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Synthesis of Business Motivation Model (BMM) and ArchiMate: Towards a New Modelling Technique for Strategic Alignment of Business and IT

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SYNTHESIS OF BUSINESS MOTIVATION MODEL (BMM) AND ARCHIMATE: TOWARDS A NEW MODELLING TECHNIQUE FOR STRATEGIC ALIGNMENT OF BUSINESS AND IT

Research full-length paper

General Track

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Abstract

While there is no dearth of studies on strategic alignment between business and IT, there is a lack of end-to end modelling techniques to depict such alignment. This paper presents a new modelling technique, by synthesizing two leading modelling techniques – (a) Archimate – the tool proposed by The Open Group Architecture Framework (TOGAF) and the Business Motivation Model (BMM). The contribution of this paper is that it presents a new, end-to end modelling technique that can link the IT capabilities to the business strategy, thus depicting strategic alignment. Additionally, through this technique, the paper also presents a new comprehensive model to explain how an Enterprise Architecture framework (like TOGAF) can enable strategic alignment between business and IT.

Keywords: Business Motivation Model, ArchiMate, Strategic Alignment, Enterprise Modelling, Enterprise Architecture.

1 Introduction

Researchers have explored the usage of IT to impact the adopting organization's ability to compete better in the market, or in other words, the strategic potential of IT. However, a key prerequisite to harness the strategic potential of IT has been found to be through the alignment of IT and business (de Leede et al., 2002; Irani, 2002; Kearns and Lederer, 2003, Chan et al 2006). The concept of Business-IT alignment has been an area of utmost importance to practitioners and researchers alike (Papp 2001; Tallon and Kraemer, 2003; Luftman et al. 2006; Preston & Karahanna 2009; IT Trends SIMposium 2013). While the literature is replete with studies on strategic alignment over the last few decades (Luftman 1996; Hsaio and Ormerod 1998; Kearns and Sabherwal 2006; Preston & Karahanna 2009; Dwivedi et al. 2009; Johnson and Lederer 2010; Ravishankar et al. 2011), there is a lack of studies that attempt to explain or model the process or mechanism of 'how' strategic alignment between business and IT, over time, can be achieved by organizations.

Enterprise architecture (EA) has been proposed as a guiding solution framework to realise the much-desired business-IT strategic alignment (Wegmann 2002; Chen et al. 2005, Pereira and Sousa 2005; Gregor, Hart and Martin 2007; Saat, Franke, Lagerström and Ekstedt 2010; Cuenca, Boza, and Ortiz 2011; Seigerroth 2011; Zarvic and Wieringa 2014). Enterprise Architecture Body of Knowledge defines the term Enterprise Architecture as 'a practice, which analyzes areas of common activity within or between organizations, where information and other resources are exchanged to guide future states from an integrated viewpoint of strategy, business and technology'. Enterprise Architecture is implemented using several widely accepted standards and frameworks. The most common frameworks are the Zachman's Framework, The Open Group Architecture Framework (TOGAF), Four Domain Architecture, Reference Model for Open Distributed Processing (RM-ODP), OMG's Model Driven Architecture (MDA), Department of Defence Architecture Framework (DoDAF), Generic Architecture Reference and Methodology (GERAM), Nolan Nortan Framework and others (Lankhorst 2013).

In the last few years, a few attempts have been made to model strategic alignment. ArchiMate is a modelling language, founded by the Open Group (also the founder of TOGAF), which is used to design Enterprise Architecture. Also, ArchiMate is arguably the most comprehensive and widely used modelling language for Enterprise Architecture, with full support for the TOGAF framework (Fritscher and Pigneur 2011; Clark, Barn, Oussena 2012). While, ArchiMate can be used to model the 'Technology Architecture', 'Information Systems architecture' and 'Business Architecture' effectively, it, with its core components, had limitations on modelling the 'Preliminary' and 'Architecture vision' (the Strategic components of business) of the TOGAF framework. This limitation has been now been overcome by the introduction of an extension called the 'Motivation' extension. While this extension supports the modelling of many business strategy concepts in ArchiMate, it still has a limited set of elements. This limitation was also noted in recent studies by several researchers, who suggested combining Enterprise Architecture modelling techniques (like ArchiMate) with other business strategy modelling techniques like the i* Model or the Business Model Canvas (Yu, Strohmaier, and Deng, 2006; Quartel, Engelsman, Jonkers, & Van Sinderen, 2009; Iacob, Meertens and Jonkers 2011). So

