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Strategic renewal and the change of capabilities in utility firms

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Abstract
Purpose – The purpose of this paper is to analyze how strategic renewal affects the reconfiguration of capabilities. In the context of organizational change in a large utility firm, we examine the evolution of the capability structure, and explain the emergence and persistence of capability gaps.

Design/methodology/approach – The paper uses an inductive multiple case study methodology to compare four processes of capability reconfiguration at Eskom, South Africa’s electricity supplier.

Findings – The results show that strategic renewal unfolds through different processes, which vary in their impact. Some processes have an immediate effect in closing capability gaps. The impact of others is with a significant time lag. Most critical, however, are processes that widen capability gaps. As a result, firms may face severe and persistent performance deficiencies.

Research limitations/implications – Prior research has only marginally addressed the relationship between strategic renewal and capability reconfiguration, and has largely neglected emerging capability gaps.

Practical implications – Strategic renewal may cause unintended crowding out effects of specific capabilities. Managers need to consider these potential implications of strategic renewal.

Social implications – Understanding the challenges of how to improve the performance of utility services is crucial for economic development, welfare and social inclusion.

Originality/value – This study importantly highlights that the emergence of capability gaps is a common phenomenon rather than an exception in strategic renewal processes. The findings contribute to the strategic renewal literature and to management research in infrastructure sectors.

Keywords Strategic renewal, Capabilities, Capability gaps, Infrastructure sectors, Utility firms, Organizational change, Eskom, Republic of South Africa

Paper type Research paper
Introduction

Strategic renewal is a process of substantial change with respect to key organizational attributes to sustain a firm’s long term prospects and viability (Agarwal and Helfat, 2009). Changes may involve the business model, technology, organizational structure, customer base, and product market strategy. Strategic renewal is particularly difficult if a firm organization has not only to streamline and improve the existing operations but also to transform some of its attributes more fundamentally. An example is the transformation of utility firms from strongly engineering-dominated toward more management-oriented organizations.

Modern infrastructure services likewise require excellent engineering and management know-how. The transformation toward a more commercially thinking and operating utility is a fundamental requirement to improve productivity and efficiency. However, strategic renewal is a major challenge for many utility firms worldwide (OECD, 2006, 2007; Urban Land Institute and Ernst & Young, 2007; UN-HABITAT, 2011). Research has been surprisingly quiet about the difficulties utilities have in driving this transformation. This paper analyzes strategic renewal processes and assesses the hurdles utility firms face. We use a qualitative approach to disentangle the capability reconfiguration processes which underlie strategic renewal, and draw attention to some hidden implications that have been rarely addressed. This way, we contribute to a better understanding of strategic renewal in the context of infrastructure sectors. At the same time, we aim to contribute to the strategic renewal literature by drawing more general insights from our data on the nature of capability reconfiguration processes during strategic renewal.

Organizational transformation and the improvement of service quality are central challenges for South African utilities (National Planning Commission, 2011; UN-HABITAT, 2011). Well-functioning, widely accessible and affordable infrastructure services are essential for the productivity of an economy and the welfare of a society. Maintaining infrastructure systems and service standards is challenging because of the massive investment needs and the diverse demands that different customer groups and other stakeholders have. In addition, utilities in South Africa and other Southern African countries operate in a complex and dynamic environment because the countries are currently undergoing a massive transformation process. This involves major shifts in the countries’ production structures to allow more people to participate in economic activities, and therefore contribute to eliminate poverty and reduce inequality. Infrastructure services are a vital element underpinning this transformation process. Thus, it is crucial for utilities not only to build infrastructure facilities and services fast enough but also to serve the changing demands of a dynamic business world and society. As a result, utilities are facing enormous pressure from customers, policy-makers, and taxpayers to increase efficiency. Expectations are high that strategic renewal will result in organizational structures that are adequate to meet current and future demands.

There is a broad body of literature in management research on strategic renewal. One prevalent topic is that strategic renewal is closely linked to the reconfiguration of capabilities in firm organizations. Some studies have found that the nature of how the capability reconfiguration process unfolds is critical for the success of strategic renewal (Murmann, 2003; Lavie, 2006; Capron and Mitchell, 2009; Salvato, 2009). Other research has found more ambivalent results. For example, strategic renewal may have
a capability-destroying effect (Tushman and Anderson, 1986). Yet other contributions have highlighted that patterns of change emerge, which reveal an initial decline in leveraging a firm’s capabilities before performance improves again (Delmas et al., 2009; Levinthal and Wu, 2010). The variation of results shows that there are contrasting explanations about evolving capabilities during strategic renewal. Prior research appears not to fully capture how various reconfiguration processes may unfold at the same time, interact in a complex way, and under what conditions they amplify, neutralize and reverse the intended effects toward greater efficiency. The research on strategic renewal has only marginally addressed these interactions and has largely neglected the possibility of emerging capability gaps.

