INSIGHTS OF VALUE MEASUREMENT SYSTEM DEVELOPMENT: CONCEPTUAL AND INSTRUMENTAL APPROACH

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crossref http://dx.doi.org/10.5755/j01.em.17.4.2985

Abstract

Today value creation expanded outside the organization. Strategic management is concerned with advantage-seeking and opportunity-seeking behaviours, resulting in value creation for different stakeholders groups: organizational (customers, employees, managers, and shareholders, etc.) and contextual (government, society, etc.). Some of them could be conceptualized as “dynamic and interactive”; others – as “static and controlled”. Different interpretations of value could be found in economics, strategic management, marketing, human resources management, accounting and finance theories. Recent approaches are based on evolutionary economics and public management. The variety of interpretations of value leads to ambiguous understanding the concept itself, correctness of its measurement and innovations of value measurement system. The article reveals heterogeneity of value concept. This result is based on the analysis of different theories, which directly and indirectly could influence value measurement systems. New insights for value measurement system development are presented as well.

Keywords: value, measurement system, management accounting, financial management.

JEL Classification: M10, M41, O1.

Introduction

Value based management is the recognition that stakeholder’s value is the result of thousands of decisions made by individuals in corporation every day. Stakeholder’s value is created or destroyed at any time. The preconditions of knowledge and evolutionary economy have influenced global changes, which, consequently, had impact on the value creation factors. Thus, the nature of decisions had changed as well.

Value measurement system is conceptualized in academic literature differently. Research of value measurement systems was started in the last decade of previous century and was mainly focused on the conceptions and principles those systems were based on. Later the problems of adoption of measurement tools were pointed out. But value measurement process and results depend on objective and subjective factors such as reliability of data, validity of valuation assumptions and competence of CEO and CFO. Furthermore recognition of value understanding (corporate value and values for other stakeholders) outside organization remains context dependent. This leads to ambiguous understanding of value concept itself and correctness of its measurement, which ensures the value management at corporate level. Value measurement at conceptual level could be analysed as a set of objective and subjective factors, which determine the recognition of organizational and contextual stakeholders as precondition of measurement process and level of interpretation of the results. Modern stakeholders’ theory is based on the presumption that interest groups (stakeholders) could be conceptualized as “dynamic and interactive” or “static and controlled” categories. Complexity of interaction of different stakeholders depends on numbers of interest groups and on the level of inconsistence of their goals. Instrumental level determines the choice of methods, measures and the correctness of its application.

The research question is as follows:

How do the heterogeneity of value and different conceptions influence value measurement systems?

The aim of this study is to disclose trends of value measurement system development using conceptual and instrumental point of view.

Research is based on analytical/modelling methodology and systemic comparable analysis of theoretical and empirical studies and induction methods. The first part of the paper covers theoretical analysis of value concept, interpretation of stakeholders’ approaches and determination of contextual and organizational stakeholders. The second part presents conceptual framework of value measurement system. The set of measures that are dependent on the aims of stakeholders and valuation perspective is presented at instrumental level. The main result of this study is giving new insights of value measurement system creation.

Theoretical background

Conceptualization of value

Writers have defined concept of value and value-based management in different ways basically
depending on the purpose of their analysis. Most of them were derived from the field of economics, namely exchange, utility and labour value theories. Different interpretations of value could be found in marketing, human resources management, accounting and finance. Furthermore, considerable amount of strategy and organizational behaviour literature on competitive advantage is closely linked to value concepts and preferential choice. Recent approaches are based on evolutionary economics and public management.

However, the only way to measure the value of a company is to use the financial metrics, namely to calculate future discounted cash flows. This means that the concept of value in most cases remains shareholder orientated. From one point of view, competition between organizations in financial markets means that the best investment projects attract capital and the financial resources are used in the most productive way. The result of productive use of financial resources leads to the growth of products and labour markets and growth of economy. This proposition is in line with Adam Smith’s point of view that benefits of individual investors create the value for society. On the other hand, value creation process in a particular organization is contingent in terms of external environment and organization itself.

Although research on value in marketing is based on the concept of trade-off, that is derived from economic theory of utility. This view of value based on economics states that consumers spend their income so that to maximize the satisfaction they get from product (Bowman and Ambrosi, 1998). This neoclassical theory has provided the basis for consumer value, customer value and relationship value concept. Other researchers consider value in the contexts of labour value theories. This body of work considers how positive differential advantage is derived from the actions of labour (Lado and Wilson, 1994). This approach implies that labour can be a source of firm heterogeneity and hence a source of value (Bowman and Ambrosi, 1998).

