BUSINESS MODEL DESIGN OF TNC IN THE WORLD IT-MARKET

Lytvyn A. Business model design of TNC in the world IT-market. This article introduces the study on business model design of transnational corporations (TNCs) in the field of information technologies (IT). A business model describes the rationale of how the TNC creates, delivers, and captures different forms of value - economic, social and others. There are few integrative models that unite finer aspects of strategy, e.g. resource-bases, activities, organisational structure, products, environmental factors etc. In fact, experts still tend to argue about what it is that makes IT-companies successful, whether it is company-internal resources, or the external environment, or the balance of the internal and external environment. The paper is devoted to the theoretical generalisation and practical investigation of TNC’s business model design in the sphere of information technologies. The aim of the paper is to provide an input as to which components should be included in a theoretical business model in order to distinguish the business improvement of companies in world IT-market. The business model elements which provide the capital flow into the IT-companies under the influence of the global environmental factors and determinants of the self development of companies are also drawn.

1. Introduction

The field of business model formation substantially evolves. In the world market of information technology, transnational corporations of IT have been forced to analyze their competitive environment, define their position, develop competitive and corporate advantages, and understand threats to sustaining advantage in the face of challenging competitive threats. Rapid changes in the internal and external environment influence the business model of transnational corporations in the field of information technologies. The fastest growing companies in this new environment appear to have taken advantage of the structural changes and to innovate in their business models. Advances in information technologies have driven the recent interest on business model innovation. Different approaches including industrial organization, the resource-based view, dynamic capabilities, and game theory help to understand the dynamics of competition and develop recommendations on how companies should define their competitive and corporate strategies.

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2. Concepts underlying business models

B. Mahadevan argues that a business model is a unique blend of three streams, which are critical to the business. These include the value stream for the business partners and the buyers, the revenue stream and the logistical stream. Value stream identifies the value proposition for the buyers, sellers and the market makers. The revenue stream is a plan for assuring revenue generation for the business and the logistical
stream addresses various issues related to the design of the supply chain for the business. The long-term viability of a business largely stems from the robustness of the value stream. Furthermore, the value stream in turn influences the revenue stream and choices with respect to the logistical stream [1]. Joan Magretta assumes that a business model great strength as a planning tool is that it focuses the attention on how all the elements of the system fit into a working whole [2].

Bob Glushko defines business model as the story of what a business does and how it makes money doing it. He emphasizes that the generic business model pattern has two parts: making something or preparing to deliver something that customers value; finding the customer, transacting to create the sale or relationship, delivering the value. B. Glushko reviews such types of business models as: “Creators” – companies design what they sell, “Distributors” - companies buy something from a creator and then sell it, “Landlords” - companies sell the right to use, but not own some asset, “Brokers”- companies match potential sellers and buyers [3].

Ramon Casadesus-Masanell and Joan Enric Ricart suggest that the business model refers to the logic of the company, the way it operates and how it creates value for its stakeholders. Besides the business model they define concept of strategy and tactics: strategy refers to the choice of business model through which the company will compete in the marketplace, tactics refers to the residual choices open to the company by virtue of the business model that it employs. To integrate the concepts of strategy, business mode, and tactics, R. Casadesus-Masanell and J. Enric Ricart have introduced the generic twostage competitive process framework. In the first stage, companies choose “logic of value creation and value capture” (choose their business model). In the second stage, companies make tactical choices guided by their goals (in most cases, goals entail some form of stakeholder value maximization) [4].

According to Jonas Hedman and Thomas Kalling, business model is a term that is often used to describe the key components of a given business, normally a company, or to describe a particular business. Their approach integrates disparate strategic perspectives such as e.g. the resource-based view (RBV) and industrial organisation (I/O), and therefore improve strategy theory [5].

So, the term business model is used for a broad range of informal and formal descriptions to represent core aspects of a business, including purpose, strategies, infrastructure and organizational structures, trading practices, operational processes and policies.

3. Business model design of IT-companies

There are few integrative models that unite finer aspects of strategy, e.g. resource-bases, activities, organisational structure, products, environmental factors etc. In fact, strategists still tend to argue about what it is that makes companies successful, e.g. whether it is company-internal resources (Barney, 1991), whether it is successful reconfiguration of the value chain (Porter, 1985) or generic strategy (Porter, 1980).

I/O and RBV are both interested in competitive advantage. But their views on what competitive advantage is and on what it is based differ. While both RBV and I/O may be seen as content-based approaches to strategic management, the process-based view on strategy focuses on the processes through which strategy contents are created and managed over time. M. Porter brought in the I/O perspective, by claiming that external industrial forces affect the work of managers. Substitute products, customers and suppliers as well as potential and present competitors affect the possible choices of actions. The two “generic strategies” are:

1) to differentiatate the product so as to enable a premium price, or
2) to produce with low-cost and compete with a low price rather than quality.

