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Redefining competitive advantage in the South African platinum market

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Sustainable competitive advantage of South African Platinum Mining Companies may take on a vastly differenct face when compared with the past 30 years. The Mining Charter has disrupted the dominating factor of monopolizing mining rights, as the South African Government seeks to redistribute the incredible mineral wealth of this nation, amongst its previously disadvantaged citizens. The South African currency has done an about turn from weak levels of R13.95/$ in 2001/2, the currently strengthened Rand has aided the country's growth; however the strong currency has also substantially dented the earnings of the SAPMC, and their planned expansions. Fortunately strong market fundamentals have sustained prices over the past ten years, however commodity cycles exist. With platinum at $900 per ounce in 2005, much exploration is occurring across the world, and this may increase supply, thus applying downward pressure on prices. South Africa is currently blessed with 75% of the world's known economical and available platinum reserves, but this position will be challenged as greater exploration seeks new orebodies. The market demand for platinum has been well managed, with new uses being discovered for platinum on an ongoing basis. Demand has been generated by two major prongs:

- The use of auto catalysts, reducing exhaust fumes in Northern Hemisphere cities.
- The growing platinum jewellery market particularly in the Far East, and first world countries.

The dilemma faced by the current and future platinum CEO's is to identify future focus areas, manage their current dashboard, implement sustainable strategies now and after 2010, navigating this change may be a precarious task. Cognisance must be given to the fact that the major platinum players all have similar market position, strategies and available resources. This article outlines what is currently generating competitive advantage for:

- South Africa as a mining nation
- The South African platinum mining companies over and above their technical factors.

It alludes to the defining competitive advantage industry should focus on to generate sustainable competitive advantage in the future. No specific company's competitive advantages has been dealt with, as this would detract from the research, and would result in bias in the research.

Introduction

Audience

This report is aimed at the investors, directors, management, and academic researchers in the South African platinum industry. Future directors and managers may use it as a current reference point as well as considering it for the future.

Origin, background, and context of the dilemma

The platinum market role-players, like those of other commodity markets, are more price-takers than price-makers; the role of price-maker can only really be achieved by means of a monopoly or oligopoly (which may exist), where one is able to control and influence one's market/ industry dominance. For one South African Platinum Mining Company (SAPMC) to have an edge over its rivals, it is required to generate some additional form of competitive advantage, outpacing very similar competitors without much differentiation. Thus with technical factors being eliminated, management of these SAPMC, must seek greater intangible factors of competitive advantage, to outperform their competitors.

Summary of country, industry and management dilemma

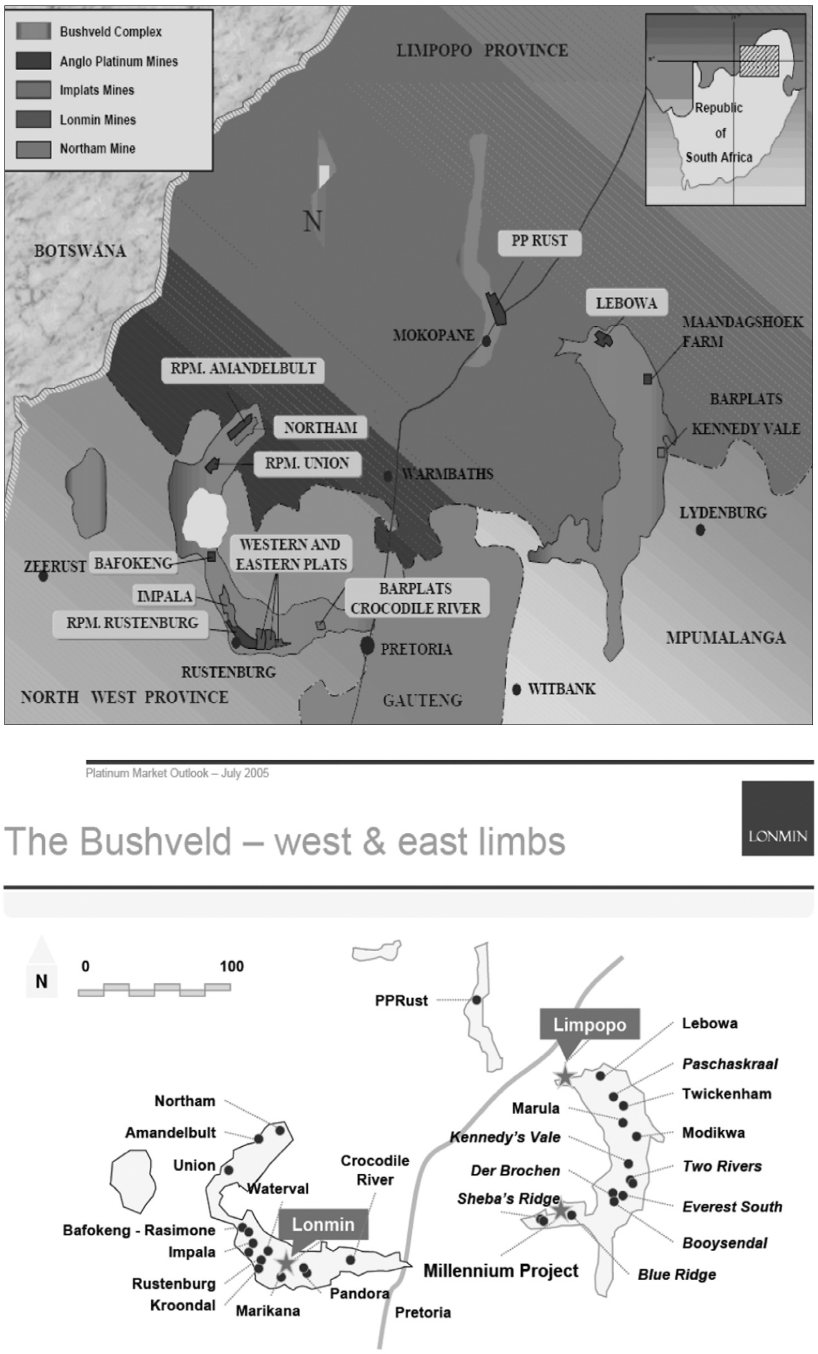
The real management dilemma: Is there a fundamental driver of competitive advantage required for an SAPMC?

