

model developed for simulation, will impact all aspects of the subsequent simulation study such as the simulation model development speed, the validity of the model, the experimentation and the confidence based in the model and future reusability of the models. Having an input conceptual model based on theory, as the ψ -theory DEMO is based on, and having the models transformed into an exchangeable format (XML), lays down a profound opportunity for generating simulation models that can be automatically analyzed. Furthermore the XML format is simulation environment independent, which allows the simulation models to be generated using any simulation environments or tools. Although the simulation is not discussed in details in this paper, it opens up a potential future research, which will be investigated by the authors.

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Enterprise Architecture for Small and Medium Enterprise Growth

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Abstract. A key constraint for growing small and medium enterprises (SMEs) is the business skills required to grow the enterprises through the stages of transformation. Criticism against growth stage models for SMEs is of concern, since these models contain the typical knowledge that appeals to managers of small enterprises as guidance in how to manage growth. In this article we propose the SMEAG model to explore the relevance of enterprise architecture (EA) for enhancing existing growth stage models in order to counteract some of this criticism. EA is well-known as a field that claims to manage change and complexity. The rationale to combine the concepts of growth stage models and EA is based on the level of change and complexity associated with the growth of small enterprises into medium enterprises. SMEAG combines the existing growth stage model of Scott and Bruce, the Enterprise Architecture Framework by Hoogervorst, and the EA as Foundation for Business Execution Model by Ross, Weill and Robertson.

Keywords: Enterprise architecture, small and medium enterprises, growth stage models.

1 Introduction

Growing small enterprises to become medium enterprises, with the objective of job creation in South Africa, is a top priority [5]. However, a key constraint is the business skills required to grow the small enterprises through the various stages of transformation. This lack of business skills as constraint is confirmed from a global perspective by Jones [7: p. 1] in his statement "it is recommended that training be provided for all SME entrepreneurs to prepare them for the road ahead and the challenges and crisis that they will inevitably meet along the way". Hanks, Watson et al. [4] also refer to the lack of business skills, although phrased slightly differently: "pilot an organization through the growth process represents a formidable managerial challenge".

The initial assumption may be that there are consolidated growth stage models available for small and medium enterprises (SMEs) to address this lack of business

skills. However in a review of relevant material [2, 4, 7, 9-10, 12] there is evidence that this assumption may be questionable, specifically due to the status of such growth stage models for SMEs. In their review of research on small firm growth Davidsson, Achtenhagen and Naldi [2] define growth stage models as a description of the distinct stages of SME growth and the set of typical problems and organizational responses associated with each stage. They noted that authors of review articles on growth stage models for SMEs agree that it is not easy to extract a coherent picture from research, but the inherent complexity of the phenomenon is at least acknowledged. One of the critiques is that the growth stage models tend to assume all SMEs pass inexorably through each stage. A second critique is that growth stage models of SMEs are not sufficiently supported by empirical observation.

This criticism of growth stage models is of concern since these models typically contain the knowledge that appeals to managers of small enterprises [2, 9].

Enterprise architecture (EA) is widely claimed to be an approach to manage change and complexity [6, 18]. EA not only constitutes a baseline for managing change, but also provides the mechanism by which the reality of the enterprise and its systems can be aligned with management intentions [16]. We argue that EA can contribute towards a solution to the criticism against growth stage models that a small enterprise may not pass through all stages of transformation.

This paper explores using EA to enhance existing SME growth stage models with the objective to provide guidance for SME managers during the transformation process from being a small enterprise to becoming a medium enterprise. The rationale to combine the concepts of growth stage models and EA is based on the level of change and complexity associated with the growth of small enterprises into medium enterprises.