Our study attempts to fill this gap by examining the relationship between strategic renewal and capability reconfiguration. We contribute to this stream of research by assessing the mechanisms through which strategic renewal affects a firm’s capability structure. In the context of organizational transformation in South Africa’s infrastructure sectors, we elaborate how the reconfiguration process unfolds and the capability structure evolves. We particularly consider the emergence of capability gaps in this process, and its implications. Generally, we attempt to answer three questions. How does strategic renewal affect a firm’s basis of competence and skill? What are the implications of this change process for improving a utility’s performance? And what are the unintended challenges? By answering these questions, we add to the strategic renewal literature and the literature on strategic management in utility sectors.

The strategic renewal process of the South African electricity supplier Eskom forms our empirical background. The next section discusses the existing literature. Then, we describe the research methodology. There follows a section that presents our findings and a section discussing the results. We then conclude with theoretical and managerial implications and also highlight some limitations of this study.

Theoretical background
There has been a long tradition in the literature of studying processes of organizational change in general (Van De Ven and Poole, 1995; Brown and Eisenhardt, 1997; Aldrich, 1999; Witt, 2000; Van De Ven and Sun, 2011) and strategic renewal in particular (Floyd and Lane, 2000; Agarwal and Helfat, 2009; Capron and Mitchell, 2009). Agarwal and Helfat (2009) identify two major topics in the research on strategic renewal. One issue addressed in the literature is the distinction between discontinuous transformation (Tripsas, 2009; Gulati and Puranam, 2009) and incremental change (Plowman et al., 2007; Capron and Mitchell, 2009). In both cases, strategic renewal may, over time and through different patterns of change, result in a substantial change of the respective firm and its attributes. Another main topic is the impact of strategic renewal on the competitive structure in existing markets (Tushman and Anderson, 1986; Helfat and Lieberman, 2002). These studies are often in the Schumpeterian tradition of creative destruction with a strong focus on technology – and R&D-based firms and the influence of their innovations on industry dynamics, such as firm entry and exit.

An implicit assumption across the various perspectives is that strategic renewal involves the reconfiguration of capabilities. In fact, initiating and implementing strategic renewal means altering a firm’s existing capability structure. This is because renewal involves a shift in products, services, markets, technologies, or strategic orientation. The extent to which the newly required capability structure differs from
the existing one determines the capability gap (Lavie, 2006). Thus, capability gaps are a generic characteristic of strategic renewal. Assessing strategic renewal from a capability perspective therefore requires a focus on capability gaps and the ability of a firm to close the gap through reconfiguring its capabilities, and a detailed analysis of the reconfiguration process that leads to the new capability structure.

There are few studies that shed light on emerging capability gaps. For example, Lavie (2006) focuses on the impact of technological change on a firm’s capability structure and the emerging capability gap, whereas Levinthal and Wu (2010) highlight the diminished value of existing resources in diversifying firms. Capron and Mitchell (2009) study different modes of capability sourcing to close capability gaps.

A capability gap generally implies that organizational tasks are achieved in a quantity and quality which is lower than envisioned. Consequently, the performance declines. Capability gaps are therefore one possible explanation for reducing, at least initially, a firm’s efficiency during the strategic renewal process (Dyner and Larsen, 2001; Delmas and Tokat, 2005; Delmas et al., 2009; Levinthal and Wu, 2010).

Despite these contributions, there has been little research that explains how capabilities evolve during strategic renewal. Strategic renewal has been mainly discussed as a directed process of reconfiguring capabilities toward the required new configuration. What has been largely neglected so far is the possible loss of capabilities. Losing capabilities may lead to persistent performance deficiencies through a process that intended the exact opposite, namely to initiate change toward more efficiency. Important questions are when capability gaps emerge and how long capability gaps – and therefore performance deficiencies – persist. Also, what defines the extent of a capability gap and the length of its persistence? And what are the implications for the strategic renewal process if some underlying reconfiguration processes unfold as intended and others do not?

The ambivalent situation of potentially destroying capabilities (Tushman and Anderson, 1986) with the consequence of generating capability gaps but at the same time reconfiguring the capability structure to improve performance tends also to have attracted little attention. Prior research has largely neglected the interactions between different processes underlying strategic renewal. This tends to be particularly true for research on the role of strategic renewal and the impact on capabilities in utilities and infrastructure sectors – with a few exceptions (Dyner and Larsen, 2001; Delmas and Tokat, 2005; Delmas et al., 2009; Dominguez et al., 2009; Gebauer et al., 2012a, b).

In sum, capability gaps have been considered to describe temporary deficiencies in the capability structure and therefore explain initial performance deficiencies during strategic renewal processes. This paper assesses the possibility that capability gaps, which emerge in the process of strategic renewal, remain persistent and lead to longer-term performance deficiencies. We conduct a case study analysis to derive a better conceptual understanding of the drivers of strategic renewal and how the complex interactions between different capability reconfiguration processes determine the outcome of strategic renewal.

**Research method**

Given the limited understanding about how the interaction of various capability reconfiguration processes affects a firm’s strategic renewal, we use an inductive case study methodology (Lincoln and Guba, 1985; Eisenhardt, 1989; Miles and Huberman, 1994).
Applying a qualitative design is adequate if the theoretical explanation for a phenomenon is insufficient (Eisenhardt and Graebner, 2007; Zikmund et al., 2010, Chapter 7). Our study relies on a multiple case study approach across a range of capability reconfiguration processes, which underlie a specific strategic renewal process in one firm. We treated each capability reconfiguration process as a single case.

