

EXPLORING HR PERSPECTIVES ON SUCCESSION PLANNING AS RETENTION AID FOR ENGINEERING PROFESSIONALS: THE CASE OF SADRI IN 2007/08

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Succession planning is a key talent management initiative. It plays an important role in ensuring that critical skills are available at all levels throughout the organisation, so that the organisation can achieve a competitive advantage. Succession planning ensures the bench strength of the organisation and integration between the employees' skills and the organisation's strategy, thus making provision for its performance in the long run. This study reports on HR's perspectives on succession planning as a retention aid for engineering professionals in the South African defence-related industries in 2007/08, which were found to be in a declining life cycle. The study was undertaken to examine what practical methods organisations were employing to retain engineering staff in light of the current skills shortage, particularly in the fields of science, engineering and technology in South Africa.

Key phrases: Succession planning, engineering professionals, South African defence-related industries, competitive advantage, retention, bench strength, talent pipeline

INTRODUCTION

The central dilemma confronting high technology companies, like those active in the South African defence-related industries (SADRI), is how to successfully manage two conflicting trends: continuity and rapid change. Continuity ensures, inter alia, the availability of the required talent, such as engineering talent, to sustain the productive capacity of the organisation. Rapid change, on the other hand, ensures that the organisation adapts swiftly to the ever-changing needs of customers. Both approaches aim at achieving the long-term goal of the organisation, which is survival and growth, as measured by performance, and ultimately expressed as profitability.

The traditional approach to the dilemma of continuity and rapid change is to manage the different parts of the organisation either for efficiency or innovation. Efficiency includes attention to productivity, while innovation focuses on seizing improvement opportunities. The availability of engineers provides a useful measure of innovation potential, and at the same time ensures continuity. It stands to reason that talent plays an important role in managing both continuity and rapid change. Talent at all hierarchical levels and occupations within the organisation forms one of the building blocks of an organisation's competitive advantage (Boxall 1998; Grant 1996; Heinen & O'Neill 2004; Helfat & Peteraf 2003; Joia 2000; Nienaber 2002; Peteraf 1993; Truss & Gratton 1994). Competitive advantage attracts customers on the basis of superior value offered to them, while at the same time defending the organisation's value offer from eroding efforts on the part of competitors. Competitive advantage is the foundation of an effective strategy (Carpenter & Sanders 2009; David 2009;

Ireland, Hoskisson & Hitt 2009; Nienaber 2002; Pearce & Robinson 2009; Thompson, Strickland & Gamble 2007). It follows then that central to the high technology organisation's strategy should be the management of its talent as talent gives effect to the organisation's strategy. This view is in accordance with the resource-based view of the firm (Helfat & Peteraf 2003; Peteraf 1993) as well as the knowledge-based view of the firm indicating the importance of staff and how they are applied in creating and maintaining a competitive advantage.

The dilemma of continuity and rapid change is exacerbated with the apparent lack of skills worldwide, especially in the fields of science, technology and engineering in South Africa (see for example Axelrod, Handfield-Jones & Welsh 2001; Bodden, Glucksman & Lasky 2000; Business Report 2007; Chambers, Foulon, Handfield-Jones, Hankin & Michaels 1998; Engineering News 2006; Mail & Guardian 2007a, b). The mobility of highly skilled employees, particularly engineers, intensifies the situation. In view of these aggravating circumstances, high technology companies, like those in SADRI, are compelled to reformulate their talent management strategies, with specific emphasis on succession planning. The identification and retention of key employees at all organisational levels has become crucial for growth and sustained performance, especially in the defence-related industry in South Africa. This industry is a declining industry competing for talent with more attractive industries, particularly finance and manufacturing (Steyn & Daniels 2003). Succession planning provides for the retention of critical skills required to ensure that sustained value is offered in terms of customers' changing needs; it also addresses the dilemma of continuity and rapid change.

Previous studies on succession planning focused on successor origin (Carlson 1961; Parrino 1997; Vancil 1987); the impact of size and succession frequency (Grusky 1961); relationships between succession (frequency) and an organisation's performance (Beatty & Zajac 1987; Gamson & Scotch 1964; Grusky 1961; Ip & Jacobs 2006); the likelihood of a succession event (Naveen 2000); the drivers of succession (Aberdeen Group 2006); successful succession planning practices (Karaevli & Hall 2003); the form of a succession event (Arndt 2002; Deutsch 2001; Gilpin 2000; Schlosser 2003); and succession in general (HRM Software 2000). None of these studies specifically examined succession planning as a retention aid for talent to ensure competitive advantage. This study is thus aimed at filling this gap in the research literature.

The purpose of this article is to report on the prevalence of succession planning within SADRI organisations and its potential application as a retention aid for engineering professionals, from an HR perspective. Theoretically, succession

planning allows for the retention and development of talent for the future, and encourages individual advancement. Given the potential role of engineers in attaining a competitive advantage, their retention is crucial in sustaining not only organisational but also national competitiveness.

