

Analyzing the future of Enterprise Resources Planning Techniques in South African Construction Sector

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Abstract

Enterprise resource planning (ERP) is the assimilated administration of fundamental industry progressions, frequently in material period as well as arbitrated by software and technology. Enterprise Resource Planning (ERP) techniques accomplished very significant character in the last 10 years. However, with the emerging pace of carrying out, it has also remained experimental that growing amount of completing mistakes as well as unreasonable preservations. SME manufacturing is an extraordinary commerce for the fact that large proportion of construction segments it's probable to groups them as small as well as medium sized Enterprise (SMEs). This study measures how related the ERP is to construction industry. It as well approximations a script founded on enterprise data techniques as well as mirror it to ERP via the case revision of segmental household industrialist. Consequently, the concept of Enterprise Resources Planning Techniques, has become buzz word amongst the small and medium enterprises in South African Construction Sectors despite the fact that the concept of ERP is attaining higher level of significant in western countries such as Western countries, Europe due to its ability of smoothing the business, in Africa, particularly in South Africa the integration and adoption of ERP in SMEs is facing several challenges. Consequently, the purpose of this article is to theoretically assess, the status quo of ERP implementation in small and medium enterprise.

Keywords

Small and Medium Size Enterprise; Enterprise Resources Planning, Construction Sector

1. Introduction

In 2008, the DTI issued a wide-ranging report on the Small, Medium as well as Micro Businesses (SMME) sector of South Africa (The DTI, 2005). As monetary state change over period as well as amend to innovative surroundings, so likewise the SMME setting in South Africa. This supremacy be particularly true specified the major profitable events of the last eight years. More or less of these events include the worldwide monetary crisis of 2008 as well as 2009, as well as a new administration in state (President Zuma vs. former President Mbeki). Likewise a full cycle of interest rates (from a compression to an accommodative cycle), as well as the peak of the commodity super cycle.

With these changes in mind, it remains reasonable to assume that the SMMEs in South Africa have adapted themselves to the new circumstances. The aim of this report remains to identify the current situation of SMMEs in South Africa, as well as to compare this through their condition in 2008. From these period-contrasts some tendencies materialize. Booyens, I. (2011). This capital note starts off with a tiny impression of the current writings on SMMEs in South Africa, with a focus on the DTI account. Then we present the methodology rummage-sale to derive a substitution for the number of SMMEs in the state. This section remains followed by the relevant data, which remains acquirable in

boards as well as graphs as stated by two chief subjects. The first topic deals with demographic as well as geographic properties of SMMEs SME South Africa. (2015).

It derives data from the Quarterly Labour Force Assessment (QLFS), as issued by Statistics South Africa (StatsSA). Here we focus on the distribution of SMMEs by province, race, revenue groups as well as profitable sectors. The second main topic emphasizes on the monetary indicators of SMMEs. It remains based on the Quarterly Monetary Assessment (QFS) of Stats SA, as well as the attention remains on the aggregate income declaration of corporations. Meanwhile we cover extensive range of pointers on SMMEs, we mostly present only tables as well as charts of the data, with incomplete remark as well as analysis. The aim remains to offer future capitalization with the records they require to do additional in penetration analysis of precise topics concerning SMMEs. Financial Services Regulatory Task Group. (2007)

SME in South Africa's complete description is any establishment with one or more of the subsequent features: Less than 200 workforces. Yearly revenue of less than R64 million. Wealth possessions of less than R10 million. The National Small Business Amendment Act (26 of 2003). Watson, L., & Netswera, G. (2009). Feature of construction productivity are long-lasting yield such as household, structure, highway, etc big and weighty units, exclusive, immovable, multifaceted progression, as well as exclusive. Construction commerce is wealth properties industry. It as well necessitates additional businesses to upkeep them and donates gross domestic product

2. Literature review

South Africa stands emerging reckless, however inappropriately, not everybody in the construction productiveness remains entertained. In specific, South Africa's construction and engineering subdivision is in a bad sequence, with a catalogue interchange at 69% lesser than in 2009. Booyens, I. (2011). despite all the programs put in place by government to assist the constructions companies to be sustainable, and continue to operate efficiently and effectively, their performance still relies with individual companies. We stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another. The client simply requires on-time delivery of work, high quality of work, accurate reporting and systematic activities that suit today's way of operating. Stahl (1994), Construction companies in South Africa is contributing significantly towards the economy, this SME often experience issues of performance in adherence to schedule, delivering quality of work and reliability. Mainly this is caused by lack of systems to manage and improve business processes to be efficient and effective. ERP systems are said to be techniques are bundled that backup most progressions association, such as profitable, logistics, human resource administration, as well as industrialized, however implementing this Systems it's a challenge to most construction companies.

