Talent management in the mining industries of developing nations

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Talent management is and will continue to be a limiting growth factor for the mining industry. Top-performing global mining and related companies from developing nations share a common pool of engineers and technical staff who compose a "value chain". This value chain allows for the conception, design, construction, operation and expansion of a mineral-extracting enterprise.

Historically, Africa and South America have been a source of raw material for developed nations. For the last few decades, China – with its insatiable need for commodities – has driven growth in these regions by causing effects ranging from a rise in the price of these commodities to direct infrastructure investments.

Roger Agnelli, former CEO of the Brazilian mining company, Vale, recently gave an address at the Sloan School of Business of the Massachusetts Institute of Technology (MIT). Vale is the world's largest producer of iron ore. Agnelli stated that "Africa will be home to the 'next battle for natural resources', given its potential for agricultural and industrial development, as well as its relatively close proximity to Asia". He further detailed that "the only continent that can compete with South America with regard to natural resources is Africa".

One pertinent example of the commodities push is the mining sector, which has helped to shape large companies in developing nations. This sector comprises companies that extract minerals from the ground, contractors who build the services and installations, and consultants who design the projects. Companies such as these, which have emerged from developing nations, have become increasingly globalised and are currently competing with established mining entities from developed nations that have realised shortcomings regarding their future competitiveness. Demographic shifts mainly led to a shortage of talented individuals in the workforce.

Research conducted on this topic aimed to obtain a better understanding of the talent management of engineers and technical staff in global mining companies and associated services in developing countries.

A secondary objective of the research project was to determine how talent management ranks as a strategic priority, as well as to identify the tools and guidelines used to support this strategy. The researcher also attempted to determine if successful practices were applied, and to identify difficulties experienced in leading companies in this sector.

Developing a conceptual method to manage talent in the mining industry

Data was gathered using survey research, as well as phenomenological and narrative research. A survey was used, as it provides quantitative or numeric descriptions of trends, attitudes or opinions of a population by studying a sample of the population. The sample was composed of randomly selected individuals of a representative list of global mining companies and associated services from developing nations. The identification of key role-players allowed for the acquisition of the essence of human experiences about a phenomenon as described by participants. This was achieved by means of unstructured interviews in which the interviewed subjects presented their views and experiences regarding this phenomenon.

An existing bibliography was utilised to guide the research and characterise the results. In a recent study on the six principles of effective global talent management by G Stahl et al., published in the *MIT Sloan Management Review,* the two major talent management theories that have been developed up to now are outlined. These are the differential approach, closely related to McKinsey & Company's early ideas, and the inclusive approach, which is related to Schiemann's ACE approach, which considers alignment, capabilities and engagement (ACE).

According to Stahl et al. (2012:26), many companies place a great deal of emphasis on high-potential employees. This is despite the fact that the practice of sorting employees based on their performance and potential has generated much criticism. This is known as the differential approach. Companies favouring this approach focus most of the rewards, incentives and attention on their top talent (A players), give less recognition, financial rewards and development attention to the bulk of the other employees (B players) and work aggressively to weed out employees who don't meet performance expectations and are deemed to have little potential (C players).

Stahl et al. (2012:26) observe that some companies prefer a more inclusive approach and attempt to address the needs of employees at all levels of the organisation. With this approach, talent management tactics used for different groups are based on an assessment of how best to leverage the value that each group of employees can contribute to the company.

Stahl et al. (2012) explain that hybrids of these two philosophies are applied in practice with the intention of bringing out the most positive aspects of each individual.

Through the use of the survey as research methodology, the researcher was able to generalise the results obtained through a quantifiable description of attitudes regarding talent management in top-performing global mining and associated services companies from developing nations.

LinkedIn, which boasts one of the largest professional social networks available today, with more than 147 million members, was used as the database for the selection of individuals. In order to obtain a 90% confidence level and a 10% sampling error, and considering an estimated 15% response rate, the researcher sent out 286 survey questionnaires.