there seems to be a need to augment ArchiMate with techniques for better modelling business strategy. The Business Motivation Model (BMM) from the Object Management Group is a modelling framework which has been purpose-built for modelling business strategy. This framework, through its concepts of multi-level ends (vision, goal etc.) vs means (mission, strategy etc.) is intended to be used to model the strategic components of business. Increasingly, the BMM Model is being used in conjunction with other techniques and architectures like Role Activity Diagrams and Service Oriented Architecture and even ArchiMate (Beistein et al 2006; Feglar 2006; Quartel, Engelsman, Jonkers, & Van Sinderen, 2009). However, there is a lack of a single comprehensive modelling technique too model end-to-end strategic alignment of business and IT, giving rise to the below research question:

How can we comprehensively model end to end Business-IT Strategic Alignment so that it shows a mapping of information technology to business strategy?

2 A New Modelling Technique to Explain Strategic Alignment of Business and IT

In attempt to answer the research question, a new modelling technique is being proposed that intends to explain how strategic alignment can be achieved using Enterprise Systems (as a dominant form of IT) through the lens of an Enterprise Architecture Framework: TOGAF. The chosen modelling language/framework used for this purpose is a combination of (a) ArchiMate from the Open Group, and (b) the Business Motivation Model (BMM) from the Object Management Group.

The author of this paper is of the opinion that the BMM has components that, if combined carefully, can augment and enhance the ArchiMate language (esp. its Motivation extension for business strategy elements). Thus, a carefully combined approach of ArchiMate and BMM components is used as a technique to develop a model for achieving alignment with Enterprise Systems.

2.1 Explaining the Ingredients: ArchiMate and BMM

We will start the discussion of our new modelling technique from ArchiMate, as shown in Figure 1, and proceed to find the shortcomings in ArchiMate and bring in BMM to complement it to form a new modelling notation.

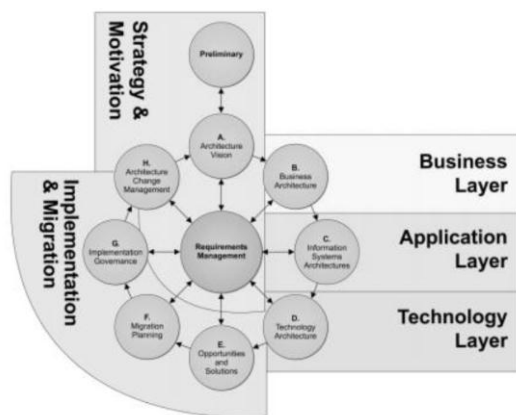


Figure 1. Correspondence between TOGAF ADM Phases and the ArchiMate Notations

The ArchiMate language consists of the ArchiMate core notations: these are the Business, Application, and Technology Layers. These are supplemented by a Motivation extension: elements to model the strategy and motivation underlying an architecture.

The Business, Application, and Technology Layers support the description of the Business, Information Systems, and Technology Architecture domains defined by the TOGAF framework respectively. The Motivation extension in the ArchiMate language can be used to support the Requirements Management, Preliminary, and Architecture Vision phases of the TOGAF ADM, which establish the business goals, architecture principles, and initial business requirements.

The modelling technique is discussed from bottom up, i.e. starting with the Technology Layer. TOGAF Phase D deals with Technology Architecture, which displays how information technology can be deployed to realize the applications and data requirements defined in Phase C. The ArchiMate notation has a distinct layer for Technology Architecture, in which technology such as devices, operating systems software, DBMS, and communications infrastructure can be represented. The Technology Layer depicts computing nodes on which applications are deployed as well as the devices and system software composing these nodes. Furthermore, it depicts network infrastructure that connects these nodes and artifacts that represent the physical deployment of application components. The ArchiMate 3.0 Specification has added a new set of physical elements and their relationships that are derived from the Technology Layer. These elements can be utilized to model things like physical machinery and facilities.

Next in line is the Applications Layer. The Application Layer shows the application software or application components, their relationships, and their functionality in the context of the IT landscape of the organization. It may be noted that the ArchiMate language models the data domain as a part of the Application Layer; it does not define a separate Data Architecture as is done in the TOGAF standard. This is the layer where all the application software like ERP, CRM and other purpose-built custom software of the organization is shown.