Our sampling strategy was first to identify a utility firm that went through a strategic renewal process comprising substantial changes in some of its key attributes. In a second step, we identified the involved capability reconfiguration processes through which strategic renewal took place. This strategy allowed us to derive a set of comparable reconfiguration processes, with which we could qualitatively address the above research questions in a systematic and detailed way. Identifying a set of distinct reconfiguration processes is especially important since the unfolding processes may vary widely in their impact on the firm’s capability structure. A comparative analysis of these processes enables us to infer some more general conclusions about the impact of strategic renewal on the capability structure.

The study is based on inductive data inquiry of Eskom’s commercialization process. Eskom is one of the largest electricity utility worldwide and the largest on the African continent. It has an installed generation capacity of more than 41,000 MW, generates approximately 95 percent of the electricity used in South Africa, and supplies 45 percent of the electricity in Africa. Eskom has about 42,000 employees. The company is state-owned.

We selected Eskom because the company has a history of being the forerunner in South Africa’s infrastructure sectors in improving its service quality. The commercialization process started in 1985 and continued through the late 1980s. The process is well documented. Since it was one of the major transitions in Eskom’s history, with far-reaching consequences for virtually all people involved in this process, interviewees were able to recount even detailed aspects of this transformation. Among utility firms, Eskom is also one of the most professionalized organizations. Thus, any challenges during the transformative process we observe in this case can be expected to be even more severe in less professionalized utilities. In this sense, the Eskom case is a benchmark for strategic renewal in utility firms that – despite all problems – may have gone relatively well. The finding may dramatically underestimate the challenges that less professionalized utilities face.

This study is based on interviews as our primary data source. We conducted ten interviews. The interviews were semi-structured. Former CEOs, former and current board members, former executive managers, and former and current senior-level managers served as key informants. The informants were asked to identify major transformation processes within Eskom. All ten interviewees referred to the commercialization process, i.e. the transformation from an engineering-dominated to a more commercially thinking organization, as one of the most substantial transformations in the last few decades of Eskom’s firm history. The informants were then asked to give a detailed account of Eskom’s commercialization process with a specific focus on the implications on capabilities and particularly the different capability reconfiguration processes. They identified and described the reconfiguration processes that Eskom implemented to renew the organization and how the capability structure was intentionally and unintentionally affected by the implemented measures. The informants provided illustrations of how competences and skills changed. The number
and detail of the insights into the reconfiguration processes emerged inductively from
the fieldwork. In addition, extensive archival material such as annual reports, internal
documents, monographs and company reports were included in our analysis to enrich
our data base, triangulate the interview information, and therefore increase validity. The
interviews were conducted in 2009 and 2010.

The interviews were recorded and transcribed. The transcriptions and archival
material were analyzed using standard qualitative data analysis software (MaxQDA 10).
After deriving an understanding that Eskom’s commercialization process involves four
main processes, we coded capability-related information for each process separately.
This included information about the capability structure before the strategic renewal,
the newly required capability structure, the development of capability gaps, the
processes of capability sourcing, and the impact of reconfiguration. We then iteratively
developed a detailed understanding about each of the four evolving reconfiguration
processes, which enabled us to describe, analyze and compare them in a within-case and
across-case analysis.

We started with a within-case analysis of each capability reconfiguration process.
The idea was to become familiar with each case as a stand-alone entity. We assumed
that familiarity with the cases accelerates the across-case comparison. The within-case
analysis allowed specific aspects of the reconfiguration phenomena to emerge before
we transferred these findings to conduct the across-case analysis (Eisenhardt, 1989).
It particularly enabled us to conceptualize the nature of the four reconfiguration
processes.

Closely coupled with the within-case analysis is the across-case analysis. Deriving
a detailed understanding of the causes and effects between the various capability-related
aspects within one case provides the prerequisite for a thorough across-case analysis.
The across-case analysis aims at capturing patterns that regularly appear across
various cases. The across-case comparison also aims at sorting out those patterns that
get seemingly strong support from isolated cases but do not emerge in others. During the
across-case analysis, we looked for similarities and differences in the capability
reconfiguration process. The across-case analysis enabled us to identify several distinct
effects that reconfiguration processes have on strategic renewal. By applying the within-
and across-case analysis, we develop primary organizing themes with supporting
propositions around how reconfiguration enhances and hinders the strategic renewal
process.

Results
From our data analysis emerged four capability reconfiguration processes, which were
instrumental for the strategic renewal of Eskom’s capability structure. These were:

1. professionalization with a new appointment practice;
2. cost reduction and performance management;
3. organizational restructuring; and
4. facilitating a mindset shift.

In the following, we describe briefly what caused Eskom’s commercialization process.
Then, we characterize the four processes, explain the shift in capabilities and
discuss what implications this has for the overall capability composition at Eskom.
Finally, we derive some general insight on strategic renewal by comparing the four reconfiguration processes. Table I summarizes the results and presents representative quotes for each reconfiguration process.

