Challenges of Performance Management within Enterprise Life Cycle

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Abstract **Management and assessment of company's performance has a material role in ensuring corporate sustainability. The concept of enterprise life cycle emerged under the corporate management theory for the purpose of explaining changes undergone by an enterprise over the time. The publication concerns the concept of the existing link between performance indicators and enterprise life cycle phases, the most typical features and the regularity thereof.**

Keywords - **Sustainability, enterprise life cycle, phases, performance indicators.**

I. Introduction

Enterprise is a complex stochastic, social and economic system undergoing cyclic development, by implementing regular and qualitative changes. The impact of historical events upon the future development of an enterprise can be assessed by means of the Enterprise Life Cycle approach (ELC). The aim of this article is to link the functional efficiency of an enterprise, performance management and assessment with the regularities of the enterprise life cycle. The empiric method (analysis of texts and documents) and the method of theoretical research (analysis of the statistical data) are applied.

II. Description of the Enterprise Life Cycle Methodology

During its term of operation, an enterprise as a social and economic system, experiences various functional stages, in literature referred to as the enterprise life cycles. Life cycle is a course characterizing expected changes involving definite consecutive conditions of non-coincidental nature.

The main issue of enterprise life cycle studies is the nature of evolutionary changes, number of stages, peculiarities and length. Life cycle models are used in branch, industry, organizational, project and product studies, emphasizing development as a process or sequence of determined forms.

The development of a branch is determined by the competitiveness of separate industries, enterprises, goods or services.

Several related branches of industry that have reached a certain life cycle stage (growth, maturity, decline) can operate within the framework of a single branch of industry involving companies that have reached different development stages and are producing goods which individually are subordinated to evolutionary processes (figure 1). The industry life cycle stages can differ among countries because the needs of the consumers differ depending on the standard of living. In the opinion of the authors, an interrelationship exists among the life cycle of the product, enterprise and branch of industry (figure 1).

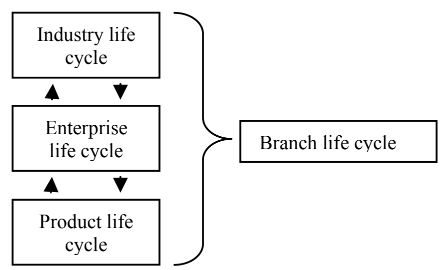

Fig. 1: Correlation and interrelationship among the life cycle of the branch of the industry, enterprise and the product

There is a viewpoint that the life cycle is the time period from emergence and creation of a system till reduction in functional efficiency and liquidation thereof. The concept of enterprise life cycle is based upon the biological analogy of living bodies. Though, unlike the biological body, winding up of an enterprise is not a mandatory stage, because spiral development averts it.

According to the authors, the theoretical structure of enterprise life cycle is outlined in figure 2. Each principal phase (Growth phase, Maturity phase, Decline phase) can involve a different number of stages (from 1 till n).

Stage G1	Stage Gn	Stage M1	Stage Mn	Stage D1	Stage D2	Stage Dn
Growth phase (G)		Maturity phase (M)		Decline phase (D)		
Enterprise life cycle (ELC=G+M+D)						

Fig. 2: Enterprise life cycle theoretical structure

A separate life cycle stage is: „unique configuration of variables related to organization context and structure" (Hank, 1993) [1].

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One of the first commercial enterprise life cycle models (Lippitt, Schmidt, 1967) consisted of three cycle stages characterizing corporate development:

1) birth – establishment of the operative system and reaching of the operative capacity;
2) youth – stability and reputation
3) maturity – attaining uniqueness and adaptation by expanding the sphere of activities [2].

The methodological basis for enterprise life cycle is reaching of complex equilibrium with the variable environment, encompassing both - the internal and the external environment. An enterprise operates in the environment of variable external circumstances, where a particular equilibrium condition is of dynamic nature, because in comparison to technological systems, an enterprise – as an economic system, is characterized by the presence of the active element – human participation; adaptability to changeable circumstances; ability to change one's structure and behaviour. There are studies that prove that the human capital can materially influence the performance of an enterprise (Richard, 2004) [3]. And since the life cycle in general is a progression through differing dimensions of time span and influencing factors, knowledge management, development and preservation of intellectual capital by making use of the enterprise social capital management approach is becoming topical.

III. Problems with enterprise sustainability

Depending on the age and size, enterprises have different endurance against crisis situations, so, for example large enterprises are more stable than small enterprises which are subject to limited resources. Likewise, also experience provides advantages. Whereas in small enterprises, on its turn, separate types of crisis or features may also not be apparent due to the simplified structure or other factors characteristic to small enterprises. Experts stress that 50% from companies engaged in entrepreneurial activity fail in the first year and 95% thereof within the first five years.

The most popular form of entrepreneurial activities among entrepreneurial subjects in Latvia is limited liability company (SIA). Statistical data on registration and winding up of limited liability companies in the time period from 1991 till 2009 show that from 5580 limited liability companies registered in 2002, 22.9% or 1278 limited liability companies have failed to survive the age of 7 years to be reached in June 2009. Whereas what concerns companies registered even earlier – in 1992 and 1993 accordingly, more than 70% have been wound up [4].

