The Five Change Forces in the Evolution of Corporate Finance Function

Andrej Bertoncel* Violeta Bulc*

Abstract: The evolution of business systems consists of four key phases: the working, learning, thinking, and conscious phase. It seems that all four phases represent independent cycles. However, a closer look at the leading elements for added value creation (labour efficiency, knowledge, creativity, intuition) and the winning factors (productivity, quality, innovation, and life energy) at each phase reveals their close interrelation and interdependency. This paper reveals the model of five change forces of business transformation and their impact on financial subsystem. While leaders play a vital role in the evolution process of the company as a whole, the CFO is at the forefront of transformation of the financial subsystem.

Keywords: evolution of business systems, financial subsystem, business environments, model of five change forces

JEL Classification: G30, J20, L20, Z13

Introduction

Business systems are undergoing a dramatic transformation in response to the continual changes that have become the only constant in the business environment. Nowadays, companies are constantly adapting to these changes while trying to create as much added value as possible. Competitive differentiation of any business system can only be reached by constant search for new success factors, and at the centre stage of these activities is value enhancement.

Nowadays, the CFO should be actively involved in formulating a corporate strategy and in decision making processes (PWC Financial &Cost Management Team, 1999). He/she is faced not only with the need for additional financial knowledge and skills; but also with the need for comprehensive understanding of

^{*} Andrej Bertoncel and Violeta Bulc are at the Institute for Business Growth and Creativity, Ljubljana, Slovenia.

human resource management, communication management with stakeholders, etc. His/her exclusive concern and responsibility is no longer financial statements and good financial result. By all means, financial gains remain an important factor, but it is not the only deciding factor anymore.

Creating the (biggest possible) added value remains the most important goal of every corporation regardless of its organizational form, size or evolutional phase. By creating additional value, the necessary resources are provided for the sustainable development of a corporation, but nowadays different resources are used and a broader circle of participants is involved. Risk averse, or even negative, attitude towards changes of any kind, is conditional on the existing doctrine of risk management. Positive attitude, or at least neutral, towards changes in our surroundings should replace existing negative notion as the changes have become the only constant in ever-changing environment. In the innovative economy, the constant change can be seen, at least by creative companies, not only as a threat but an opportunity, as well.

More balanced result is being requested, along with other concepts such as added value creation for all stakeholders and not just shareholders, more social responsibility of corporations, self-actualisation of employees, etc. New social-economic trends bring new challenges for leadership. Short-term financial effects give way to long-term economic and social effects. The financial result alone is no longer the most important goal, it has become a relationship which has a mission. In new technology era of innovative high-tech companies the intangible assets account for a larger part of company value than the tangible assets, and human capital is becoming more important than physical capital. However, the methods and tools for measuring the contribution of human resources to corporate result and wealth remain un-chartered.

Efficient human resource management has become a key competitive advantage and it is outdated to treat employees as labour cost only or even worse as 'walking' cost. Intangible items such as talent, expertise, and relationship can not be clearly measured (quantified in numbers), but are the key success factors in the innovative economy. Therefore, a major change in the mind set of all of us is required in order to accept the fact that not everything can be (quantitatively) measured and that we have to develop (and are already developing) new business models and entirely new yardsticks for measuring human capital efficiency.

Previously inward-oriented and centralized financial function has turned outwards, it is decentralizing and seeking balance and consensus. The unjust win-lose relationship is being increasingly replaced by more balanced win-win relationship. Participants of today, in business as well as in other relations, do not want to be merely measured against set standards (measuring efficiency is a feature of the old economy). They aspire to their self-actualisation (a feature of the

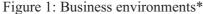
innovative economy). A self-aware, creative individual ('I am') is becoming the driving force of development, a winning factor in the relentless battle for the highest possible level of innovativeness, and thus for bigger added value creation.

