qualitative performance indicators e.g. customers satisfaction. The aim of Karmania board was to make the incentive system to be goal oriented and fair which would drive employees’ motivation and performance higher. But as the new contribution based bonus was added, the peer to peer satisfaction factor required the evaluation of the relating actors and this couldn’t be entirely objective based. This evaluation on the technical supervisors generated some team problems. This could lead into irresponsible behaviors through systematic negative response on commitments, although the performance would be evaluated through the achievement of each departments commitment on cost objectives. The customer-supplier relation within Karmania is often problematic, this could perhaps degrade employees’ commitment. The mutual help among members of different project teams generally vanishes. For example, if the a project urgently needs the help from another project, the later constantly rejects assistance even though help would be available with motivation that “The task was not predicted, thus it is not our obligation”. The above mentioned issues give good reason for finding a more suitable management control system in which the project managers could balance the matrix coordination towards the multiple line departments. This situation also illustrates that a purely financial control on the project management would not necessarily be sufficient for higher motivation and better contribution towards the work.

Further adjustments were implemented in 2010 to address and overcome the issues that were identified in this chapter.

**Refining Control systems for better achievements**

With the new system, the cost estimation responsibility of the Technical department at the tendering stage was canceled and Project managers and tender supervisors get back their earlier
The Project team members continue to make progress in their respective line departments. The project managers got their new role as facilitators, while the technical supervisors became coordinators. The technical supervisors must submit the resource allocation forecast to the top management for receiving approval.

**Function of newly emerged Control Tool**

A new planning tool that is developed as a complementary to the standard project tasks and related interfaces. The administration responsibility of the tool management was put on the project manager. Clear cuts between interfaces were specified to facilitate the coordination among the services. The project manager needed to consider parameters such as project deliverables that should be aligned with the contract scope and resources allocation, hence the tool became both planning and organizational tool, which helps the project manager to have a complete view on the project, its progress and targets. The tool was connected to the other specific tools used by line departments. This favored the technical supervisors to receive feedbacks from the tool. The interdependence of these tools is reinforced: the planning tool of project managers gives a overall view on the resource allocation of the project, while the straight tools facilitate coordination within each of these departments across the various projects.

**Readjustment in Incentive systems**

The old incentive system with individual, collective and global parameters as discussed earlier are set aside and replaced with the new incentive system. In contrast the old incentive system, the new incentive systems becomes more subjective.

Except incentive systems of the sales and production departments, the other line departments have a change in their incentive system. The middle managers turn out to be the main actors handling the bonus system. Each service has its own methods of performance evaluation. 

Regarding the Production department, its incentive scheme consists of subjective and qualitative indicators, additionally it is tied to financial indicators and customer satisfaction. The surveys on customers’ satisfaction is no longer utilized but feedback are gathered more direct and indirectly as the project proceeds. The cost budget factor in Technical department, that was tied to detailed commitment is now eliminated. Thus the incentive systems become purely subjective and it is
more based on contribution rather complex formulas as before, which particularly reinforce more efficient coordination and better motivation among project teams.

**Additional Discussion**

The newly developed tool is readjusted further and was essential to align the project managers and the line departments. The tool is now based on a well structured representation of the projects’ scope, contract, resources etc. To operate the tool, each project manager needs to know the key tasks and the relevant phases and milestones of the tasks. The technical and installation supervisors may be more watchful to provide information and they can make a distinction how it interprets into the profitability of each project. The readjusted control system is very much different from that of 2009 and advances toward a more Combined control system. The interaction of top managers in projects issues are more extensive compared to the past. The operational management are not often held responsible for the financial results, and the affiliation between the project managers and the line departments moves forward towards a more combined approach. The key performance parameters are less central in the discussions between the project managers and line departments at level of top and operational management. The incentive system is no longer focused uniquely on the objectives, rather than complex formulas as before. This means the new strategy is more efficient than before at it was set to practice.

**CONCLUSION**

The main objective of thesis is suggest a method to cope with control systems for enforcing more efficient strategic transformations in service delivery organizations especially in the telecom sector.

This research is constructed through the case study methodology in combination with theoretical study as a foundation and the above propositions certainly need to be polished and set into quantitative practice in future.

The intention of this thesis is not to disregard a separate utilization of analytical and synergistic systems, rather it suggests a combined approach that unites the two approaches as a fair combination. These ideas have been used to interpret the strategic transformations that occurred
in the studied organization focused on service delivery operations in telecom sector. It is believed that this study generally have some common value that could be used in similar scenarios or industries that have their core business in service delivery operations.

This main aim of this paper is to bring forward two novel ideas that could promote an efficient management control. To begin with [1]s’ framework based on the utilization of managerial control systems, it could be widen to cover up other parameters such as the organizational structure, that address straight as well as matrix coordination, the strategic planning tool and the incentive system. Secondly it suggests the rational interaction between of all these parameters that without doubt having different weight when employed on strategic transformation. A closer analysis reveals the most favorable configuration is when an synergistic and analytical feature utilization when used jointly.

Generally it is suggested that further research would be necessary in this field. The driven proposals in combination with literature review presented proofs that suggests a combined utilization of synergistic and analytical control systems that may fairly keep up the accomplishment of strategic transformation. Moreover is was explicit that Project Portfolio Management engages some mixture between synergistic and analytical utilization of control systems. The case study exemplifies a combined approach and its key roles in the implementation of strategic transformation. This leads us towards the first proposal namely an evenhanded interaction of management tool, organizational structure, use of control system, and incentive system may hold up the accomplishment of strategic transformation in project based service delivery companies more effectively.

In project management, combination of synergistic and analytical control fits into place with organizational features with matrix and cross departmental management. In distinction from others, literature review done on project management has revealed the importance of the interface actor function. Such a functional role could make obvious the fact that project management aspires enhancing the straight coordination by making matrix management between multiple line departments. Such approach to matrix coordination between line departments is also explicit characteristic of the project oriented corporate. Nevertheless it must be pointed out that research on the mentioned functional role as interface actor remains exploratory. Present
research on interface actor function is focused on the administrative side of this function and
does not deal with its role in terms of strategic governance and coordination i.e. reformulating
and implementing strategy. An interface actor can be a catalyst if he/she has the roles of strategic
governance. The case study make obvious the efficient roles of such an interface actor. The
second proposal is therefore that such an interaction may be privileged by an interface actor
facilitator. The cross-functional teams also acting as a mediator in this matrix relations. The
“Theory Literature Review” chapter inquired the assumption that control are generic tools and
therefore can be used either interactively or analytically. In addition the other points of view give
good reason for the design of customized strategic tool for synergistic support, which in its turn
could be proposed by project oriented companies. Particularly such tools become necessary
when creating a widespread awareness across multiple departments, in such misalignments
would easily be avoided between different line departments. The case study exhibits the crucial
roles of the formation of a new customized strategic tool. This paper puts forward the synergistic
utilization of control systems in project oriented company specializing in service delivery.

In a nutshell, the first round propositions for future research may be summarized to firstly
address the interface actors’ role for smoothing the progress of a combined interaction between
cross-functional teams. Secondly, function of customized tool supporting implementation of an
synergistic control system in project oriented companies could be more explored. And thirdly
combined interaction of organizational structure, management tool, utilization of control system,
and incentive system may support a better accomplishment of strategic transformation in project
based companies specializing on service delivery operations.
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