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**KNOWLEDGE
ABSORPTION**

GROWTH, DEVELOPMENT, AND FORMATION

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Statement of originality

This document is written by Manon van den Berge who declares to take full responsibility for the contents of this document.

I declare that the text and the work presented in this document is original and that no sources other than those mentioned in the text and its references have been used in creating it.

The faculty of economics and business is responsible solely for the supervision of completion of the work, not for the contents.

Abstract When we look at our past, we see that the only thing that brought our civilization forward is the emergence of new technologies. Therefore it is argued in this paper that technological development must not any longer be seen as an exogenous economic factor, but as the economy itself. I have general purpose technologies (GPTs¹) defined as blue oceans with endless opportunities and they contain havens of sustained economic growth. Within this paper it is explained how we are going to discover and exploit these GPTs. For that purpose it was a necessary condition to design a GPT myself. The creation of a global value chain was central and for that purpose I designed a global business model. This device will function as an engine for sustained economic growth and increasing returns. The central research question was: *How can we successfully link the operations of our big businesses² across global industries using alliance formation?* Conclusion: Because the global business model and the alliance form used are new - it is a blue ocean that doesn't exist yet - it was hard to explain the vision fully. Overall respondents had a very positive attitude towards it.

Keywords Growth ♥ Development ♥ Formation

¹ Carlaw and Lipsey (2011; 155) defined GPTs as: "A technology that initially has much scope for improvement and eventually comes to be widely used, to have many uses, and to have many spillover effects". E.g. the internet, the computer, etc.

² In the context of this research a big business is equal to the definition of a transnational corporation (TNC). The definition of TNCs given by the OECD (2000) states that they [...] comprise companies and other entities established in more than one country and so linked that they may coordinate their operations in various ways, while one or more of these entities may be able to exercise a significant influence over the activities of others, their degree of autonomy within the enterprise may vary widely from one multinational enterprise to another. Ownership may be private, state or mixed.

Summary

Background problem In a process Schumpeter famously dubbed creative destruction, economic depression can unfreeze an economy that has locked certain technologies. Just as new forms of life evolve after every mass extinction, a new and different economy emerges with the recovery from every major depression.

Purpose The purpose of the paper is to refine theory on global value chains by developing a new empirically relevant general purpose technology (GPT) within the class of organizational forms

Method After presenting an analysis of the industry life cycle and diverse views about industry visions of some great economic and strategic thinkers, we review recent developments in the field of business model innovation. In addition, some firm settings are discussed from which I propose my global business model derived from a composed global value chain. I will further develop the model by interviewing some dudes of big businesses across global industries to compare their thinking and feeling with mine. The aim is to optimize the global business model with practical experience

Findings

1. The global business model can be used as a transformation model
2. The global business model is a model that supports alliances
3. The global business model can be used as an investment model

Practical implications (if applicable) The global business model aims to be a route map to achieve economic growth and increasing returns. The model has not yet been adopted, so all conclusions should be weakened to an exploratory level

What is original/value of paper The global business model aims to function as a performance measurement system for our global value chains which integrates all relevant economic processes and which can be used to simultaneously improve operational efficiency, increase the operational effectiveness, and to discover blue oceans. It provides us with a structure wherein ideas, knowledge, information, technology and communication flow freely

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1 Introduction

At present there are mega changes happening in our society. Organizations that do not adapt quickly enough to the new market conditions will therefore not survive the coming years.

Business consultants (such as me) indicate that traditional big businesses are too slow and bureaucratic; they insufficiently innovate, and they are insufficiently focused on their customers. As a consequence the cost structures of these organizations are too high to be able to compete well.

In other words, the efficiency and effectiveness of these organizations is inadequate for long-term success. Therefore it is important to look better at characteristics of new organizations that are better suited to the demands of the 21st century.

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So, the goal is to simultaneously improve operational efficiency (i.e. lowering cost structures) and to increase the operational effectiveness (i.e. forming new resource combinations), and to discover blue oceans for the creation of new markets and/or industries (diversification strategy).

We'll open up with the following quote of Hitt et al. (1998; 22):

“Some of the recent important strategic discontinuities encountered include the elimination of industry boundaries, fewer distinctions between industrial and service business, major advances in logistics, computer aided design and communications, and opening of global markets.”

The considerations in the above exposition strongly suggest the need for new empirically relevant general purpose technologies (GPTs) within the class of organizational forms, which is what I attempt in this paper.

1.1 Background problem

To describe the background problem we'll make use of the following citation of Sterman (2000; 389-390) because he perfectly formulates the situation of our background problem.

“In a process Schumpeter famously dubbed creative destruction, economic depression can unfreeze an economy that has locked certain technologies. Every economy needs basic technologies for energy, transportation, and communications. An ensemble of technologies and infrastructure built around coal, steam, rail, and the telegraph dominated the industrialized world in the late 19th and early 20th centuries. Populations and industries were concentrated in large cities surrounded by farm and forest. These technologies and settlement patterns were self-reinforcing. Coal has a fairly low energy density and is difficult to handle, which favors centralized settlement patterns and transport modes like rail and steamship. Telegraph lines were often strung along the railroad right of way, lowering the cost of infrastructure and maintenance, the coal-steam-rail-telegraph ensemble remained dominant until the Great Depression of the 1930s. The depression bankrupted many of the firms in these industries, their physical infrastructure deteriorated, and the power of their leaders waned. When the economy began to recover from the depression in earnest after WWII, new investment did not recreate and refurbish the old networks and technologies but focused instead on a new ensemble of basic technologies. The new economy of the postwar era was built around oil, natural gas, and electricity for energy; internal combustion and electric motors for mechanical power; automobiles and aircrafts for transportation; and telephone, radio, and television for communication. The suburbs emerged and industrial location patterns became less centralized. These technologies were also mutually reinforcing; catalytic cracking enabled crude oil to be refined into gasoline at low cost; gasoline is a energy dense, easily handled fuel suitable for a large fleet of small vehicles and decentralized settlement patterns; internal combustion engines are small and powerful enough to use in aircraft; and so on. All these technologies were

invented well before the 1930s, but the costs of switching were prohibitive because they were incompatible with the existing ensemble of technologies and social structures. Despite their great potential, the new inventions could not achieve widespread use until the old infrastructure – physical, social, and political – was swept away by the great depression and second world war. The depression and war functioned as a mass extinction event that erased the basis for the old technologies and the firms that dominated them. Just as new forms of life evolve after every mass extinction, a new and different economy emerges with the recovery from every major depression.”

1.2 Problem discussion

One of the problems that came up reviewing the alliances literature is the limited industry scope. There is no appropriate scientific literature to be found regarding alliance formation across global industries (besides alliance formation between R&D labs). Besides, most literature mentions the role of the government as a factor that hampers firm growth with regard to alliance formation because of all laws and regulations. The biggest stumbling block in preceding research has been the high interplay between the (control of the) government and the oligopolistic industry structure of today’s society, which resulted in a negative feedback loop and hence economic stagnation/decline. One can think of antitrust policy within the sphere of monopoly practices being harmful for consumers because of the competitive and static view firms hold in relation to their ecosystem. But because of the exposition of thoughts and research that I will put out in this paper I am confident to say that because of the blue ocean strategy and mutually dependency of all economic participants this problem can be overcome. This type of research is ripe for a fresh reexamining.

Organizations cannot be considered as isolated entities. Organizations are part of an ecosystem where all processes constantly coevolve with each other (Moore, 1996). Being

aware of the overall big picture is a necessary condition to balance short term strategy and long term vision.

When we look at our current economy we see that our old mature industry setting (i.e. oligopolistic structure) is stagnating because of the high involvement of the government which employs all kinds of protection measurements favoring the old mature firms. Unfair competition is the result. These mature firms have built high mobility barriers to protect their territories and because this strategy is protected by the government there is no room for healthy competition and thus renewal. The result is that feedback loops are not functioning. Stagnation and decline is the result. The old infrastructure is not able to adjust to the new demands of the 21st century and society gets locked. In this paper the current industry structure is described as a bloody red ocean. Firms can apply a lot of different dynamic firm capabilities to escape this static economic deadlock. But how can firms make use of them in an environment which is not dynamic?

1.3 Purpose and research question

This thesis' purpose is to explicitly research and consider aspects with regard to what factors are important in linking the operations of our big businesses across global industries using alliance formation. I looked at this issue from three different perspectives i.e. industry level, business model innovation, and firm level. Research findings were analyzed and compared to primary and secondary data in order to draw conclusions.

Central to my research was the question: *How can we successfully link the operations of our big businesses across global industries using alliance formation?*

1.4 Method

The research question requires an overall picture of alliance formation in order to identify what factors are important in answering our research question. Secondary data was collected from several relevant sources i.e. scientific literature, internet, and subsequently critically evaluated. Primary data was collected by conducting semi-structured interviews with some dudes that work inside or with big businesses. The interview results have been examined in relation to the theory in order to evaluate what factors are important in linking the operations of our big businesses across global industries using alliance formation. A detailed description of the methodology used is to be found in the chapter 3.

1.5 Structure of the paper

The structure of the paper is as follows. After the introduction of Chapter 1, Chapter 2 presents the theoretical framework. Chapter 3 discusses the methodology. In the fourth chapter the empirical findings are set out. Chapter 5 gives a representation of the analysis. The sixth and final chapter consists of a conclusion and discussion.

2 Theoretical framework

This chapter comprises of two parts. I'll start with a short introduction. The first part presents the problem identification. It is an analysis of the industry life cycle. This part comprises of sections 2.1.1-2.1.5 an analysis, a literature review in section 2.1.6, and a discussion in section 2.1.7. The second part of the chapter comprises a review of the scientific literature regarding three views i.e. industry, business model innovation, and firm

that I'll use to solve the problem. This review can be found in section 2.2.1. Each view comprises of one or more settings. In total 13 settings will be discussed. Section 2.2.2 consists of an elaboration of the 13 settings and subsequently a remodeling of these 13 settings takes place in section 2.2.3. The next section 2.2.4 formulates the research question and explains how I will work it out. In section 2.2.5 all processes of the model are outlined. In section 2.2.6 follows a specification in the form of a composed value chain and global business model. Finally in section 2.2.7 I'll propose my GPT model.

2.1 Introduction

Economic theory doesn't offer us models that predict how transnational corporations (TNCs) globally connect to one another (Vitali et al., 2011; 1). These authors investigated the worldwide structure of corporate control. Their theory concluded that TNCs form a giant connected component or core, possibly with a core-periphery structure. One of the implications can be that mutual ownership relations among firms within the same sector can, in some cases, jeopardize market competition (Vitali et al., 2011; 1). And moreover, linkages among financial institutions have been recognized to have ambiguous effects on their financial fragility. Following their theory and thus the current state of global affairs, I will investigate in what way this structure can best be applied to balance competition and cooperation. This is especially of great importance because of the tight interconnected financial sector in this giant connected core.

Setting the scene

2.1.1 Industry life cycle

I will set out the industry life cycle process from the moment of birth (i.e. a GPT / disruptive / radical / bold innovation / blue ocean makes its entrance) till death (i.e. when the market is saturated).

2.1.2 Phase 1: Emerging

A radical innovation has entered the scene. This phase I call variation.

Innovation The innovation is radical and the challenge is achieving legitimacy.

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Cooperation A network is important in achieving legitimacy. Vertical integration results when a good working network of complementary assets is set out in achieving legitimacy. A good working feedback loop with the market is important so that the GPT meets user demands.

Competition Competition is weak, legitimacy is weak. Players compete to become the dominant design.

2.1.3 Phase 2: Growth

Selection of dominant design takes place and sales will peak. This phase is marker by the rise of monopolies. This phase I call selection.

Innovation Product improvements.