However, there is no clear way to show the technical capabilities like integrated data, optimized and automated processes, real-time information etc. such software can enable the organization with. So this a limitation (Limitation A) of the current ArchiMate standard.

The next layer up is the Business Layer. The Business Layer displays how the business operates: the core business processes, the users (or roles) executing these processes, and the information (objects) exchanged between the processes. It can be utilized for purposes such as risk management, system development, organizational redesign or reengineering, and process re-engineering.

The topmost later is the Motivation Layer: the layer that represents the business goals of the organization. Initially ArchiMate had ignored this aspect completely. However, lately it has introduced the Motivation extension. The core concepts of the ArchiMate language emphasize on what could be called the extensional aspects of the organization; i.e., its form as an operational entity. The Motiva-

tion extension deals with the intentional aspects – i.e., the business goals, principles, requirements, and other aspects that motivate the existence of the organization. The paragraphs below explain the elements of this layer in detail.

A prime element is ‘stakeholder’ that represents an individual, team, or organization with an interest in the outcome of the architecture. These include the board of directors, shareholders, customers, business and application architects, legislative authorities. Another prime element is a ‘goal’ that represents some end that a stakeholder wants to achieve. In essence, an end can represent anything a stakeholder may desire, such as a state of affairs, a produced value, or a realized effect. Examples of goals are: to increase revenue, to reduce service times, or to introduce online self-service.

However, there is no discrimination between high level and low levels goals. In other words, the high level strategic goals and low level business targets (and everything in between) are treated and depicted equally. So this a limitation (Limitation B) of the current ArchiMate standard.

A third prime element ‘requirement’ represents a required functionality that must be realized by a system. A fourth element ‘principle’ represents a general required property that guides the design and evolution of systems in a given context. Similar to requirements, principles define desired properties of systems. However, principles are broader in scope and more abstract than requirements. This is yet another limitation (Limitation C) of ArchiMate; no clear rule is given about how to distinguish requirement from a principle.

So in essence, three key limitations of the ArchiMate notation were identified:

- There is no clear way to show the technical capabilities that the software can enable the organization with
- The high level strategic goals and low level business targets (and everything in between) are treated and depicted equally
- No clear rule is given about how to distinguish the element ‘requirement’ from the element ‘principle’.

To address these limitations of the ArchiMate modelling notation, other notations like UML were reviewed. However, the best suited notation that could address the above-mentioned limitations of ArchiMate is to augment it with the concepts of Business Motivation Model (BMM) to form a new modelling notation.

Business Motivation Model (BMM) contains a set of built-in concepts that define the elements of business plans. They are associated in a structure that is methodology-neutral; it will support a range of approaches for creating and maintaining a Business Motivation Model for an enterprise, and is particularly strong in support of processes that are driven by business change.

The main idea underpinning the BMM is that an organization has a reason to be, expressed as its ‘Vision/Mission’. In view of this Vision/Mission, there are relevant ‘Influencers’ that are subject to ‘Assessments’, as a result of which ‘Ends’ are pursued by some ‘Means’. The Means are realized by elements like Organization Units, Business Processes, and Business Rules.

Ends are about what an enterprise wants to be. Ends describe the state of the enterprise at some point in time. Ends are divided into two groups: Vision and Desired Result. Vision is an overall image of what the organization wants to be or become. This is often expressed in qualitative terms eg: our vision is to be and remain the USA's leader in supermarket chains. Desired Results are more specific Ends than the expression of Vision, and are planned to determine how lower level states could contribute to the Vision. BMM differentiates between Goals and Objectives. Goals are end states expressed in high-level terms, in support of the Vision. They are usually associated with targets for strategic initiatives, and are often qualitative, coarse-grained expressions. e.g. increased market shares within the next five years. Objectives are end states described in more detail, which are expected to follow the guidelines given in the much used SMART acronym. Objectives are often tactical, more fine-grained initiatives, and their accomplishment contributes to the attainment of Goals. e.g. a significant rival enterprise acquired within the next 15 months.