The problems of enterprise viability are gaining topicality not on the first year of company's existence, but slightly afterwards. The reasons for first year failure mentioned by experts are: capital shortage, weak corporate management, unsuccessful business concept. Though, even the companies that manage to survive the problems or the shock of the initial period, latter on reach the winding up stage. It means that methods, instruments and ideas which could be applied previously, had lost efficiency. There are indications that this could be linked to changes in the scope of the owner or shareholders of the enterprise and, with lapse of time, these persons start to hinder continuous implementation of innovations, improvements and control. Under the influence of the time factor the managerial capacity is growing weaker and therefore corporate merger and replacement of management is natural. Whereas the motivation and behaviour of owners and managers, which could identify the desire for growth is of material importance for development of small enterprises.

IV. Methodological problems for determining enterprise life cycle

The enterprise life cycle concept emerged under the corporate management theory with the scope of explaining changes in the company over time. Certain parallels can be drawn with the product life cycle theory. Though, notwithstanding the usefulness of application of this approach in the enterprise management process and the academic interest concerning this phenomenon, real problems have been observed with regard application of this conception. First of all, experts have not reached a consensus on the number of life cycle stages, secondly, there is no clearly defined methodology on how to determine the particular life cycle stage and thirdly, the term "life cycle stage" is used depending on the direction of the study.

The understanding of different authors with regard enterprise life cycle stages differs (Dodge, Fullerton, Robbins, 1994; Greiner, 1972; Quinn, Cameron, 1983; Cameron, Kim, Whetten, 1987): consecutive events describing changes over the time [5]; hierarchic progression which is hard to avert [6][5]; a row of organizational activities and structures [7]. Greiner (Greiner, 1972) is of the opinion that there are five essential parameters determining the enterprise development model or life cycle stage:

1) age of the organization - linked to the time factor;
2) amount of the organization (number of employees, production amounts);
3) evolution stage – growth period which is not subject to material changes;
4) revolution stage which basically causes crisis situations;
5) parameters characterizing the branch and that determine the probability of the afore mentioned evolution and revolution stages (profitability of the branch, growth tempo) [6].

Hank (Hank, 1993) indicates that the differences between the models are disclosed by two methodological problems. First of all, the majority of enterprise life cycle models are conceptually shaped and secondly there are too many of them because of lack of empirical analyses [1].

As for today, to be noted are two approaches to enterprise life cycle studies. The first one is of explicitly empirical nature, involving exact study of life cycle stages by applying quantitative research methods. Such studies are based upon continuous observation of a particular enterprise by applying the longitudinal method. These researches differ from each other because of the study subjects and type of organization (commercial, non-commercial). The second approach is less widespread and the essence thereof is to use the enterprise life cycle concept for the purpose of integrating it in other studies of management or operational sphere of the enterprise.

The research conducted by the authors concerns the second approach, because establishment of an enterprise performance indicator assessment system is linked to enterprise life cycle stages, features characteristic thereof and regularities.

Quantitative elements are used very rarely in determining the life cycle stage. When performing the contextual analyses of literature sources, the authors concluded that various authors have used qualitative elements for characterizing the enterprise life cycle phase or stage. Numerous studies have been undergone within the framework of the ELC conception and the opinion of experts summarized, indicating both towards the possibilities of application of the said conception and also the limitations thereof:

1. *Possibilities* – to anticipate the consecutive stages of enterprise development; provide qualitative description of each development stage of the enterprise; choose appropriate operative strategy for the respective development stage;
2. *Limitations* – it is not possible to unequivocally determine separate stages, it is impossible to determine the exact beginning and end of a stage and it is impossible to determine the length of a separate stage.

It is to be concluded that enterprises can go through separate stages in different speed and the age of the enterprise is not closely linked to life cycle stages. Each of these stages encounters different problems determined by qualitative and quantitative changes both in the internal and external environment of the company that can be linked to the performance of the enterprise.

V. Assessment of Enterprise's Performance

According to the authors, the concept of enterprise life cycle from enterprise performance assessment and management approach is: **the totality of enterprise development stages creates a phase, which is characterized by specific aims and tasks, whose fulfilment results in aggregate determine sustainable development of the enterprise.**

The authors suggest division of the enterprise life cycle in three main stages – *growth, maturity and decline*. The afore suggestion of the authors is based upon the following assumptions:

- During the entire enterprise life cycle turnover and profit dynamics are changing unproportionally;
- Profit and return are mutually interlinked indicators, and from the perspective of scope indicators, return is more comparative with the average indicators of the branch;
- Cash flow balance problems (shortage of means of payment, inefficient cash flow management) are closely linked to the development possibilities of the enterprise. The generated cash flow of the enterprise is the basis for liquidity;
- Long term performance of an enterprise ensuring operative capacity and development within the life cycle is of importance for an enterprise.