Cooperation Bandwagons are formed.

Competition Competition takes place in achieving market share. In this phase there is a dramatic increase of competition. Clones arise everywhere.

2.1.4 Phase 3: Mature

Only a few players survive as a result of natural selection. This phase is called retention.

Innovation In this phase incremental innovation takes place.

Cooperation The creation of economies of scale and scope.

Competition Product improvements and lowering costs. Industry structure is oligopolistic in nature. This phase is marked by price competition.

2.1.5 Phase 4: Emerging niche markets created

Niche markets are created through non-integration. This phase I also call variation.

Innovation Where innovation meets demand. Products are customized.

Cooperation Spin-offs and outsourcing.

Competition The business model.

Conclusion This is the moment we currently live in. Referring back to the introduction of this chapter, this is the moment that every global sector is organized this way. TNCs are formed. These TNCs together with the financial sector form a giant connected core and as

we could have seen in the afore mentioned analysis this core is out of traditional growth opportunities (we are at the end of phase 4) and following Mr. Cooper (2011) what we need is bold innovation. What we need is a business model for bold innovation. This is where my global business model comes in. First, let's take a look at what scientific literature has to say about this topic.

2.1.6 Literature review – part 1

For this literature discussion I'll use the theories of Mr. Grant and Mr. Cooper.

Mr. Cooper (2011; 2) is discussing about the problem that the launch of a truly differentiated new product in mature markets is rare these days. As a result, development portfolios have become decidedly less innovative since the mid-1990s, and R&D productivity is down. His answer is bold innovation—breakthrough products, services and solutions that create growth engines for the future.

But when we look at the theories of Mr. Grant (2010, 2013) we can see that organizations in mature markets are organized according to some “law of nature”. This man is talking about an industry life cycle. The innovation process starts with new products or services and ends with process innovation and price competition until the market is mature and saturated. Then the problem of Mr. Cooper comes in. Mr. Cooper argues that organizations in mature industries are organized according some law of nature. They start small, creative, and innovative and end up bureaucratic and highly efficient. The latter one is not suitable for bold innovation. And that is the dilemma here. Let's take a look at table 1 below, where Mr. Grant (2010, 2013; 267) has set out the contrasting characteristics of mature firms versus innovating firms.

Tbl.1 The characteristics of “operating” and “innovating” organizations

	Operating organization	Innovating organization
Structure	Bureaucratic	Flat organization without hierarchical control
	Specialization and division of labor	Task-oriented project teams
	Hierarchical control	Fuzzy organizational boundaries
	Defined organization boundaries	Emphasis on enhancing variation
Processes	Emphasis on eliminating variation (e.g., six-sigma)	Loose controls to foster idea generation
	Top-down control	Flexible strategic planning and financial control
	Tight financial controls	Autonomy
Reward systems	Financial compensation	Recognition
	Promotion up the hierarchy	Equity participation in new ventures
	Power and status symbols	
People	Recruitment and selection based on the needs of the organization structure for specific skills: functional and staff specialists, general managers, and operatives	Key need is for idea generators who combine required technological knowledge with creative personality traits
		Managers must act as sponsors and orchestrators

2.1.7 Discussion

All global sectors that we formed since the beginning of our modern capitalistic system in 1771 are facing this situation. All where build up upon physical based resources. Our capitalistic system currently faces a global transition from physical based resources to knowledge based resources.

The problem is not that there is no bold innovation but that this kind of innovation is risky and requires a lot of investment. These innovations come from outside the traditional

TNCs. Besides in making the transition it is necessary that the giant connected core I mentioned in the introduction organizes different in such a way that we simultaneously improve operational efficiency (i.e. lowering cost structures) and increase the operational effectiveness (i.e. forming new resource combinations), and discover blue oceans for the creation of new markets and/or industries (diversification strategy). This is important so that a proper infrastructure can be build to accomplish the knowledge revolution. What is missing is a global business model that can be used as an investment model and transformation model as well using the cloud as an enabler for the infrastructure to escape the current economic deadlock.

Small, young organizations are organized exactly the way bold innovation requires but they lack risky investment capital especially due to the global financial crisis.

Organizations in mature markets are mostly linked through some web of network to a TNC operating in the core of the capitalistic system. Besides the parent TNC and other TNCs there is also the financial sector and all together form the giant connected core I mentioned in the introduction. This core has the financial resources at its disposal and when it cooperates it can share risk in making investment decisions for bold innovation for their businesses in mature markets.

So bold innovations come from outside the R&D centers, they come from the young, innovative, and creative organizations. Organizations in mature industries possess R&D labs which enables them to constantly further develop the bold innovations in various forms and make them commercially viable. The giant connected core with financial sector included will function as an investment device. In this way there is a constant offspring of new markets and industries.

To make this happen I will unbundle all core processes of individual TNCs and remodel them using alliance formation (see table 2 on page 30).

We can now further elaborate Mr. Grant's theory/table as follows.

2.2.1 Literature review - part 2

When researching what factors are important in finding an answer to our research question it was necessary to have a general overall picture in which alliance formation takes place.

The most obvious settings one can think of is studying the industry setting, business model innovation, and firm setting. Firstly an explanation of why I used the upcoming 13 settings as the foundation for my research. I used them because they perfectly describe the context of our learning organizations (i.e. big businesses/transnational corporations): their history, their current situation and their future orientation.

Industry setting For this setting are used the dynamic substitution process (setting 1) described by Schumpeter (1943) as a process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one; as well as and in contrast to the first one, the relative static industry views like the internal positioning (setting 2) by Stigler (1964) in where the vertical integration process is described and the external positioning (setting 3) by Porter (1979) in where the process of building high mobility barriers to entry is explained.

Business model innovation The dynamic view of business model innovation (setting 4) by Osterwalder and Pigneur (2010) describes a value chain process in where each firm is positioned within the value chain and functions as a specialized unit within the chain

through pursuing a value adding activity in the process. The value chain is seen as a process with a beginning and an end. This view takes into consideration the outside environment of individual firms in which each firm realizes that it is a part of a chain in which each firm can further specialize and thus add more value. The resulting end product is produced in cooperation with other firms within the value chain throughout alliance formation and has a much higher quality and a lower production price than if a single firm would have produced the same end product individually. So this strategy increases customer value and simultaneously lowers customer prices. Nevertheless this setting has a limited industry scope and operates within the bloody red oceans.

Firm setting The firm settings outline capabilities that firms can apply in creating an escape route to leave the bloody red oceans in which they currently compete. When these capabilities are used by firms in alliance formation across global industries it is possible to create new growth opportunities. Strategic positioning (setting 5) by Treacy and Wiersema (1997, hereafter T&W) is used, in this thesis, in a modified way so that firms are able to position themselves in a more favorable way and to be able to hold focus in order to further specialize. For this further specialization process the theories of the division of labor with a deeper focus on the core (setting 6) by Pavitt (1998) and Drucker (1987) were used. Through this process the innovation processes (setting 7) described by Schumpeter (1943) and (1934) can take place. It is found in the scientific literature that cutting edge and bloody edge technologies/innovations arrive exogenously to R&D and therefore the theory of general purpose technologies (GPTs) (setting 8) by Carlaw and Lipsey (2011, hereafter C&L) is used to describe this innovation process. Dynamic capabilities (setting 9) by Zollo and Winter (2002, hereafter Z&W) and Zott (2003) are used in a modified way to connect all processes on a global level. The process of strategic alliances (setting 10) described by Das and Teng (2000, hereafter D&T) is used to explain how firms across industries can be

successfully connected. Corporate entrepreneurship (CE) (setting 11) by Covin and Kuratko (2010, hereafter C&K) is a means to leap frog declining businesses and create and invest in new blue oceans (e.g. GPTs). It is a tool to connect the inside world to the outside world. The horizontal strategy development process (setting 12) by Prahalad and Hamel (1996, hereafter P&H) is used to describe how firms together can create a global strategic intent. All this will result in one big learning organization (setting 13), able to balance long term vision and short term strategy, an organization “structure” described by Senge (1990). This structure is based upon knowledge creation, capturing, and appropriation.

2.2.2 The 13 settings elaborated

Industry setting The dynamic substitution process described by Schumpeter was a common phenomenon at the beginning of our modern capitalistic system, which can be traced back to the writings of Adam Smith (1776). Back then there was a lot of economic development. New organizations were formed producing new products as a result of GPTs, and subsequently new industries emerged. Business cycles were responsible for economic development. Business cycles are natural cycles of growth and decline, but overall development takes place through the invention and innovation of new products. Then, half way the previous century the internal positioning process took place, highly supported by incentive measures of the government. The role of the government became more and more important as we shall see. As a consequence of the internal positioning organizations were growing without inventing new products. To ensure their positions – i.e. not to be substituted by new young and innovative companies – these old organizations protected their territory by applying the external positioning process. Again this process was supported by the government through incentive measures. A static oligopolistic industry

structure was the result. Besides this the economic structure depended upon government protection. Unfair competition resulted. Because these big organizations with high mobility barriers were highly regulated by the government there was no room for healthy competition and thus renewal. Stagnation was the result because the dynamic substitution process (setting 1) could not take place. Because of the highly regulated economic structure the entire economic system got stuck which resulted in self-destructive behavior because of a negative feedback loop (stagnation/decline). The natural business cycle process couldn't take place. The structure was unable to adapt. It is a natural cause and effect process: the more the government grows, the more the economic system declines.

Business model innovation Business model innovation focuses on specialization in terms of division of labor and linking strengths so that each process in the value chain adds value in developing products and lowering prices for customers. This process is limited to a regular value system within an industry. For my global business model I make use of business model innovation in another way. I will connect the strength of organizations using the strategic positioning of T&W through alliance formation across global industries. In this way it is possible to lower the cost structures, create new resource combinations and discover blue oceans. It is a way to leave the bloody red oceans (based on exhausted physical (property based) resources which resulted in economic stagnation and decline) and to enter the spacious blue ones (based on knowledge based resources which results in sustained economic growth and increasing returns).

Firm setting As said above, the strategic positioning is used for further specialization so that more value can be added by each organization. The result will be innovation. GPTs arrive exogenous to R&D. They are the drivers of economic development but require risky investment. The old industries need these GPTs and they have the financial resources to

invest in them. It is a win-win situation. Dynamic capabilities often have a very limited firm focus. By upscaling them to a higher (global) level they become more valuable. CE is a perfect tool to handle the internal and external environmental dynamics and to balance stability and chaos necessary for economic development. The principles of the learning organization will be used to balance long term vision and short term strategy.

2.2.3 Remodeling of 13 settings

In recent decades, all major organizations/industries were made into fortresses/silos. I have defined these silos as bloody red oceans. It is the result of specialization and globalization. This siloed structure had the lack of internal communication, sharing, and follow-up on important issues. The result was that opportunities to anticipate or avoid problems may have been lost. This process is easily to happen again because of the highly specialized industries. They are all dependent upon each other.

Actually, the oligopolistic structure of our global industries has a huge advantage because basically all the processes within the oligopolistic structure are already linked through alliances, horizontal as well as vertical alliances. Basically the oligopoly industry structure is one big organization, one big monopoly. Together they possess almost complete market domination. But these silos, we must now connect with each other. This is critical for their survival because these industries are currently stagnating because they are out of familiar growth opportunities. Therefore we have to create new growth opportunities. The only way out is by creating a new game. That's exactly what we do.

By linking the silos by means of ICT, resulting in a huge knowledge cloud (i.e. Google drive), there arises a self-regulating system. We create a brain.

I will model a relative stable core that functions as a stabilizer where there's cooperation (cooperating big businesses across global industries in the form of shared leadership), and highly dynamic ends where there's competition and self organization (young, small, and innovative companies). Positive feedback loops are coming from the ends of the model, the source of growth. The core (a dynamic stabilizer) is responsible for negative feedback loops. They will keep each other in balance.