Setting the stage: organizational change and the new strategy toward commercialization

In the 1970s and early 1980s, a continued increase in electricity demand required additional generation capacities to be planned, commissioned and built on a yearly basis. In the early 1980s, the growth rates of demand fell and correspondingly the requirements for building new electricity generation capacities became lower too. However, Eskom’s program to build new power stations could not be simply stopped, as many new capacities had already been ordered. As a result, Eskom had a reserve margin of almost 40 percent in 1991 with an installed capacity of about 37,000 MW, while the maximum demand was about 23,000 MW (Eberhard, 2007, p. 219).

As a result of the expansion of generation capacity, prices increased by 48 percent in 1977, which led to an investigation into Eskom by the Board of Trade and Industry (BTI). In 1982, Eskom increased tariffs again by 22 percent. This caused strong reactions among customers – especially from energy-intensive industries. The government intervened. It set up a commission to investigate Eskom’s price increase, tariff structure and operations. The government was concerned with the electricity tariffs and the increasing capital requirements for electricity provision.

Following the commission’s report and the discovery of a serious case of fraud, the government decided to establish a new organizational structure and initiated the relevant legislative process. A central motivation for the government’s changes at Eskom was to implement an adequate control and management system that actively transformed the utility into a more effectively and efficiently operating organization. In March 1985, a two-tier structure was introduced with the Electricity Council and the Management Board.

The Electricity Council was responsible for policy formulation, strategic planning and controlling Eskom’s operations. The members of the council were mainly customer representatives and other stakeholders. The Management Board was responsible for the daily operations. It had to manage Eskom on “sound business principles and within the guidelines, policy and objectives determined by the council” (Conradie and Messerschmidt, 2000, p. 249). The implementation of the two-tier structure transformed Eskom into a more business-oriented organization.

The orientation toward a more commercially operating company was further facilitated by the appointment of John Maree as the Chairman of the Electricity Council. Maree was an accountant. This was the first time that Eskom was led by a non-engineer. And this, maybe even more than Eskom’s new organizational structure, was a fundamental deviation from the “old” Eskom. Prior to Maree’s appointment, the entire management consisted of engineers, including positions such as the executives of finance and personnel.

The changes from an engineering-dominated to a commercially-dominated thinking found its direct manifestation also in the formulation of a new vision and strategy. In a two-day strategy meeting with the top 30 managers at the Carlton Hotel in Johannesburg, which became known as the Carlton Conference of the Top 30, Eskom identified seven strategic priorities. A corporate mission and strategy were formulated. The mission was that Eskom provides “the means by which customers’ electricity
### Capability reconfiguration processes

<table>
<thead>
<tr>
<th>Professionalization</th>
<th>Driver of capability reconfiguration</th>
<th>Reconfiguration</th>
<th>Implications for the capability structure</th>
<th>Representative quotes</th>
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<tbody>
<tr>
<td>Selection process: new appointment practice with new selection criteria to fill positions</td>
<td>Appointment of non-engineering staff at executive, senior and middle management level from outside Eskom</td>
<td>Share of accountants and managerial professionals increased</td>
<td>“[We] introduced a lot more business competence. We started to employ chartered accountants; we started to get exposure in management to financial people and commercial people other than engineers. And, yes, so partly because of drop-off in demand and because of political pressures via the de Villiers Commission, and the fall off in load that concerned government with regard to price increases that were coming about, the organization was forced to change. But also knew it had to change.”</td>
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| Implementing cost reduction and a performance management system | Selection process: cutting number of employees; leaving engineers tend to be not replaced | Engineers rather than managerial professionals left Eskom | Share of accountants and managerial professionals increased | “Largely the build programmes staff first went, this massive engineering section [...] it was probably very necessary that we had to cut back.” |

| Organizational restructuring | Adaptation process: implementation of training and management development programs | Developing managerial competences at the senior and middle management level through training of the staff inside Eskom | Managerial competences increased (share of accountants compared to engineers remained unaffected) | “So then Eskom looked at it and said, we’ve got a problem here, our composition is not right, we’re under pressure [...] Okay, what do we have to do? We’ve got 30,000 people, we’ve got to get rid of 15,000 – I’m being very simplistic here – to get the numbers right, you’ve got to get rid of 10,000 [engineers] [...] and woops, the skills left the organization. I don’t think that was the smartest way to handle that problem.” |

“[Eskom] went through a crisis of expertise, where it lost a lot of technical skills for a whole lot of reasons, but they managed to address that quite successfully, through training programmes and so on, and buying in skills.”

“For instance, I virtually got on a plane and I travelled the world to go and look at management development throughout the world.”