Summary of technical competitive advantages

- Orebody accessibility
- Exploration ability
- Width of orebody
- Grade management of grade quality
- Metallurgical properties and recovery quality
- Size of consistent ore reserve blocks
- Mining method, mine design and depth below surface
- Geological anomalies and ground conditions.

Review of country and industry

The world's largest gold deposit was discovered on the Witwatersrand, but even greater is the world's largest platinum deposit, which occurs not even one hundred kilometers north within the Bushveld Igneous Complex (BIC). Most fascinating about these two deposits, geologically they have been formed by substantially



Figures 1 and 2. Location maps of SAPMC. Source Anglo Platinum and Lonmin websites, www.lonmin.co.uk/ www.angloplat.com

different processes—the Witwatersrand gold basin was formed by a sedimentary deposit, whereas the BIC was formed by igneous processes involving molten lava and volcanic flows. From an economic perspective, gold was the backbone of the SA economy, and generated billions of rand in foreign exchange. The exciting portion about platinum is its potential to outstrip gold's earnings by almost four times, as SA currently holds 75%, of the world's known economic reserves. Up until 1968, Rustenburg Platinum Mines were the only significant miners of platinum in SA. However, as world demand increased in the late 70s, due to decisions about the environment in North America and Europe. A solution was sought to eradicate noxious gases emitted from internal combustion engines in northern hemisphere cities. The solution lay in auto catalysts which, through the use of platinum, enabled noxious emissions to be substantially reduced. As environmental legislation increased across the northern hemisphere, a greater demand has been generated for the 'green-white metal'. In addition, the platinum jewellery market has seen significant growth, constituting up to 40% of platinum sales, as the white noble metal has increased in popularity in the bridal market sector, especially in Eastern countries. The following factors have introduced additional stress in the SA platinum industry:

- US dollar weakness therefore a strengthened rand, but also a robust SA economy
- SA Mining Charter, extensive new entrants into the market
- Substitutions for platinum as prices soar
- Depressed palladium prices, due to Palladium spike in 2001/2

- Skills shortage in terms of expansion requirements.

Key challenges faced by these producers include:

- Produce at the lowest cost sustainably
- Build a premier investment brand name
- Harness a high performance culture
- Make farsighted bets on new technologies
- Bring new mines to market within time and on budget
- Lacking infrastructure on the Eastern Limb
- Managing the ore mix of current operations
- Keeping costs in line on deeper mines.

Profit per fine ounce sold is an adequate measure of the industry and company's effectiveness. Should metal prices or exchange rates waiver, companies should adapt accordingly. The true measure of effectiveness is the ability to consistently manage increasing costs, ensuring that SA has the lowest cost in the production of platinum.

Literature review

Lessons from accredited academic publications

SAPMC returned superior performances, due to a previously weak rand and strong demand for platinum, resulting in record platinum prices. Using the research done by Collins (2001), it became clear that a national competitive advantage existed among the SAPMC, as all were exposed to the same market fundamentals. However, some of the SAPMC managed to outperform the index, having greater CA.

CA is described by Perreault and McCarthy (2002) as, 'a firm [that] has a marketing mix, that the target market sees as better than a competitor's mix.' This is relevant to the SAPMC, as they are long-term investment companies, which each do their own marketing, in an endeavour, to attract investors.

Their competitive advantage ranges from being:

- Lowest cost focus
- Ore reserve dominance and extensive growth
- Being the best at what they do
- Pursuing innovation and mechanization
- Effective purchasing
- Financing ventures and pursuing opportunities
- Competitive barriers using mineral rights, processing and refining methods.