So, by tearing down the siloed economic structure I create a novel open communication network. Basically the changes result in a culture change in where all stakeholders communicate in sharing fractal data. The new structure is perfectly adaptable to changes from within the chain and from outside the chain.

By creating this new game we will finally be able to make the transition from a capitalistic system based on physical based resources to a capitalist system based on knowledge based resources in where the further specialization process can take place.

Referring back to the citation of Sterman, describing our background problem, we learn that a major economic depression offers us the opportunity to switch to GPTs that didn't fit the previous economic infrastructure (physical, social, and political).

Boulding (1964; 23) with regard to the dangers and possibilities associated with the transition from civilized to post-civilized:

'In any case there is probably no way back. The growth of knowledge is one of the most irreversible forces known to mankind. It takes a catastrophe of very large dimensions to diminish the total stock of knowledge in the possession of man. Even in the rise and fall of great civilizations surprisingly little has been permanently lost, and much that was lost for a short of time was easily regained.

Hence there is no hope for ignorance or for a morality based on it. Once we have tasted the fruit of the tree of knowledge, as the Biblical story illustrates so well, Eden is closed to us. We cannot go back to the childhood of our race any more that we can go back to our childhood without disaster.’

In my interpretation of the above Boulding means civilized with regard to physical based resources which are limited in supply and based on the law of decreasing returns. And post-civilized stands for knowledge based resources with endless growth opportunities and based on increasing returns. The physical resources are exhausted, are causing too much harm to the environment of planet earth, and are therefore not sustainable. We, as society, are therefore forced to move on to a capitalist system based on knowledge/resource creation. I therefore fully agree with the concept of shared values by Porter and Kramer (2011). With regard to knowledge based resources, cooperation and collaboration is encouraged because these resources are enhanced when they are applied. They are the basis for growth and direction for the organization itself. It is about collective learning. Knowledge based resources are mobile. There is therefore no need to patent ideas. Knowledge based industries are multidisciplinary which means that there is a high degree of collaboration and cooperation between specialized units which makes patenting highly difficult and also not desirable. The game is based on completely other rules.

To have returns you first must have investment. I will model two forces that constantly invest in the economic system to ensure there is a relative stable investment climate; the allying big businesses by using CV (corporate venturing) and a non-regulated financial system.

When using this approach we will finally be able to accomplish the transformation from physical based resources to knowledge based resources. We will finally be able to fully

exploit the fruits of the tree of knowledge; fruits like nanotechnology, nanoscience, biotechnology and bioscience. These knowledge based blue oceans were discovered a long time ago (right before the internal positioning strategy (setting 2) was pursued), but because of the issues described above we were unable to exploit them (our economic infrastructure wasn't ready yet). According to Peters (2010) most people agree that the impact of nanotechnology will be revolutionizing and significant. High returns will be likely come from investments in new materials. If companies are seeking extraordinary value from nanotechnology they need to develop capabilities that can deal with the uncertainties surrounding the generation of resources. This generation of resources is in contrast to the focus on the transactional capabilities associated with picking resources.

2.2.4 Research question

From the theory we now can formulate the research question and explain how we will work it out.

Research question: *How can we successfully link the operations of our big businesses across global industries using alliance formation?*

I will compose a global value chain which will result in a global business model, that can be used as a transformation model – as I will later explain – in which all relevant economic players are involved. Subsequently I will formulate several propositions that will guide us in finding an answer to the research question.

2.2.5 The model outlined

Now all the foregoing will be summarized in a model. The model will be substantiated under the heading ‘The model specified’. Figures 1, 2, 3, and 4 summarize the global business model.

When reviewing the scientific literature I collected all factors – from three different perspectives i.e. industry level, business model innovation, and firm level – that I think are important in answering the research question. I categorized these factors using the VSR processes and they are enumerated in table 2 (read from top to bottom). VSR (variation, selection, and retention) processes are responsible for the dynamics in the environment. Referring back to setting 9 of the scientific literature review, I said I would use the theories of Z&W & Zott (2003) in a modified way. The modification resulted in an extension of the VSR learning mechanism from organizational level to global business model level. In this way they become more valuable. First, I use the following citation of Winter (2003; 994) to explain why I needed to extend this VSR learning mechanism from firm to global business model level.

“Strategic innovation often involves ‘changing the game’ in a way that ‘takes it to a higher level’—a phrase that often connotes a focus on strengthening higher order change capabilities. This notion appeals at the descriptive level and there is clearly some logic to it. Knowledge advances cumulatively, imitation spreads solutions around, and problems that are visible, urgent, and recur at high frequency tend to get solved before problems with the opposite attributes. But these considerations do not suffice to make the progression to a higher ‘order’ of competition a logical necessity, since the levels differ in the cost–benefit balance of capability investments, and exogenous change could at any time tip an existing balance in favor of lower-order capabilities supplemented by ad hoc problem solving. The argument for such upward progression is therefore

missing an appropriate assumption that restricts the character of exogenous change in such a way as to assure that the investment in higher-order capabilities tends to pay off, while the cost-cutting move in the opposite direction does not. Just how such an assumption might be framed is unclear, but the logic is incomplete without it.”

Tbl.2 The VSR processes and Mr. Grant’s (2010, 2013; 267) table enumerated

V= variation	S= selection	R= retention
customer intimacy	product leadership	operational excellence
<p>New Product Development networks (NPDs) → universities (fresh meat/knowledge) and other innovative organizations → GPTs</p> <p>entrepreneurs → the small, innovative companies (direct feedback loops with the market)</p> <p>both need to be funded by the allying big businesses so that economic growth is accelerated and increased, and fits the needs of the economic system. This is important as well for correct functioning of feedback loops as for absorptive capacity of the allying (in-house) R&D labs.</p>	<p>allying (in-house) R&D labs across global industries → improve GPTs</p>	<p>allying bureaucratic processes of big businesses across global industries</p>
temporal advantage	a combination of competence enhancing innovation and competence destroying innovation because of exploration in cooperation with NPDs and exploitation is cooperation with the big businesses	corporate entrepreneurship
<p>NPDs → competence destroying processes</p> <p>Entrepreneurs → competence enhancing processes</p>	mostly competence enhancing processes	<p>exploitation through quickly commercializing innovations by the creation of new markets (mass production, investment decisions, resource allocation)</p>

NPDs: high-end (competence destroying) innovation → non-linearity and discontinuity	making GPTs commercial viable	incremental innovation
Entrepreneurs: low-end (competence enhancing) innovation → serving niche markets		
from here growth is fuelled	selection of dominant design	stability: relative stable climate (cooperation)
unstructured information flows and ideas	increased effectiveness	structured information flows (documentation)
the creation of learning asymmetries → the creation of competition by investing in as much diverse NPDs as possible	establishment of a learning organization culture	monitoring and measuring VSR mechanism
imitation is good and needs to be stimulated to make the environment more dynamic		Schumpeterian accounting profit
highly dynamic environment (competition)		positional advantage (huge market domination)
creative destruction		efficiency improvement
GPTs arrive exogenously to R&D (Carlaw and Lipsey, 2011)		
discovery of blue oceans		
diversification strategy		
Exploration		
instability		
chaos/disequilibrium		

Innovation A new global economic game using my global business model as an investment model and transformation model.

Cooperation In the core of the model, but also across the model.

Competition At the peripheral ends of the model but also across the model

Conclusion By organizing the economic process as described in this section using my global business model economic growth, development and formation can take place. The allaying bureaucratic processes applying operational excellence will be responsible for lowering the cost structures. The allaying R&D labs applying product leadership will result in new resource combinations. And by connecting the outside and inside world blue oceans can be discovered and exploited.

2.2.6 The model specified

In this section the purpose of the global business model is described. All processes outlined in table 2 are specified in this section in such a way that the global business model can be created from it. I first list those settings established in the scientific literature and that I am to discuss and model here. I then compare what I do with the handling of those of the settings on my list to what has been modeled elsewhere.

2.2.6.1 Global value chain

Because industry and organization boundaries are blurring, it is a very natural thing to link³ all processes of big businesses across different industries on a global level. United they form a global value chain. Every single chain of the global value chain represents a global industry. So, the job is to link these processes successfully by using dynamic capabilities.

Put the horizontal strategy development process – using ICTs – besides the blurring industry/organization boundaries and the same operating models of our big businesses.

³ My definition of “to link” is connecting through alliance formation using the horizontal strategy development process.

This provides us with the solid foundation to link the operations of our big businesses across global industries in the form of a long term strategic alliance. It gives us the foundation for a strategic intent. Strategic intent is a necessary condition to make sure that all economic processes move to the same direction. In the context of this research, it contains of an overall vision, mission, and strategy for all relevant economic players involved. We'll come back to it later.

For the purpose of this research I see every big business as a learning organization. Knowledge creation provides the further specialization of firms in the form of the division of labor. Out of the simplified value chain painted by Porter & Fuller (1986), T&W modified their value disciplines. Then again, I converted this perspective. That's how I have come to my strategic positioning (see figure 3). With regard to this, there are important linkages between my global business model and the model of C&L. The most important linkage is that of pure knowledge, applied R&D, and consumption sector with respect to the strategic positioning which I used for my global business model. C&L lack the extra dimension of the relative stable core of my model, necessary to balance exploration and exploitation in achieving increasing returns.

By forming a long term bilateral contract based strategic alliance, the big businesses can facilitate investments in new resource combinations by making use of CV (corporate venturing) (to connect the inside and outside world) and share risks and subsequently reshape their ecosystem. Within this respect, our focus is on the creation of new markets and industries. In the short run, money will be made available through risk sharing in making shared risky investment decisions and, above all, by efficiency gain which will lower the cost structures of all big businesses within the alliance formation.

A bilateral contract based alliance structure is most suitable for knowledge based resources (i.e. reputation, culture, and learning capacity) as a basis for knowledge creation, learning objectives, and when partner resource alignment is supplementary (bringing in similar resources). This leads to synergy and value creation. Besides the bringing in of similar resources as input for efficiency gain and thus short term performance improvement (restructure through lowering cost structures) by linking the operating models behind the value proposition operational excellence, this kind of alliance form can thus also be perfectly used for the bringing in of complementary resources used for innovative practices and the formation of new resource combinations by linking the operating models behind the value proposition product leadership (the in-house R&D labs across different global industries).

(T&W; 23) explain that:

“The operating models of market leaders pursuing the same value proposition in different industries are remarkably similar.”

According to Osterwalder and Pigneur (2010), the value proposition⁴ is the central theme around which a business model is built. (T&W) describe three value propositions from which firms can chose i.e. operational excellence, product leadership, and customer intimacy. Our big businesses apply these three strategic orientations under one roof. The result is that (referring back to the introduction) these companies are too slow and bureaucratic; they insufficiently innovate, and they are insufficiently focused on their customers. They don't have a focus because they want to do everything themselves. As a consequence the cost structures of these organizations are too high to be able to compete

⁴ Value proposition is the same as value discipline

well. But because of the fact that they are protected by the government they are able to survive.

(T&W; 32) explain that

“The choice of a value discipline shapes the company’s subsequent plans and decisions, coloring the whole organization, from its culture to its public stance. To choose a value discipline – and hence its underlying operating model – is to define the very nature of a company.”

According to (T&W; 32)

“Operating models are made up of operating processes, business structure, and culture, all of which are synchronized to create a certain superior value. At the heart of the operating model sits not one but a set of core processes that make or break an organization’s ability to create unsurpassed value at a profit.”