J. Wells (1985) This is disturbing bulletin, assumed exactly how critical the construction business is to South Africa's budget. It donates a great portion of GNP, show business a main part in expansion and contributes significantly to the country's GDP. Formerly there's the labour trade to contemplate – as of Stats SA, the South African construction segment hires extra than 1.4 million to general public Financial Services Regulatory Task Group. (2007) On the optimistic side, at hand is approximately anticipated on the prospect. Superior suppliers have propelled talents development arrangements to encounter talents difficulties, as well as they're being bumped by state to be in partnership with their Presidential Infrastructure Organizing Commission to organize as well as growth their working out determinations. The intensification in community substructure employ by state, together with investment in accommodation, institutes as well as the structure of transportations takes along round about confidence for proximate upcoming effort in South Africa. Stahl (1994), mentioned that Others stand observing further than the local trade, to architecture as well as configuration instances on the recreation of the continent as well as in Australasia, to produce in returns. There is increasing request for structure as well as amenities in Africa, as well as domestic construction corporations remain instructed to emphasis on intra-African market as well as disseminate linked occasions. The government's National Development Strategy embraces potential for forthcoming development, as well as at hand remain as well optimistic upcoming highlights, like the Commonwealth Sports programs for 2022, which will need a mass of assignments. Individuals in construction must concoct to accomplish their short-term liquidity matters in mandate to proceeds on such assignments to encounter South Africa's growth stresses.

2.1 Small business key to job creation

Small, Medium as well as Micro Businesses (SMMEs), likewise denoted to as Small business, play an vital role in an monetary state. They can be key drivers of profitable increase, invention as well as job creation. In South Africa, state identifies the prominence of this subdivision of business activity, so abundant so that a new Ministry of Small Business Expanding was started in early 2014. The aim of the Ministry remains to enable the elevation as well as Expanding of Small businesses. Berry, A. e. (2002). These businesses underwrite meaningfully to nationwide GDP as well as have shown to be main donors to job formation (The DTI, 2005). South Africa fights with an disturbingly high nationwide unlabored engagement rate of 25% (Statistics South Africa, Quarter 2: 2015), which remains moderately aggravated by a continuing scarcity of capable labour. In contradiction of these conditions, state remains directing to put policies, approaches as well as databases in place which purpose to create a permitting surrounding for Small business.

2.2 The range in size remains very wide

The classification for SMMEs incorporates a very wide-ranging range of corporations, some of which comprises authoritatively registered, in official as well as non-VAT enumerated associations (The DTI, 2008). Small businesses collection from medium-sized businesses, such as acknowledged outdated family businesses labour hiring more than hundred individuals, to in official micro-businesses. The former contains survivalist self-labour hired persons from the deprived strata of the inhabitants. The greater end of the variety remains as respectable as to the Small- as well as medium-sized businesses (SME) section originate in expanded states. In South Africa, a outsized mainstream of SMMEs are focused on the very bottommost end, where survivalist corporations originate (Berry, 2002). These corporations can of inherit highway trading businesses, courtyard industrialized as well as amenities, as well as infrequent home-based sunset professions. The in official sector encompasses practically completely of SMMEs; those confidential as survival entities have exact little increase probable as well as are less likely to hire staff (The DTI, 2008).

2.3 Policy Development

State policy on South African SMME Expanding was originally documented in the 1995 White Article on SMME Expanding. The Assimilated Small Business Expanding Approach providing an achievement plan with attention on: 1) increasing monetary as well as non-monetary support, 2) generating a petition for the products as well as services provided by the SMMEs as well as 3) decreasing governing constraints (The DTI, 2008). In line with this accomplishment plan, the state established a number of foundations which would be accountable for the execution of Small business Expanding approach (GEM, 2014) & (The DTI, 2008).