(continued)
Driver of capability reconfiguration processes
Capability reconfiguration Driver Reconfiguration Implications for the capability structure Representative quotes

I was at the top business schools all over the world, I was at top performing organizations as they were at that stage – in New York, in the UK, in Europe, other utilities in the US – to understand what performance management is all about. [...] And we spent a lot of time on performance management. What is real performance management?“It can increase the executive skills and for that we sent people to Harvard, to MIT, to Stanford, to London School of Economics, London Business School, to Fontainebleau, to MIT, to IMD – we did that; that was to develop the actual hands on skills from the managerial point of view. [...] So it was an upliftment, a general upliftment of the skills base, the competence base, of the people.”“It shifted. But, you see, what happened, a lot of engineers like myself, we went into the NDA and became managers. That happened in quite a few cases. We did a lot of training, introduced managerial training and so on for people. So, there wasn’t [...] I wouldn’t say there was such a huge shift, that there was a huge shift in infrastructure, but a lot of the engineers were sort of really retreaded. Yes. The ones with no interest, those were mostly the ones that left. Also[...] We also brought in new people skills. For instance, we sent a group of artisans across to Germany to become Meisters, artisan Meisters, and those were brought back here and they, in turn, trained others. And so we got a whole Meister training culture going on.”

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<th>Representative quotes</th>
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<td>Adverse self-selection process: mindset shift (from engineering orientation to commercial orientation)</td>
<td>Experienced engineering competences left because many engineers could no longer identify with Eskom as a more businesslike organization; engineers with better qualifications and longer experience had better chances at the job market</td>
<td>Share of accountants and managerial professionals increased</td>
<td>Engineering competences declined on average</td>
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“[T]here was an exodus of skills out of Eskom like you’ve never seen before – people that had 30, 35 years’ experience who were technically superb who left, to make space for new people coming in, and in many respects those people coming in were equally technically qualified, but with no experience. You need both to run the organization.”

“And John Maree then came in, and John Maree was a businessman; he was not a utility man whatsoever. And he started to apply business principles and he was quite, you know, cutthroat in his approach. And it was a total traumatic experience for many of the old Eskom guard, how he went about it. And that was a case of he had to cut your cloth […] And there was no way out; […] it didn’t fit in the budget, it was cut out. And we started doing voluntary retrenchments and it was, since ’85 you would see a tracking down of staff in the organization.”

“And in came a fellow called John Maree. Now, to the horror of all the engineers at Eskom, John Maree was an accountant or he had a, you know, he had an accountant qualification. […] But he had a really good track record as a businessman.”
needs are satisfied in the most cost-effective way subject to resource constraints and the national interest” (Conradie and Messerschmidt, 2000, p. 251). The corporate strategy as the guiding principle to implement the mission, aimed to develop Eskom “as a business that maximizes the value of its products and services to South Africa” (Conradie and Messerschmidt, 2000). This corporate strategy was underpinned by a few more detailed strategic principles that became known as Eskom’s philosophy.

The result of the Carlton Conference was that Eskom began to transform into a businesslike organization. The mission, strategy and philosophy explicitly highlighted terms such as “customer needs”, “cost-effective”, “Eskom as a business”, and “maximize the value”. The list of priorities brought other aspects forward in more detail, which might not have been part of Eskom’s prior thinking and common identity. This included changing the organizational structure, shifting responsibilities, reducing spending, balancing investments with capital availability, and cutting the number of employees.

Following the implementation of the new structure and Maree’s appointment, there were four processes that crucially shaped Eskom’s further development. The subsequent sections examine the four most decisive capability reconfiguration processes, which had a main impact on the firm’s capability structure. These four processes emerged from our qualitative data. We defined each process as a single case and drew inferences from across-case comparisons.

Professionalization as a capability selection process

Professionalization is a process Eskom set up to fill positions more rigorously than before with personnel who were qualified and specialized. The intention was to ensure that adequate professional standards were implemented in running the respective functions and departments. This required appointing more professionals with a non-engineering background such as accountants into senior manager and other positions, and also creating more general throughput in the company. Since Eskom had virtually no non-engineering professionals in-house, staff at the executive, senior and middle management level were recruited from outside the firm.

As a result, the composition of the capabilities began to change. The share of accountants and managerial professionals increased and the relative number of engineering capabilities decreased. The professionalization process, through the new appointment practices, was a selection process that directly changed Eskom’s capability structure.

The first important change was to appoint an accountant and experienced manager, John Maree, as the Chairman of the Electricity Council. This appointment was a direct result of the government’s dissatisfaction with Eskom’s performance. With an accountant as chairman, the tradition of solely promoting engineers into executive positions was discontinued.

Some other key appointments were made. Ian McRae, an Engineer and long-term Eskom employee, who had literally worked through the ranks, became CEO. Having worked in almost every position in Eskom, he had a very intimate knowledge of most aspects of the company. Ian McRae was a real Eskomite, a notion that Eskom employees have used to indicate their belonging to Eskom, which also shows the strong identity that people had built with the firm. His strong connection to the firm made him a widely known and respected person. As is shown below, having a top management team, with the Chairman Maree being highly competent and experienced in running a commercial
business and the CEO McRae being highly competent and experienced with the
to-be-restructured company, was instrumental in implementing the organizational
transformation process.

Under the pressure to professionalize the organization, Maree appointed managers
with a non-engineering background into three – for the transformation process very
central – executive positions. An accountant was hired as the chief financial officer. An
experienced manager, who had a degree in Business Administration and had entered
Eskom’s personnel department in 1975, was promoted to the position of HR chief
executive. Eskom also appointed a Professional Communications Manager. This was to
operate the respective departments (finance, HR, communication) with experts from
those professional fields.