CA succeeds only if it allows the company to provide superior value and satisfy customers/investors better than the comparison/rival companies. (Perreault, 2002). Chase, Aquilano, and Jacobs, (2001) state that, 'creating a competitive advantage through operations requires an understanding of how the operation's function contributes to productivity growth.' SAPMC all fall into this operations management definition, as the companies are all mining, processing, refining and selling platinum. Operations management is an interesting combination of managing people, applying technology and setting strategic, tactical and operational goals. Management of the productive resources, the use of orebodies, people, equipment and facilities, will determine the strategic/tactical growth, and thus the SAPMC CA. The drive thus for SAPMC is for greater efficiency, producing ounces at the lowest cost, yet maintaining a balance of effectiveness, doing the right things to create the most value and CA for the company (Chase, *et al*., 2001). The ability of the company to effectively manage learning curves; effective project management and bringing projects to fruition; process analysis and optimization through mining, processing and refining; supply chain management; enterprise resource planning; and theory of constraints will also increase a company's CA. For SAPMC to remain competitive, all their activities must relate to each other, work in unison effectively and efficiently, and support the strategy, while benchmarking themselves against the industry, and ensuring it increases in productivity. The critical element in achieving the above remains the ability of people to effectively implement these factors. Porter (1990) identified four broad attributes within a nation, which shape the environment in which local firms compete, and these promote or impede the creation of CA. These four attributes are: factor endowments; demand conditions; relating and supporting industries; firm strategy, structure and rivalry Hill, (2003). SA is most certainly a nation that has CA, having all four components of the diamond; it exports platinum extensively, and is a classic case of Porter's theory.

Currently SA has both basic components and advanced components:

- *Factor endowments*—a natural resource of platinum, climate, a semi-skilled workforce to work the tabular orebody, sufficiently trained engineers due to mining schools, which have existed due to gold, coal, and diamond mining in the country for many years, the location of the orebody, and the supporting services and infrastructure.
- *Demand conditions*—contrary, though, to Porter's theory, the market demand is not stimulated locally but rather by the northern hemisphere. Local demand is rather the ongoing demand for employment, and an extensive supply of work in the SAPMC. However, while the market demand is from overseas, financial investment by sophisticated and discerning buyers is both local and global, ensuring that SAPMC are compelled to meet high standards and produce innovatively. The investors have been investing in mining for the past 100 years plus, and as a result the local bourse has listings by major mineral resource companies.
- *Presence of suppliers and related industries*—that are internationally competitive, is extensive due to a history of gold mining on the Witwatersrand, base metals mining, and significant diamond and coal mining. The platinum miners can be truly grateful for the existence of the service/supplier support companies, which have greatly assisted the industry. There are extensive national and international research organizations, which have in excess of a hundred years of experience and research to support the SAPMC. The ability to raise finances for the SAPMC is a well established practice, with bankers and analysts well versed in the business of mining. The mining companies are clustered due to their corporate and financial head offices all being in Johannesburg, with the mines being clustered in the Rustenburg, Pholokwane and Burgersfort regions. The geology has dictated that these organizations will be clustered and sharing of knowledge and information does occur, through the various professional bodies, and employees moving between the companies.
- *Firm strategy, structure and rivalry*—the management ideology, and a strong association between domestic rivalries results in an industry CA. These rivalry forces compel the SAPMC to look for ways to improve efficiency, innovate, improve quality, and reduce costs, which inevitably leads to the creation of world-class competition.

The predominance of appointing nonfunctional top management may lead to the demise of the industry, as financial persons show a lack of initiative in improving mining methods, processes and refining. The consistent fixation on maximizing short-term financial returns leads to ineffective engineering solutions, resulting in long-term ineffectiveness and higher costs in the long term. This dominance of financial top management in mining-engineering industries may result in CA being lost in the economy, industry and the SAPMC (Hill, 2003). Of concern is the management ideology—mining companies should really have mining people (mining engineers, geologists, or engineering disciplines) running them, as they are really preoccupied with competing locally and addressing improvements through scientific, engineering and mining solutions.

Porter (1990) refers to two other variables, which stand to improve or detract from the CA/national advantage: chance events, which may totally redefine the platinum industry (for instance if a substitute is found for the use of pgms' in the use of auto catalysts) and government's choice of policies, which may result in positive or negative momentum in the platinum industry.

Change is inevitable in today's world, and the ability of an organization to adapt rapidly will influence the SAPMC as we progress into the future. These companies are going to have to deal with a more diverse multicultural workforce, accelerated learners entering at high levels, enhanced education, and ever present technology, thus changing the way we do our work. Structures will be flatter, wider, and workers will have to be more self managed, work will occur more as teams, economic shocks may become more evident, competition will be ever increasing, and social and political trends will be changing. The SAPMC will require greater proactivity, responding rapidly to market changes, while the workforce will be required to be more flexible and adaptable Robbins, (1998). Thompson and Strickland (2001) describe CA as having an edge over rivals and providing perceived superior value to investors, and this usually means performing value chain activities differently from rivals and building competencies and resource capabilities that are not easily matched. 'Investing aggressively in creating sustainable competitive advantage is a company's single most dependable contributor to above-average profitability' Thompson (2001). The SAPMC have only one choice—as they are all price-takers they must operate at the lowest cost possible to maximize profits. They operate in a market where:

- Buyers are all price sensitive
- There is no differentiation in the platinum
- Platinum is used in the same ways, has the same user requirements
- Buyers can switch at no cost, platinum to palladium
- Platinum is sold on metal exchanges, through contract.