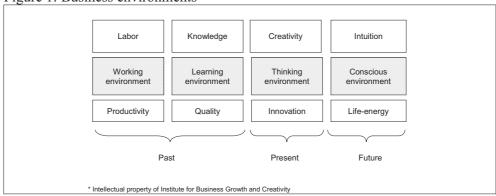
In holistic economy that would stand for even more and a partner relationship among various participants will be based almost exclusively on human capital; contrary to financial (physical) capital which is becoming more and more a commodity. Financial capital is becoming merely an entry factor, and human capital is becoming a winning (key success) factor. A commodity of the old economy the 'labour force' - is finally getting the right recognition as a source of creativity. Creative workforce who can only provide for more innovativeness, is now being recognized as the most important competitive advantage of any corporation. We witness a battle for talented people on a global scale this battle has become a global phenomenon.

Evolution of Business Systems

Past experience suggests that sustainable development of business systems appears in four main forms, e.g. phases of business evolution: working environment, learning environment, thinking environment and conscious environment. Although all four phases seem to be independent of one another, they are in reality closely related. Even more, they evolve in a logical sequence, from one phase into another. For each phase, there are specific rules of conduct, resources being engaged, corporate governance and management tools; they cannot be skipped in the development planning and execution process. Each succeeding step is an upgrade of the previous one. Each new phase requires the vital forces of its predecessor.

Each business environment has its own levers of creating added value. In the 'working environment' it is the 'hardworking' manner, in the 'learning environment' it is the gained 'knowledge', in the 'thinking environment' it is our 'creativity' and in the 'conscious environment' it is our 'intuition'. Each of the mentioned mechanisms, however, has its own 'success factor', which throughout the evolution of business environments becomes an entry (commodity) factor as it is soon engaged by competitors. In the working environment, the winning success factor is 'productivity', in the learning environment it is 'quality', in the thinking environment it is 'innovation', and in the conscious environment it is 'vital (life) energy'. Competitive differentiation throughout the evolution of business systems can only be reached by constant search for new winning factors.





Time component does not play a decisive role in the evolution of business systems. Phases evolve in a predetermined sequence of events, meaning that with the appearance of a new phase, the specific properties of its predecessor merge into the new business environment. Winning (success) factors play a leading role in evolutionary positioning as they are co-dependant, e.g. we cannot ensure long-term stable results with quality products as the key success factor only, without the appropriate productivity already in place. The same goes for innovation, which by itself cannot ensure the existence of 'thinking environment' without the presence of the expected quality and productivity already in place.

Real world evidence suggests that some industries are currently still in the phase of 'working environment', while others are already 'learning environment' and developing toward 'thinking environment'. Back at the end of the 19th century, companies were creating added value with good work ethics in a 'hard working manner'. At the same time, the systematic costs containment methods were developed in an attempt to make resource management more efficient. With improved efficiency of their operations, business systems were creating winning conditions in the market, sufficient productivity and hence higher efficiency. The ever-increasing productivity enabled the creation of competitive prices and with this the formation of the desired position within the market. 'Hardworking' was the key success factor in added value creation. This evolutionary phase is called the 'working environment'.

The differences between individual business systems became smaller and smaller. Work ethics, i.e. hard work no longer ensured a high enough added value; the 'efficiency' itself was no longer a decisive winning factor. 'Knowledge' turns out to be new prevailing source for the creation of added value. As a result, 'quality' becomes the winning success factor on the market. Productivity is simply expected

and turns into a 'commodity' factor. Foundations are laid for another phase in evolution of business systems - the 'learning environment'.

With the appearance of quality as the winning factor in the market, the central focus on 'product' in the working environment is replaced in the learning environment by the 'customer'. Knowledge, as source of creating added value, triggers the process of continuous improvement. Existing structures, ways of leading organizations and communication techniques are being challenged. With knowledge as source of added value creation, leadership becomes more important for the success of a company. However, this demands much wider activation of knowledgeable individuals into the process of strategic planning. Core values shift from 'work' towards 'knowledge'. This requires broader engagement of management and leaders, continuous education and more empowerment. In other words, more information, changed rules of conduct, and new values.

Information technology is one of the key supporting elements and pre-requisite for establishing foundations for 'thinking companies'. It also allows for cheaper and faster availability of financial capital, which is becoming increasingly a commodity. On the other side, information technology increases mobility, use and value of intellectual capital in the global economy. We witness a surplus of financial capital; the hunt for intellectual capital has begun. Creativity becomes new resource for creating added value; winning success factors are now innovations. A new phase of business systems evolves - the 'thinking environment'. Quality and productivity are generally expected and as such embedded in products.

