



High Speed Economy

Vadim DUMITRAȘCU¹, Roxana Arabela DUMITRAȘCU²

^{1,2}Faculty of Finance, Banking and Accountancy, „Dimitrie Cantemir” Christian University, Bucharest, Romania,

¹E-mail: dumitrascuvadim@gmail.com, ²E-mail: dumitrascu_arabela@yahoo.com

Abstract *The use of knowledge in business opens vast possibilities for the spectacular intensification of the rhythms of the processes of economic value creation. High speeds are a fundamental feature of the knowledge economy. The sources of high speeds in business are certain economic, technological and commercial processes with the nature of some positive feedbacks. What generates it is the organization of knowledge in the form of networks. The organizations competitiveness is marked by the ability to operate at high speeds.*

Key words:

Knowledge, networks, time, rhythms, positive feedback

JEL Codes:

C51, C53, E02

1. Introduction

Relieved of materiality, the business processes based on knowledge took off, moving with the speed of thought. That is why only the human imagination – the production of ideas, concepts and new solutions – can restrict this amazing speed. The contraction of time by higher and higher speeds of businesses led practically to the “cancellation” of the economic space. Partners dislocated at huge geographical distances associate rapidly and without too high costs in global, flexible and competitive business networks. Interconnectivity is, along with intangibility, a defining feature of modern economy (Tapscott and Williams, 2008). The dematerialization of the economic value production dissolved the boundary between what used to mean “short term” and “long term”, installing the reign of time (quasi-) instantly. “One click away” became the metaphor that describes this reality.

The increase of the economic efficiency always materialized, ultimately, in the shortening of time necessary for carrying out the operational tasks. In economics, better meant invariable faster (and continues to have the same meaning). Saving time represents the quintessence of any effort to improve efficiency. It is an immutable economic axiom. The division of labour and, based on it, the growth of labour productivity have always been the main means in this regard. Outsourcing or the operations externalization is nothing else than the division of labour applied not to some separate workers, but to entire organisations. In today’s business world the faster and, therefore the most productive are the organisations that use not only

a lot of knowledge but also that create a lot of knowledge. The production of knowledge is nowadays the most profitable type of specialization for an economic organisation (Christensen and Raynor, 2007). Knowledge as economic input and especially as economic output unchains the business, allowing them to “run” faster and farther. This trend, which amplifies ceaseless, shapes global economic scenery which we might call “the high speeds economics” or “the rapid rhythms economics”.

2. The High Speeds Economics: Principles and Mechanisms

The high speeds economics (HSE) is inextricably linked to what we call the abundance economics, the attention economics and the reputation economics, the three being interrelated instances of the knowledge economy. Modern markets are characterized by a redundant offer of goods and services, presented in so diversified shapes that even the needs and expectations of the most limited niches or groups of clients are targeted (Collins, 2003). The abundance of offer has as immediate and significant effect the extreme fragmentation of markets. In order to dispute over a substantial segment of the market, the firms must come up with unique products or original and attractive ways of promotion and distribution in order to capture the attention of consumers. Quality has become a prerequisite for commercial success, but not a sufficient one. The singularity of the value offer for customers is the factor that triggers their interest, influencing their consumption choices and purchasing decisions. Given

the abundance and the fierce battle to capture the attention of buyers the businesses that succeed are those capable to build rapidly a solid reputation. Reputation represents the critical element of differentiation of competitors in the context of modern markets. These three dimensions—abundance, attention and reputation—structure the business environment characteristic of the knowledge economy and HSE represents the pendant of this economy.

Abundance, attention and reputation are not possible without processes that function rapidly, more and more rapidly. The core of the economics of abundance is a market fragmented in a multitude of niches, in which highly differentiated products are sold. In order to reach these micro-markets it is necessary to capture the consumers' attention. And this must be done as soon as possible otherwise the competitors will do it. And, in order to capture the attention you need a good reputation. Who builds a good reputation quickly wins the market. But how to gain and maintain the reputation? Only with some unique products which can capture the attention of a large number of consumers for a longer period of time. But how to obtain such products? That who innovates faster and more frequently than the competitors can obtain them. Here the circle closes. We have reached at the heart of the matter: innovation is the accelerator of the economic "engine". The company that wins is the one that produces faster and often than the others ideas, concepts and new solutions, with extensive possibilities of technological and commercial application. Figure no. 1 explains the mechanism of functioning of the HSE.

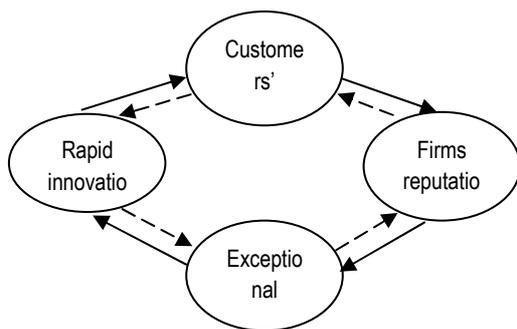


Figure 1. Basic mechanisms of EVM

HSE is based on four categories of positive feedbacks (shown in Figure no. 1 with dashed arrows), which enhance the rhythms of the business processes and, along with these, the gaps between the performances of the market leaders and the rest of the operators, according to the principle "The winner takes it all!":

- The feedbacks between the customers' attention captured by firms and the reliability of their reputation. Thus, the attention the firm succeeds to capture influences substantially its reputation which, at its turn,

will further feed the customers' interest for the company.

- Feedback between reputation and having a product of exceptional value. Reputation is gained with the help of an exceptional offer, reinforcing, in time, the value of the firm's offer.

- The feedback between the exceptional product and the rapid and continuous innovation potential. Through innovation, better products and procedures are created which fuel further the innovation process.