To achieve the lowest cost advantage, they have to be more skilled than their rivals in controlling structural and operational cost drivers. Innovative ways to save costs must be constantly explored; this is achieved by continuous improvement, and imaginatively and persistently driving out cost savings throughout the value chain. The cost leaders are good at finding ways to drive out costs effectively while still maintaining their business sustainability. The companies researched by Collins (2001) significantly outperformed their comparison companies within similar industries in the same time frame, and a reason was sought for this superior performance. Penrose 1995) is searching for something that is inherent in the very nature of any company that either promotes or limits its rate of growth. These publications are exceptionally relevant to the SAPMC, as they are all facing the same challenges, being:

- Competing as investment companies of choice
- Highly dependent on market fundamentals, as they are price-takers.
- Seeking to grow substantially, becoming the preferred platinum company
- Focus on sustainable development.

When one considers the growth strategies of all the SAMPC, and relating it to Penrose, a similarity is noted to the 'pain threshold' a layman's term used in SAPMC to determine which operations will close first should market fundamentals become increasingly negative. The 'pain threshold', refers to benchmarking SAPMC on the industry cost curve. Penrose (1995) refers to growth as nothing more than an increase in the output, and the optimum size of the firm is the lowest point on the average cost curve. Limits to the size of a firm may have various factors, related to pure or monopolistic competition, or to the limitations of management causing increasing long run costs of production, or the market causing decreasing revenue from sales fundamentals, or to uncertainty about future prospects. The notion of the market limiting platinum growth rings true, as the market does govern its possibilities of expansion. Penrose (1995) states you must either have only a socialist state or a true democracy, but you cannot go in between. The greatest economic activity in a democratic country is channelled through companies, thus the better educated your population is, the better your economy will be, and the greater the entrepreneurial skills developed. Reviewing Collins (2001) and Penrose (1995), the following was evident:

- Shareholder wealth was not the sole reason for businesses to exist, or to grow, but rather a substantial mixture of a myriad of factors that, when correctly applied in harmony and balance, generated substantial returns, which outperformed the market index. In G2G (Collins, 2001) there were examples of humility, professional will and integrity, which have resulted in companies significantly outperforming the market
- Companies researched by Collins, never miraculously transformed overnight, rather over 15 years in a consistent, diligently executed process, which required the right people, and the right culture of discipline. Penrose (1995), agrees with the above, where she says that, you cannot grow a company faster than the rate at which you grow the management, and this would imply a process of evolution—as the people within the company grow and evolve, so does the company.
- A substantial success is achieved only by sticking to simple basic concepts and not by attempts to grow the company by lurching in different directions
- People's disciplined consistent approach is essential to success and that breakthrough is not achieved by any magical merger, acquisition, joint venture, or technology. As Collins (2001) mentions, in the route to greatness, you cannot circumvent the build-up, the hard work and pain, and jump straight to breakthrough—it requires diligence, building momentum, having the discipline to stay the course, and make painful and difficult decisions, which eventually results in breakthrough

- One of the primary assumptions of the theory of the growth of firms is that 'history matters'; growth is essentially an evolutionary process and based on the cumulative growth of collective knowledge, in the context of a purposive firm. Penrose, (1995) This same issue of momentum is addressed by Collins as entrepreneurship from 'big ideas by individuals', to a social process of learning within which individual contributions can come from the bottom up, and from specialist staff
- Companies who failed to face the reality, by not interacting with the shop floor, failed in taking the relevant corrective measures, while those who faced reality head on were assisted in determining their core concept for existence, generating significant advantage Collins (2001)
- The hedgehog concept, as named by Collins (2001), included that about which a company could be passionate, the best at, and which made economical sense. 'Stick with what you understand, let your ability and not your ego, determine what you attempt,' says Warren Buffet. Collins (2001)
- For a company to attain this position of generating profits sustainably, requires management to determine its core concept over a few years, as well as the utmost discipline and a severe standard of excellence to consistently practise this simple skill, clarifying the world into a perceived simple, almost boring existence
- The limiting factors of an industry's growth or a company's growth are discussed by Penrose, 1995, as the managerial capabilities, the administrative capabilities/effectiveness, upward sloping cost curves and downward sloping demand curves; and as growth occurs it requires an evolution to deal with the increasing growth. Penrose refers to a managerial company as where the management is concerned with the long-term interests of the company and its purpose, where the shareholders are merely the providers of the capital resource, and shouldy be recompensed only in such a way as to induce investment in the company's shares
- External productive opportunities may be considered for growth, should the productive resources and existing knowledge be used more efficiently. This is not diversification for its own sake, but rather enhancing existing resources for the benefit of all, if, and only if, value can be gained Penrose (1995.
- Technology was part, but it was secondary: 20% of success was new technology, but 80% of their success was in the culture of their company; the primary variable in winning was not the car, but the driver and his team. Technology by itself is never a primary cause of either greatness or decline, but rather technology was an accelerator of momentum, not a creator of it. Collins (2001). Those displaying CA never began transformation with pioneering technology, yet they all became pioneers in the application of technology, generally after they had achieved a breakthrough by first having grasped how it fitted their core, and only if it fitted. They were motivated by a deep creative urge and inner compulsion for sheer unadulterated excellence for its own sake; by contrast, those who perpetuated mediocrity were motivated more by the fear of being left behind.