As a result, the transition from a learning environment to a thinking environment, comes with dramatic changes in the behaviour of business systems on all levels of management, governance and leadership. The undisputed search for enhanced creativity leads us closer to human being and his potentials. Only when creative processes are triggered, they result in innovations which turn out to be new winning factor in the market. Changed conditions on the market put more weight to creativity and innovation. Intellectual capital, even more than financial capital, is taking a profound role in strategic decision making processes. We are witnesses to the humanization of the business world.

The business systems are evolving toward fourth evolutionary phase called 'conscious environment'. First signs can already be seen, but it will take quite some time until the new form becomes common business practice as it is tightly bound to the development and consciousness of the individuals. Constant changes and transformations will become our way of life, the essence of existence. Leaders and managers will be challenged to assure productivity, quality and innovation of business systems and the CFO will be at the forefront of transformation of the financial subsystem.

Evolution of Financial Environment

Corporate reporting of today is still based on traditional accounting of the Franciscan monk Luca Paciola. It was appropriate (according to majority of finance managers still is) for the old economy because it is concerned with figures and methods of quantifying only, which take into account only directly measurable 'hard' factors. Despite the fact that the accuracy and credibility of balance sheet figures are questionable as they only take into account 'inert' assets cash, premises, equipment etc. ! and not the human capital. 'Inert' assets are passive and need active human application in order to be able to create value. Therefore, the traditional accounting will have to be upgraded with these new insights; new balance sheet items will have to be added such as 'human assets', 'relationships', etc., and be understood on more intuitive way. In the past, quantitative measurement has focussed on costs, capacity, time in order to explain us 'what' happened. Qualitative measurement, on the other hand, is focussed on value and human relations, and endeavours to explain 'why' something happened. Combined assessment, quantitative and qualitative, gives us more comprehensive understanding and better insight into corporate performance and driving forces of value creation.

Participants and resources for creating added value Partners Physica Human and Physical capita Human capital physical capita Holistic New Innovative Old economy economy frequent chang changes on on operational on operational directions all the level level time strategic level Extent and pace of change in business environment Evolution of business environment From standardization to self-actualization From analytical to holistic From local to global to "glocal

Figure 2: Evolution of business systems

Capital markets have already realized that 'human leverage' is becoming a driving force of development and the market value of knowledge-based organizations exceeds their book value by several times. The intangible assets of such organization already account for the majority of its value. Human leverage is being placed side by side to financial leverage and closely monitored.

Business partnerships and requested added value financial services call for transformation of current financial function and its active involvement in the decision-making processes. The standard control function is giving way to services with added value for the users of financial information while business systems are becoming more integrated and based on new class of capital – intellectual capital. The local is giving way to the global. Even more, an interesting two way interaction and influence between local and global economy is taking place. W call it a 'glocal' one. The analytical approach is giving a way to a holistic one. Focus on operations is giving way to the value. New concepts of corporate governance and management tools will have to be developed to better serve the key participants and resources in added value creation processes.

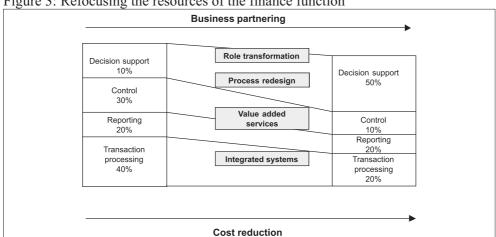


Figure 3: Refocusing the resources of the finance function

Source: Adapted from PWC, 1999, 3.

Five Change Forces Model

The evolution of business environments can be analysed from the standpoint of five change forces of transformation: resources and their optimization, sustainable growth, added value creation, and participants. The key change forces are human capital, financial resources and process of added value creation. Through the optimum structure of 'physical' capital and the use of human capital, maximum added value for all participants in the process of value creation and sustainable growth of an organization can be achieved. Transformation factors are interdependent and interrelated; when optimized, a balanced result for all stakeholders can be achieved in a given business environment and time span.