Greatest obstacle on performance in alliance formation is a non-match of culture, managerial practices, and strategic orientations. Performance will be significantly influenced by the effective integration of the partner firms’ resources as well as partner resource alignment. According to D&T, partner resource alignment is the critical test whether resources are matched and integrated in the alliance. When this process is efficiently and effectively managed it will have a positive influence on the performance in the form of adaptive fit, growth, and survival in uncertain times. Using the bilateral contract based alliance form, we successfully pass the critical test.

By linking big businesses across global industries, we also get around the problem of wide productivity differentials between firms in an industry that slow the rate of diffusion of

innovations across firms in the industry. In this way, the problem of the not invented here syndrome (NIH) is also overcome.

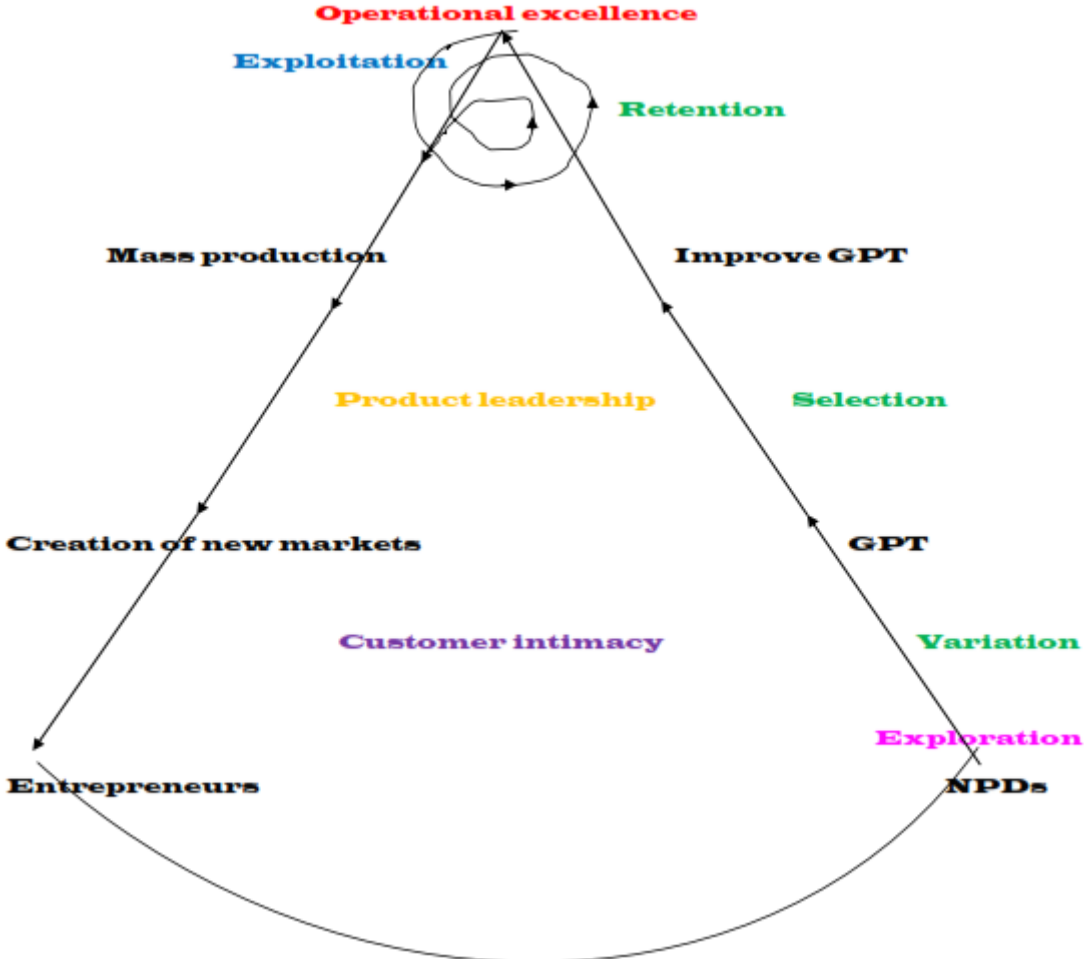


Fig.0 A closer look at a piece of the model

2.2.6.2 Global business model

Hitt et al. (1998) say that managers are facing the task to create a balance between stability and instability. This task can be accomplished by using CE. Stability is necessary for the development of strategic planning processes and decision making processes, whereas instability is necessary for continuous change and adaptation to a changing environment. The most important condition to realize increasing returns in this ever changing world is

being able to have positional advantage as well as temporal advantage. If you want to act fast, or in other words if you want to successfully commercialize your innovation, you need both temporal and positional advantage and therefore cooperation and specialization with a focus on the core is needed. It's therefore important to direct the macro as well as the microeconomics towards the same direction: creativity and innovation. A global strategic intent is a necessary condition to achieve this. Strategic intent ensures consistency in direction (P&H) and overcomes chaos. The relative stable core of our global business model represents the long term strategic alliance of the parts of the big businesses pursuing operational excellence in which incremental innovation takes place. This core functions as a generalist and possesses huge market domination (i.e. positional advantage) and has shared Schumpeterian accounting profit at its disposal, necessary for shared risky investment decisions. Players within the core cooperate to make long term and short term decisions.

The further you deviate from the core of the model, the more dynamic the climate will be. A highly dynamic environment is synonym for the Knightian uncertainty used by C&L. The more dynamic the environment is, the more competition there is. This competition creates innovation. The NPDs represent radical innovation (i.e. GPTs); the entrepreneurs are highly specialized in serving the customer with the improved versions from the R&D labs (niche markets). The NPDs and entrepreneurs are active in the most peripheral and dynamic/competitive parts of the model. These players are highly specialized and have temporal advantage. The allying (in-house) R&D labs further improve the GPTs to make them commercially viable. Exploitation and exploration are balanced. All players communicate via feedback loops to deliver ultimate value to customers.

Conclusion In this way the inside and outside world are connected. Now we can create our global business model.

2.2.7 The GPT model

The global business model comprises of four parts which can be laid over one another. Part 1 focuses mainly on the linking our global industries in where the inside world of the big businesses is linked with the outside world. Together they realize increasing returns. Part 2 zooms in on the linking of the various specialized units across the model. The 3rd part is used to position the various parts in a strategic way. And at last part 4 that models the competing values across the model.

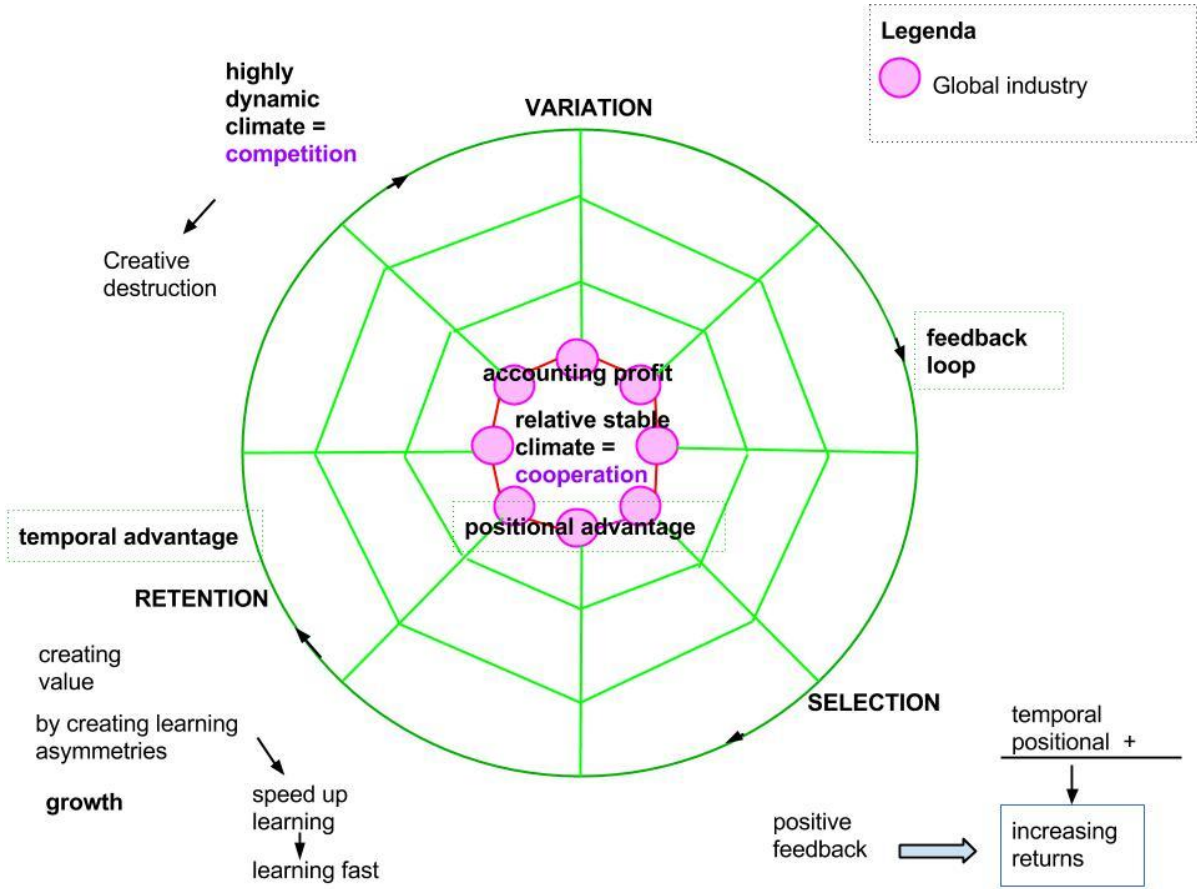


Fig.1 The global business model part 1

Proposition 1 The linking of our big businesses across global industries on the basis of their similar operating models - using bilateral contract based alliance formation - results in a global value chain

The VSR mechanism of the global business model can be seen by the allying big businesses as an investment model, through which dynamics in the environment can be monitored and measured. By using their shared Schumpeterian accounting profits, the allying big businesses across global industries can constantly invest in new technological developments, whether GPTs or not. Increasing returns and economic growth will be the result of positive feedback loops.