Implementing cost reduction and a performance management system as a capability
selection process
Cost reduction and performance management are a second set of strategic renewal
processes Eskom implemented to improve productivity. They were part of the
newly formulated strategy to reduce spending and bring the budget into balance with
financial availabilities, to lower the number of staff, to establish internal systems to
identify and promote talents, and to strengthen controlling mechanisms.

John Maree insisted on cutting down the number of employees by 10 percent. While
there were 66,000 employees in 1985, there were 60,800 in 1986, and another 4,000 fewer
in 1987. After five years, Eskom had 50,000 employees, while electricity supply rose by
20 percent. Consequently, cutting the number of employees reduced costs substantially.
Reducing costs was in line with Eskom’s new mission and corporate strategy statement.

Introducing a performance management system was also directly in line with the
defined priorities at the Carlton Conference and a central element in improving
performance through better control systems. It was crucial to identify and promote
talents within Eskom. The HR department introduced a staff ranking system and
started to evaluate and rank the top 100 managers. After it turned out to be a successful
approach, staff ranking was introduced at all company levels. Each head of a group or
unit had to evaluate and rank the staff members and take a particular focus on the top
and bottom two. It was important not to lose the top two. Severance packages or plans on
how to improve their performance might be offered to the two lowest performers.

Cutting the number of employees and improving the performance of personnel in the
firm worked out successfully for Eskom regarding productivity. These processes had a
substantial effect on the competences and skills of the organization. Professionals with
an engineering rather than a managerial background left the firm. Consequently, the loss
of engineers changed the capability structure of Eskom directly. The share of
accountants and managerial staff increased further. Cost reduction amplified the
capability shift further, in addition to the effects deriving from the professionalization
process. Similarly to the new appointment practices, the cost reduction and performance
management processes can be conceptualized as selection processes that directly
changed Eskom’s capability structure.

Organizational restructuring as a capability adaptation process
Another important strategic renewal process was the organizational restructuring of
Eskom. Structural transformation figured prominently in the priority list of the Carlton
Conference and was widely reflected in Eskom’s newly adopted philosophy. The new management saw it as a crucial strategic step to decentralize the corporate structure and shift substantial authority, responsibility and accountability from the head office to the line managers. This was seen as important change to achieve the mission and corporate strategy to satisfy customer needs in the most cost-effective way and therefore to contribute to the transformation toward a more businesslike organization.

Eskom decentralized its structure by creating strategic business units with divisions and groups as sub-units. These were either cost centers with performance measured according to meeting an approved budget, profit centers measured by revenues and costs, or profitability centers measured by their return on investments. The new structure was implemented and operating at the end of 1985. Another important change involved the division of the electricity distribution operations into 12 regional service areas aiming to develop a closer relationship with customers and a higher visibility as an organization. This was in line with the new emphasis on customer service.

The restructuring process led to changes in the composition of capabilities at Eskom. Eskom’s decision-making structure became more decentralized. Authorities and responsibilities were shifted to the strategic business units and into the regions. This shift, however, meant that people also had to be able to enact these responsibilities. Managerial competences had to be built and widely extended at the unit and division level. In contrast to the shift in competences through appointing new staff from outside the company, the required managerial skills in the decentralized units were mainly developed through training of the staff inside Eskom. The HR department had to establish adequate programs to build up and strengthen the managerial skills at the middle and lower management levels. As a result, the capability structure of the firm was broadened. The training programs increased the general level of managerial capabilities among Eskom employees, while the share between accountants and engineers remained unaffected. In contrast to professionalization and cost reduction as selection processes, the implementation of training and management development programs comprised an adaptation process that changed Eskom’s capabilities.

**Mindset shift as an adverse self-selection process**

Eskom’s top management established several measures to communicate and convey an understanding of their new strategy, and simultaneously diffuse concerns. One measure was Ian McRae and John Maree’s personal visits to groups and units at all organizational levels across the country. These field visits aimed at talking to people, listening to the challenges of their units and discussing what to do about it. McRae and Maree’s visits became known as the I&J show. These shows can be interpreted as an attempt to get a better understanding of the state of the organization and the transformation process, and of the variety of issues across the different units and groups. The purpose was to convey the new strategy, and create an identity for Eskom and its new principles. The simple fact that the CEO and chairman traveled around and talked to the staff had not been seen before in Eskom. This had a substantial impact in itself. Ian McRae’s reputation in the organization may have been part of why Eskom people took the I&J show as an honest attempt by the top management to get a better understanding of the problems on the ground.
Other measures, besides the I&J show, were more direct efforts to bring strategic renewal into the divisions and groups. The Top 30 from the Carlton Conference were instrumental in doing that in their respective areas. They served as central change agents in the organization. The new mission, strategy and philosophy were contributed and papers were hung out across the organization. Moreover, divisions and groups had to formulate their own missions, strategies and philosophies, which had to be in line with Eskom’s new strategy but broken down and adapted to the specific work and group context.