The output of this research is the proposed 'SME EA growth' (SMEAG) model. Experience in industry assisted with developing the SMEAG model through combining theories from the SME growth stage models and EA domains. The SMEAG model is derived by combining the existing growth stage model of Scott and Bruce [14], the Enterprise Architecture Framework by Hoogervorst [6] and the EA as Foundation for Business Execution Model discussed by Ross, Weill and Robertson [13]. The SMEAG model allows for judicious selection of appropriate states and transition during the SME growth process. The proposed SMEAG model is illustrated, using as case study, the operating model of an SME that is in the transformation phase from being a small to becoming a medium enterprise.

The value contribution of the SMEAG model can be summarised as the enrichment of the existing SME growth stage model concept with the following three concepts from the EA domain:

- Replacing the stage concept with a current to future state transition approach.
- The Hoogervorst Enterprise Architecture Framework [6] to indicate the areas of concern, design domains and the architecture principles and standards.
- The Foundation for Business Execution Model [13] to identify the operating model and the level of standardisation and integration required.

The SMEAG model is developed keeping the constraint of resource poverty in the SME world in mind.

Section 2 describes the background by examining the domains of SMEs, growth stage models and enterprise architecture. The proposed SMEAG model is presented in section 3. Section 4 illustrates the application of the SMEAG model in a case study and discusses the value of SMEAG model in the context of this case study. Section 5 concludes with a reference to future research.

2 Background

This section provides the background and the motivation for the research by introducing the relevant domains, namely SMEs, growth stage models and enterprise architecture.

2.1 Small and Medium Enterprises (SMEs)

In order to better comprehend the problem domain, it is necessary to understand the nature of SMEs compared to their larger counterparts. Several factors can play a role, namely:

- The role of SMEs as part of the global and the local (in our case South African) economies. According to Cassell, Nadin et al. [1] approximately 99% of all firms in the EU are SMEs, which employ about 65 million people in total. Globally SMEs account for 99% of business and 40% to 50% of gross domestic product (GDP).
- The reality of resource poverty in the SME world. Welsh and White [15] argued that the very size of a small business creates a special condition, referred to as resource poverty, distinguishing them from their larger counterparts and which requires different management approaches than that followed by larger business.
- Only a small percentage of SME owners envision growing from a small to a medium enterprise. Several studies have shown that across countries, SME growth is not the norm [2]. Most firms start small, live small and die small, and most business founders have modest growth aspirations for their firms. According to Jones [7] the average life cycle of SME's is in the region of five years or less.

The Global Entrepreneurship Monitor (GEM) report [5] identified the need in South Africa to assist small enterprises to grow into medium enterprises and in doing so to stimulate job creation. The GEM research program was initiated in 1997 as a joint venture between academics at London Business School and Babson College in the United States. GEM has grown to a consortium of 64 national teams and is regarded as one of the most important longitudinal studies of entrepreneurship in the world.

From the GEM perspective [5], a number of statistics and statements relevant to SMEs in South Africa can be listed to provide a better understanding of the cause of the problem addressed in this paper. Of the 2.4 million registered companies in South Africa in 2009, 2.2 million were SMEs. SMEs thus play an important part in the economy. Only a small fraction of firms (3.9%) in the start-up phase employ any staff, and only a tiny fraction (<3%) of necessity-oriented businesses create six or

more jobs. The GEM Report also mentioned that formal business require training in skills, such as how to keep records, budget, manage cash flow, maximize trade credit and write a business plan.

2.2 SME Growth Stage Models

Growth stage models are important for SMEs in order to understand, manage and predict problems that might arise during growing the business. The question is whether growth stage models can successfully assist the SME manager that wants to transform the small enterprise in to a medium enterprise.

Both Davidsson et al. [2] and McMahan [9] did comprehensive reviews of literature related to SME growth stage models. According to Davidsson et al. [2], studies of small firm growth are no longer in short supply, but it does not necessarily imply that everything is known about small firm growth. All of the authors of the articles they reviewed commented on the lack of a coherent picture portrayed by reference material. However, there is no evidence in the literature that this identified lack of material is currently addressed by researchers. This is unfortunate because growth stage models represent the type of knowledge small firm managers typically require.