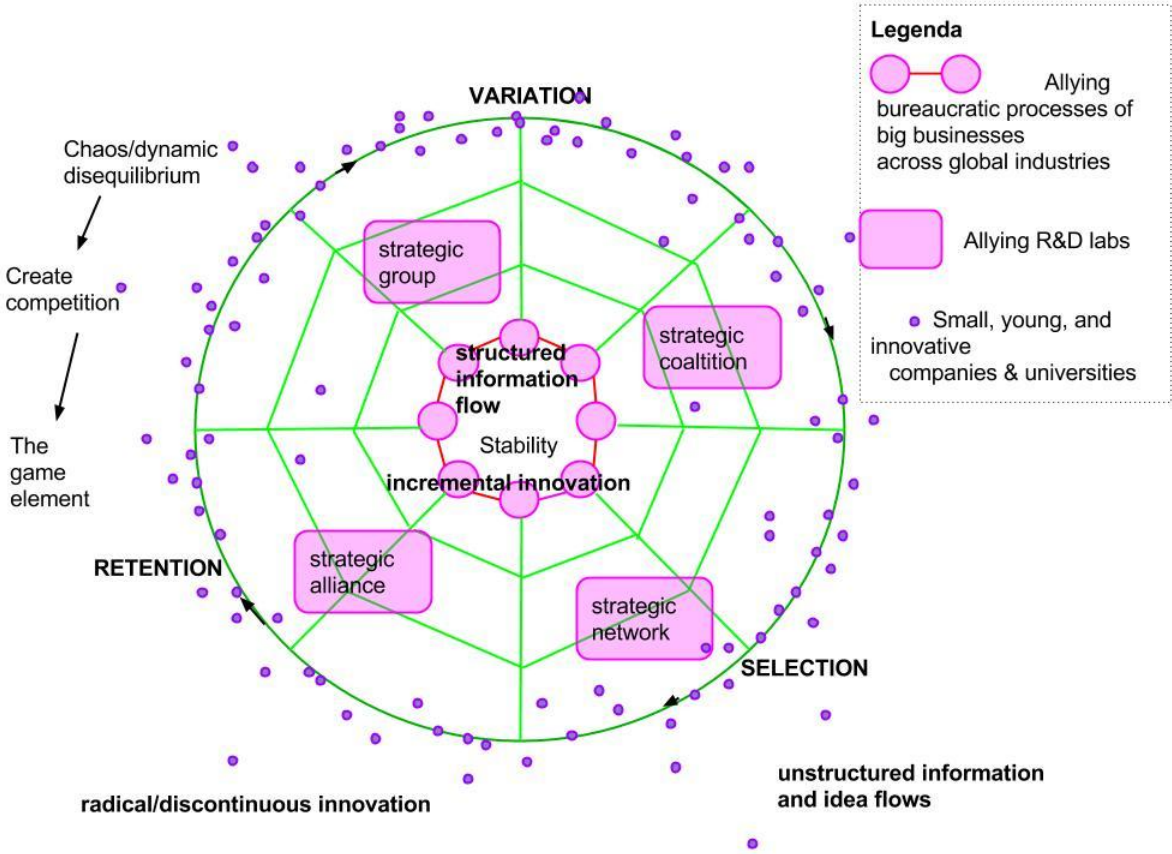


Fig.2 The global business model part 2

Proposition 2 VSR processes are responsible for the dynamics in the environment and need to be monitored continually by our cooperating big businesses and are a very important part of the measurement system of the global business model because the feedback loop results in increasing returns

The VSR learning mechanism is part of the dynamic capabilities view and gives the players the opportunity to coevolve with their environment. The variation process has its beginnings in the markets. The strategic orientation in this part of the model is customer intimacy (see fig.3). It's a highly dynamic and competitive environment. From here unfulfilled or yet unexplored customer needs and wants are infiltrated from the market through entrepreneurs (often young, small and innovative companies) because they stand in direct contact with end users. New Product Development networks (NPDs) see opportunities to fulfill these needs. New temporary NPDs are formed. These NPDs will turn the inventions into innovations (i.e. GPTs). The entrepreneurs and NPDs need to be funded by the long term strategic alliance of big businesses until the selection process for the dominant design has taken place as a result of the competition between the NPDs. Imitation is good and needs to be stimulated to make the environment more dynamic (i.e. more competitive) as input for the creation of new markets and/or industries. Schumpeter's 'theory of economic development' shows that no one except the innovator makes a genuine "profit", and the innovator's profit is always quite short lived. The selection process of the dominant design is a task which belongs to the allying (in-house) R&D labs because they need to make the GPTs commercial viable. The allying (in-house) R&D labs have a combined focus on cooperation and competition because they need to challenge each other in building a learning organization culture, able to absorb knowledge from NPDs to be able to make the inventions commercial viable. Only those who prove to be able to build a learning organization culture will be successful because of being able of

sharing information and at the same time being able to get new NPD projects (prove of absorptive capacity), and being able to form teams consisting of members from various R&D labs with different specialties. The strategic orientation in this part of the model is product leadership (see fig.3). Once the GPTs have been made commercial viable, the allying bureaucratic processes of the big businesses take over and will exploit the innovations into new markets and/or industries. The strategic orientation in this part of the model is operational excellence (see fig.3). The retention process is thus fulfilled by the allying big businesses with a shared strategic focus on operational excellence, whereas selection belongs to the allying (in-house) R&D labs with a shared strategic focus on product leadership, and variation is done by the entrepreneurs and NPDs with a strategic focus on customer intimacy.

Proposition 3 The global business model functions as a performance measurement system in terms of improved efficiency, increased effectiveness, and the discovery of blue oceans (diversification strategy) for the creation of new markets and industries

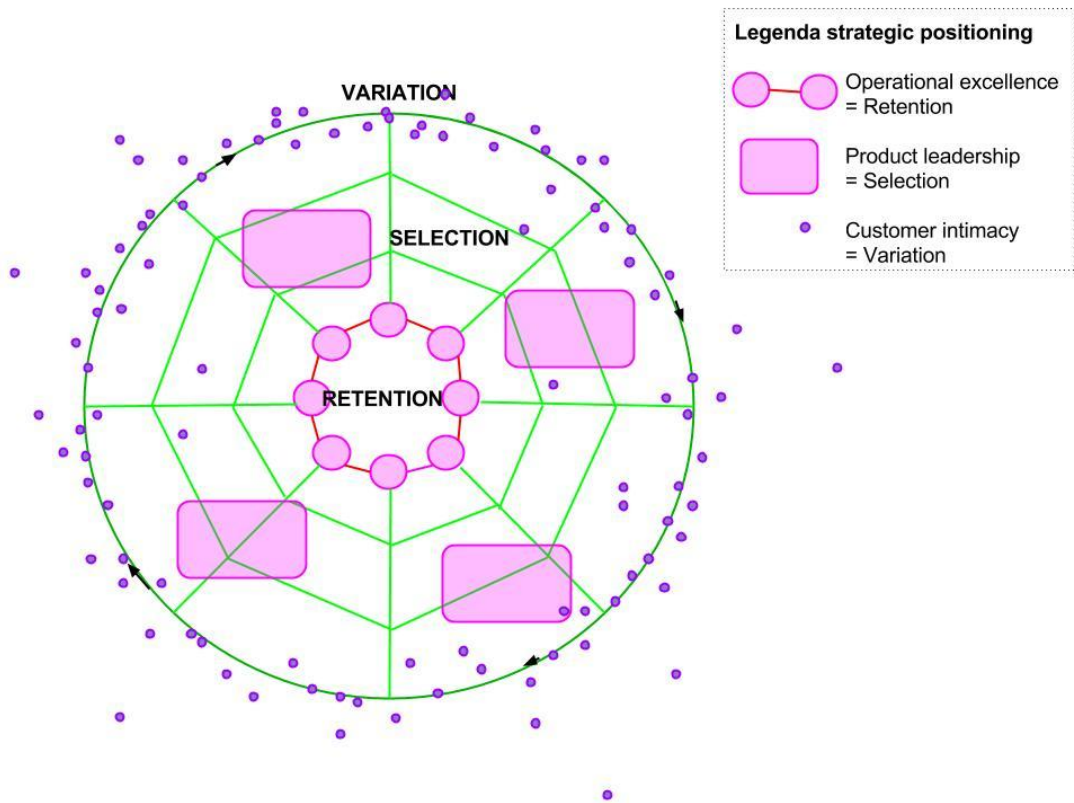


Fig.3 The global business model part 3

The “centralized” cloud, which I call the nexus, is the nerve center of the alliance. It connects all the subsystems of the individual big businesses. It is the source of knowledge creation and increasing returns. It functions as a brain. From here, the internal and external environment is monitored and measured, and based on this aggregated information investment decisions are made. It also subserves the establishment of the learning organization culture of the allying R&D centers across industries. It will also be used as a mechanism to lower the cost structures of the allying bureaucratic processes of the big businesses.

Proposition 4 The ICT of the collaborating big businesses will be brought together in the nucleus of the model, using Google Drive and every player can connect to this “brain”

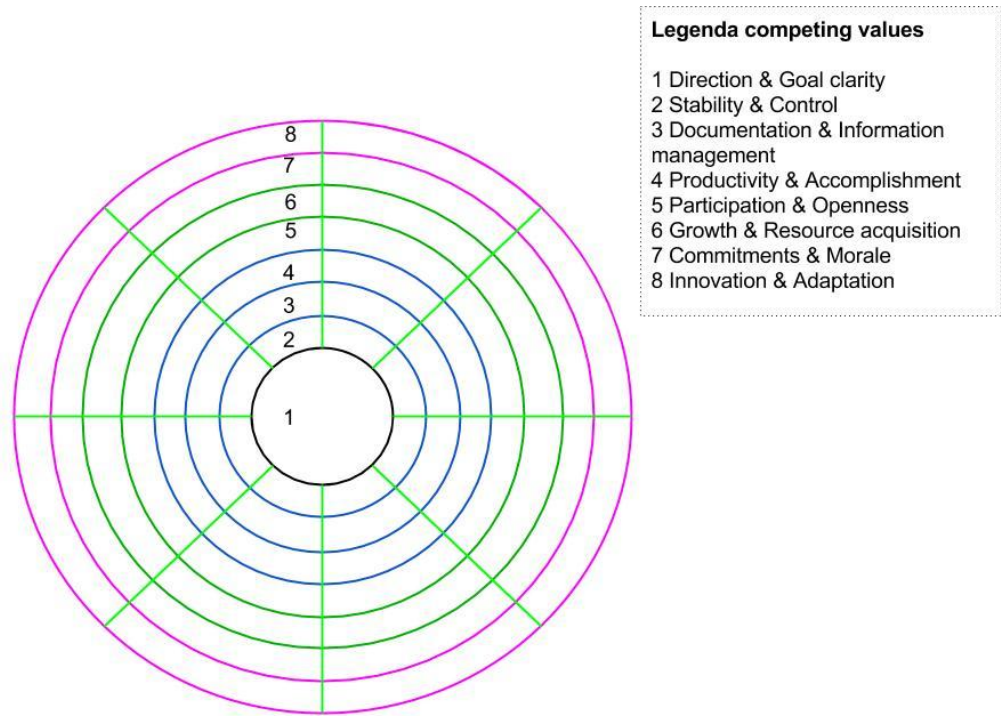


Fig.4 The global business model part 4

Besides the hard edge of development (fig. 1, 2, 3) it is also necessary to take into consideration the soft side of development (fig. 4), associated with growth processes. The whole transformation process is doomed to fail without considering the human dimension. I therefore made use of the competing values outlined by Quinn and St Clair (1997) in a modified way.

(T&W; xii) have given operational excellence the following description:

‘Companies that pursue this are not primarily product or service innovators, nor do they cultivate deep, one-to-one relationships with their customers. Instead, operational excellent companies provide middle-of-the-market products at the best price with the least inconvenience. Their proposition to customers is simple: low price and hassle-free service.’

In the context of our research operational excellence is defined as that all core processes of the long term strategic alliance of big businesses are arranged in such a way that all the (in-house) R&D labs, the NPDs and entrepreneurs can work without thinking about the bureaucratic processes involved behind their core strategy (i.e. product leadership or customer intimacy) to follow. One can think of direction and goal clarity, management of financial resources and investment decisions, facilitation of mass production, documentation and information management.

The allying (in-house) R&D labs have a shared strategic focus on product leadership and are active in the selection part of the VSR mechanism. Product leadership is by (T&W; xiii) defined as:

“Its practitioners concentrate on offering products that push performance boundaries. Their proposition to customers is an offer of the best product, period. Moreover, product leaders don’t build their positions with just one innovation; they continue to innovate year after year, product cycle after product cycle”.

Within the context of our research this proposition is defined as that all core processes of the allying (in-house) R&D labs are arranged in such a way that the establishment of a learning organization culture is paramount. One can think of participation, openness, resource acquisition, and growth.

The NPDs and entrepreneurs have a strategic focus on customer intimacy, are active in the variation part of the VSR mechanism, and are responsible for providing the best service possible for customers. This value proposition is defined by (T&W; xiii) as:

“Its adherent focus on delivering not what the market wants but what specific customers want. Customer intimate companies do not pursue one time transactions; they cultivate relationships. They specialize in satisfying unique needs, which often only they, by virtue of their close relationship with – and intimate knowledge of – the customer, recognize. Their proposition to the customer: We have the best solution for you – and we provide all the support you need to achieve optimum results and/or value from whatever product you buy”.