Means are about what an enterprise has decided to do in order to become what it wants to be. Hence Means address how to achieve the Ends. Means are distributed into three clusters; Mission, Course of Action, and Directive. Mission indicates the ongoing operational activity of the enterprise. An organization's Mission specifies its ongoing, vital activity, bound by its Vision. The primary thing that distinguishes Mission and Vision from the other Means and Ends is their relatively eternal nature. Courses of Action are what the enterprise has decided to do) to sustain its Mission/Vision. Corresponding with the Ends breakdown between Goals and Objectives, Courses of Action are distinguished between Strategy and Tactics. Again, as with Ends, it is not probable to get a clear distinction. Strategy is perceived as a long-term, high-level plan of action, whose purpose is to accomplish one or more Goals. Tactics are seen as tangible, short-term plans of action to attain tactical Objectives.

As is obvious, the BMM is a much more detailed standard than ArchiMate for modelling the business-side of the organization. However, sometimes it may become overwhelming to model all of this in conjunction with all the technical layers of ArchiMate to show the strategic alignment of business and IT: one of the key sole purpose of this modelling technique.

The following section explains how the two notations ArchiMate and BMM are synthesized to derive a generic modelling notation to use for demonstrating strategic alignment of business and IT in organizations.

Furthermore, to keep the scope of the research feasible, two decisions are made. For the first, TOGAF is chosen as the EA framework that will be used to study the phenomenon. For the second decision, Enterprise Systems are used as the chosen type of IT. Enterprise Systems (ES) can be defined as large-scale, packaged, application software systems that can be used to streamline and integrate the business processes of an organization, and considerably improve information and knowledge levels within the organization as well as with its customers and suppliers (Davenport 2000).

2.2 Overcoming the Limitations with an Enhanced Modelling Technique

The model, as shown by Figure 2, is explained by breaking it down into its constituent layers namely technology layer, applications layer, business layer and motivation layer. Each of these layers are decomposed into one or more levels. For example, the Application Layer is decomposed into two levels: (a) the software system (Enterprise Systems Suite) and (b) the Application Services. This overcomes the above-mentioned limitation A. Again, the Motivation Layer is a combination of constructs from ArchiMate and the BMM in a way that it acknowledges the mission of the organization and the different strategies to achieve them (as is done in BMM, but not in ArchiMate). Further, a clear delineation is done here between goals and objectives, which is absent in ArchiMate. This addresses the above-mentioned limitation B. Finally, the ambiguity of ‘requirements’ and ‘principles’ of ArchiMate is removed through the element ‘Business Capabilities’ in the Business Layer. This addresses the above-mentioned limitation C. An explanation of the components of each of the layers and levels follows.