Both Davidsson et al. [2] and McMahan [9] refer to the seminal book by Penrose [11] explaining the two different connotations of growth, namely the amount of growth versus the process of growth. SME growth stage models are related to the process of growth. SME growth is viewed as a series of phases or stages of development through which the business may pass during an enterprise life-cycle.

Massey, Lewis et al. [8] confirmed that the life cycle phenomenon has been found meaningful by SME owner managers. A comprehensive comparison of ten life-cycle models, with particular focus on the life cycle stages and the organizational dimensions used to describe them, is reported in Hanks et al. [4].

All the reviews [2, 4, 8-9] mentioned the justified criticism regarding over-determinism, questionable empirical support and that the stage models tend to assume all SMEs pass through each phase of a growth stage model.

Various models have been proposed specifically addressing the criticism regarding the sequential stages. As an example, Perenyi, Selvarajah et al. [12] proposes a conceptual model with the focus on the transitions between the life cycle stages. These transitions can indicate the development of SMEs, without constraining the model by imposing the sequential nature of the stages. In Hanks et al. [4] it is proposed that each life-cycle stage consists of a unique configuration of variables related to organization context and structure.

The SME growth stage models that focus on generic problems organizations may encounter during growth is, however, valuable for the definition of SME operating models and assisting SME managers to make important decisions [7]. The model by Greiner [3] makes entrepreneurs aware of possible crises and solutions as part of the transformation through the different stages. The model by Scott and Bruce [14], the five stages of which is illustrated in Fig. 1, is based on the model by Greiner.

	Stage 1 Inception	Stage 2 Survival	Stage 3 Growth	Stage 4 Expansion	Stage 5 Maturity
State of Industry	Emerging, fragmented	Emerging, fragmented	Growth, some larger competitors, new entries	Growth, shakeout	Growth/shakeout or mature/declining
Key Issues	Obtaining customers, economic production	Revenues and expenses	Managed growth, ensuring resources	Financial growth, maintaining control	Expense control, pro-ductivity, niche market-ing if industry declining
Top Management Role	Direct supervision	Supervised supervision	Delegation, co-ordination	Decentraliza-tion	Decentraliza-tion
Management Style	Entrepreneurial, individualistic	Entrepreneurial, administrative	Entrepreneurial, coordinate	Professional, administrative	Watchdog
Organization Structure	Unstructured	Simple	Functional, centralized	Functional, decentralized	Decentralized functional/product
Product and Market Research	None	Little	Some new product development	New product, innovation, market re-search	Production innovation
Systems and Controls	Simple book-keeping, eyeball control	Simple book-keeping, personal control	Accounting systems, simple control reports	Budgeting systems, monthly sales and produc-tion reports, delegated control	Formal con-trol, systems management by objectives
Major Source of Finance	Owners, friends and relatives, suppliers leasing	Owners, suppliers, banks	Banks, new partners, retained earn-ings	Retained earnings, new partners, secured long-term debt	Retained earnings, long-term debt
Cash Generation	Negative	Negative / breakeven	Positive but reinvested	Positive with small dividend	Cash genera-tor, higher dividend
Major Investments	Plant and equipment	Working capital	Working capital, extended plant	New operating units	Maintenance of plant and market posi-tion
Product-market	Single line and limited channels and market	Single line and market but increasing scale and channels	Broadened but limited line, single market, multi-ple channels	Extended range, in-creased mar-kets and channels	Contained lines. Multiple markets and channels

Fig. 1. Scott and Bruce SME Growth Model [14]

In the Scott and Bruce model the different criteria, such as stage of the industry, key issues, etc., are presented related to each stage, from the inception stage through to the maturity stage. For example, in the first stage, *inception*, the key issues are that of obtaining customers and economic production, which change in the *maturity* stage to that of expense control, productivity, and niche marketing if the industry is declining.