I have defined this proposition as that all core processes are directed towards commitments, morale, innovation, and adaptation.

Proposition 5 The global business model functions as a transformation model through which we are able to make the transition from physical based resources to knowledge based resources; which results in a huge innovation process, 1 big learning organization

3 Methodology

The purpose of this chapter is to describe and discuss the research method and methodology that has been used for this research in answering the central research question: *How can we successfully link the operations of our big businesses across global industries using alliance formation?* In addition, an evaluation of the sources will be presented as well as the methods used to increase reliability and validity will be emphasized.

3.1 Research strategy

Based on the theoretical framework the global business model was created and I formulated the following five propositions. These propositions will guide us in finding an answer to the research question.

Proposition 1 The linking of our big businesses across global industries on the basis of their similar operating models - using bilateral contract based alliance formation - results in a global value chain

Proposition 2 VSR processes are responsible for the dynamics in the environment and need to be monitored continually by our cooperating big businesses and are a very important part of the measurement system of the business model because the feedback loop results in increasing returns

Proposition 3 The global business model functions as a performance measurement system in terms of improved efficiency, increased effectiveness, and the discovery of blue oceans (diversification strategy) for the creation of new markets and industries

Proposition 4 The ICT of the collaborating big businesses will be brought together in the nucleus of the global business model, using Google Drive and every player can connect to this “brain”

Proposition 5 The global business model functions as a transformation model through which we are able to make the transition from physical based resources to knowledge based resources; which results in a huge innovation process, 1 big learning organization

3.2 Data collection

In this thesis both primary and secondary data were collected.

3.3 Selected research method

The research question demanded a general overview of the big businesses across global industries in order to find an answer to our research question. The question also required a deeper and more qualitative understanding of how big businesses are dealing with these issues. Therefore, the qualitative approach was selected.

3.4 Scientific approach

For this thesis an inductive approach was used. This approach can be seen as non-linear.

3.5 Case study

The research question had a “how” form and the case study method was most likely to be appropriate for this kind of questions (Yin, 2009). For this research the multiple case study was used which allowed me to compare and contrast the findings from the different cases and to see what is common and unique across the cases. The unit of analysis comprised the selected cases.

3.6 Interviews

It was important to collect the most important information from the selected interviewees in order to find an answer to our research question. An interview protocol (see appendix 1) was set up to increase reliability, so every object is handled in exactly the same way. The necessary interview questions fitted the central research question and were also part of the protocol.

Semi-structured interviews, with open-ended questions, were used as method in this thesis. The reason for choosing the semi-structured interview technique is essentially due to the aim to encourage the interviewees to freely discuss their own opinion.

In order to increase the reliability of the answers all interviews have been recorded, subsequently transcribed material have been sent back to the respondents, statements have been amended according to the respondents' comments and finally the material has been approved by the interviewees.

3.7 The cases

The test area (tbl.2) that has been selected for this research, in other words the sample, is based on a non-probability approach which means that the sample has not been chosen by using random selection method.

Tbl.2 The test area

genus	age	job title	organization	education
male	46	Senior manager network development	Daimler AG	MBA
male	63	Director	Deloitte	MSc
male	64	Director	X	MSc
male	29	Consultant	JBR	MSc
male	38	Director	X	MSc
male	53	Managing director	WagenaarHoes	MSc

3.8 Reliability and validity

Two important concepts to take into consideration when conducting qualitative research are validity and reliability because they are about the objectivity of the research. These concepts can be seen as two distinct ways to measure the level of trustworthiness and credibility of the research.

4 Empirical findings

Chapter 4 presents the results of the empirical data that has been collected by conducting qualitative interviews. First the background of the selected cases used in this research will be presented in section 4.1. Secondly section 4.2 presents the respondents' inputs regarding what factors are important in linking the operations of our big businesses across global industries using alliance formation. The input has been categorized by using the five important topics that were covered during each interview, i.e. global value chain, VSR mechanism, performance measurement system, Google Drive, and transformation model. Appendix 2 shows the analysis of the empirical findings.

4.1 Presentation of the cases

4.1.1 Daimler AG

Daimler AG is a big business in the automotive industry. The current industry structure is that of an oligopoly. It is one of the largest corporations of Germany. The company was originally founded in 1883 and currently it has over 275000 employees. The interview took place at Mercedes, a Dutch division of Daimler AG. The interviewee was Jorg Roelofs, MBA. His job title is named senior manager network development.

4.1.2 Deloitte

Deloitte is one of the big four audit firms. It is a professional services organization with its head quarters in the US. The current industry structure is that of an oligopoly. The Big Four are the four largest international professional services networks, offering audit, assurance, tax, consulting, advisory, actuarial, corporate finance, and legal services. Deloitte was originally founded in 1845 and currently it has about 200000 employees. The interviewee was Peter Schansman, MSc. His job title is named director.

4.1.3 Organization X

Organization X is a France multinational and is the worlds' market leader in its segment, i.e. Industrial Gases (industry: chemicals). The current industry structure is that of an oligopoly with 5 leading players. The company was originally founded in 1902 and

currently it has over 43000 employees. The interviewee was Jaap Hoogcarspel, director of a Benelux division of Organization X.

4.1.4 Organization X

Organization X is a Dutch multinational, active in the fields of decorative paints, performance coatings and specialty chemicals, and employs approximately 50,000 people. The company was founded in 1994. The interviewee was a director, MCs.

4.1.5 JBR

JBR is a Dutch business consulting firm for small and medium sized enterprises. The company was founded in 1984. The interviewee was Yoush van Vlimmeren, MSc. His job title is named consultant.

4.1.6 WagenaarHoes

WagenaarHoes is a Dutch management consulting firm. The firm supports private and public companies in complex organizational change, and also gives support in strategy development, leadership development, and organizational development. The interviewee was Jan Willem Kradolfer, MSc. His job title is named managing director.

4.2 Empirical findings of the five important topics

4.2.1 Global value chain

4.2.1.1 Environmental dynamics (internal vs. external)

In general In general all respondents are stating that the big businesses are adapting to the changing world. Nevertheless the ways in which this happens are quite varied. They cooperate with other players i.e. form alliances or/and integrate new technologies/companies or create a new company. With regard to new technologies most of them respond in a reactive way. One company is developing new technologies inside. So instead of the outside in perspective, this company is using the inside out perspective in contrast to the others. I have defined one answer to question 1 as an outlier and is therefore important to note. I quote:

“there will definitely be a new economy, there will be new products, there will be new types of services, new types of business models, I totally agree, but that that the older companies, as you refer to it, need to change and to adapt I fully agree, but in the end people still need the core products we will all switch to types of services and types of e-commerce style in the end also the e-commerce and the new products and services need the old products as we are producing them today.”

External In more specific descriptions the following can be stated. Important with regard to the dynamics in the external environment, big businesses follow and are influenced by trends like the financial crisis, news papers, politicians, regulators, globalization, environmental issues (i.e. pollution), urbanization, innovations, the BRICS countries, political situation on the globe, turmoil in the middle east, the rapidly changing situation between east and west, heavily dependency of big businesses on the financial markets,

funding of R&D, and in which part of the world to invest. And also here the way they handle these dynamics differs. Some just watch it and look for new technologies, some discuss it, some react on it, i.e. adapting their internal processes, some position themselves as victims, some get paralyzed, and some collaborate, etc.

Internal The way big businesses handle the dynamics internal is done informal and formal. If companies adjust their internal processes as a respond to the external changes the following has been stated. Reorganization of production processes with the aim to be more flexible, a huge investment in research and development to design more environmental friendly products, the cultural diversities are getting much bigger, the creation of an internal business innovation division – a think tank, creation of a new company in cooperation with others, understanding technological innovations like data analytics with regard to algorithms, research is related to core business, movement towards biochemicals, investment in renewable resources, to be more energy efficient, a lot of discussion in the board of directors to try to understand the changes in the external environment.

The following quotes were important:

“What I see in a lot of organizations, to be more efficient, be more focused, and to transform, to be more effective, more efficient, and more adapt to the existing world”

Central questions with regard to the discussions in the board of directors:

“How to understand the changes in this world as we see it now?”

“How do we change our own businesses?”

4.2.1.2 Potential growth opportunities

Overall two growth strategies are applied, i.e. market development and product development or a combination of the two. Another respondent stated that the company tries to be innovative by organizing a yearly worldwide innovation day.

Some firms are just paralyzed and what can be seen there is this:

“Analyzing the opportunity and waiting, at least that is what I feel.”

4.2.1.3 Greatest obstacle/opportunity

Obstacles With regard to the greatest obstacles in composing the global value chain the following has been stated. “The regulator, the identity, culture, competition, how to share the cake, convincing the big businesses to work with the global business model, it’s not possible due to the fact that big businesses are successful because of their current operation, and money.”

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Opportunities With regard to the greatest opportunities in composing the global value chain the following has been stated. “It broadens the client base, cooperation by bilateral agreements, open innovation, reducing the CAPAX structure, be more effective, getting to new markets, a good business plan & leadership are important.”

Some mentioned issues that cover an opportunity and an obstacle simultaneously. “Be very open minded, i.e. look at similarities and not at differences. With regard to how to share the cake: have this sorted out right in the beginning and assure an exit option i.e. a back door. Make sure that the core/center of the global business model stays in perfect

condition. Communication is central. A strong and powerful core is important to manage this all.”

4.2.2 VSR mechanism

4.2.2.1 Upscaled learning mechanism

The following has been stated.

‘That’s interesting, that’s what you created? I think you see it very strongly. And highly innovative companies like Google. I think that is a very good example of this cycle so to say.’

Most of the respondents gave a description of how big businesses currently apply these processes. They more or less told that the world already works like this, but in an unstructured way. Nevertheless none of the respondents asserted the functioning of the core of the global business model being the current way of operating. When it came to this issue the main question was

“How do they decide what will be the direction?”

4.2.2.2 Investment instrument

The following has been stated. “It can, well might be but then you will have to invest jointly. Companies use it as product portfolio.”

“Yes. I guess in some level it already happens. but there is a central party, a holding or a big investment firm, a private equity firm has some idea or global direction, we want to go that way.”

“You have variation and the market selects just by saying as collective we want that innovation. and will grow and grow. Yeah the cash cows are already in the center I believe”

4.2.2.3 Measuring & monitoring VSR processes

One respondent had the following to say about how big businesses currently measure and monitor VSR processes.

“And the selection, I guess quite some firms struggle with it, how to do it best.. What I said at the beginning, I think they really, it could always happen that they see an opportunity and say well that’s nice, we should do it, start analyzing it, still think it is really nice and analyze a bit further so and some of them decide yes we are going to it, this is a good opportunity so also not very structured is my belief. It depends on an entrepreneur within the organization some staff member of who says yeah we’re going to do this, I believe in it and if they don’t believe in it, it might take a lot of time for it before I decide to select.”

For the global business model the following suggestions have been made. “You need this central group; it is the task of the core of the global business model. A good reporting system is needed because you need information.”

4.2.3 Performance measurement system

4.2.3.1 Important to include

Suggestions made where: add the effect on the outside world (with regard to operational excellence - efficiency improvement), who establishes what the orientation is, KPI's, decision making, what goals, connect inside with outside & build in trust building mechanism, and effectiveness.

4.2.3.2 Why/why not and in what way

With regard to the suggestion to connect inside with outside & build in trust building mechanism the following reasoning was made.

“what I can say on that subject is that you use your model as an performance measurement model, as a performance measurement tool as well in relation to the outside world from a big company and to me it is important to get the connection with inside world of the company itself.”