THEORETICAL BACKGROUND

All organisations have succession systems since at some point they will face the challenge of replacing current leaders (Friedman 1986). Succession systems are also important to ensure that the organisation is provided with a sufficient number of choices should a planned or unplanned succession event occur: this is commonly referred to as the bench strength of the organisation. The bench strength, at all levels of the organisation, affects the organisation's ability to remain competitive (Bady 2007; Bersin 2008; Cunningham 2007; Joseph, Wilson, Taylor, Honey & Savoie 2006; Kesler 2002; Prieur 2007; Rothwell 2002; Seymour 2008; St-Onge 2007). These succession systems range from formal, task-driven approaches to informal relationship-based approaches (Fiegener & Welsch in Cabrera-Saurez, Saa-Perez & Garcia-Almeida 2001). Rothwell (2005:6) defines succession planning as a deliberate and systematic effort by an organisation to ensure leadership continuity in key positions, retain and develop intellectual and knowledge capital for the future, and encourage individual advancement. This definition includes not only leaders in the succession plan, but all key role players in the organisation who contribute to the performance of the organisation.

A potential outcome of a successfully implemented succession planning programme is a sustainable talent pipeline which is capable of sustaining the future performance of the organisation (Conger & Fulmer 2003). The broad objective of succession planning is thus to ensure the availability of incumbents when a vacancy arises, to motivate and encourage the quick adoption of the incumbent's new role, and to ensure further learning so that greater roles can be assumed (Clutterbuck 2005). Succession planning should be an integral part of talent management practices that influence the recruitment, selection, mentoring, career development, leadership development, career planning, recognition and reward initiatives aimed at ensuring the sustained competitive advantage of the organisation (Bersin 2008; Cunningham 2007; Heinen & O'Neill 2004; Kesler 2002; Lamoureux 2009). Succession planning should therefore be integrated with the strategy of the organisation.

Succession planning is more likely to occur in organisations that:

- a. could reduce their costs associated with the succession event by planning the succession process;
- b. place a high value on human capital; and
- c. have a strong affinity for choosing successors from within the organisation (Naveen 2000).

The retention of skilled technology workers is important for three reasons, namely (1) the continued success of the organisation; (2) skilled individuals have an increased number of employment options resulting in higher mobility; and (3) organisations must avoid incurring high recruitment, opportunity and training costs (Mosley & Hurley 1999). Mosley and Hurley (1999) therefore advocate a proactive approach to staff retention citing that once individuals have articulated the desire to leave, efforts to retain them may already be too late. The proactive approach could be sealed in succession planning.

Engineers belong to one of three primary taxonomic orientations, namely (1) a technical orientation, (2) a management orientation and (3) a project orientation (Allen & Katz 1986). Engineers falling in the technical orientation show little interest in management and focus purely on technical aspects (also see Cordero, DiTomaso & Farris 1994). Engineers with a management orientation use their technical expertise as background while project-oriented engineers fall in-between the technical and management orientations. Engineers falling within a project orientation would in lieu of promotion rather be involved in interesting and challenging projects.

Engineers are valued for their technical expertise, but at times in their career must choose between a technical or management career. The provision of a dual career ladder (DCL) would be one way of retaining technical talent, like engineers, in technical positions rather than transitioning to management. In addition, the DCL system justifies the creation of additional, non-supervisory positions at remuneration levels comparable to equivalent management positions (Skelton 2003). The DCL also recognises technical competence and maintains organisational capability and competitive advantage (Boxall 1998).

Nevertheless, Igbaria, Kassicieh and Silver (1999) argue that the DCL approach (in other words independent management and technical career paths), although useful as a retention strategy for the organisation, may not adequately address the work and career needs of the individual, as it may be applied in a mechanistic way thereby negating the value of succession planning. Skelton (2003), however, believes that if properly applied a DCL approach obliges individuals within these positions to

maintain their technical competency – implying an ongoing investment in education and training that is development as per the succession plan.

According to Allen and Katz (1986), implementation of a DCL system suffers from perceptual problems of prestige within organisations – promotion within the managerial path is seen as being more prestigious than the “equivalent” technical advancement. As such, the DCL approach is not often employed and thus development and retention of technical staff suffer.

In an effort to overcome the shortcomings of the DCL approach, Lee and Maurer (1997) constructed the following five “standard” human resource functions matched with each taxonomic engineering type:

- a. staffing;
- b. compensation;
- c. grievance procedures;
- d. training and development; and
- e. career planning.

At least three of these functions are included in effective succession planning – the exceptions perhaps being grievance procedures and compensation. Lee and Maurer (1997) propose that the approach to staffing, training and development, and career planning be tailored to suit the taxonomic engineering type. Customising the process based upon the prevalent engineering type, according to Lee and Maurer (1997), implies that the organisation has, or is willing to do the following:

- a. Agree on definitions for each engineering type according to organisational realities and not based upon arbitrary and artificial distinctions. This view corresponds with that of Skelton (2003).
- b. Assign responsibility for implementing and administering training and development and career planning initiatives to an individual or group. This view is consistent with that of Kesler (2002), Prieur (2007) and St-Onge (2007).
- c. Integrate the succession plan with other staffing, training and development, and career development initiatives should they exist. This view is consistent with that of Groves (2007) and Heinen and O’Neill (2004).
- d. Take into account the individual’s aspirations and seek the consent of the individual before assigning a particular engineering type. This supports the view of Gaffney (2005) who believes that employee retention rates improve when

employers collaborate with their employees to align their career direction with the goals of the organisation.