2.3 Enterprise Architecture

Section 2.1 confirmed the importance of SMEs to contribute to job creation considering the large number of SMEs that is part of the economy. Three of the challenges derived from the discussion in section 2.1 are the phenomenon of resource poverty, the small number of SMEs that are interested in growth to become a medium enterprise, and lack of skills of SME managers to transform a small enterprise into a medium enterprise.

The question is whether growth stage models can successfully assist the SME manager that wants to transform the small enterprise to a medium enterprise. Section 2.2 mentioned that growth stage models are criticized. One of the key reasons for this criticism is that all the enterprises do not pass through all the stages in a specific sequence following all the stage criteria for a specific stage. It was also noted that the transformation from a small to medium enterprise is complex with high change impact.

From the perspective of change and complexity EA is considered as a discipline that could contribute to the solution to assist the SME management during the growth of a small enterprise. Investigating the relevance of EA to complement growth stage models is therefore relevant.

The four EA concepts that are specifically considered as part of the development of the SMEAG model are briefly presented in the remainder of this section, namely:

- The relevance of EA considering the change and complexity associated with SME growth.
- The introduction of the state transition approach versus a stage based approach.
- The Hoogervorst EA Framework [6].
- The Foundation for Business Execution Model [13].

The Hoogervorst EA Framework [6] is defined as the expression of aspects (areas of concern and design domains) that are considered relevant and must be addressed by the architecture to be defined. EA is defined as a coherent and consistent set of principles and standards that guides enterprise design [6].

Hoogervorst [6] states that enterprise engineering enables enterprise change and adaptation, with EA providing the guidance for the design in order for the enterprise to operate as a unified and integrated whole. Zachman [17] also discussed EA as an approach to manage change and complexity by emphasising the state transition concept of the change from a current state (as-is) to a future state (to-be) perspective.

Ross et al. [13] proposed the Foundation for Business Execution Model where enterprises have to define their operating model and define the processes and infrastructure critical to their operations (i.e. their EAs). The model describes how an enterprise can thrive and grow. In order to grow you need to understand the relevance of process standardization and process integration as part of the transformation process. Process

standardization delivers efficiency and predictability across the company and integration links the efforts of organizational units through shared data.

The operating model determines the level of standardization and integration required. Four different types of operating models are described [13], namely diversification (low standardization and low integration), coordination (low standardization and high integration), unification (high standardization and high integration) and replication (high standardization and low integration). For each of the operating models a core diagram is proposed [13]. Fig. 2, for example, presents the proposed *replication* core diagram. When designing a *replication* core diagram, one starts with the identification of the key processes to be standardized and replicated across the business units. The next step is to identify the technologies automating those key processes. It is not necessary to include the data and customers as part of the core diagram as integration is not a requirement to support growth as part of the replication operating model.

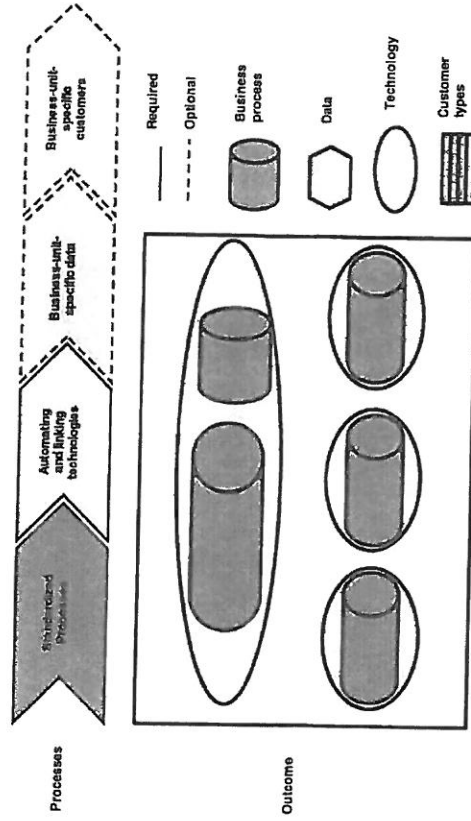


Fig. 2. Replication core diagram (adapted from Ross et al. [13])