Despite these attempts, the identity of employees with Eskom faded away, especially among engineers. As a mindset shift was required toward more commercial thinking, many engineers decided to leave the company. No longer pursuing engineering excellence as the main priority but running the operation with a focus on cost minimization and strict performance criteria resulted in a part of the engineering workforce leaving the organization. In other words, the increasing commercial thinking drove out engineering skills and contributed further to a shift of competences. This change was a self-selection process leading to Eskom’s capability composition shifting even more to an increasing share of managerial professionals.

Furthermore, there was a bias toward more qualified engineers leaving the company. Engineers who were better qualified and showed a higher performance tended to leave the company in higher numbers because it was easier for them to find another position in the job market. The implication was not only that the competence composition shifted but also that the engineering competence declined on average regarding qualification and experience. Because of this adverse self-selection process, the lost capabilities were disproportionately high compared to the shift of engineers to other professional groups. Overall, the composition of competences in the management team shifted during this period from entirely engineering-dominated to something around 60 percent engineers and 40 percent other professionals.

Comparing capability reconfiguration processes and their impact on strategic renewal

The results from the inductive study of Eskom’s commercialization process show that strategic renewal has a profound impact on the firm’s capability structure. Comparing the four distinct processes enables us to draw some conceptual insights into how reconfiguration processes vary systematically in their impact on a firm’s capability structure and on the extent to which they cause and mitigate capability gaps. Figure 1 shows the different processes and their implications.

As it emerged from our analysis, implementing adequate selection processes was instrumental for the strategic renewal process. New appointment practices brought the required capabilities from outside into the firm. Cutting the number of employees affected predominantly engineering personnel. Appointing more accountants and other managerial professionals than engineers changed the composition of the competences. The tendency that more of those who left Eskom were engineers than accountants facilitated this competence shift further.

The professionalization process and the cost reduction had mainly the intended impact of shifting the competences and skills from a sole engineering base toward a more balanced capability structure with engineering and managerial capabilities. Regarding the timeframe, these two selection processes had an almost immediate impact on the reconfiguration of the capability structure in the intended direction. As the process of appointing accountants and managerial staff from outside the firm could
start directly after the new strategy had been formulated, the extent of the capability
gap was relatively limited and short. Thus, particularly the new appointment practices
mitigated the potential emergence of a persistent capability gap and closed the induced
capability gap.

The adaptation process aimed to develop managerial competences inside the firm
through training programs. Similar to the two selection processes, the adaptation
process also had the intended impact on strategic renewal. It facilitated the
transformation toward the required capability structure. However, training was
a much more time-consuming process and therefore contributed to the initial persistence
of the capability gap. The HR department did not have those programs readily available.
Since skill development programs had not been required in the past – or only to
a limited extent – it was not only that the programs were not available. The HR department itself had to develop an understanding in the first place about what adequate programs should look like and how to develop them. To develop such an
understanding, HR executives visited many other utilities and traveled to the top business schools in North America and Europe to learn about relevant programs. As a result, the HR department developed a number of programs with the purpose of strengthening the managerial competences within Eskom. These included a management development program, a leadership program, the expansion of existing and the introduction of new bursary schemes (including for MBA studies at Harvard, MIT and LBS, and developing case studies to deal with Eskom’s specific problems), and an artisan development scheme.

At the same time, the HR department pursued the idea of developing a learning campus at Megawatt Park, Eskom’s headquarters. The department started to develop and implement systematically its new internal learning and training programs and extended existing ones. Performance management programs including the above-mentioned ranking systems were implemented around the same time.

Broadening the scope of Eskom’s capability structure through the adaptation process took time. Since training programs had first to be developed and implemented, the impact on the reconfiguration of the capability structure in the intended direction was substantially longer than in the two selection processes. The required capability structure was not immediately available and therefore a capability gap was created that persisted for a certain period. The time required to establish adequate training programs determined the extent of the capability gap. Compared with the selection processes, which largely resulted in the immediate change of the capability structure, the restructuring process with the necessary establishment of training programs and structures had a less immediate effect. The capability gap was closed with a substantial time lag.

The mindset shift with the corresponding adverse self-selection process had the most severe implications from a capability perspective. Compared to the selection and adaptation processes, capabilities were lost and caused changes in the composition of capabilities at Eskom in an unintended direction. A significant number of employees were unwilling to support the shift toward a more commercially operating organization. Shifting the focus from engineering excellence to cost effectiveness was resisted and caused many engineering staff to leave the organization. The leaving engineers had accumulated a large part of Eskom’s experience base, namely highly tacit engineering knowledge with many years of experience. In addition, the more experienced staff left and Eskom lost not only relevant capabilities but even some of the most critical capabilities. Thus, there was a strong adverse selection effect of the loss.

This crowding out effect was substantial. The loss of experience and tacit knowledge was not replaceable in the short or even medium term. Hiring from outside the firm and rebuilding these capabilities through the new training programs was virtually unfeasible. Thus, strategic renewal caused with this unintended process a highly persistent capability gap. The persistence of the capability gap was determined by the time needed to rebuild the lost experience and tacit knowledge. Closing the gap required employees to newly acquire this knowledge through many years of learning-by-doing.