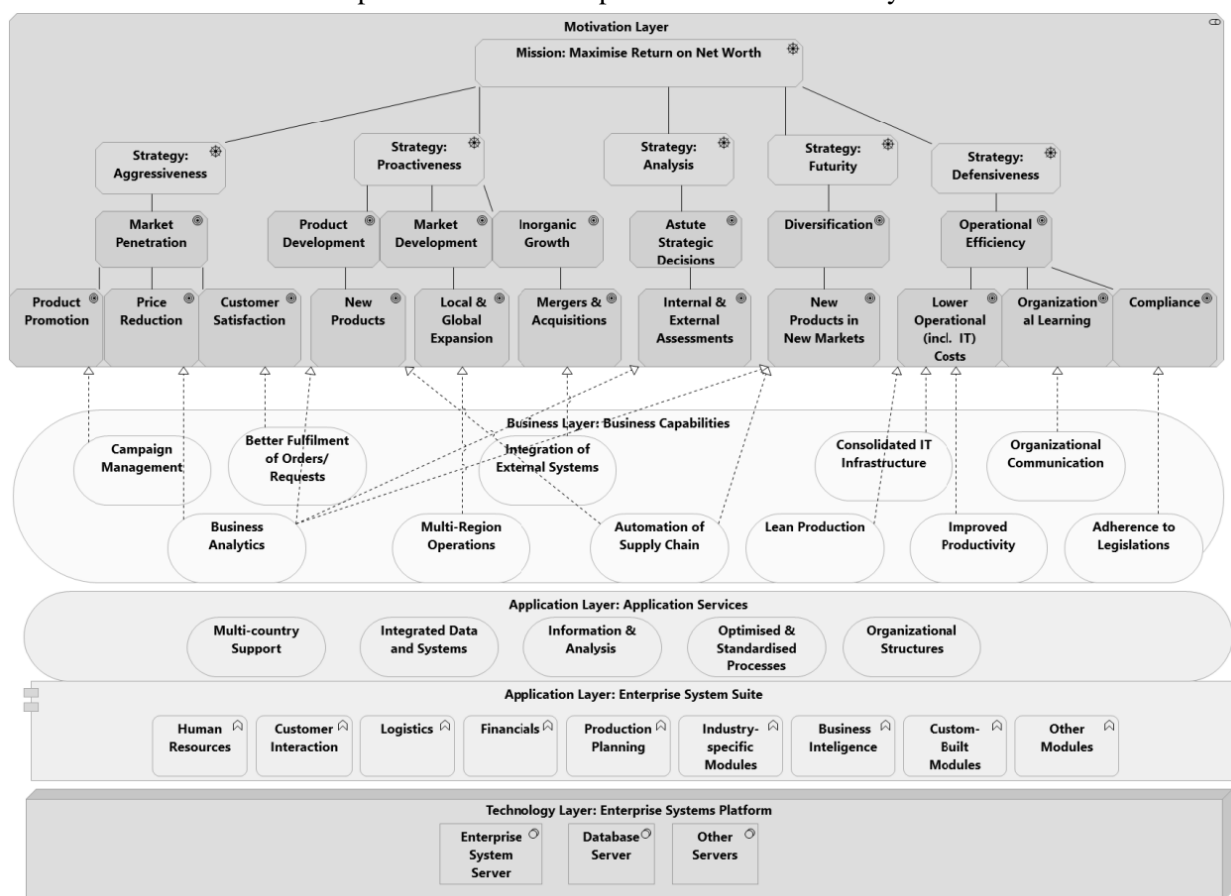


Figure 2. A modelling technique to model Strategic Alignment of Business and IT through Enterprise Architecture

2.2.1 The Technology Layer

The technology layer, shown as a single level layer shows the deployment of technology (specifically IT) that an organization has in place as a part of their IT platform. However, due to the scope of our research, we limit our interest to the one node i.e. Enterprise System Platform. Enterprise Sys-

tems are used as the chosen type of IT. Enterprise Systems (ES) can be defined as large-scale, packaged, application software systems (Davenport 2000). These systems come in different forms, but the most dominant forms are the Enterprise Resource Planning (ERP), Customer Relationship Management (CRM). As shown in the technology layer, Enterprise Systems are usually deployed with an application server that manages the software and an independent database server. This form of technological deployment of Enterprise Systems is widely witnessed irrespective of the vendor and the system (Motiwalla and Thompson 2009).

2.2.2 The Applications Layer

The applications layer shows the IT applications that an organization has in place as a part of their IT portfolio and the services that it provides to them. The application layer is shown to consist of two levels: the application systems level and the application services level. Due to the scope of our research, we limit our interest to the one application, i.e. Enterprise System. As a result, the bottom part of the applications layer of the model is shown to consist of one single application – the Enterprise System. Irrespective of the vendor and the system, most Enterprise Systems are composed of in-built functional units called ‘modules’ that interact with each other to provide all the functionality. As shown in the applications layer, such modules include Financials, Human Resources, Sales and Distribution, Materials Management, Production Planning and many others. Additional modules are available for specific industries like banking, Retail, Education, Mining and many others. All these modules have built-in optimized functionality which the vendors claim are based on ‘best-practices’ collected from organizations around the world. Such functionality covers most of the IT needs for the adopting organizations (Motiwalla and Thompson 2009).

The top part of the applications layer shows the different application services that are offered by the application(s) – in this case the Enterprise System.

Ia. Integration Data and Systems: Enterprise Systems provides the capability to unify and harmonize data and systems with an organization’s unique environment, and use the systems to better connect organizational units and processes, as well as customers and suppliers (Markus 2000; Al-Mashari 2003; Puschmann and Alt 2004; Kelle and Akbulut 2005; Karimi et al. 2007).

Ib. Optimised and Standardized Processes: Enterprise Systems provides the standardization of processes using best practices embodied in the software, and shape processes to fit the unique or strategic needs of the business (Davenport 2000; Al-Mashari 2003; Siau and Messersmith 2003; Botta-Genoulaz and Millet 2005; Chand et al. 2005; Rikhardsson and Krammergaard 2006).

Ic. Information and Analytics: Enterprise Systems also provides information in real-time and transforms data into context-rich knowledge that supports the unique business analysis and decision-making needs of multiple work forces (Davenport 2000; Spathis and Constantinides 2003; Botta-Genoulaz and Millet 2005; Rikhardsson and Krammergaard 2006; Harley and Wright 2006).