3 The Proposed SMEAG Model

In this section we propose the SMEAG model, where the objective is to provide a model for SME managers that are involved with the transformation of a small enterprise into a medium enterprise to assist them during the growth process. The abbreviation SMEAG evolved from the different concepts included in the proposed model, namely *Small Medium Enterprise + Enterprise Architecture + Growth*.

The SMEAG model is an enhancement of the Scott and Bruce growth stage model [14] incorporating:

- the EA principle of a current and a future state,
- the Hoogervorst EA framework [6] concept describing the areas of concern, the domain and the enterprise architecture principles and standards, and

- the operating model and core diagram concepts from the Foundation for Execution model of Ross et al. [13].

The growth stage model by Scott and Bruce [14] was selected since it highlights the typical decision making points in the transformation from a small to medium enterprise.

The Scott and Bruce growth stage model (Fig. 1) was adapted not to pass through the stages sequentially and phase by phase, but rather based on the identification of the current state to the future state concept advocated by EA.

The Hoogervorst EA framework [6] was selected to incorporate EA concepts including the areas of concern, EA design domains and the EA principles and standards. The Foundation for Business Execution Model [13] was selected as EA model for inclusion in the SMEAG model to support the applicable operating model. It is the potential value of the operating model to address growth that makes this model applicable to the SME manager. Not only will it position the importance of the selection of an appropriate operating model, but also the level of process standardization and process integration required to support the growth based on the operating model. The SMEAG model, as illustrated in Fig. 3, consists of three components:

- The SMEAG Fact Sheet.
- The SMEAG Work Sheet.
- The Operating Model Core Diagram.

These components are described in more detail in the following three sub-sections.

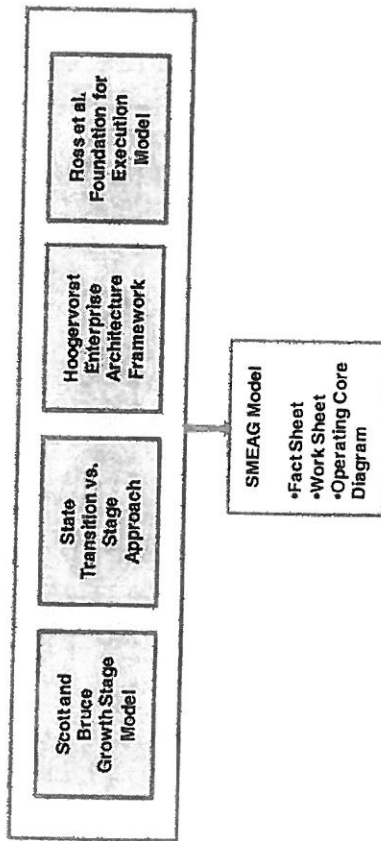


Fig. 3. SMEAG Model

3.1 The SMEAG Fact Sheet

The SMEAG Fact Sheet is a generic accelerator using EA to enhance the SME growth stage models that is pre-populated and available as accelerator for the SME management.

There are two aspects that relates to the SMEAG Fact Sheet. The first is the structure, referring to the relationships between the *Area of Concern*, the typical options to

consider describing the *State*, the *Design Domain* and the *Architecture Principles and Standards*. This generic structure is derived from the Scott and Bruce Growth Stage Model [14] (Fig. 1) and the Hoogervorst Framework [6].