When considering the SAPMC, shareholders are truly the providers of the capital resource, SA is the supplier of the Platinum resource, and the human resource, which is supplied by the people of SA, belongs to individuals who join together to provide a workforce of around 150 000 people. People will be the determining and overriding factor that will enable a SAPMC to transform, to become a force to be reckoned with. None of the SAPMC are able to physically transform their platinum resources. Rather the people, who are employed through their ingenuity, being the best at what they do, and being passionate about it, will enable one of the SAPMC to really rise above the rest. Collins recommends ensuring that you first employ the right people, people who have a farmworker ethic, leaders who are not celebrities but rather focused on doing what is best for the company, who are humble yet ferocious in their quest, in ensuring their companies become the best at what they do, where profits are not the sole motive, but are rather required for the growth and expansion. This philosophical approach is also addressed by Penrose (1995), where she refers to the culture of the organization in terms of trust, mutual trust, commitment, shared responsibility co-operation, confidence building, and developing a strong social and psychological culture, which are all relied upon for effective internal management, and being more effective than financial/administrative controls.

The essence of the 'Penrose Curve' the company's existing human resources provide both an inducement to expand and a limit to the rate of expansion. Even growth by acquisition, merger or joint venture, does not escape the constraints imposed by the necessity of using inputs from existing managerial resources to maintain the coherence of

SAPMC reported and measured themselves according to the below mentioned factors in their annual presentations, strong on financials and financial indicators

Simple economic measure, cost per ounce	Margins of operations capital expenditure inflation rates	Outlook on: market fundamentals exchange rates	Income statement net profit per
Headline earnings per share Growth strategies Market fundamentals New technology Overview of operations Platinum production Highlights BEE compliance Mining Charter progress	Operating cash flow Drivers of earnings Drivers of costs Safety statistics Programmes and campaigns Productivity improvements Joint ventures Cost cutting Process efficiency	Senior-management Balance sheet LOM profiles Ore reserves Sustainable development Environmental Market developments, Business development Exploration	Benchmarking Focus areas Unit costs CSI Projects Efficiencies China Initiatives

the organization Penrose, (1995). Mistrusting and tightly managing the wrong employees results in immense cost. Rather, by employing self-disciplined people, bureaucracy was minimized and management layers eradicated, creating simple structures, and enabling faster decision making, where people operated entrepreneurially within boundaries. Penrose (1995) further refers to deliberately reducing the administrative structure, in order to bring about an extensive decentralization of responsibility and devolution of authority. Enduring, great companies preserve their core values and purpose, while reviewing their business strategies and operating practices and endlessly adapt to a changing world. Penrose (1995) concludes by saying that enterprising management is one identifiable condition that enables continued sustainable growth—it is not the only element, but it is an essential element, much like eggs in an omelette.

Lessons from industry and company publications

Key drivers in SAPMC economic engines are:

- *Primary factors*—metal prices; exchange rates; marketing and market development; orebody quality; ore reserve management, including exploration; cost efficiency of operations; productivity of employees; attracting, recruiting and retaining the right employees; ability to beat inflation, and generate sustainable operating cash flow
- *Secondary factors*—political stability globally and locally; speculation within markets, money, oil, gold, etc.; education levels of workforce; national pandemics
- *Contributing factors*—historical track record of management to deliver on its obligations and promises; history on paying dividends; ability to reinvest its retained earnings generating further wealth for share holders; ability, and record of generating cost-efficient capital; ability to capture contracts and service them; efficiency and ability to manage cash flow; ability to service debt; grade management of orebody; platinum recovery management, including processing, smelting and refining; sustainability of ore reserves; future earnings/growth; performance culture/discipline; management's rating on sourcing good investments, and bring them to fruition, better than anybody else.

Outcome of fieldwork

A questionnaire based on what would define CA, but based on the fundamentals exercised by G2G companies, was sent out, and interviews done with a range of people within the industry (Collins, 2001). Their commitment to the industry was reflected in that the majority of the people interviewed and employed by the SAPMC, be it directly or indirectly, rated their own experience as having a passion for work, a great experience, being part of something first class, and deriving a tremendous sense of purpose from the inner quest for excellence itself. In totality, three of the four companies featured as doing well and two consistently returned good to excellent results, and this corresponded with the company's performance, and consequently their share prices reflected this as well.