Buy-in of engineers, irrespective of taxonomy, could be a means of proactively retaining their scarce skills based on their aspirations. It is especially the defence-related industry in South Africa that can benefit from this willingness to engage in effective succession planning. This implies that succession planning of these organisations should be integrated with talent management initiatives, which should in turn be integrated with the strategy of the organisation to ensure its long-term survival and growth.

RESEARCH DESIGN AND METHODOLOGY

The basic philosophical assumptions held by a researcher, although largely hidden in research, influence the inquiry (Creswell 2009) as they explain why things are the way they are for the researcher (Henning, Van Rensburg & Smit 2004). The inquiry reported on is situated in an interpretivist research philosophy with its emphasis on experience and interpretation. Interpretive research is concerned with meaning and seeks to understand people's meaning-making, among others, of a social reality, in this instance HR's perspectives on succession planning as retention aid for engineers in SADRI in 2007/08. As such the interpretive philosophy seeks to produce descriptive analyses that emphasise understanding of the phenomenon studied rather than searching for broadly applicable laws. The interpretive philosophy is congruent with the purpose of this research, namely exploring the perspectives of practitioners of succession planning as a retention aid of SADRI engineers with a view to understanding this practice. Ontologically, knowledge (in the interpretivist philosophy) is subjective as understanding is mutually constructed (Henning *et al* 2004). This is also applicable in this instance where the interviewer constitutes an insider as part of the interview and research process. Through interviews with available senior human resource officials in the participating organisations, participants' perspectives of succession planning as retention aid for engineering professionals in SADRI were explored. The descriptions of the participants' perspectives of the social reality studied provided data which formed the basis of themes and categories regarding the usefulness of succession planning as a retention aid for engineering professionals in SADRI. These themes could be used to develop succession planning as a retention aid for engineering professionals, particularly in SADRI. As such the themes can be generalised, rather than generalising (laws) from sample to population. This view is supported by Collis & Hussey (2009), Creswell (2009), Hallebone & Priest (2009) and Henning *et al* (2004).

The above explanation of the interpretivist philosophy alludes to the application of a qualitative research approach in collecting and analysing data for this research. In this instance using a qualitative research approach was appropriate to the purpose of the inquiry conducted. Furthermore, the qualitative approach is in line with the predominant research approach within the interpretivist philosophy (Collis & Hussey 2009; Creswell 2009; Hallebone & Priest 2009; Henning *et al* 2004). The problem was studied by way of case study which was deemed appropriate for this inquiry, as it explored a contemporary phenomenon in its real-life context (Myers 2009; Perry 2001). Empirical evidence was obtained via interviews as interviews were deemed to yield richer data than a survey since responses to open-ended questions could be cross-examined.

A questionnaire with 28 open-ended questions based on the theory presented in the previous section was used as an interview guide. The questionnaire is included in the appendix. The first four questions covered demographics, while questions 5 to 7 covered the importance of engineers in the organisation and succession planning as a tool to retain them. Question 8 attended to the use of DCL, while question 9 explored current retention strategies. Questions 10 and 11 explored current succession planning strategies, while questions 12 to 28 examined the implementation of succession planning in the organisation in question.

Interviews were arranged telephonically or via electronic mail (e-mail) with the most senior human resource manager within the organisation, as succession planning, generally, was found to be the responsibility of the human resources manager (see for example Prieur 2007). In the organisations without a specific human resource manager, the interview was requested with the manager responsible for talent management. As such the interviewee was deemed the person likely to know the most about the subject studied, taking care of external validity (see Perry 2001:319). Consent was requested from the participants prior to commencement of the interview.

Hour-long interviews were conducted at the organisations' premises at a time convenient for the participant over a six-month period. The succession planning definition as proposed by Rothwell (2005:6) served as the reference definition throughout the interviews. In organisations without formalised succession plans, evidence was sought for other systems or processes that were broadly in line with succession planning such as recruitment, leadership development, training, skills development and retention. The clarification of concepts took care of construct validity as both interviewer and interviewee could agree or disagree on the definition of the construct studied (Perry 2001). These interviews were recorded and

transcribed and transcriptions were analysed by applying content analysis and descriptive statistics.

The SADRI consisted of a population of 44 organisations, representing a range of products and turnover categories. SADRI organisations were involved in research, development, production and service of military equipment and facilities for a state's armed forces. Typical products included land-based weapons (like guns and tanks), aerospace systems (like aircraft, missiles, satellites and fighter jets), naval systems (like nuclear submarines and advanced anti-air defence systems), telecommunication systems, power solutions and surveillance radar. Organisation size varied from large organisations that had a turnover in excess of R250 million per annum, while the turnover of small organisations was between R10 million and R50 million per annum. In the main, these organisations were not listed on the stock exchange and hence were not compelled to disclose any information. The limited amount of public disclosure meant that the study had to be conducted on an organisation-by-organisation basis with the accuracy and reliability of the data being severely affected by the amount of information willing to be disclosed.