With regard to the effectiveness the following has been stated.

“Might be the effectiveness. To what extent do you deliver value to the society as well. It might be achieved by the increased effectiveness. but it all depends on the direction you give to the R&D alliances.”

With regard to KPIs to measure objectives:

“In a general way, we have objectives. And I think we should clearly establish the objectives and measure progress against objectives because if we don't do that we have a big problem. I absolutely want KFI's, because we need to know whether we make progress. And if so, how much?”

4.2.4 Google Drive

4.2.4.1 In general

A general statement that has been made requires special attention and that is that the global business model might require algorithms and big data to measure and monitor (reporting system) the “centralized” cloud.

Another general statement also requires special attention.

“First of all I wouldn’t name it Google Drive because Google Drive is one of the. I would call it the cloud. Only the cloud and what kind of cloud is not interesting, what kind of cloud. Is it Google drive, is it drop box, is it another, is it Microsoft 360. I don’t mind at all.”

4.2.4.2 The company’s information technology/integrated computer systems

IT is used for production, to steer the company and ICT to communicate with customers i.e. through the use of smart phones to connect inside to the outside world and vice versa.

Nice quote:

“It’s 20 years old. We are moving to Google enterprise soon. So we are making a big, big, big step. We will completely change our working habits on ICT and that is going to be a big change.”

Further the following has been named. “I think it is SAP and adapted to the company’s wishes.” For the global business model it seems to be important:

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“They probably use some server and make some cloud, the Google cloud, to store data, but what kind of data? And in what format is the data stored? that’s maybe even more important than use Google drive or Microsoft Cloud, or whatever cloud you use. You should store it in the same way as the rest stores it.”

With regard to the use of cloud space the statement has been made that it is expensive at the moment. But soon it will be a commodity and very cheap.

“Then it will be no problem anymore to make a backup system from one cloud server to another. Because now the fears of big companies are: if they use the cloud and the server goes down then you have a problem in your processes.”

4.2.4.3 Feeling about sharing this information

The following has been stated. “It’s is a learning curve, so you need to be courageous.”

“It is a cultural thing so maybe you also need to be younger and less traditional and more open minded so culturally open minded”

“Think in opportunities and not in risks. It is just perfect. Not sure if they are ready for it now to share all the knowledge, information they have available; but it will go that way. Sharing is the new owning.”

4.2.5 Transformation model

4.2.5.1 Vision about the global business model

The following topics have been highlighted. “The global business model has a lot of hidden potential. It is about continuous learning. On the contrary a hazard to continuous learning is that we don’t know where it will stop. The global business model probably will happen. It’s a really structured way for looking at innovation processes in the world. I like it because it is a vision.”

A nice vision I’d like to quote.

“I think the trends that you mentioned before you asked me the question, are the right trends. Because that’s something I wanted to stress as well. And if the global business model is the correct model, to predict our future, I don’t know [gentle laugh] that is something we have to find out then but the interesting idea is that a value chain, information, focus on R&D to me that will be very important for future business operations.”

One person didn't know.

4.2.5.2 Greatest obstacle/opportunity

Opportunities & obstacle at once Two respondents gave suggestions that covered the greatest opportunity and obstacle at the same time. One is to open up the core. And the other one I'd like to quote.

“there is a thinking mistake in this question to me. The global business model will not function as a transformation model. It is an explanatory model to understand change. Change will come. And to understand change you need models to understand change. to have the opportunity, to discuss change in the board of directors. And maybe the global business model can help facilitate the discussion in the board of directors of big companies to understand what change is all about. What kind of transformations are at hand, how it will impact in the business process itself. a model itself isn't the driver for change. Change is done outside in the real world. And it will be there. But to understand change that's the big, the big thing. And if a model can help people who are leading businesses to understand change, well that be, that will be very handy. So rephrase this. That is an obstacle and opportunity then at the same time.”

One of the respondents has given the following advice.

“If you want to try it you have to try it small. So you don't need to start globally. Maybe you can start in the Netherlands”

Obstacles The following obstacles have been given.” Individuals, could be companies, could be entities that actually disagree, so pay attention to the soft side. Explaining the model is hard.”

5 Analysis

In chapter 5 the empirical finding will be analyzed in relation to the theoretical framework.

Section 5.1 displays whether the propositions are accepted or not.

5.1 Global value chain

Proposition 1 The linking of our big businesses across global industries on the basis of their similar operating models - using bilateral contract based alliance formation - results in a global value chain

50% of the respondents said the big businesses are adapting to the changing world from inside-out.

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The bilateral contract based alliance form is mentioned by one respondent as an opportunity to create the global value chain. As for the use of the cloud, this type of alliance form is also mentioned once as an opportunity.

One of the respondents mentioned the global value chain as to be the right trend.

Two respondents rejected this assumption.

Conclusion This proposition is partly accepted.

5.2 VSR mechanism

Proposition 2 VSR processes are responsible for the dynamics in the environment and need to be monitored continually by our cooperating big businesses and are a very important part of the measurement system of the business model because the feedback loop results in increasing returns

A significant outcome is that it seems that the world already works this way (4 out of 6). Besides, the VSR mechanism also seems to be used as an investment model as well, sometimes (2 out of 5). Although, not in such a structured way as used for the global business model.

2 out of 5 can imagine the global business model can be used as an investment instrument.

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There was one real objection towards this proposition and that is that one respondent didn't see an investment instrument in it, but argued that it is a common approach which every company applies in their product or development portfolio.

Conclusion This proposition is partly accepted.

5.3 Performance measurement system

Proposition 3 The global business model functions as a performance measurement system in terms of improved efficiency, increased effectiveness, and the discovery of blue oceans (diversification strategy) for the creation of new markets and industries

With regard to this subject there were no real significant outcomes. Some suggestions to include in the performance measurement system were made, i.e. goal clarity (1 out of 4), decision making processes (1 out of 4), to make a connection with the inside performance of the parts of the global business model in relation to the performance of the global business model as a whole (1 out of 4), and KPIs (1 out of 4). Also, the effectiveness of the direction the core sets out with regard to the value delivered to society (1 out of 4), to build in a trust building mechanism: otherwise the global business model won't work (1 out of 4), for the global business model a central group is required (1 out of 4), a reporting system to measure the objectives in using KPIs (1 out of 4).

None of the respondents truly objected this proposition.

Conclusion This proposition is partly accepted.

5.4 Google Drive

Proposition 4 The ICT of the collaborating big businesses will be brought together in the nucleus of the global business model, using Google Drive and every player can connect to this “brain”

This proposition is partly accepted because all of the respondents agree that the cloud (instead of the use of Google drive as a standard) will be the way to work.

Also with regard to this proposition there were no real significant outcomes. The format to be used to work in the cloud is mentioned (1 out of 4) to be an important factor.

Objections to this proposition are that the cloud currently is very expensive in use, and therefore a backup system is too expensive and the big businesses are seeing this as a big treat (1 out of 4). Culture has been mentioned as a treat because you need to be open minded (1 out of 4). One respondent is not sure if the big businesses are ready for it now to share all the knowledge, information they have available (1 out of 4). And as last there might be reluctance because of the company's value and patents (1 out of 4).

None of the respondents fully rejected this proposition.

Conclusion This proposition is partly accepted.

5.5 Transformation model

Proposition 5 The global business model functions as a transformation model through which we are able to make the transition from physical based resources to knowledge based resources; which results in a huge innovation process, 1 big learning organization

This proposition has a significant outcome and is accepted because most respondent have a positive attitude towards the global business model (4 out of 5).

The following objections were made: entities that might disagree (1 out of 5) and explaining the global business model (1 out of 5). There were also two obstacles mentioned that covered an opportunity: opening up the core of the company and that the global business model is a model to understand change.

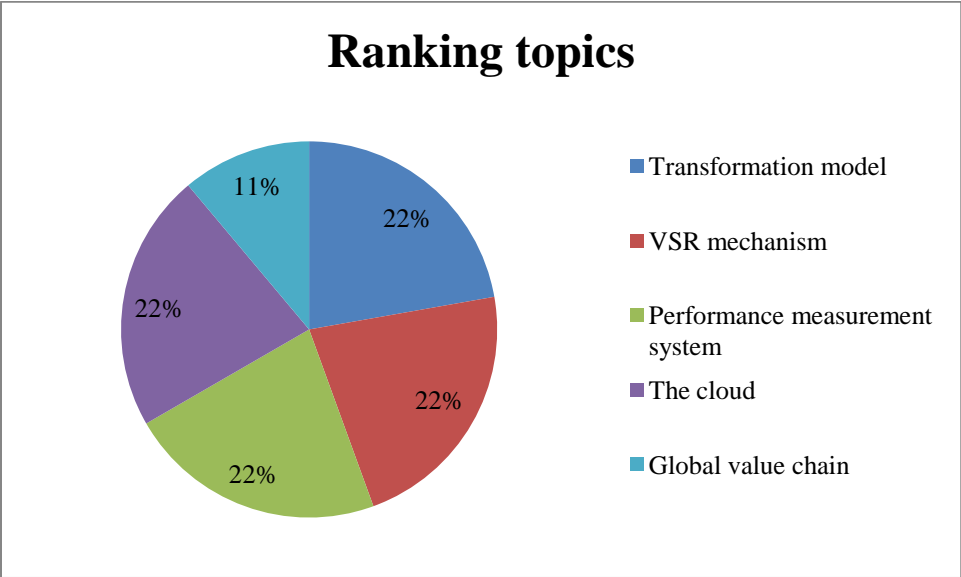
None of the respondents fully rejected this proposition.

Conclusion This proposition is partly accepted.

5.6 Ranking of topics

Figure 5 represents a ranking of the five important topics covered during the interview. At the end of the interview I asked each respondent to mention the most important topic. It was possible for them to mention more than one topic.

Fig.5 Ranking topics



Conclusion The transformation model, the VSR mechanism, the performance measurement system, and the cloud are considered to be the most important topics. These topics were all mentioned twice; in contrast to the global value chain, that was mentioned once.

6 Conclusion & discussion

The purpose of this paper was to explicitly research and considers aspects with regard to what factors are important in linking the operations of our big businesses across global industries using alliance formation. This final chapter aims to answer our research question. Conclusions are based on the analysis of the previous chapter. The chapter ends with a framework for discussion and suggestions for future research.

6.1 Research question

The central research question was: *How can we successfully link the operations of our big businesses across global industries using alliance formation?*

We now can answer this question as follows.

6.1.1 Global value chain

Because the global business model and the alliance form used for the model are new, i.e. the global business model is a blue ocean that doesn't exist yet, it was hard to explain the vision fully.

Because the global business model is a blue ocean, creative destruction, a GPT, this means that the rules of the games are waiting to be set. And that the biggest obstacle - just as my theory shows, the economic regulator, is mentioned by the respondents as biggest obstacle with regard to composing the global value chain - can be overcome due to the fact that my model is a blue ocean.

6.1.2 VSR mechanism

The world already works like this, but not in such a structured way as used for my model.

6.1.3 Performance measurement system

In a general way the big businesses are all willing to operate more efficient, effective, and innovative.

6.1.4 Google drive

Most notable is that it doesn't really matter which cloud to use. What matters is that all participants agree that the use of the cloud will be the way to work for the big businesses. Also the sharing of information, even core information, doesn't seem to be a real problem. You just need to show some guts, that's all.

6.1.5 Transformation model

There appears to be some conformity of the big businesses in moving towards the global business model. The added value of this outcome is that we can start with the transformation process immediately.

6.2 Discussion

With regard to the transformation model the most significant outcome has been found because 4 out of 5 of the respondents have a positive attitude towards the global business model.

With regard to the VSR mechanism the second most significant result (4 out of 6) has been found. It seems that the world already works like the way I have modeled it in my model.