As a degree of complexity is associated with talent management, an interpretive form of data collection was implemented concurrently with the quantitative data collection in order to understand this phenomenon and the perceptions of individuals in organisations. Semi-structured interviews, consisting of mostly open-ended questions, made up the core of the qualitative data collection. Five key individuals were purposefully identified on the basis of their professional trajectory and location.

Results of the survey

The survey had an overall response rate of 26%, with engineers responding to 28% of the requests and managers and human resource (HR) officials responding to 24% of the requests. The companies represented in this survey illustrated an acute awareness of what talent management is, as well as its importance.

→ *Northern Cape province: The primary crusher structure at the new Kumani Mine near Kathu. Photo: Graeme Williams – MediaClubSouthAfrica.com*

Historically, Africa and South America have been a source of raw material for developed nations.

These companies also shared the view that talent management is strategically important when designing an organisation's business plan. However, only a fifth of the companies indicated that they manage their business and talent management strategies concurrently.

The survey covered three possible role-players in talent management: the unit manager, the direct manager or supervisor and HR officials. With the exception of the selection process of potential employees, in which HR officials seem to play a slightly more predominant role, direct supervisors or managers have the most important role to play in the retention, development and growth of employees within a company. This implies that a technical person is responsible for most of the talent management activities in these organisations.

The surveyed organisations seem to show characteristics of the approaches of both McKinsey & Company and Schiemann.

In terms of the McKinsey approach, a talent mindset seems to dominate organisations, especially at management level. In terms of creating a value proposition for employees, growth and development seem to be a priority and companies tend to incorporate some of the aspects of wealth and reward.

In terms of Schiemann's ACE model, organisations seem to be making an effort in trying to obtain alignment, create a company culture and encourage teamwork. However, managers in these organisations do not see this as a practical way of enhancing their employees' efficiency. These organisations make use of marked capability-enhancing initiatives, but do not seem to be doing as well in obtaining employee engagement.

A total of 74% of the respondents have worked with three or more different nationalities in the past year, showing considerable exposure to different cultures, as well as a growing probability of having a more heterogeneous work environment. Although the majority of respondents believe that cultural diversity is considered in their organisation's talent management strategy, only a third of them believe that this is done with considerable emphasis. Talent management efforts seem to be efficient in terms of the identification, recruitment, development and retention of employees of different cultures.

The majority of respondents agreed that the short duration and remoteness of projects are important factors affecting turnover in their organisations. These organisations seem to be retaining employees successfully under these conditions by implementing a financial stimulus, strict health and safety procedures, training, limited exposure periods, and encouraging frequent trips home.

Overall, respondents believe that their talent management activities are well adapted to their working conditions and environments, indicating that talent management is either developed in-house or adapted.

According to staff respondents, the most important concept in the talent management programmes is development. Growth, development and a good corporate image are aspects at which these organisations are excelling. The respondents also consider these factors to be important and believe that the organisations are mostly practising a Schiemann-like approach that considers multicultural aspects. The direct manager or supervisor was pointed out as the single most important person in the retention and development of staff. In contrast to the abovementioned general population, the most

important aspects were identified for engineers. Engineers regard development as the most important element when judging a talent management programme. They consider the programme in which they participate to lean towards the Schiemann approach, in which multicultural aspects are covered. The biggest concerns of these engineers seem to be the lack of growth and development opportunities, as well as exciting work opportunities.

HR officials, managers and engineers also differ in their perceptions of opportunities to grow and develop, as well as their perceptions of exciting work opportunities. Furthermore, HR officials and managers differ in their understanding of exposing engineers to more exciting opportunities because managers believe that there is a reduced need for growth opportunities. This differentiates their perceptions from those of HR officials and those of engineers.

Engineers consider it important to be exposed to multicultural aspects. Although their managers generally agree with them on this matter, HR officials seem to be of the opinion that more multicultural aspects and a more defined Schiemann approach should be implemented than is actually the case in practice.