Interviews provided a means to obtain a deeper understanding of the context in which a response was given and to recognise that the approach to retention and succession planning in particular would be unique. The purpose of this study was to gain a clearer understanding, thus a sample of ten organisations was purposely selected from different turnover categories. Although no ideal sample size for studies using a qualitative approach has been established, guidelines are available for case studies. Eisenhardt (1989) proposes between four and 10 for cases, while Morse (in Denzin and Lincoln 1994) suggest six cases and Creswell (2002 in Onwuegbuzie & Leech 2007) proposes three to five cases. As such the 10 organisations selected and the seven responding to the invitation to participate are in keeping with these guidelines for high-level qualitative, case study, research. Collectively the seven participating organisations accounted for 71% of the SADRI turnover (AMD 2004:12), representing a significant portion of SADRI. The unit of analysis was thus the organisations studied, while the unit of observation was the person interviewed (Babbie 2007; Perry 2001). The main limitation of this study could be that the views of the interviewees were not representing the views of the organisation, especially in the cases of firm numbers 4 and 7 where a person other than the one charged with the responsibility for succession planning were interviewed as well as in the case of firm number 1 where only one of three responsible parties were interviewed. Reliability was ensured by using a formalised, structured process which, if followed by other researchers, should lead to getting the same results.

It should be noted that this study also complied with ethical requirements as informed consent was obtained from participants and they were assured that the information submitted would be used on a confidential basis. The organisations are therefore not named, but rather numbered from one to seven in this paper.

RESULTS AND DISCUSSION OF RESULTS

Table 1 summarises the profile of the responding firms.

Table 1: Organisational characteristics of the surveyed organisations

Characteristic/Firm	1	2	3	4	5	6	7
Number of employees	1700	310	54	800	550	220	500 (est) Defence-related
Engineering professional as percentage of total employees	23.5%	66.7%	72.2%	37.5%	40%	70%	20%
Shareholder (ownership)	Private – German	Private – French	Private – South African	State – South African	Private – Swedish	Private – French	Publicly owned
Engineering staff retention a priority	Yes	Yes	Yes	Yes	Yes	Yes	Dependent on BU
Formalised succession plan	Yes	Informal, semi-structured	No	No	No	In process	Yes
Owner of succession plan	Board, CEO, HR	HR	CEO	CEO	Indefinite	HR	CEO
Person interviewed	Senior HR Manager	Senior HR Manager	CEO	Senior HR Manager	Senior Business Development Manager	Senior HR Manager	Senior Business Development Manager
Previous succession event	Yes, 2 nd pending	Yes	Pending	Pending	No	No	No
Age of succession plan	13 years, 1st generation	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Varies between BU
Who organisational level succession plan is directed at	Top performers throughout	Scarce skills and key individuals across the firm	Senior technical/management positions	Senior management	Key positions throughout	Executive and management senior engineers	Business unit executive
Priority in formulating a succession plan	High	Medium	Low	High	Medium	Medium	High
Formulation time frame	3 months, 2 nd generation	Ad hoc	Not applicable	12 months	2–3 years	12 months	Reviewed yearly

Table 1 contains a host of information that needs clarification. The size of these firms varied in terms of number of persons employed and percentage of engineers forming part of total employment. Engineering professionals could not be correlated with the organisation's overall size. The firm employing the smallest number of persons (54) employed the largest percentage of engineers (72,2%).

Six of the seven respondents indicated that the retention of engineering staff was a priority. One respondent indicated that retention was dependent on business units. Two of the respondents indicated that their firms had a formal succession plan in place, one had an informal succession plan in place, and one respondent indicated that a formal succession plan was in process. This observation is consistent with that of Fiegenger and Welsch (2001), indicating that succession plans can vary from formal task-driven to informal relation-based. Three of the respondents indicated that their firms had no formal succession plan in place. This observation is consistent with Harvey (2009), Kesler (2002) and Rothwell (2002), indicating that a number of firms neglect succession planning at all levels of the organisation, although they may recognise it as a business imperative.

The two responding firms with succession plans in place indicated the age of the succession plans as 13 years and varied between business units. The age of the succession plan seemed to be outdated to take care of current retention issues given the changed demographic and competitive landscapes.

The majority of responding organisations indicated that their succession plans were aimed at senior executives, while a minority indicated that top performers throughout the organisation and those with scarce skills also throughout the organisation are targeted in the succession plan. This observation is consistent with Bady (2007) and Harvey (2009) who note that the succession planning is an uncommon practice and the default succession planning takes care of senior executive succession and little below that. The consequence of neglecting lower echelons of the hierarchy might weaken the bench strength and adversely affect the talent pipeline with serious consequences for the firm's performance.

Three of the respondents indicated that succession planning is a high priority, three indicated it as a medium priority and one indicated succession planning as a low priority. The formulation time frames of the succession plans varied from three months to two/three years. These time frames corresponded to the priority given to succession planning in the respective firms. The majority of these responses seemed at odds with the responses that retention of engineering professionals is a priority.

Two of the responding firms were previously involved in a succession event, while three indicated a pending succession event and three were not affected by a succession event. The two firms affected by a succession event had a formal and informal succession plan in place.