The second aspect is the content of the SMEAG Fact Sheet, as illustrated with examples in Fig. 4. The first row, *Organization Structure*, has its origin in the Scott and Bruce growth stage model [14], and the second row, *Operating Model* is a contribution from the Foundation for Business Execution Model [13]. The *Area of Concern* is identified from either a growth stage model or an EA model. The various *States* are identified from the various sources and then the *Design Domain* is allocated with guidance from Hoogervorst [6]. The *Architecture Principles and Standards* are either sourced from EA models or developed by EA experts. The preparation of the SMEAG Fact Sheet is not merely a 'concatenation' of the various sources, but rather an analysis, contextualisation and alignment of the information from the various sources.

Area of Concern	State Options	Design Domain	Architecture Principles and Standards
Organization Structure	Unstructured Simple Functional centralized Product/... decentralized	Organization	* Grouping of activities (units) must create minimized cross-boundary relationships. * Process design must address delegation of coordination activities explicitly. * Collaboration services must be made available.
Operating Model	Diversification Co-ordination Replication Unification	Technology	* Key processes to be standardised. * Multiple customer interaction channels must operate transparently (inter functionally) * Informational data may have only one authorizing source. * Customer data must be available from one unified source. * Redundant data entry about the same data is not allowed.

Fig. 4. SMEAG Fact Sheet

3.2 The SMEAG Work Sheet

The second component of the SMEAG model is the SMEAG Work Sheet. In contrast with the SMEAG Fact Sheet the SMEAG Work Sheet is dependent on the input of the SMEAG management to complete the following four steps:

- The review and extension of the SMEAG Fact Sheet with SME specific 'areas of concern', if available.
- The selection of the 'areas of concern' from the SMEAG Fact Sheet applicable to the SME.
- The identification of the current state per area of concern from the SMEAG Fact Sheet, as well as the future state if relevant.

4. To determine the actions required for the transition from the current state to the future state.

The SMEAG Work Sheet is an input for the business plan prepared by the SME management for each financial year. An example of a Work Sheet is illustrated in Fig. 7 when we discuss the case study.

3.3 The SMEAG Operating Core Diagram

The third component of the SMEAG model is the Operating Model Core Diagram to guide the SME manager through the standardization and integration of processes and identification of the enabling technology. This step involves the incorporation of the Foundation for Business Execution Model [13]. At this stage it is necessary to confirm the operating model for growth (diversification vs. coordination vs. unification vs. replication.)

4 Case Study

This section illustrates the use of SMEAG using a case study. Section 4.1 provides the case study background. Section 4.2 highlights the stage vs. state problem and section 4.3 applies SMEAG.

4.1 Case Study Background

The case study is based on an SME that is growing from a small enterprise into a medium enterprise. The nature of the underlying business conducted by the small enterprise is that of a 'consulting practice' with a narrowly defined service range. The number of full time employees is around 35 and the number of sub contractors varies between 10 and 20.

The SME's management wants to understand the areas of concern and wish to identify the initiatives to be included in the business plan to manage the growth from a small to medium enterprise deliberately.

During 2010 the SME developed an operating model with one of the objectives the growth of the enterprise from a small into a medium enterprise. The growth model for 2011 is based on the replication of new pipelines and, although not clearly stated as part of the 2010 operating model, the *replication model* [13] was found a good fit to describe the growth model. A brief overview of the 2010 operating model of the SME is included in Fig. 5.

4.2 Stage vs. State Problem Confirmation

The SME's initial problem was that it was not possible to determine the current and future 'stage' of the SME using growth stage models as guideline.