SAPMC understanding of the G2G principles

- The essential is to sweat the assets, achieve maximum effectiveness of the assets, enabling sustainable operating cash flow .
- Growth is important, resulting in investor wealth increasing.
- The integrity of management in keeping promises and delivering consistent results was highly valued by investors, suppliers, managers, socio-economic groups.
- Underpromising and overdelivering, was ranked highly by long-term investors.
- SAPMC were expected to take a decent long-term view, and ensure they deliver against it. Management was perceived as bowing to the analysts and market pressures.
- The platinum market is dominated by the largest player, but this position of dominance is being challenged as the barriers to entry into the market are reducing.
- Extended rand weakness will further reduce the barriers of entry into the market. However, current extended US dollar weakness should remain due to the US twin deficits, the looming pension and social security issues, in terms of the US baby boomers going on pension.
- The business school indoctrination, of vision, values, strategy, and long-term planning as the key to success, are still important from a perspective of ensuring a company's sustainability, but it will not achieve enduring greatness for a compan.
- The right people will make the difference. Enduring companies, ensure that your vision, values, and strategy are implemented by having the right people, who are self- disciplined, and who are passionate about what they do.
- People who generate an extreme discipline of consistently applying the core concept, over and over again. Sticking to their knitting, simplifying the world, understanding it in simple terms, and having the discipline, resolve and courage, no matter what, to continue driving the momentum, which started long before.

Market fundamentals—a way forward

As the platinum price stays above $900 per ounce, greater

The SAPMC were rated by participants as being successful due to the following factors

Size	Marketing strategy	Undiversified investments	Management of stakeholders
Available reserves	Leadership	Cash flow	Technology enhancements in mining, processing and refining
Growth strategy	Cost focus	Years of momentum and knowledge	Right-sizing their organization
Monopolizing the market	Focus on the basics	Successfully transforming into a lean and mean machine	Innovation, ingenuity and simplifying their business
Flat structures	Faster decision making	Reduced bureaucracy	Deep mining
Ability to adapt to change	Surviving at depth	Tenacity	Stable leadership culture

exploration will result in greater reserves becoming available and product substitution by consumers. As demand drops off or supply increases, the protective shell may be removed, and these companies will be called to survive in a different market. Should the platinum price drop back to 2002 levels of $480 per ounce, there may be some severe stress that enters the market. Good indicators to watch have been the gold price and the rand, the platinum price in the 1980–90s has been at least $100, greater than gold, so should gold continue on its current bullish trend, then platinum should logically be in good health and vice versa. Generally the rand and platinum are hedged against each other, and this balance has worked well for the SAPMC. When rand weakness occurred (2000–2002), SAPMC reaped substantial benefits; those who were net exporters of their product, incurred costs on a rand basis and sold their product in US dollar terms. 75%, of the world's reserves of platinum lie in South Africa, should platinum demand stay strong, and supply remain constrained, then buyers of platinum may be forced to bear the rising costs of producers, and instead of being 'price-takers', platinum producers may become 'price makers'. The platinum jewellery market tends to be the 'pressure relief valve', and as soon as platinum prices get excessive, price sensitive demand kicks in. The foundation of the platinum industry remains the legislated autocatalysts in the northern hemisphere, with more countries having to follow suite, due to global warming and the Kyoto agreement.

One big thing for SAPMC to focus on

A myriad of answers were presented, which included: growth strategy, basics of mining, technology and innovation focus, cost control, recruitment and retention of the right people, determining their core business concept and sticking to it, delivering on their promises, remaining undiversified, delayering their steeped structure, sweating their current assets, refraining from focusing on ounces at all costs, and growth at all costs. There were many opinions about what the SAPMC should be doing to improve or sustain their performance. The most important factor for management is: 'finding out what their core business is, allowing it to evolve and then sticking to it with minor adjustments, while refraining from lurching to and fro, at each new market fashion, or analysts demands.'

Core values and purpose of SAPMC

When compared with their global counterparts, SAPMC were generally found wanting and many had actually not considered their core values and purpose beyond simply making money. Many good initiatives exist and are driven into issues like CSI, which has also recently been legislated by the Mining Charter in SA. The work done by these companies in the surrounding communities is noble; however, it seems to be more for the benefit of the business and also some conscience cleansing in the wake of 1994. Greater value may be gained if they dug a little deeper, and considered global issues such as seriously contributing to clean air, and thus vastly improving the lives of millions of city dwellers; in delaying global warming; and saving planet earth, thus contributing to the overall benefit of mankind. Thus the SAPMC have the noble role of contributing to the total benefit of mankind, improving people's lives, and uplifting the communities that surround the SAPMC. The presence of these SAPMC should mean that these areas will be left better off than without their presence, if profit is the primary motive, then we have reached a sorry state of affairs in this unique industry, which has market fundamentals almost unequalled and unrivalled in the world.