Succession plan ownership and the responsibility for its implementation were found to rest with the chief executive officer (CEO) in three of the organisations. In two

cases HR assumed the responsibility. In one case the succession planning process and decision rested with the organisation's board, CEO and HR collectively. This response seemed to be in line with top management's responsibility for the organisation's performance. As such the top managers should know what positions and skills requirements are critical to strategy execution. And these skills should form the focus of retention efforts. However, if line management is not familiar with human resource practices, like talent management, and technical development opportunities are given preference over personal development and the aspirational needs of the individual, managers may find themselves looking for replacements. This observation that a CEO, board of directors and HR were responsible for succession planning in one organisation is in line with the view of Prieur (2007) who notes that HR should not be the only department involved in succession planning.

The drivers behind succession planning efforts in participating organisations with a succession plan, and those contemplating one, are illustrated in Figure 1 below.

Figure 1: Drivers of succession planning

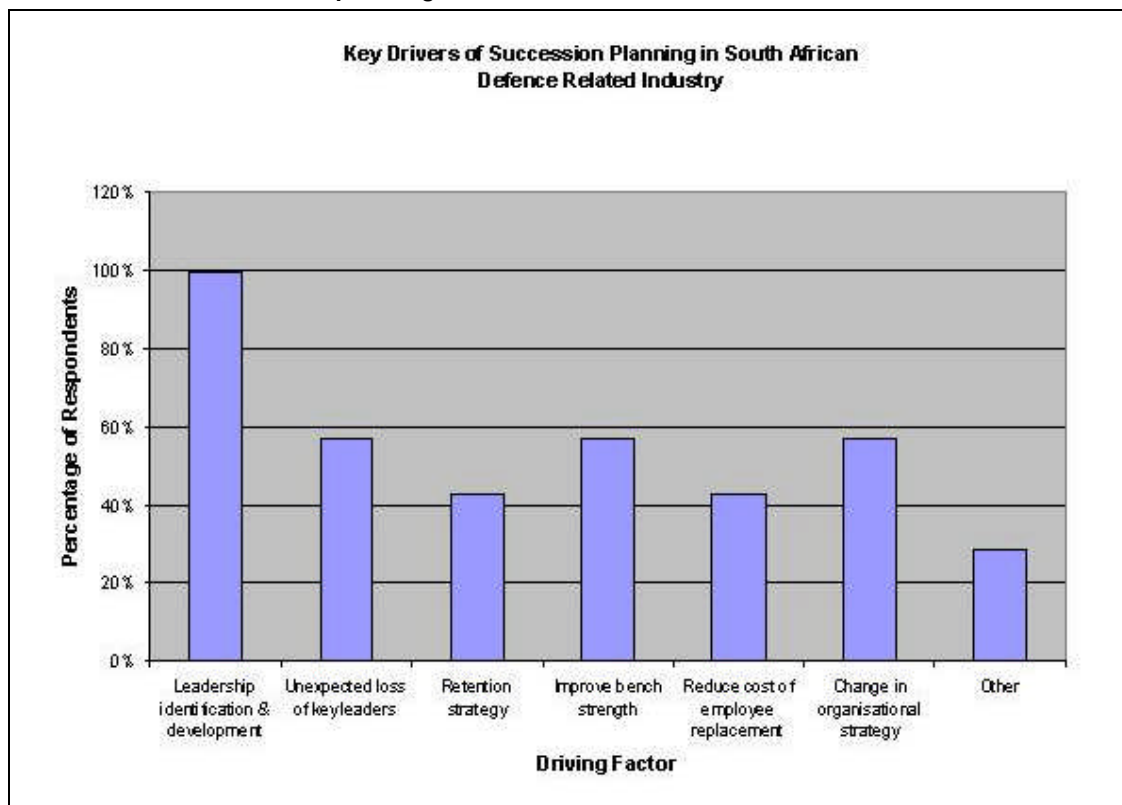


Figure 1 shows that the drivers for succession planning were generally leadership identification and development, followed by the unexpected loss of key leaders, accommodating a change in organisational strategy, reducing the cost of employee

replacement, employing a retention strategy and other reasons. Figure 1 illustrates that leadership identification and development was the dominant motivation behind succession planning. This response is in line with the response of the majority of respondents who directed their succession planning effort towards executive positions. It was, however, concerning to note that succession planning drives the retention strategy in a small number of participating firms.

Organisational processes affected by succession planning initiatives are illustrated in Figure 2.