Using the 2010 operating model (Fig. 5), the current and future states of the SME were mapped according to the Scott and Bruce model (the model is illustrated in Fig. 1). The outcome of the current and future states mapping for the case study SME is illustrated in Fig. 6. The current state varies between Stage 2 and Stage 4, and the

Focus Area	Current State	Future State
Ownership: Legal structure	One registered entity	No change
Ownership: Shareholding	Current shareholding weighted towards non managerial interest.	Restructuring of shares into individual management as opposed to investment hands.
Cash generating capability	Solid	No change
Operating Model	Although different "markets" exist within the definition of the current business focus the business runs as one consolidated whole	The end-state envisages the dismantling and restructuring of the entire organization so as to: Stabilize end state revenue. Refocus the business mix so as to achieve higher margins. Maintaining overheads. Changing financial reporting.
Operating Model: Dividend Policy	No defined dividend policy.	Dividend policy in conjunction with risk and performance management system.
Operating Model: Business Definition	Company plays in the bottom segment and margins are at the lower level of the possible range.	The end-state envisages a drift to higher margin business within the current business definition and a diversification into "efficiency" originated process work.
Operating Model: Performance Management	The organization design (and the financial support system) is not geared to report on divisional /project profitability.	A performance management system based on consistency of rewards versus roles and a clearly articulated and motivational reward system.
Risk Management	Retention of cash and a mixed of permanent and variable resources.	Limitation of current model turnover. A mix of fixed versus variable resources. Retention of cash.
Risk: Contingent liabilities of area of future financial risk	None	No change
Organizational Structures: Corporate Governance	Multitude of roles played by certain individuals.	A more formalized governance structure.

Fig. 5. 2010 Operating model of SME to be used as case study

future state between Stage 3 and Stage 5 of the Scott and Bruce model. For four of the criteria there is no difference between the current and future states.

This mapping illustrates why the SME had a problem to determine its current and future 'stage' according to the guidelines of growth stage models. The mapping illustrates that an enterprise is not necessarily in the same stage for all criteria when growing, i.e. an SME does not necessarily progress sequentially and simultaneously through all the criteria of a stage. The enterprise thus may not gain any value by moving automatically to the next stage for of all the criteria, as proposed by growth stage models.

The proposed SMEAG model, suggesting a possible way to address this problem, was next applied to the case study.

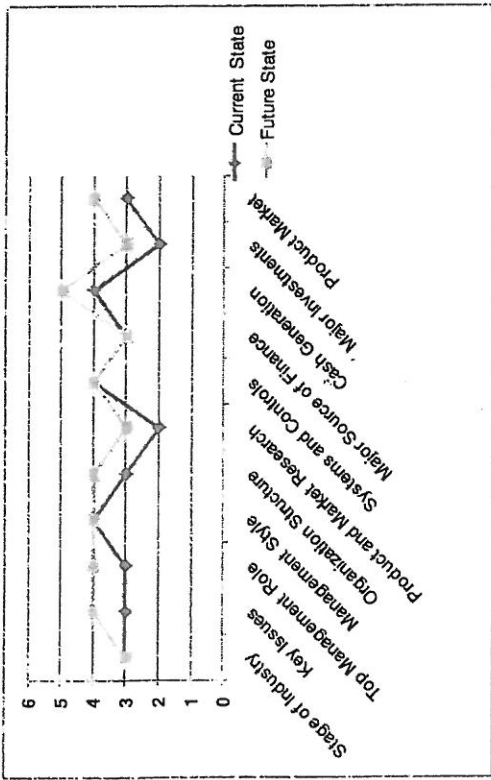


Fig. 6. Current and Future State (Case Study)

4.3 SMEAG Model

The case study SMEAG model is based on the 4 steps described in section 3.2. Step 1 is to review the SMEAG Fact Sheet with the 2010 Operating Model of the SME (Fig. 5). An example is included as illustration in Fig. 7.

Area of Concern	State Options	Design Domain	Architecture Principles and Standards
Dividend Policy	No dividend policy Dividend policy	Business	* Minimum 10% of turnover available for working capital before dividend is considered.

Fig. 7. Example SMEAG Extended Fact Sheet (Case Study)

The second step is to complete the SMEAG Work Sheet as described in section 3.3. The third step, adding the required actions are also included in Fig. 8 to illustrate the outcome.