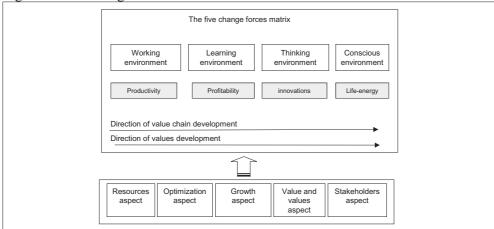


Figure 4: Five change forces matrix

The Resources

Material resources and financial capital were key resources in the old economy and still are to lesser extend in the new economy. Their efficient use in the 'hardworking' manner was a competitive advantage; the main characteristic of early development phases is all-encompassing control activities in order to increase efficiency (productivity). Inputs and outputs, including the labour force, are carefully measured and dealt with exclusively in terms of quantity. In learning environments, gained knowledge and skills are more valuable resource for value creation than 'hard-work'. The material (physical resources) and capital are turning more and more into a commodity and giving way to the intellectual and relationship. The intellectual capital and relationships among individuals are new key resources that will be intertwined in the process of creating added value and sharing it. The 'fil rouge' of change is the tendency towards non-material 'soft' resources and values, or rather a balanced role of both non-material 'soft' and material 'hard' ones. The human being is becoming the most important resource and ought be managed efficiently, up to the standards of open environments for learning and creativity.

The Optimisation

All-including controlling and cost optimisation are the characteristics of working environments. To manufacture as much as possible (quantity) as cheaply as possible means decreasing the costs per produced unit, and thus greater efficiency. A higher

level of productivity in the working environment of old economy, through cost optimisation, represented a competitive advantage. Inputs and outputs, including the labour force, are carefully measured and dealt with exclusively in terms of quantity. Optimised tangible or physical resources in new economy are not a sufficient advantage anymore; intangible assets and intellectual resources should also be optimised. Productivity and quality have to be augmented through innovativeness.

Common perception of abundant intellectual resources available on the market that can be simply acquired or replaced is fundamentally wrong. Intellectual capital should be managed in an efficient and planned manner. The efficient use of intellectual resources enables continual improvement. Human capital with its talents, skills and relations becomes the central factor of success and vital resource that has to be first developed and then after carefully managed towards a continuous growth. Financial leverage (optimum structure of 'physical' capital) and human leverage (optimum utilization of 'human' capital) nowadays go hand in hand. In the future, sharing of life energies will be in the stage-stage of value creation and as such their optimal distribution will be required.

The Growth

As a rule, companies opt for growth strategy and thus for the expansion of their operations. Sustainable growth only guarantees stable long-term development of any corporation. Growth has a positive notion in business and general public perception as it stands for stability, safety and profitability. In old economy, the development strategy was based, first and foremost, on sustainable organic growth. Predominantly organic growth is characteristic of companies in the first development phase. Only after such companies have evolved into learning ones, they should start acquiring other companies on larger scale, thus combining internal and external growth.

Combined growth, organic and external, complemented with strategic (non-capital) alliances, is recommended approach for the thinking companies in creative economy. We further state that only thinking companies should perform mergers and acquisitions. While moving towards the conscious environments, the role of the physical (financial) capital further loses on importance; there will be more and more strategic alliances on a non-capital basis and partnerships based on intellectual capital. In conscious economy of 'knowledgeism', financial capital as the basis for alliances will be replaced by intellectual capital; numerous partnerships will the driving force for sustainable growth. Despite the shift from financial to human capital, from capital alliances to more non-capital alliances and partnerships, all business environments have in common their focus on sustainable growth, which is a

foundation for long-term corporate value enhancement in each environment regardless of its given characteristics.

The Value and Values

Producing as much as possible at the lowest price results in a higher added value. Therefore, focus on the cost based management is a primary notion of the first phase of development. The paradigm of maximizing value for owners, i.e. shareholder value dominates in the new economy – value based management. Everything is subordinated to this idea, often in favour of short-term effects. Such an approach has proven to be too one-sided (owners represent only one interest group) and does not take into account other factors in the environment. In thinking environments, the multifunctional relations prevail among all stakeholders, i.e. individuals from both the internal and external environments – stakeholder based management. In conscious environment, the relationship will grow into partnerships where self-aware individuals in the spider-web-like inter-relationship will be intertwined in the process of creating added value and sharing it. In first development phase, the material goods are regarded a value, and price is a decisive factor of choice.