But because it has not been modeled in the way it is modeled in my model we can make real improvements in having a structured way for measuring and monitoring the innovation process to get the economy back going. This tool can be used by the CEOs through shared leadership in making (risky) investment decisions. In this way they will be less dependent upon the financial system and share risks. The unregulated financial system will get its own function in funding the new economic system.

With regard to the tasks of CEOs the following has been stated by one of the interviewees after I asked him what the added value of a CEO is.

“Well what, just a pause awhile, but for me one thing and that's motivating people so, the right people get other around. That develop and radiate a common vision but mainly commitment. So motivate. That's for me, generate confidence and motivate. Those are the things that are important as CEO.”

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In my vision it is important that the CEOs are aware of their corporate social responsibilities and therefore get a new, the above mentioned, task. Besides they will have to perform example behavior. Since the first heading of the global business model is towards the use of nanotechnology, the following is important in example behavior. Coordinated use of VSR mechanism, shared leadership, knowledge sharing, and cooperation.

The VSR mechanism will be used to structure the innovation process through alliance formation based on the horizontal strategy development process using the cloud. Now the foundations have been laid for the global strategic intent.

It seems to be important to sort out in what way the VSR mechanism should be measured and monitored, in such a way that the innovation process can be organized in a structured way. It is suggested to use algorithms and big data for this.

Important in this is that as soon as possible the parts that pursue operational excellence within and across global industries will be connected to each other so that efficiency improvement results and that consequently the cost structures can be lowered. The money that will be available from the improved efficiency can subsequently be used in creating learning environments in the R&D labs across global industries. This is important to enable the successful use of nanotechnology. Besides through connecting silos, in parts on the basis of their similar operating models, the result will be that the entry barriers to entry will be broken down and that new entry can enter the playground; remember: GPTs arrive exogenously to R&D.

At the same time the current power structure, the pyramid, will be broken down and replaced by a self regulating system, the circle. The cloud is used as an enabler to set up the communication flow that will function as feedback loop in realizing increasing returns. The VSR mechanism is a structured way to measure and monitor the dynamics in the system.

The sooner we start this process the less resistance there will be. It will be a transformation process without people being aware of it. When they notice, the transformation is already underway and they will follow. We'll make use of the herd behavior in a positive way. So in this, the CEOs need to perform a central task, i.e. create shared global strategic intent, perform example behavior and motivating people.

I'd like to refer to the following quote of one of the interviewees.

“So when I was reading it, I just came with the big question: will you make it more productive, more efficient, more effective by making it more coordinated or do you lose some of the hidden of the invisible hand of the economy by making it this structured?”

My answer is as follows: The self regulating behavior of the market described by Adam Smith (1776) with his concept of the free market based on the concept of the invisible hand is built upon the idea of no rules. In contrast, my global business model functions as a transformation model through which we will be able to make the transition from a capitalist system build on physical based resources to a capitalist system build on knowledge based resources. The concepts of Adam Smith (1776) are developed in the era of physical based resources and therefore his concepts cannot hold full ground and back then the intervention of a government was legitimate because of the unfairly distributed physical resources, i.e. oil, diamonds, gas, gold, etcetera. Instead my model is built upon knowledge based resources and therefore fully capable of the functioning of the free market and the invisible hand. The tree of knowledge is forever growing. The more people connect to the tree the more fruits its will give. This is further enhanced through the use of the VSR mechanism and the cloud, the foundations of the global strategic intent to be able to give direction and goal clarity. This is, because the creative process needs to be organized to overcome chaos, therefore a relative stable core is needed. It is the balance between cooperation and competition.

Opening up the core doesn't seem to be an obstacle for the big businesses in using the cloud in sharing information, while I had expected this to be the biggest obstacle.

6.3 Suggestions for future research

It seems to be important to find out what format is most appropriate in using the cloud.

This needs to be investigated as from now because the cloud functions as the nexus of the global business model.

The global business model is far from finished. The model should be further tested in practice. Learning organizations are in constant motion and they will love to work with her. This is the only way to further improve the model. This process needs to be started immediately.

Most important is to start creating the conditions under which the global business model can be used. This can only be facilitated when our learning organizations start working with her. That's the essence of a learning organization.

I have created the global business model for our big businesses. I have developed this GPT for them to work with so that they can transform themselves into the new economy. This is creative destruction in its purest form; it will keep the economy going.

It is important to figure out how the CEOs are facing this big opportunity and whether they face fears towards the expansion of their job responsibilities. This needs to be sorted out immediately so that potential fears can be eliminated.

KPIs need to be set up. The decision making process needs to be put set. All arrangements for the alliance formation must be set put. There needs to be developed a simplified version

of the model. And it is important to sort out in what way the algorithms and big data are to be used to measure and monitor the dynamics in the system.

So the foundation of our new economy will be build upon several GPTs: nanotechnology, biotechnology, and my global business model. The model itself is built upon multiple GPTs, like the cloud. Scientific literature showed us that the only drivers for sustained economic growth are GPTs. They enable the swarm behavior responsible for new markets and industries. And because my model is built upon knowledge creation, capturing, and appropriation, increasing returns are assured. And because my model is a GPT, in other words a blue ocean, in again other words creative destruction, this means that the rules of the game are waiting to be set. All rules and regulation of our old economy cannot hinder my model. My global business model is a new game. Now our task is to create the conditions under which the global business model can function.

Hopefully my model can make a real contribution in guiding us into the new capitalist system based on knowledge based resources with a social structure, the foundations for a self regulating system. And in doing so, my model will guide us towards the times of sustained economic growth and increasing returns.

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Appendices

1. Interview protocol

Central research question *How can we successfully link the operations of our big businesses across global industries using alliance formation?*

Proposition 1 The linking of our big businesses across global industries on the basis of their similar operating models - using bilateral contract based alliance formation - results in a global value chain

Q1 How does the organization currently handle environmental dynamics (internal vs. external)?

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Q2 How does the organization currently handle potential growth opportunities?

Q3 What do you think will be greatest obstacle/opportunity with regard to this proposition?

Proposition 2 VSR processes are responsible for the dynamics in the environment and need to be monitored continually by our cooperating big businesses and are a very important part of the measurement system of the global business model because the feedback loop results in increasing returns

Q4 What do you think about the proposed upscaled VSR learning mechanism? Can you imagine that this mechanism will be used as an investment instrument as well?

Q5 How do you think these processes can best be monitored and measured?

Proposition 3 The global business model functions as a performance measurement system in terms of improved efficiency, increased effectiveness, and the discovery of blue oceans (diversification strategy) for the creation of new markets and industries

Q6 What more is important to include in the performance measurement system?

Q7 Why (or why not) and in what way?

Proposition 4 The ICT of the collaborating big businesses will be brought together in the nucleus of the global business model, using Google Drive and every player can connect to this “brain”

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Q8 What can you tell me about the company’s information technology/integrated computer systems?

Q9 What do you feel when you imagine the company is about to share this information with other players in the global value chain?

Proposition 5 The global business model functions as a transformation model through which we are able to make the transition from physical based resources to knowledge based resources; which results in a huge innovation process, 1 big learning organization

Q10 What is your vision about the global business model?

Q11 What do you think will be greatest obstacle/opportunity?

2. Analysis of the empirical findings

core theme	Theme	Subtheme	Sub subtheme	Pattern	
Global value chain	Environmental dynamics	General	adapting to changing world: from inside to outside	1 out of 6	
			adapting to changing world: from outside to inside	3 out of 6	
			we don't need to change	1 out of 6	
			External	financial crisis	2 out of 6
				news papers	1 out of 6
				politicians	1 out of 6
				regulators	3 out of 6
				globalization	1 out of 6
				pollution	1 out of 6
				urbanization	1 out of 6
				innovations	2 out of 6
				BRICS countries	1 out of 6
				political situation on the globe	1 out of 6
			turmoil in the middle east	1 out of 6	
			rapidly changing situation between east and west	1 out of 6	
	Internal	heavily dependency of big businesses on the financial markets	1 out of 6		
		funding of R&D	1 out of 6		
		in which part of the world to invest	1 out of 6		
		discussion	2 out of 6		
		adjusting processes	2 out of 6		
		investment in research and development	3 out of 6		
		R&D	2 out of 6		
		Potential growth opportunities	market development	alliances	2 out of 6
				alliances or investment	1 out of 6
				combination of market development & product	1 out of 6
	Internal development	analyzing and waiting		3 out of 6	
				1 out of 6	
				1 out of 6	
	greatest obstacle/opportunity	Obstacle	regulator	3 out of 6	
			culture	2 out of 6	
protection of intellectual property			1 out of 6		
competition			1 out of 6		
convincing them to work with Plaza			1 out of 6		
how to share the cake			1 out of 6		
identity of the organization			1 out of 6		
money			1 out of 6		
not possible to unbundle			1 out of 6		
stability and scope are important			1 out of 6		

		opportunity	broadens client base	1 out of 6
			cooperation by bilateral agreements	1 out of 6
			open innovation	1 out of 6
			reducing the CAPAX structure	1 out of 6
			be more effective	1 out of 6
			getting to new markets	1 out of 6
			good business plan	1 out of 6
			leadership	1 out of 6
			try it small	1 out of 6
		obstacle and opportunity at the	be very open minded	1 out of 6
			a very strong and powerful center	1 out of 6
			build-in a back door	1 out of 6
VSR mechanism	Upscaled VSR learning mechanism	current situation	the world partly works like this	4 out of 6
		I don't understand it		2 out of 6
	Investment instrument	yes		2 out of 5
		no		1 out of 5
		might be		1 out of 5
		I don't understand it		1 out of 5
Performance measurement system	General	current situation	Measure customer & employee satisfaction	1 out of 4
			variation through consulting firms	1 out of 4
			retention through benchmarks	1 out of 4
			selection is a problem	1 out of 4
	important to include	effect on outside		1 out of 4
		decision making: who and how		1 out of 4
		KPI's		1 out of 4
		what goals		1 out of 4
	Important to include + the reason why	effectiveness of the direction the core sets out: value delivered		1 out of 4
		connect inside with outside & build in trust building mechanism: otherwise Plazia won'		1 out of 4
		Plazia	central group	1 out of 4
		KPIs to measure	reporting system	1 out of 4
		I don't know		1 out of 4
Google drive	The company's information technology/integrated computer systems	using the cloud	cloud space is expensive	1 out of 4
		from inside to outside	use as communication tool	1 out of 4
		20 years old		1 out of 4
		move to Google drive		1 out of 4

		no idea		1 out of 4
	Feeling about sharing this information	obstacle	reluctancy because of the company's value and patents	1 out of 5
		obstacle	it's a cultural thing: be open minded	1 out of 4
		obstacle	not sure if they are ready for it now to share all the knowledge, information they have available	1 out of 4
		opportunity	alliance/knowledge sharing/bilateral contract based: it's a learning curve; be courageous	1 out of 4
		opportunity	think in opportunities	1 out of 4
		opportunity	just perfect	1 out of 4
		opportunity	sharing is the new owning	1 out of 4
		opportunity	but it will go that way	1 out of 4
Transformation model	Vision about Plazia	a lot of hidden		1 out of 5
		don't know		1 out of 5
		continuous learning		1 out of 5
		continuous learning	hazard	1 out of 5
		it probably will		1 out of 5
		Like it		1 out of 5
		Plazia is covering the right trends		1 out of 5
	greatest obstacle/opportunity	opportunity	try it small	1 out of 4
		obstacle	entities that disagree	1 out of 4
		obstacle	explaining the model	1 out of 4
		obstacle and opportunity at the	open up the core	1 out of 4
		obstacle and opportunity at the	Plazia is a model to understand change	1 out of 4