Figure 2: Organisational processes affected by succession planning

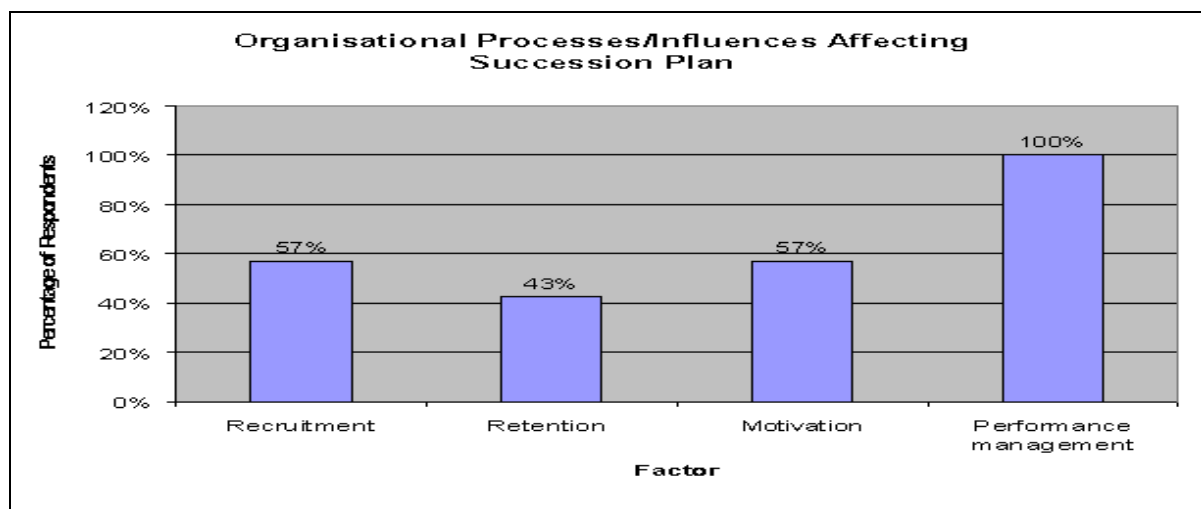


Figure 2 shows the extent to which recruitment, retention, motivation and performance management processes were affected by succession planning initiatives. Clearly performance management was the most affected followed by motivation and recruitment, while retention was the least affected. The information in Figure 2 suggests that succession planning was integrated with (typical) talent management initiatives, pointing to the potential success of the succession planning programmes. Again the observation that retention was the least affected by succession planning is of concern. This response was consistent with retention strategy as a minor driver of succession planning in the responding firms. If succession played a limited role in the retention of key staff, the question arose as to how the firms wished to retain them.

It is recognised that succession planning, although a potential effective retention aid, is not the only way to retain talent. Alternate retention plans, in the absence of succession planning as retention aid for engineering staff, were thus explored and are depicted in Figure 3 below.