Id. Multi-Country Support: Enterprise systems have built-in support for multiple currencies, multiple languages, and multiple global locations of business. (Chand et al 2005; Utecht and Hayes 2004).

Ie. Organizational Structures: Enterprise Systems support the setting up of organizational hierarchies and structures in a uniform and standardized way across the entire organization. This ranges from the corporate level (headquarters and branches) to business unit levels, and also include multi- entity organizations (holding and subsidiaries).

2.2.3 The Business Layer

This layer, in a single level, shows the capabilities that the technology layers helps to build in the organization, that may contribute towards meeting its objectives, goals and mission. These capabilities include (but not limited to):

Iia. Better Fulfilment of Orders/Requests: Timely and accurate fulfilment of orders and service requests through faster, accurate and integrated transaction processing enabled by Enterprise Systems (Kennerley & Neely 2001; Spathis & Constandines 2003; Chand et al 2005; Rikhardsson & Krammergaard 2006)

Iib. Lean Production: Reduction in inventory carried due to better production planning enabled by the optimized processes in the Enterprise System (Kennerley & Neely 2001; Spathis & Constandines 2003; Harris & Davenport 2006)

Iic. Automation of Supply Chain: Linking supply chain partners like suppliers, wholesalers, retailers etc. using the Enterprise System's integration tools (Kennerley & Neely 2001; Grant 2003; Harris & Davenport 2006; Rikhardsson & Krammergaard 2006; karimi et al 2007; Lance & Muretta 2013; Mostaghel et al 2015)

Iid. Organizational Communication: Co-ordination between business units through standardized processes and user interfaces of the Enterprise System (Grant 2003; Spathis & constandines 2003; Gattiker & Goodhue 2005; Rikhardsson & Krammergaard 2006; Teo, Singh and Cooper 2014)

Iie. Consolidated IT Infrastructure: Common infrastructure through integration and standardization of IT components in the form of the Enterprise System (Grant 2003; Spathis & Constandines 2003)

Iif. Business Analytics: Analysis of the organization's operations finances, customers, suppliers and other stakeholders enabled by the real-time information and analytical tools provided by Enterprise Systems (Spathis & Constandines 2003; Harris & Davenport 2006; Chen and Fang 2013; Mathrani and Mathrani 2013)

Iig. Integration of External Systems: integrating other systems quickly and easily into the already integrated Enterprise System (Grant 2003; Harris & Davenport 2006)

Iih. Compliance: Adherence with legislations, like the Sarbanes-Oxley Act with the built-in support for such laws in Enterprise Systems (Thomson and Motiwalla 2009).

2.2.4 The Motivation Layer

This layer presents the topmost layer of the organization: the 'ends' that organizations wish to achieve and the 'means' through which they can achieve those 'ends'. In other words, the 'motivations' for the organizations to exist. This layer is structured in a hierarchy designed as a combination of concepts

proposed by ArchiMate and Business Motivation Model, and supported by several researchers like Beistein et al (2006), Feglar (2006), Quartel, Engelsman, Jonkers, & Van Sinderen, (2009), Fritscher and Pigneur (2011), and Clark, Barn, Oussena (2012).

At the top of the hierarchy is the mission of business organizations: maximizing the benefits/returns of the owners/shareholders of the business. A key measure for this is the Return on Equity (RoE), also called Return on Net Worth (RoNW) and has been widely used as the 'end' for any business organization, as suggested by Tully et al (1993), Hitt & Brynjollson (1996) Barua et al (1995). Return on Equity is the amount of net income returned as a percentage of shareholders' equity. Thus 'Maximising Return on Net Worth' is shown at the topmost level (ML0) of the motivation layer in the model; this can be taken to be the ultimate 'end' for any business organization.

The next level shows that to achieve this ultimate 'end', different organizations employ different 'means'. These different means can be well and comprehensively depicted by a widely cited framework called the Strategic Orientation of Business Enterprises (STROBE) by Venkatraman (1989). This framework suggests that business organizations choose one or more of the six 'strategic orientations': Aggressiveness, Proactiveness, Defensiveness, Analysis, Futurity and Riskiness. However, stated by Venkatraman, the riskiness orientation has more to do with individual traits and also is captured in pieces in the other orientations the futurity orientation. Therefore, at the next level of hierarchy in the model, we have five strategic orientations (based on STROBE) as the 'means' to achieve the end goal: 'Aggressiveness', 'Proactiveness', 'Defensiveness', 'Futurity' 'Analysis'. Each of these concepts are defined below as per Venkatraman (1989).