Nowadays, we are saturated with a wide offer of the most diverse products. We have started to pay attention to quality in its broadest sense and to environmental attributes. Decisions are not exclusively rational (a good value for the price), but often emotional, based on our views and beliefs (like opting for eco products). We pay more and more importance to 'spiritual' world. We strive for a balanced business and family life, we request self-actualisation (status, recognition of our achievements, promotion) and not just monthly wages. The work environment is changing into an environment of co-habitation, co-operation and co-confirmation (values). Values in their broadest sense are coming to the fore (spirituality), while the material commodity (economic value) is losing on importance.

The Participants and Intellectual Capital

Intangible capital human, structural, social and organizational capital will only gain in significance against physical capital in the future. Physical capital is becoming a commodity. In terms of quantity, there is enough of it and it is getting cheaper. The original orientation towards profit and then towards an appropriate (maximum) return on the invested capital is giving way to return on 'intangible' human capital. We are approaching era when this will no longer be just a phrase, but the true focus of our thinking and acting. The existing business models do not focus

enough on people, their behaviour, new organizational culture and values. In creative environment, however, the key success factor is intellectual capital, i.e., a human being with his talents, skills and relationships. The efficient use of intellectual resources facilitates a continual improvement in the 'thinking' environment, and only a combination of internal and external creative relations will build a large enough critical mass to facilitate the processes of continual innovation. In creative environment, human capital is winning factor and strategic resource; satisfied and confident 'thinking' individuals alone will make it possible for a corporation (or region) to join the club of the successful, the rich and the happy. The ability to make right decisions regarding employees is one of the last reliable sources of competitive advantage, as only few organizations really master it. Too many organizations still do not comprehend and recognize their most valuable asset; they do not know how to properly handle it and consequently it is poorly managed. For economists and leaders, this will pose a major challenge and will represent a transition from the analytical to the holistic and from standardization to self-actualisation.

Transformation of Financial Function Throughout Evolution of Business System

While leaders play a vital role in the evolution process of the company as a whole, the CFO is at the forefront of transformation of the financial subsystem.

Operational processes dictate centralized, inward-oriented financial management. The power of financial management is based on control and measurement; authority is built with the processing and servicing of financial data and reporting. Controlling and reporting, no doubt, will continue to exist in the future, although the significance of the control function will be substantially lower, as will be data processing and importance of daily transactions. These functions are becoming 'routine' activities. The collection and processing of data is increasingly directed towards activities that create added value for the users of financial information. Through cost optimisation, automatic data processing, etc., the financial function is diminishing in terms of number of employees and is changing the role. Operational processes are becoming 'thinking' and integrated processes, and activities are oriented towards services with added value and are more involved in the decision-making processes than in the past. With increased influence of all stakeholders in the process of added value creation, the financial function will adapt and become more decentralized (multi-centric) and externally-oriented. It will build on consensus and value creation for all stakeholders. One-sided, short-term orientation built on the post-Keynesian doctrine of maximizing effects for owners is gradually replaced by a more flexible, long-term-oriented policy of creating value for all stakeholders.

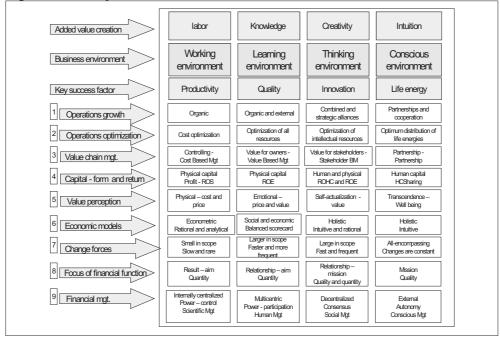


Figure 5: Development of financial function

The rational and analytical approach to solving of economic issues, a characteristic of econometric models, strives for the measurability of all economic factors. What cannot be measured, cannot be managed. In ensuring cost efficiency it was of key importance to measure the influence of individual tangible and financial factors. The socio-economic model introduces a balanced scorecard of both financial and non-financial indicators. The thinking environment, however, will require holistic (integrated) models which will measure the quantity and quality of 'hard' and 'soft' factors and will be intuitive and rational. It will never be possible to measure (quantify) a human being in all his/her dimensions, the tools for measuring the holistic effects of human capital will have to be perfected; the first attempts to develop such tools have already been made. In order to manage human capital successfully in the future, it will have to be 'measured', but based on qualitative and quantitative tools.