Area of Concern	2010 State (Current)	2013 State (Future)	Actions
Organization structure	Functional centralized	Functional centralized	Review process design to ensure delegation of coordination activities is explicitly addressed.
Operating model	None	Replication	Key processes to be standardized.

Fig. 8. Example SMEAG Work Sheet (Case Study)

The final step is to prepare the replication core diagram. The replication core diagram is representing the key processes to be standardized as well as the enabling technology. The case study described in this paper is based on replication as operating model and Fig. 9 illustrates the replication core diagram for this case study. Since it is a replication model only processes and technology are included in the diagram (integration is not a requirement to support growth as part the replication operating model). The identification of the key processes was done during a work session using reference models as accelerator.

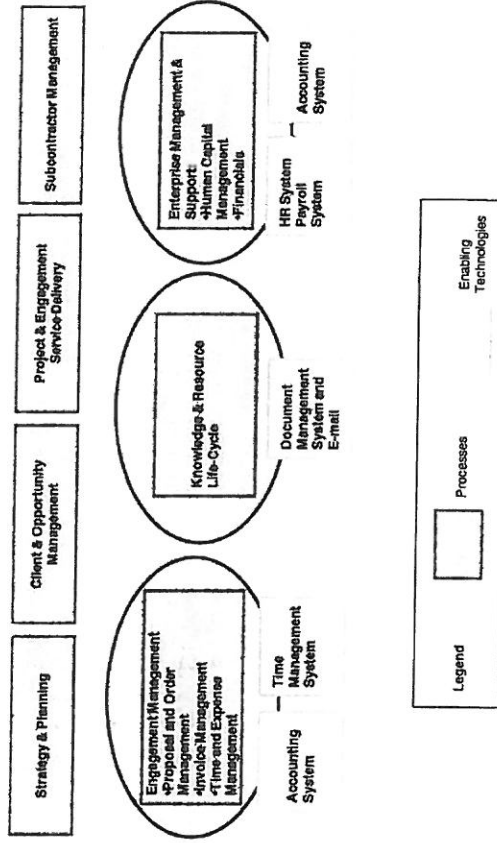


Fig. 9. Case study replication core diagram

4.4 Discussion

From the perspective of the SME management the SMEAG model successfully addressed the 'stage' problem in the case study by replacing it with the state based approach. The SMEAG Fact Sheet was successfully used to populate the SMEAG Work Sheet. The final outcome is the 2011 Business Plan and the SMEAG Work Sheet contributed to a more complete description of the areas of concern. The value of the replication core diagram is seen as the first step to standardize the key processes for roll-out to the different pipelines. Based on the architectural principles and standards the SME management are asking for the integration of the systems to have a single source for information. A key benefit is that accelerators are making it a feasible model from a SME resource poverty perspective, considering that the number of hours required from SME management is relatively low and the cost implication a minimum.

5 Conclusion

The primary objective of the SMEAG model is to provide guidance for SME managers during the transformation process of growing from a small into a medium

enterprise. In the case study that was used to illustrate the use of the SMEAG model, the state based approach was successfully used to address the stage based problem. There is thus evidence that enterprise architecture is relevant to complement existing SME growth stage models. Not only does EA address the gap regarding the configuration of the various current and future states per area of concern, it also enhances the model to have a better understanding of the different operating models for growth and the importance of the standardization and integration of processes.

The key contributions of the SMEAG model are:

- The positioning of the current state versus future state concept.
- The positioning of EA regarding its principles and standards against those of growth stage models..
- The integration of the operating model core diagram to identify process standardization and integration.
- The packaging of the model to make it a practical tool for SME managers.

The outcome of this research is the first version of the proposed SMEAG model. The next iteration of development will focus on the completeness of the model, the interdependencies between the areas of concern, as well as the options indicating the state per area of concern in the SMEAG Fact Sheet. The content of the SMEAG Fact Sheet will also be verified and extended against more growth stage models and other EA models.

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