G2G areas of improvement in the SAPMC

- Employing the correct people for the industry, and dealing with the wrong people, instead of attempting to performance manage poor performers. Greater attention needs to be paid to people character, work ethic and value systems when employing: 'you train for skill and hire for attitude'. People were perceived to be joining SAPMC due to where the company was going, not because of who was in the team, in contrast to the G2G companies.
- The best people are being placed on the biggest problems and thus good people are not really grown but used as firefighters, and as a consequence the company also does not grow, and fails to produce sustainable results.
- The people's lives were also rated as not very balanced in SAPMC, leading to social complications, poor focus at work, and poor decision making. Balance indicates the company has respect for the employees' rights, thus the company also receives respect back from the employees.
- SAPMC were more concerned with their strategies, vision and values, and less concerned with the people who are expected to execute these strategies; there is a mental understanding of what should be done, but a shortfall in its execution.
- There is an acceptance of mediocrity, which leads to the right people exiting and the wrong people remaining. Lazy people are able to exist in some of the structures, and a culture must be driven where hardworking people thrive.
- Treatment of people is still paternalistic, where they simply do as thay are told, indicating a lack of trust, openness and honesty.
- SAPMC were perceived as being ruthless when dealing with people, and a greater focus is required on being more rigorous, by applying exacting standards across all levels at all times, where the best people need not worry, and only the best make the cut annually, and no poor performers leave without forewarning.
- There remains a lack of proper talent management, as many CEOs and executives are still being appointed from outside the mining/platinum industry; development of internal talent, requires greater focus. Adequately developing and preparing future executives over a long-term period, and talking directly to them about their future, and being direct and playing open cards, will pay dividends, as this shows respect for individuals and they can make the best decisions for their lives, instead of being left to wonder.
- The dominating forces on the boards were not always people of the industry, and this also resulted in short-term focus, where rivalry was based more on financial results rather than best practice, which consequently will lead to better results.
- There are still large divides, between executive and worker perks, thus workers interests are still not really aligned with management and shareholders. Class distinction is still in place, where management preaches productivity but retains perks at the cost of workers' jobs. The majority of SAPMC are still perceived as

existing purely for profits and not for the benefit of the nation, people and employees.

- The core business concept is poorly defined, and requires a lot more attention, so that a deeper understanding by all is gained of what is core and fundamental, incorporating all stakeholders in the SAPMC.
- There is still evidence of steep management structures, extensive head offices, which add little value to the business and industry.
- Openness and frankness remains a major hurdle to most of the companies, where people are fearful to open up and discuss issues of concern to the business. SAPMC are still operating in fear of the leader and most of the executives are rated as high profile, with big personalities and celebrity type people.
- People remain demotivated at the lack of confronting reality and the brutal facts of what is deterring the companies' results. There is evidence, though, that this is changing, and hopefully openness and truth, confronting the brutal facts will become more the order of the day.
- Excessive bureaucracy and red tape exist due to many of the wrong people not being adequately dealt with, resulting in the right people leaving.
- SAPMC battle to instill a culture of discipline, where people with self-discipline make disciplined thoughts, which leads to disciplined actions and consequently disciplined behaviour. A number of the companies were rated as having a tyrant rather than a culture of discipline. The solution is to avoid bureaucracy and rather create a culture of discipline with an ethic of entrepreneurship—resulting in a magical alchemy of superior performance and sustained results.
- Long-range planning is important for sustainability; however, it never gave SAPMC CA. More important is producing results on a daily basis and building its momentum. SAPMC, who have large strategy and planning departments, were not performing any better than those without. It is like water and air: you need it to live, but you won't out compete with it in hand.
- Focusing on what not to do is more important when you have employed the right people; the right people know what to do, and the important issue is not detracting attention from the core business concept.
- SAPMC are spending a lot of effort on motivating, aligning and managing change, due to their having the wrong people, their core business concept not being defined, lurching back and forwards, which requires management's continual attention in keeping the workers on board. A number of productivity programmes were launched, retrenchments and, change agents were used, but failed to produce sustainable results as the core business concept remained undefined. People's jobs and livelihood are continually threatened on the back of productivity improvements.
- SAPMC are found to be seeking that magic wand that will solve all their difficulties of poor management, de-motivated people, bureaucracy, failed projects, and irrelevant technology. Solutions are sought in new executives, management, technology, and business ventures, due to them having failed to simplify their business into a clear crystalline concept. They remain undisciplined, focus in the wrong areas, and do not have the self discipline to stop doing the unrelated. This leads to a loss of momentum and, demotivated people as each new executive brings his own new initiative and momentum is lost, affecting results, and consequently the share price suffers.
- Credit is also not perceived as filtering to the people on the shop floor for the company's' results, the CEO and directorate are often perceived as gaining the credit as well as much higher rewards for the company's' performance.
- Executive compensation, a very sensitive issue, requires attention in comparison to the G2G. Its structure is important, but executive compensation when dealing with the right people for your company, has more to do with attracting and retaining the right people, than it has to do with driving performance.
- SAPMC were found to be enduring, and excellent in terms of being undiversified.
- When one deals with adversity, a blind eye is still turned to reality, ego and the bold vision gete in the way, rather than the rebuilding and redesigning of the company to come out much stronger and more powerful than before.
- Competition is generally viewed as an asset and significant benchmarking does occur, which generates positive rivalry amongst industry participants.
- Continuous improvement as a way of life, while retaining the core, was also a concern. Many of the companies were consistently challenging the status quo, but failing to maintain the core. In long-term SAPMC it is imperative to stay with strategies that drive momentum, and as far as possible avoid major changes in direction.
- Choosing a single denominator to measure the bottom line, which encompasses all factors influencing the viability of the business, and return to shareholders. The denominator intent is purely for the sake of gaining deeper understanding; the denominator should lead to more robust and sustainable economics.