The authors link the enterprise performance indicators according to the three life cycle phases with the turnover, profit, cash flow and formalization level (Table 1)

TABLE 1
PERFORMANCE INDICATORS UNDER ELC

Indicator	ELC phases		
	Growth phase	Maturity phase	Decline phase
Branch growth rate (Tn), in comparison to turnover increase rate (Tu)	Tu>Tn (explicit increase dynamics Tu)	Tu ≈ Tn (slow increase rate Tu, trend as Tn)	Tu<Tn (no increase observed Tu)
Profit dynamics (Pu)	Tu>Pu	Pu>Tu	Pu - dynamics is negative
Cash flow (CF) result (operative - OCF, financial FCF, investment - ICF)	OCF+ FCF+ ICF-	OCF+ FCF- ICF-	OCF+/- FCF+/- ICF+/-
Formalization level	Low (till 20% from total processes)	High (40-80% from total processes	Very high (above 80% from total processes)

According to the life cycle model, especially hard is the first – the growth phase and enterprise "mortality" is especially high exactly during the first years. In the first life cycle phase the main problems of an enterprise are caused by not balanced cash flow and high financial risk. Weak planning influences not only cash flow but also the choice of goods and service market. There are doubts with regard compliance of the management methods with the needs of the particular stage in small and medium size enterprises, especially concerning such fields as innovations, finances and human resources management. Due to lack of practical skills in these spheres, many enterprises do not reach their potential that could guarantee sustainable development. In this growth stage, the scope of the enterprise is "fast and coordinated development". It means that resource attraction dynamics are rather explicit (above 15% annually), the level of return might be negative, thus, with an upward trend.

In the growth phase the available technologies (technical, organizational and management) and resources are used to create economic benefits (products, services) complying with the set qualitative requirements of the clients. The customer base is still in the development stage, though with the tendency to expand. In this stage the cash flow which is under the impact of external funding, investments and development is especially sensitive. The enterprise growth phase is characterized by flexibility and movement, though weak control – the enterprise faces poor planning and organization. Favourable external environment and the ability of the enterprise to make use of such are of major importance in this phase, in order it could generate cash flow for further development. If within this stage the enterprise can be considered new, the empirical researches (Robinson, McDougall, 2001) concerning further development of new enterprises and the attained results approve that the performance of an enterprise is materially affected by the structure of the branch of the industry and the strategy chosen by the enterprise [9].

The maturity phase is characterized by the necessity to revise internal processes and resource usage efficiency, because upon increase of the number of clients, the turnover increases and the enterprise has to be able to restore the resources and technologies on the basis of the gained profit – i.e. the importance of return is increasing. The prerequisites for passing over into new quality and the necessity for innovative solutions emerge in this stage. According to Adizes (Adizes, 1991), in this phase the company is becoming passive, because it has reached a stable market position, safety [10]. This, on its turn, causes loss of creative potential, loss of innovative ability and inertness to changes, consequently leading towards failure. The level of bureaucratization is high.

In the decline phase one can talk about turnaround management of the enterprise. Reaching of the decline phase can be based upon crisis in the return of the enterprise; insufficient financial control, high level of unsubstantiated costs; weak managerial proficiency and inefficient capital investments.

The financial potential of an enterprise is determined on the basis of the achieved financial performance, (profit and loss statement) separate asset and liabilities positions of the balance sheet and the correlation between them. The financial potential can be considered both in short-term (liquidity and solvency) and long term (financial stability) perspective.

The performance indicators' system which is created by considering the most characteristic features and problems of the respective life cycle phase, allow for provision of a more comprehensive informative basis for the decision taking process of the corporate management. The priority indicators of life cycle phases point toward long-term development capacity, by observing the requirements for short-term stability of the enterprise. The importance of liquidity is linked to enterprise growth phase problems, whereas the importance of return is increasing in the subsequent life cycle phases and affect the life quality and long-term development perspectives of the enterprise.

The authors share the opinion that in the enterprise life cycle model, the financial indicators of the enterprise, by considering the influence of the time factor, can be viewed as priorities: today – liquidity; in short term – return; in long term – stability. In terms of maturity and decline of the enterprise life cycle phase the talk should be not about the book profit, but about the economic profit.

Conclusions

The economic life and processes within an enterprise are subject to cyclic development. Changes in the enterprise within a particular period of time are explained by the enterprise life cycle model. The life cycle of a separate enterprise is closely linked to the life cycle of the branch.

From the perspective of performance assessment, it is recommended to divide the enterprise life cycle in three typical phases: growth, maturity and decline. Application of a more detailed division would not be rational, because the above suggested phases reveal the main problems in the context of resource attraction, management and performance: commercial turnover and profit dynamics, changes in cash flow elements and formalization level.

Being aware of the coherence of separate life cycle phases, it is important to determine the life cycle phase which the enterprise has reached – is it growth, maturity or the potential loss - decline has begun. At present there is no methodologically substantiated instrument available that would grant such a possibility, what, on its turn, indicates towards the necessity to set forth study of the field.

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