- Feedback between innovation and the level of consumers' attention. Innovation sparks the markets' interest, which allows companies to deepen their knowledge base regarding the customers' preferences, needs and aspirations and this new knowledge stimulates actively the innovation capacity.

These positive feedbacks express recursive causal relationships, in which the effect influences its own cause, with an enormous destabilizing capacity (not necessarily in the negative sense of the term). Each of them may generate sudden and significant breaches in the markets' dynamics, causing the net distancing of the leader company from the rest of the competitors. The essential feature of this distancing is the high speed at which it occurs. The winner strategy is the one that manages to create virtuous circles of growth based on at least one of the mentioned positive feedbacks. Only within HSE the idea that time represents the rarest of the resources became fully palpable.

3. Knowledge as Source of High Economic Speeds

The degree of dematerialization of the productive processes determines the rhythms of businesses. The more knowledge is incorporated as input and, especially, the more new knowledge is generated as output of the business processes, the faster the organisation can be. Knowledge as economic resource holds the extremely valuable property of being able to counteract the decreasing performances of the physical and financial capital. The explanation is not very complicated: from a certain point, the physical and financial capital move more and more slowly and its slowness, which can be neutralized by the very high speed of knowledge. The phenomenon is based on the following mechanism: initially, the increasing performances of the physical and financial capital result from the scale effects, which appear as more and more capital is invested; but, subsequently, from a certain volume of the activity, implicitly the physical and financial capital invested, the scale economies disappear or even become negative, turning into scale diseconomies. It happens because of the hierarchical – centralized way of organisation, coordination and control of the physical and financial capital. Hierarchy has a fairly limited capacity to address the informational

complexity. When the informational complexity of an economic system becomes sufficiently high, it can no longer be absorbed by the hierarchical structure, the system experiencing an entropic shock (the pronounced decrease of the organisation degree), whose direct economic expression is the appearance of scale diseconomies (negative scale effects). Along with the scale diseconomies is triggered also the decline of the capital's performances. The increase of the system's dimensions by the allocation of some additional physical and intellectual capital quantities no longer leads to the amelioration of the economic efficiency, but on the contrary, causes its degradation. The economical use of knowledge gravitates round an organisation, coordination and control principle, fundamentally different – the network – which is extremely efficient in absorbing and managing the informational complexity (Johnson, 2007). With a very wide tolerance towards complexity, knowledge organized in network structures manages to neutralize the entropy. Therefore, the scale economies generated by attracting a bigger knowledge volume manifest on very long periods of time. Also, knowledge, by its own economical nature, produces also qualitative system effects (synergies) – multiplication and training effects – which the physical and financial capital stimulate in quite modest limits. These three categories of system effects – sustainable scale economies, multiplication effects and training effects – allow knowledge to register highly superior exploitation and development speeds or rhythms compared to those of the capital. In this way, the slowdown tendency of the specific rhythms of the physical and financial capital is counteracted, tendency materialized in decreasing performances.

More knowledge invested in and extracted from the dynamic economic processes equals the businesses' stimulation. If the rate of knowledge incorporation (R_{KI}) and the rate of knowledge release (R_{KR}) are advanced by the rate of increase of the volume of the physical and financial capital (R_{IPF}), the decreasing performances of the latter will soon appear and amplify. In essence, the three rates represent speeds or rhythms of the economic processes, highlighting an important optimality proportion: $(R_{KI} + R_{KR}) > R_{IPF}$.

Despite the fact that, in general, the production costs of new knowledge have a fixed character and a very high level, their distribution over a wide base and rapidly increasing of users determines unitary values (average) low enough of these costs. Instead, the costs of knowledge reproduction have a variable and therefore marginal nature. This means that, along with extension of use of the knowledge standard, the respective costs will rapidly tend to zero. Therefore, overall, the economic creation and exploitation of knowledge

ensures total unitary costs rapidly decreasing (Anderson, 2006). The reverse of this phenomenon is the rapidly increasing economic productivity of knowledge. The described process becomes possible due to the reticular structures of knowledge organisation, within which exponential evolutions, contagion and diffusion phenomena are generated. The functioning of HSE is abundantly supplied by such phenomenology.

4. Conclusions

The capacity of the business organisations to function more and more rapidly constitutes the essential factor of competitiveness in the HSE context. But really imported is not the maximization of the business processes' speed in the absolute way. Really important is the organisations' ability to modulate their speeds or, more precisely, to go at different speeds. Now sprint, now fund, now marathon and sprint again etc. This is the essence of the strategic agility concept: to choose the right rhythm depending on the particularities of the strategic context.

Any economic process consumes, in very different proportions and combinations, certain economic resources—capital, labour, natural resources and knowledge. Many processes focus on the exploitation of a single type of resource, using the others to a smaller extent. But absolutely all business processes, without any exception, use an economic resource that we have not mentioned – time. All have certain duration or progress in time. The processes' rhythm or speed expresses the intensity of time consumption.

The competition between processes or alternative modalities of resources allocation is, in the first instance, a competition for time. This is because time, by the virtue of its irreversible nature, is the only economic factor totally irretrievable. The other resources may have multiple and consecutive applications, time however does not have it, being used exclusively: once spent on an activity, the one and the same time frame cannot be spent for another activity. Time represents exclusively an economic meta-principle, being therefore much more than an economic resource. That is why the way of use of time within an economic process constitutes the essential criterion to verify the efficiency of that process. If the other economic resources (labour, nature, capital, knowledge) are characterized by various degrees of rarity, their availability drawing the boundaries of the organisations' potential, time appears like a supreme arbiter, with veto right, defining the organisation's incapacities. Time is the only total constraint for an organisation, the equipment with the other resources representing only partial constraints.

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