1a. Aggressiveness: It is the strategic orientation in which the organization aims to improve its existing market share and outperform competitors.

1b. Proactiveness: It is the strategic orientation in which organization searches for new market opportunities and business ventures as well as new products and services that can be offered.

1c. Defensiveness: It is the strategic orientation in which an organization engages in activities to improve its efficiency and reducing the costs of business operations in an effort to preserve its prospective domain.

1d. Futurity/Riskiness: It is the strategic orientation in which an organization's decisions or activities reflect long-term considerations. These often tend to be venturing into new high risk areas based on future predictions.

1e. Analysis: It is the strategic orientation in which an organization takes actions based on factual, comprehensive information for decision-making through detailed root-cause analyses and potential solutions.

The next level shows how the different strategic orientations mentioned in the above level can be translated in the form of different high level 'goals'. These are based on the explanations given by Venkatraman (1989) for each of the above strategic orientations. These explanations are used in combination with the terms used in Ansoff's (1957) widely used Product-Market strategy.

In Aggressiveness, the main goal is to achieve Market Penetration.

2a. Market Penetration: this means that the organization aims to increase its revenue using its existing offerings (products and services) in existing markets.

In Proactiveness, the main goals are to achieve Product Development, Market Development and Inorganic Growth.

2b. Product Development: this means that an organization aims to increase its revenue by creating new products and services targeted at its existing markets.

2c. Market Development: this means that an organization aims to increase its revenue by expanding into new markets (customer segments, geographies, countries etc.) using its existing offerings.

2d. Inorganic Growth: this means that an organization aims to increase its revenue by acquiring or merging with other organizations.

In Defensiveness, the main goal is to achieve Operational Efficiency

2e. Operational Efficiency: this means that an organization aims to reduce costs by improving productivity and efficiency of its operational and administrative activities

In Futurity, the main goal is to achieve Diversification

2f. Diversification: this means that an organization aims to increase revenue by introducing new offerings in new markets. It is the riskiest strategy because both product and market development is required. In Analysis, the main goal is to make Astute Strategic Decisions

2g. Astute Strategic Decisions: this means that an organization aims to make 'intentional choices or programmed responses about issues that materially affect the survival prospects, well-being and nature of the organization' (Schoemaker 1993 p.107)

The next level shows how the different goals mentioned in the above level can be realized through more specific, achievable, measurable 'objectives'. These are based on the different indicators given by Venkatraman (1989) for each of the above strategic orientations. These indicators are again used in combination with the terms used in Ansoff's (1957) widely used Product-Market strategy.

- Market Penetration can be realized through: 3a. Price Reduction; 3b. Increase in promotion and distribution, 3c. Increase in Customer Satisfaction
- Product Development can be realized through: 3d. Offering new products
- Market Development can be realized through: 3e. Selling to different customer segments 3f. Local and Global Expansion
- Inorganic Growth can be realized through: 3g. Mergers and Acquisitions
- Operational Efficiency can be realized through: 3h. Decrease in Operational/Direct Costs, 3i. Decrease in Admin/Indirect (including IT) Costs, 3j. Organizational Learning, 3k. Adherence to Legislations
- Diversification can be realized through: 3l. Offering new products to new markets
- Astute Strategic Decisions can be realized through 3m. Internal and External Assessments

3 Conclusion

This paper presented a new modelling technique, to depict strategic alignment between business and IT by synthesizing two established modelling notations ArchiMate and BMM. The contribution of this paper is two-fold. Firstly, it augmented the ArchiMate modelling notation with the constructs of the

Business Motivation Model (BMM) to present a new, more comprehensive technique of modelling strategic alignment between business and IT and addressed the limitations of the individual notations. Secondly, the paper also presents a new illustrative model that aims to explain how an Enterprise Architecture can enable strategic alignment between business and IT. However, this paper is expected to be succeeded by another study to elaborate and empirically tests this modelling technique using case studies of organizations. Such research can then be used as a prescriptive framework to (a) model, and (b) achieve strategic alignment between business and IT in a wide range of organizations.

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