Porter’s work was further developed in 1985, with the value-chain model, in which focus is on the activities and functions of the company, i.e. the underlying factors that drive cost and differentiation advantages. Thorough control over activities, and internal/external grouping of activities, would enable companies to utilise cost and differentiation potentials through the reaping of scale advantages or the creation of innovative forums. The I/O framework has some serious shortcomings in its neglecting of company-internal factors. The Porterian framework has been used extensively within IT research. McFarlan suggests that IT can be used to manipulate “switching costs”, and erect “barriers to entry”. Porter argues that information pervades every element of the value chain activities in organisations. Therefore, information technologies can be used to enhance the value chain activities to gain competitive advantage through low cost or differentiation [5].

The strategy concept means whatever phenomenon such as choice of industry, industry position, customers, geographical markets, product range, structure, culture, value chain, resource-bases, technologies etc. Jonas Hedman and Thomas Kalling have integrated the relevant components into one model: customers and competitors (i.e. industry), the offering (generic strategy), activities and organisation (i.e. the value chain), the resource-base (resources) and the source of resources and production inputs (factor markets and
sourcing), as well as the process by which a business model evolves (in longitudinal processes affected by
cognitive limitations and norms and values).

We propose to use this model also for companies that operate in the world IT-market. The model
integrates company-internal aspects that transform factors to resources, through activities, in a structure, to
products and offerings, to market. The logic is that in order to be able to serve the product market, businesses
need activities, input from the factor market (capital and labour) and the supply of IT-resources. The same
resource-base and activities and organisation can produce different products and hence have a scope of
different offerings (e.g. hardware in two or more colours), but at some point during diversification, new
activities are needed (e.g. software in two or more versions) and potentially also new resources, thus forcing
the development of business models. With this view, even a non-diversified company can have many
different business models. However, the more profound the difference between products, the higher is the
probability that the businesses are organised independently from each other.

Figure 1. Business Model of TNC in the world IT-market

There are causal relations between the different components. In order to serve a particular customer
segment and compete with the products within that segment, the offering must have a favourable
quality/price position. In order to achieve this, companies need to offer customer-perceived quality of
physical product features and service, which in turn requires effective activities (e.g. large scale,
competence) and organisational structure (efficient communication and division of labour and authority).
This requires human, organisational and physical resources that have to be acquired on factor markets and
from suppliers of production inputs [4]. Although not depicted graphically, external actors are potential
partners or competitors in all aspects of the business: in the bundling of products (e.g. computers and
software), in activities (e.g. outsourcing IT, buying services from advertising agencies) and in the
configuration of resources (e.g. banks and insurance companies share customer data bases).

Gartner Group expects “knowledge-oriented” business models to dominate in which a number of
hub-like members share and organize knowledge and social relationships. PricewaterhouseCoopers expects
“metacapitalistic” business models and predicts that “the century-old business model in which brand-owning
companies put a premium on maintaining a huge internal base of physical capital will crumble and give way
to thinly capitalized brand-owning companies operating with external or outsourced networks” [6].

Ad-sponsored business models appear to be increasingly prevalent in the world market of
information technologies. Many companies choose to finance themselves using ad revenues and offer their
products or services free to consumers. These products and services range from hardware to software applications and IT-services. The emergence of ad-sponsored entrants in the IT-industry poses significant threats to the incumbents in these markets whose business models are often based on subscriptions or fees charged to their customers. Ramon Casadesus-Masanell and Feng Zhu suggest that incumbents use a variety of measures to respond to ad-sponsored rivals. They not only use tactics such as adjusting their prices, but also consider the adoption of new business models by switching from subscription-based models to ad-sponsored models or by extending their product lines to include ad-sponsored versions of their offerings. Consider four alternative business models [7]:

1. **pure-subscription-based model**: the company offers at positive price one product that comes without ads;
2. **pure-ad-sponsored model**: the company’s product comes with ads but it is given away for free. Ads have a detrimental effect on the product’s perceived quality;
3. **mixed-single-product model**: the company’s product has advertisements and it is sold at positive price;
4. **mixed-product-line-extension model**: in this case, the company offers two products, a high-quality product that, just as in the mixed-single-product model, is sold at positive price and comes with a few ads, and a low-quality product that is ad-sponsored (has many ads but is given away for free).