2.4 Responsible institutions

The Small Enterprise Expanding Agency (SEDA) remains an intervention of the Subdivision of Small Business Expanding. It was recognized in December 2004, over and done with the Nationwide Small Business Amendment Act (Act 29 of 2004). It remains to complete administration's Small business approach, design as well as execute a standard as well as mutual nationwide transport system for Small enterprise expanding, as well as assimilate state funded Small enterprise sustenance interventions across entire tiers of government. Ofori (1990), understood The Small Enterprise Give funds Agency (SEFA) was complex with the South African Micro-Give funds Apex Fund (SAMAF) as well as Khula Enterprise Give funds Limited, to provide for Small businesses requiring backing up to a perimeter of R3 million. SEFA proposals bridging give funds, circling loans, duration loans, as set give funds as well as funds salaried capital requires. The Nationwide Youth Expanding Agency (NYDA) was molded with the determination of support young South Africans among the ages of 14 as well as 35 years to shock businesses as well as to give funds present businesses. In mandate to warrant as well as sustenance technological revolution, as well as to increase the international driven of South African businesses, the Department of Science as well as Technology established the Technology as well as Invention Agency (TIA). The development of the TIA was concluded a union of seven entities which were formerly tasked to do the same. Lastly, the Nationwide Employment Fund (NEF) was originated with the purpose of present monetary as well as non-monetary funding to non-attendance supremacy businesses.

3. Gap Analysis

To begin with the critical assessment analysis of the existing literature review of the existing studies, the ICIS I web of science data base was used with Enterprise Resources Planning was used as key words. The time frame was from

2000 to 2017. The search only focused on the peer reviewed articles published in English, falling in certain subject areas. The search resulted in 400 documents which were toughly assessed and selected by means of title, and abstract with the purpose of developing additional boundaries, and eliminating incorrect or unrelated entries. (Screening phase). Throughout this phase, groups of inclusions and segregation standard standards were established against which individually every single journal article was evaluated. Precisely articles assessed are those, which focused on ERP implementation in SME. It should be pointed out that studies that did not meet these requirements were not taken into account. At this stage, produced 180 studies focusing of ERP implementation in manufacturing, FMCG, Construction, Computer, and services industries. These studies were labelled on the basis of set standards, for example in this paper the studies that were assessed were selected based on the citation. To this end, the table below shows the 15 based studies that were critically analyzed.

Authors		Sectors /Industry					Classification				
		Manufacturing	FMCG	Constructions	Computer	Services	State	Corporation Size		Research Methodology	
								Large scale	SME	Qualitative	Quantitative
01	Mustafa Aġaoġlu	x					Turkey	x			x
02	Huseyin Selcuk Kilic	x					Turkey		x		x
03	Uchitha Jayawickrama				x		United Kingdoms	x		x	
04	Pedro Ruivoa	x					Lund, Sweden		x		x
05	Kees Boersma	x					Netherlands	x		x	
06	Abhijit N Bhirud			x			India		x		x
07	Amgad Badewi	x					United Kingdoms		x	x	
08	Dr. Ziad Moh'd		x				Jordan	x			x
09	Imran Mahmud	x					Bangladesh	x			x
10	Noorliza Karia					x	Malaysia	x		x	
11	Haruna Jinno	x					Japan	x			x
12	Jose V. Gavidia					x	South Carolina, USA	x		x	
13	Caetano Haberli Jr		x				Midwest of Brazil	x		x	
14	Kalinga Jagoda	x					Australia	x		x	
15	BooYoung Chung			x					x		x

4. Conclusion

The aim of this research was to explore the Analyzing the future of Enterprise Resources Planning Techniques in South African Construction Sector, with the view of unpacking the issues to the owners for them to make sound decisions to improve their processes in order to meet their customer's requirements. Despite all the programs put in place by government to assist the constructions companies to be sustainable, and continue to operate efficiently and effectively, their performance still relies with individual companies. We stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another. The client simply requires on-time delivery of work, high quality of work, accurate reporting and systematic activities that suit today's way of operating.

Construction companies in South Africa is contributing significantly towards the economy, this SME often experience issues of performance in adherence to schedule, delivering quality of work and reliability. Mainly this is caused by lack of systems to manage and improve business processes to be effective and effective. ERP systems are said to be techniques are bundled that backup most progressions association, such as profitable, logistics, human resource administration, as well as industrialized, however implementing this Systems it's a challenge to most construction companies. Founded on the information, the script founded technique looks as feasible substitute to ERP for the construction sector. Although a number of studies have been conducted over the past two decade in order to address these issues, but there is still a gap in the current literature review, therefore the aim of this paper was to theoretically assess, the status quo of ERP implementation in small and medium enterprise. The results of critical analysis of the current literature clearly demonstrate that there are gaps related to lack of exploring the SME

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