Regarding the impact of strategic renewal on performance, insights from the interviews indicated that Eskom’s loss of capabilities and its long-term implications can hardly be underestimated. Most interviewees referred to the firm’s commercialization process, when they gave reasons for the declining service quality 20 years later. It is difficult to assess the causal link of these statements in this study, but it indicates for how long the loss of critical tacit knowledge and important experience tends to have an impact.
This study contributes to the existing literature by clarifying some aspects of how strategic renewal unfolds. The results offer two theoretical insights. First, we find that strategic renewal consists of different underlying change processes that vary in their effect on facilitating renewal. We derive three conceptually distinct capability reconfiguration processes, namely selection, adaptation and adverse self-selection. Selection and adaptation processes support the changes of capabilities in the required direction. In contrast, the process that we refer to as adverse self-selection counteracts the transformation. The unintended crowding out of competences and skills works against the envisioned renewal of the capability structure. Critical capabilities are lost. In this sense, our results indicate that the capability reconfiguration processes do not necessarily drive the transformation in the intended direction or that the processes even reinforce each other. It emerges from the Eskom case that strategic renewal may trigger processes with severe unintended challenges that undermine the expected outcome of strategic renewal.

Interpreting in the context of the strategic renewal literature, our results suggest that the initial emergence of capability gaps and the respective decline of performance during strategic renewal are not necessarily merely the initial effect of an unfolding adaptation process, which is mitigated after a certain time period. We provide an additional explanation by showing that the strategic renewal process may be the definite cause of some of the emerging capability gaps. The primary source of the decline may be the loss of capabilities that were unintentionally crowded out from the firm. It is a main result of this inductive study to show that this possibility needs to be considered.

Second, the various processes differ in their capacity to close capability gaps. We find that some processes mitigate the threat of a persistent capability gap faster than others. Selection processes tend to have an immediate impact on altering the capability composition in the intended direction. In Eskom’s commercialization process, they contributed to close capability gaps. Adaptation processes need substantially more time to build the required capability structure. From our study it emerged that they contribute to close the capability gap only with a time lag. The adverse self-selection process causes a loss of critical competences and knowledge, and therefore deepens the capability gap rather than mitigating it.

These findings extend the few contributions in the literature (Lavie, 2006; Capron and Mitchell, 2009; Dominguez et al., 2009) on how emerging capability gaps are closed and what role different processes play. With a few exceptions (Capron and Mitchell, 2009; Dominguez et al., 2009), these processes have been largely unaddressed in both streams of the literature, the strategic renewal literature and the research on management issues in infrastructure sectors. In addition to the above insights, the Eskom study importantly highlights that the emergence of capability gaps is a common effect rather than an exception in the course of strategic renewal (Figure 1).

Conclusion
The provision of adequate utility services is key for economic prosperity, welfare and social inclusion. Recent calls to improve the performance of utilities have highlighted the need to transform the prevalent engineering-dominated organizations into more management-oriented firms. This is particularly important in the context of Southern African countries, in which infrastructure services play a central role in underpinning the transformation processes by providing widely accessible, reliable and
affordable services. This paper analyzed strategic renewal processes in the context of a utility firm. It offers some insights that are relevant for management scholars, utility managers and policy-makers.

The findings from the commercialization process of Eskom, South Africa’s electricity supplier, underline the importance of a capability perspective to analyze strategic renewal. Renewal unfolds through several processes, which affect the capability structure differently. Some contribute to an almost immediate closure of the induced capability gap. Other processes take longer and enable a capability gap to persist. There are some processes that counter strategic renewal and widen the capability gap. As a result, service quality and performance decline. The performance deficiencies tend to be long lasting if the capability gap comprises tacit knowledge and experiences which are difficult to replace in the short and medium term.

The findings also have important implications for management practitioners and policy-makers. Our results indicate that initiating and implementing strategic renewal may cause unintended processes. Reconfiguring the capability structure may trigger crowding out effects of specific capabilities. This may result in threatening the strategic renewal process and undermine the intended performance improvements. Managers aiming at organizational change need to seriously consider these possible implications.

This study has some limitations. One important limitation is that our findings are based on the analysis of multiple reconfiguration processes of one strategic renewal process in one utility. To strengthen the validity of our results, further research is required that replicates and extends the insights from this study. Examining additional renewal processes within Eskom may reveal whether underlying selection, adaptation and adverse self-selection processes drive the reconfiguration process similarly to those identified in this study. Another possibility would be to study strategic renewal and the underlying capability reconfiguration processes in other utility firms. This would deepen the understanding of strategic renewal in general and transformation processes in infrastructure sectors in particular.

Furthermore, strategic renewal of utilities is not solely a change process at the organizational level from an engineering-dominated to a businesslike firm. Commercialization and other transformation processes in utility firms are embedded in a complex environment involving several other processes relevant in the current transformation of Southern African countries. This includes processes such as urban growth and restructuring, black economic empowerment, and the increasing awareness of environmental impacts on infrastructure services. But even without considering these additional processes, our case shows that strategic renewal in itself already involves enough challenges, which utilities have to address. In this sense, our case study rather underestimates the challenges which can be expected to emerge by including other conditions in the analysis. Further research may include these factors and examine their respective influence on the reconfiguration of the capability structure and strategic renewal.

References


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