Business components are the modular building blocks that make up the specialized enterprise. Each component encompasses five dimensions [8]: business purpose - the logical reason for component’s existence within the organization, defined by the value it provides to other components; activities, conducted by each component to achieve the business purpose; resources, the people, knowledge and assets that support their activities; governance model, each component is managed as an independent entity, based on its own model; business services, provided and received by each business component.

### 4. A new business model formation: Dell case

A way of bridging the gap between business model and strategy is to recognize that an effective business model must first be supported by effective strategy and over time become embedded in the strategy. Cisco and Dell were built on their founder’s insights that were crystallized in what was clearly a business model (Michael Dell appears to be one of the earliest chief executives to use the term). Now the model is still the reference point for strategic planning but just that: a reminder of the founding principles – and the logic of value-generation [9].

The exceptional performance of Dell Computer in recent years illustrates an innovative response to a fundamental competitive factor in the personal computer industry - the value of time. The Dell case illustrates how one business model may have inherent advantages under particular market conditions, but it also shows the importance of execution in exploiting those advantages. In particular, Dell’s use of information technology has been vital to executing both elements of its business model - direct sales and build-to-order - and provides valuable insights into how IT can be applied to achieve speed and flexibility in an industry in which time is critical. The traditional distribution system of the PC industry is an indirect model often referred to as “the channel”. The PC maker sells its products to distributors, who buy products from many manufacturers and then sell them to a variety of retailers, resellers, system integrators, and others, who sell products and services to the final customer. This distribution system was an effective means for distributing high volumes of PCs with a variety of configurations to reach a broad customer base. However, it had inherent weaknesses that left it vulnerable in a time-based competitive environment. First was its reliance on market forecasting to drive production. Even the most successful PC makers, such as IBM, Apple, and Compaq, were chronically bedeviled by their inability to accurately forecast demand in a market driven by ever shorter product cycles. They were either caught with short supplies of hot products, causing them to lose sales to competitors, or stuck with excess inventories of slow sellers, which clogged the distribution channels and often had to be sold at a loss to move them out. Even with the best forecasting, the indirect model was plagued by the need to hold inventory at each step in the channel in order to fill orders. In the early 1990s, it was common for PC makers to have up to 90 days of inventory on hand and in the channel. The high inventory costs and lack of responsiveness of the indirect channel meant that there was an opportunity for someone who could find a way to circumvent the channel. The company that seized this opportunity was Dell, which pioneered a new business model based on selling PCs directly to the final customer, and building the PC only when an order was received [10].

The model created by Michael Dell is well known: while other personal-computer makers sold through resellers, Dell sold directly to end customers. That not only cut out a costly link from the value chain, it also gave Dell the information it needed to manage inventory better than any other company in its industry. And because the pace of innovation in the industry was intense, Dell’s inventory advantage meant
it could avoid the high cost of obsolescence that other computer makers had to bear [2]. Armed with its innovative business model, Dell has consistently outperformed rivals for more than a decade. In this case, Dell’s business model functioned much like a strategy: it made Dell different in ways that were hard to copy. If Dell’s rivals tried to sell direct, they would disrupt their existing distribution channels and alienate the resellers on whom they relied. Trapped by their own strategies, they were damned if they copied Dell and damned if they didn’t. When a new model changes the economics of an industry and is difficult to replicate, it can by itself create a strong competitive advantage.

5. Conclusions
The term business model refers to a broad range of informal and formal descriptions to represent core aspects of a business, including purpose, offerings, strategies, infrastructure and organizational structures, trading practices, operational processes and policies. There are various approaches that propose the optimal structural and functional connections within the company and with the exogenous elements, e.g. resource-based view, industrial organisation view, value chain, generic strategy, knowledge-oriented, component, ad-sponsored and other integrative frameworks.

The effective business model of the IT-company is rigorous in its value logic. The role of the many forecasts, figures and spreadsheets that typically feed into business model planning is to provide grounding for the hypothesis of value. Business models should separate model from strategy but ensure the links to strategy. The most effective business models will be industry independent, though their initial embodiment in strategy may be industry-specific. The most powerful business models will be those that provide an immediate target of opportunity but that permit the longer-term opening up of larger and broader market spaces in which to create value complexes.

Change can appear both in exogenous or endogenous processes. A poor offering (e.g. too high price/quality) may initiate change programmes that result in reformed activities and reconfigured resource base, but it can also work the other way. IT-companies take stock of their IT-resource base and may find new ways to combine IT-resources, and new ways to dispose of activities as a result of IT-resource modifications. This can result in new products and improved product market positions. So change can take either direction, and the depth of change will vary. Logically it seems that IT-resource bases are more difficult to change than products and activities. What is important though is the realisation that whatever the modification, it will affect other components of the model. Dell’s business model has ignited a spark that is not likely to be extinguished in the near future.

References:

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