Analysis of research

The purpose of this research was to prove whether there was one fundamental driver of competitive advantage, having completed a literature survey, and fieldwork survey. The fieldwork substantiates the literature survey and the outcome is that the interviews carried out correspond correctly with what the literature proposes. The reasons are as follows: SAPMC who are seen to be practising some or more of the G2G principles, as well as what Penrose proposes have:

- Better consistent financial results
- Better production results
- Better share price performance
- Better share value
- Well-motivated workforces
- Attract and grown talent pools
- Demonstrated when dealing with people, greater rigour generates greater results
- People are the fundamental driver of CA.

Conclusion

SAPMC employ unskilled labour, resulting in a 'have and have nots' syndrome. Illiteracy in SAPMC of 50% of employees is commonplace. In most northern hemisphere countries, especially the West, where the majority of Collins's G2G companies exist, illiteracy is almost unheard of. SA history still affects the working environment, and culturally the SAPMC operate in diverse environments, ranging from distinctly socialistic to democratic. SAPMC labour forces are well-unionized and partake in a tripartite agreement with the SACP and ANC. Historically all these parties tend to be strongly socialist, and believe strongly in the rights of workers, whereas G2G companies operate extensively in the US, where labour laws are not restrictive. SAPMC should therefore drive a win-win-win philosophy in terms of their people, make them win at their careers, the company wins on the back of their performance, and the economy wins twofold;, as people grow, the economy grows, and as the companies performance grows, the economy grows; it is good news all round. The growth of a firm is connected to attempts of a particular group of human beings, the manner in which it is done, the efficiency, and the profits; operating cash flow and the quality of the company are all in the hands of the management and the people who make up the company. Managerial input is critical to growth, but more importantly, 'the right managerial input is key to growth'. The right managerial input will have the passion, the discipline, the energy, a deep understanding, and an attitude to be the best they can be. This results in the company being the best it can be in its simple and clearly defined area. Growth may not always be physical, or market capitalization; it could be in efficiency, in margins, in the company's ability to have the right culture and attitude; it is not purely growth as seen to become the number one in size. The one fundamental underlying issue is passion; it is the key of the Hedgehog concept, and cannot be manufactured. When passion is deep and genuine, it arrives only in one form, in the hearts of the people employed. Management's biggest job is not to kill passion, but rather to focus on finding out what ignites and keep it burning (Collins, 2001).

Defining CA in SAPMC

When a company sustainably manages to outperform industry rivals and the market, and is considered the preferred employer in industry, attracting and retaining the best and right people, then it has managed to achieve competitive advantage.

This may be achieved by the following:

- Having the right people and dealing with the wrong people; ensuring the right people are in the right places, and then only, where you want to take the organization to
- Ensuring that trust prevails, in an environment of openness and frankness
- Ensuring that the message that is conveyed internally to the top is the same message that reaches the market, and that honesty/openness is what the market receives
- A culture of discipline is achieved, not negative but positive, where people are self-disciplined and, take disciplined decisions, which leads to disciplined thought, and consequently results in disciplined behaviour (Collins, 2001).
- Having leaders, who are humble yet ferocious about their task, who are perceived as meek, yet are extremely effective and professional in their task
- Determining the organization's core business concept, and sticking to it consistently
- Core values that go beyond just making money and appeal to the moral values of the nation, and the people employed in the company
- Giving credit to all, for good and bad performance, and sharing in the rewards equally
- The endurance of management, to be disciplined to apply consistently, what you believe will be successful in the end, even when competitors are outpacing you
- Having a rigorous performance culture, where mediocrity is unacceptable, where hardworking people thrive, and company standards are inspired
- Development of talent pools, which results in the internal appoint of executives and CEOs, growing your business on the back of the ambition of your employees
- Having the best people, results in great results for the company, which draws even more great people, who want to be part of a championship team
- Having many self-managed entrepreneurial type people in the organization
- Paying attention to attitude, character, work ethic, and value systems when recruiting
- Having as flat a structure as possible, devoid of class distinctions and hierarchy
- Growing business through the people, and avoiding retrenchments as far as possible
- Having an early warning system, through which employees may express their unhappiness, without any reprisal, and thereby limiting unnecessary staff turnover
- Placing your best people on your biggest opportunity
- Ensuring and actively managing for balance in your employees' lives
- Having a means to minimize the effect of 'celebrity-type leaders', ensuring that the truth, the brutal facts and reality are faced head on, and are not filtered
- Challenging the status quo, but keeping it in line with the core business concept
- Not embarking on too many new strategies, cost-cutting initiatives, productivity campaigns and high profile change agents, but rather a continuous discipline, almost boring approach of slowly, and deliberately sticking to your core business concept
- Build an organization that survives multiple changes, internally and externally
- Ensuring that decisions are made within good time, and are in line with your core business concept; the worst you can do is to make no decisions
- Encourage benchmarking and view competition as an asset
- Use adversity to rebuild and redesign your business into something stronger and more powerful. Adversity is the only measure of your true strength (Winston Churchill).

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