The personal interviews confirmed the survey results in terms of the surveyed organisations not having a clear-cut McKinsey "star-guided" strategy or a pure Schiemann team approach. These organisations seem to use a mix of the two philosophies, with more emphasis on some aspects. Most of these strategies are developed in-house.

In terms of the important aspects that should be present in a talent management strategy, managers and HR officials tend to have a balanced perception of the need to recruit and retain talent. Managers, however, think it is less important to develop staff. This fact and the role that managers play in all phases of talent management should be considered in order to improve talent management.

Managers need to be aware that they are the most important piece in the talent management puzzle.

Recommendations

It was found that an awareness of talent management seems to be a matter that is familiar to all the organisations that participated in the research. This accentuated awareness is a reflection of the strategic priority talent management has in these organisations, which has come to limit the time frames and viability of some projects in the recent past. Such an awareness has pushed for the development and adaptation of general talent management theories in respondents' realities and work environments. The implemented strategies drew mostly on Schiemann's ACE approach, as well as McKinsey & Company's "star-guided" approach.

The perception of some of the respondents shows that there is a high degree of satisfaction with regard to the talent management initiatives in place in the various organisations. This satisfaction points to the fact that specifically oriented and purposefully designed talent management strategies, which attend to the cultural and work environment conditions, are created in-house and not directly translated from the generic bibliography used in this research.

However, these organisations have three main shortcomings: a homogenous, but steadily changing internal culture, a geographical fragmentation of the talent management strategy, and the extent to which technical managers are responsible for talent management.

The fact that the organisations that participated in this research have recently been involved in globalisation initiatives would be the most important factor behind a generally homogenous work environment. The geographical fragmentation in talent management strategies is demonstrated in the number of engineers (approximately half of those surveyed) who participate in such initiatives, the lack of consistency in implementing a teamwork culture, and having employees selectively aligned to the company's objectives and goals.

Direct managers need to play an important role in overcoming the abovementioned shortcomings. In the organisations that participated in this survey, these roles are mostly exercised by people with an outstanding technical career, but who are not necessarily managers with people management expertise or training. As a general rule, these managers do not completely visualise the important role they have to play in the development and retention of staff.

The key to growth and competitiveness in terms of an efficient talent management strategy revolves around the manager's ability to assume a leading role in talent management. They are there because they have mastered the technical and financial aspects of the company, but they should consider the human aspect of their business in order to be sustainable.

In order to overcome present shortcomings, talent management initiatives and managers will need to focus on accentuating training and offering more challenging and exciting work for engineers, with appropriate tools in a system guided by a general strategy.

About the author

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References

McKinsey & Company. 2001. *The war for talent organization and leadership practice.* McKinsey & Company Inc.

Schiemann, W. 2009. *Reinventing talent management.* Hoboken, New Jersey: John Wiley & Sons.

Stahl, G, Bjorkman, I, Farndale, E, Morris, S, Paauwe, J, Stiles, P, Trevor, J & Wright, P. 2012. Six principles of effective global talent management. *MIT Sloan Management Review*, 53(2): 25–32.

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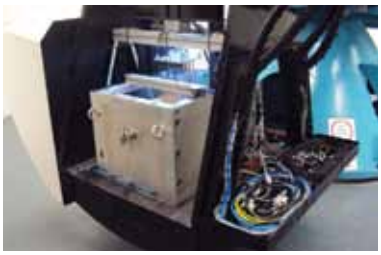

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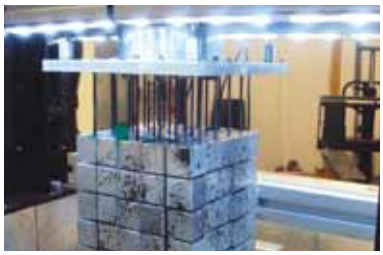

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