Figure 3: Alternate retention strategies

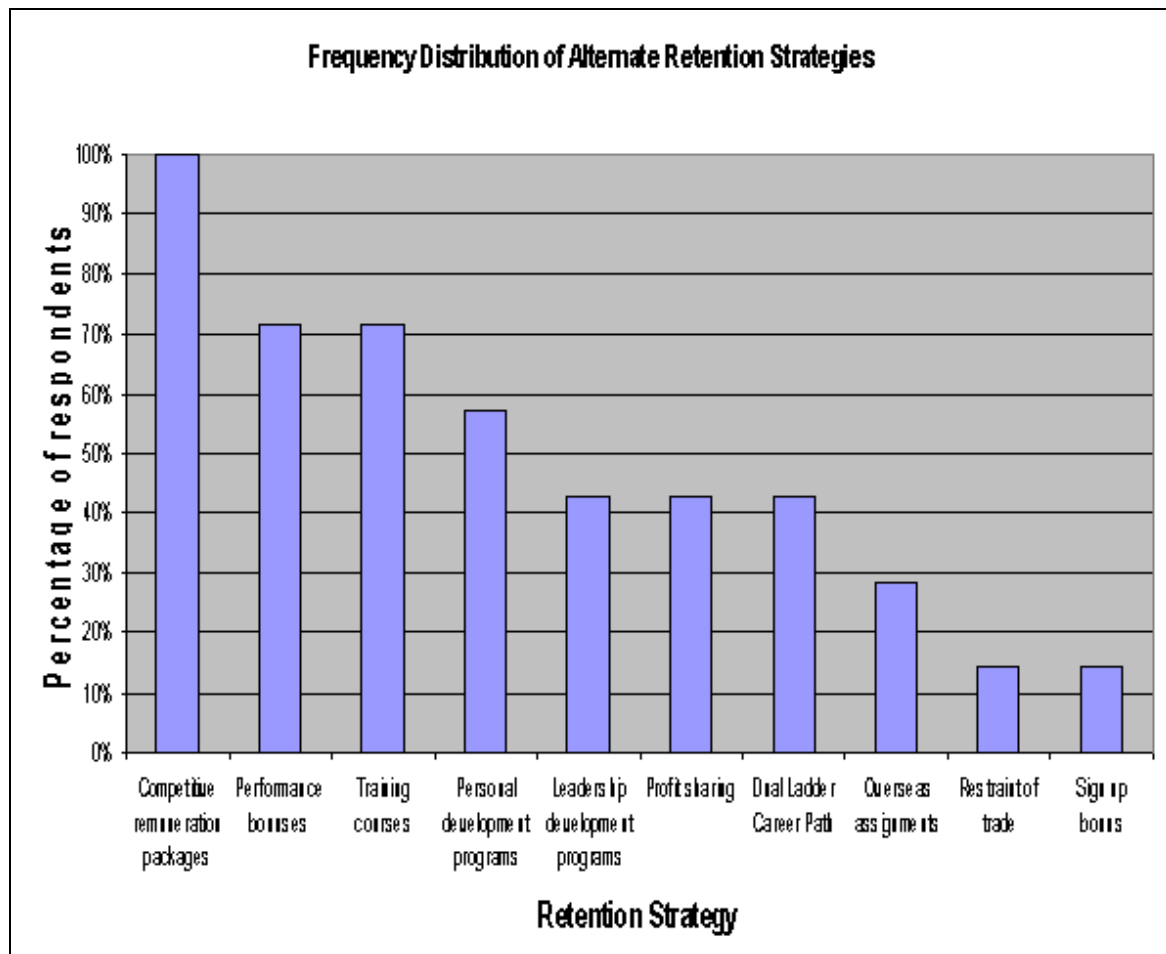
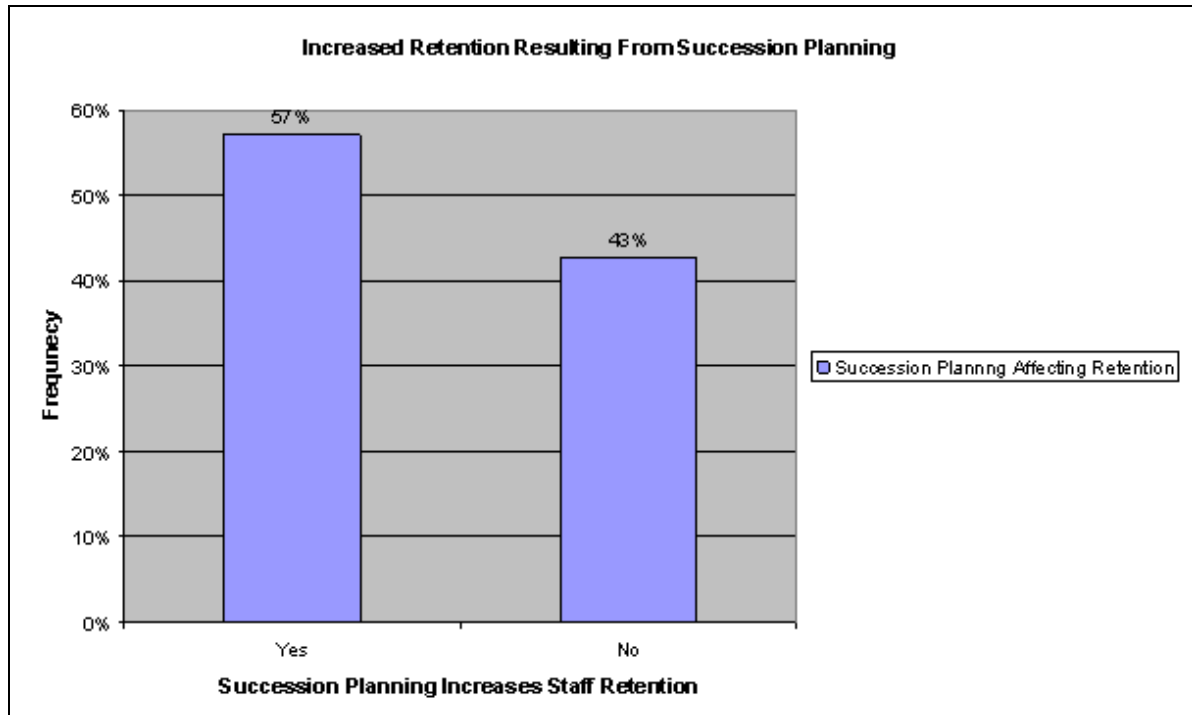


Figure 3 illustrates alternate retention strategies used by the companies in the absence of formal succession planning. These included (in decreasing frequency) competitive remuneration, performance bonuses, training courses, personal development programmes, leadership development programmes, profit sharing, a dual career ladder, overseas assignments, restraint of trade and sign-up bonuses. Competitive remuneration packages, performance bonuses and profit sharing can easily be matched by competitors and as such were discounted as true retention strategies. The remaining strategies corresponded to some degree with elements of succession planning, for example training courses, personal development programmes and leadership development programmes, which could be seen as part of development to retain talent. Dual career path was pointed out as a specific retention mechanism aimed at engineers interested in technical work rather than managerial positions. Overseas assignments could be seen as possible challenging work.

Finally, improved retention resulting from succession planning is depicted in Figure 4 below.

Figure 4: Improved retention resulting from succession planning



The information in Figure 4 does lend a degree of support to the assertion that succession planning did result in improved staff retention, even in organisations where no formal plans existed, only alternate strategies. However, in the absence of quantitative information, the assertion remains anecdotal.

CONCLUSION

This paper set out to report on succession planning as a retention aid for engineering professionals in the South African defence-related industry in 2007/08. Succession planning aims at ensuring the availability of key skills throughout the organisation by retaining and developing critical skills that give an organisation a competitive advantage. Competitive advantage attracts customers by offering superior value and at the same time safeguards the organisation from the eroding efforts of competitors. Competitive advantage in turn forms the foundation of effective strategy, the cornerstone of organisational performance.