Small (local) markets are being replaced by large markets, or rather the world is becoming one large global market. It is not just the size of the market that is changing, but also the extent and pace of those changes. What used to change rarely and slowly, in a matter of decades, and was at first locally conditioned (e.g. the industrial revolution in England), is now changing at an amazing speed, simultaneously all over the world. The scope of changes is becoming all-encompassing and unceasing

process. Rejecting change forces (e.g. an active fight against the introduction of railways in the past) is giving a way! and this will apply in the future even more! to 'change management'. We should learn how to live with continual changes in our business life, not to respond with stress, but to take them as a fact of life and as a great opportunity rather than a threat.

In competitive environment, business activities aim at the greatest possible efficiency; for the best possible financial gains. Focus is clearly on the utilization and maximization of the value of physical capital. The requirement for an appropriate 'quantitative' financial yield should be augmented with a requirement for an appropriate return on human capital, measured with 'qualitative' indicators.

Conclusion

Business is people! Therefore, the laws of nature should also apply to business systems where people are the key creators and operators, regardless of the level of automation and normalization. Regardless of its assumed appearance.

In this paper, we challenge the role of managers and leaders as representatives and advocates of 'hard' factors, of everything measurable and clearly definable in our business environment.

In order for business environments to prosper, people need to take more and more often an active role in the business evolution, to co-create it, upgrade and reinvent it. Thus, it might be the right time to stop looking at the business systems as something artificial, and start accepting them as another natural shape of cohabitation and development. With such perspective, a whole new and broader domain of possibilities suddenly opens up in front of us. Either in the field of business models, of management methods, of forms of connections, or of growth, transformation, and life cycles. All of a sudden, we feel that a business system is a living being with its own dynamics of development, its own history, presence and future. As a result, the logical focus of management and leadership passes from functions and processes to a level closer to people, to relationships. And that is where financial subsystem should search for the content of the next stage of its own evolution. We believe that for overall prosper development of corporate environments 'innovative and thinking' CFOs in terms of humanization of our workplace, are needed, as well!

REFERENCES

Bontis, N., (1999), Managing Organizational Knowledge by Diagnosing Intellectual Capital, International Journal of Technology Management, 118: 5/6/7/8. Bulc, V., (2006), Ritmi poslovne revolucije, Ljubljana: Vibacom.

Davidson, H., (2002), The Committed Enterprise, Woburn: Butterworth-Heinemann.

Dess, G. C., Picken, J. C., (1999), Beyond Productivity, New York: AMACON.

Drucker, P., (1995), Managing in a Time of Great Change, New York: Dutton.

Flamholtz, E., (1992), Human Resource Accounting, 2nd ed., San Francisco: Jossey-Bass.

Fitz-enz, J., (2000), The ROI of Human Capital, New York: AMACOM.

Gates, S., (1994), The Changing Global Role of the Finance Function: A Research Report, The Conference Board.

Kaplan R. S., Norton, D. P., (2001), The Strategy – Focused Organization, Cambridge: Harvard Business Press.

Kets de Vries, M. F. R.,(2001), The Leadership Mystique, A User's Manual for the Human Enterprise, Edinburgh Gate: Pearson Education.

Langer, J., Alfirević, N., J., Pavičić, (2005), Organizational Change in Transition Societies, Hamshpire: Ashgate.

PricewaterhouseCoopers Financial & Cost Management Team, (1999), CFO: Architect of the Corporate Future, New York: John Wiley&Sons.

Rifkin, J., (1995), The End of Work, New York: G.P.Putnam's Sons.

Rosenbluth, H., (1992), The Customer Comes Second, New York: William Morrow and Company.

Stern, G. B. III, (1991), The Quest for Value, New York: Harperbusiness.

Strassmann, P., (1999), Information Productivity, New Canaan: Information Economics Press.

Trompenaars, F., Hampden-Turner, C., (2001), 21 Leaders for the 21 st Century, Oxford: Capstone.

Zuboff, S., (1988), In the Age of the Smart Machine, New York: Basic books.