The changing competitive landscape, especially the lack of science, engineering and technology skills in South Africa, as well as the mobility of engineers, requires that

especially high technology firms, such as those in SADRI, reformulate their talent management strategies with specific emphasis on succession planning. The identification and retention of key skills within these organisations, in line with their strategy, is imperative for the organisations in question. This is especially true since the defence industry is currently vulnerable as it finds itself in a declining life cycle, and engineers may migrate to more promising industries such as manufacturing and finance given their mobility.

The literature review revealed a gap in the use of succession planning as retention aid and this study has subsequently filled this gap with special reference to engineering professionals in SADRI. The literature further revealed that organisations realise that succession planning is imperative, given the changing competitive landscape, though they seem to pay only lip service to this critical initiative. If organisations implement succession planning, the efforts are mainly directed at top management and not the entire pipeline to ensure bench strength.

The results of the study reported on are no different from those of previous studies on succession planning. The responding organisations indicated that the retention of engineering professionals was important. However, this response was at odds with their responses about the priority of retaining engineers with only 42% respondents indicating this to be a high priority, 42% a medium priority and 12% a low priority. This response seemed to correspond with the firms' possession of succession plans (42%), which ranged from formal (66%) to informal (33%). The drivers of the succession plans were mainly leadership identification and development of leadership, confirming the respondents' succession focus on top management positions in the firm, rather than all key positions to ensure sustained performance in the future. This finding is of concern as the departure (whether expected or not) of key skills may adversely affect the organisation given the vulnerable state of the industry. This concern is heightened by the findings that succession efforts of these firms were generally not aimed at retention, and that retention is the organisational process least influenced by succession planning. This raised the question as to how the participating firms would identify and retain crucial skills to secure competitive advantage given the fragile state of the industry.

The alternate retention strategies employed by the responding firms included training courses, personal development programmes and leadership development courses, which are deemed to be development initiatives and are part of succession planning.

The respondents believed that improved retention resulted from succession planning. However, the absence of evidence of widespread formal succession planning

(however many of the broad objectives of the succession planning in general were to be found in other organisational systems and processes) belies this opinion.

With succession planning at the forefront of business agendas, the shortage of engineering professionals in South Africa, the mobility of engineers with more lucrative industries awaiting the entry of engineers, the vulnerable state of SADRI and the changing competitive landscape, the future viability of these firms may be in jeopardy should they lose any of their key skills in the organisation.

The study nevertheless showed that elements of succession planning were present in the organisations studied. As such the potential exists to integrate and leverage the available elements, while incorporating the lacking elements. However, succession planning is a complex undertaking that needs to be integrated with a number of organisational initiatives, mainly under the auspices of human resource management, and with the strategy of the organisation. As such important stakeholders, like the CEO and HR, should join forces to optimise the succession planning effort of the organisation.

The findings of this study correspond to those of previous studies: specifically that where succession planning efforts were implemented, they were mainly directed at top management and not the entire pipeline. In organisations where the CEO and HR joined forces, the succession planning efforts seemed to be the most successful, giving these organisations an edge over rivals in creating and sustaining a competitive advantage and ensuring the firms' long-term survival and growth.

At this stage it needs to be pointed out that the study was only exploratory in nature in order to understand the phenomenon of succession planning as retention aid for engineering professionals in SADRI. As such the findings cannot be generalised to the population as a whole. Only trends can be noted, which could be investigated further.

Given the importance of succession planning, further research is required to understand this phenomenon, particularly in South African organisations. The study could be extended to include an examination of the integration of succession planning with the strategy of the firm which forms the basis of organisational performance.

APPENDIX

Succession planning is *"[a] deliberate and systematic effort by an organisation to ensure leadership continuity in key positions, retain and develop intellectual and*

knowledge capital for the future, and encourage individual advancement” (Rothwell 2005).

How many employees do you currently employ?

How many engineers do you employ?

How many organisational levels exist?

How would you describe the organisational structure?

- Single, unified.
- Multiple SBU, centralised.
- Multiple SBU, decentralised.
- Other.

Is retaining engineering staff a priority?

How easy/difficult has the retention of engineering staff been?

Who takes responsibility for career development?

Is a distinction drawn between technical and management career tracks amongst engineering staff?

Which staff retention strategies does the organisation currently employ?

Is succession planning one of them?

Does the organisation have a succession plan?

If in existence, how long has the succession been in place?

If not, is the creation of one a priority?

At which organisational levels is the succession plan directed?

Why?

Does the succession plan influence other organisational systems and processes such as:

- recruitment?

- retention?
- motivation?
- performance management?

What drives the succession planning process?

- Leadership identification and development.
- Unexpected loss of key leaders.
- Retention strategy.
- Improve bench strength.
- Reduce cost of employee replacement.
- Organisational strategy.

On what basis are candidates assessed?

- Job specific potential and performance.
- Performance trend and leadership competency.
- All capabilities and trends.

Are successors likely to come from inside or outside the organisation? Why?

Who is involved in formulating the succession plan?

What is or should HR's role be in the process?

Who takes ownership of the plan?

- CEO.
- Board of directors.
- HR.

How formalised is the plan?

Has the organisation undergone a succession event, ie change in management, buyout, merger, leader/manager deceased?

What was your experience of the event?

Has the succession planning process had any influence on staff retention?

What are the impediments to the succession planning process?

Do you believe HR is significantly involved in strategy formulation and implementation?

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