Changes of customer’s requirements, intensity of competition, changing internal and external factors of organizational environment resulted that effective competitive positioning is a primary factor influencing organization’s ability to create value and wealth not only for shareholders, but also stakeholders and broader society. Besides the fact that the main objective of an organization remains to maximize shareholder profits, using theory of rationality, today value creation expanded outside the organization. Strategic management/entrepreneurship is concerned with advantage-seeking and opportunity-seeking behaviours resulting in value for different stakeholders: individuals (customers, employees, managers, and shareholders, etc.), organizations (private and public) and society.

**Stakeholder approach**

The stakeholder approach to understanding organizations in their environments has shifted to a broader perception of organizational roles and responsibilities beyond profit maximization as compared to the traditional shareholder perspective (Foster and Jonker, 2005). An organization is defined in terms of the grouping of stakeholders in which it is immersed (Johansen and Nielsen, 2011). Its mission is not providing benefits, i.e. profits, for shareholders and owners but rather integrating interests and claims from other stakeholder groups into the balanced strategic management of the business (Mitchell et al., 1997; Friedman and Miles, 2006).

Freeman originally defined stakeholders as “groups and individuals who can affect, or are affected by the achievement of an organization’s mission. Generic stakeholder groups include customers, consumers, employees, unions, competitors, suppliers, governments and investors. Stakeholder management refers to the necessity of an organization to manage its relationship with stakeholder groups on an action-oriented basis (Freeman, 2005). Since Freeman’s introduction of stakeholder theory, a postmodern or constructionist approach has replaced the idea of “stakeholder management” with that of “stakeholder enabling”. The shift indicates a move from a static and instrumental perception of stakeholders as groups who can be “managed” towards a notion of stakeholders as groups involved in dynamic interaction with post-bureaucratic, networked organizations” (Calton and Kurland, 1995; Friedman, 1984; Miles et al , 2012). Contained in the idea of “stakeholder enabling” is an increased focus on establishing and maintaining mutually beneficial dialogues, where the organizational license to operate can be established or negotiated.

The main stakeholders could be classified into two broad interactive groups: contextual and organizational. Contextual stakeholders are passive in relation to the particular organization’s activities and value creation, but they shape the external environment and business conditions. Those stakeholders are society, government and state’s regulators. The organizational stakeholders are active in relation to particular organization’s activities and value creation process. Those stakeholders are shareholders, customers, suppliers, financial institutions, managers and employees. Complexity of interactions of different stakeholders depends on the number of interest groups and on the level of inconsistency of their goals. The complexity level of the aims and interests of those groups and the intensity of interaction between them
determines the space where value could be created.

**Contextual stakeholders**

Creating wealth for owners is typically interpreted as “financial wealth,” which is a primary goal. However, owners/entrepreneurs may also achieve other forms of wealth, such as “socio-emotional wealth” (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010) and personal happiness. Increasing the wealth of owners should contribute positively to additional economic activity (e.g., job creation, technological advancement, and economic stability and growth) and thereby benefit the society. There is potential for other social benefits as well. To achieve these longer term and major outcomes, several interim outcomes are likely to be critical, such as creating new technologies or developing innovations with value-creating potential.

Value creation depends on both the side processes and the ties where the amount of value realized by the target users and an exchange of a monetary amount for the value that is received. Existing studies agree that these ties should and do create new and appropriable social benefits from private infrastructure investments and dwindling state finances to innovative solutions for inequality, poverty alleviation, human development and sustainable development. Government has a constructive and catalytic role in promoting entrepreneurship, providing the social and physical infrastructure, ensuring access to education and finance, and supporting technology and innovation. Government has consequences, positive and negative, for the development of the “society.” Benefits for organization could be determined by forecasting future activities and results, minimizing risk and capital costs. This is the case not only concerning investments in infrastructure, technology, and education but also concerning financial, trade, intellectual property rights and competition policies. (Stigliz, 2011). However, these ties have appropriable benefits to society, for which it is able and prepared to pay either directly — as consumers, or indirectly — as taxpayers. It also ensures future growth of cash flow for the organization.

**Organizational stakeholders**

The organizational stakeholders group could be analysed using relationship value management framework that categorises six interest groups, namely customer markets, internal markets, supplier/alliance markets, referral markets and recruitment markets, which need to be managed for improved value creation and delivery. Those interest groups could be conceptualized as value components (customers, employees, managers and external interest groups including shareholders and suppliers). The activities that have to be managed involve key elements such as value determination, value creation, value delivery and value assessment. Those activities are realized in sub cycle of each value component. The framework suggests that activities within the customer component are customer attraction, creating customer satisfaction and ensuring customer retention. Activities within employee component involve employee recruitment, satisfaction, and retention. Stakeholder (shareholders, investors and suppliers) engagement, satisfaction and retention are the activities that concern the last external value component. (Payne, Holt, Frow, 2001).

Anderson et al. (2006) suggest that organizations typically adopt one of three alternative approaches, identifying: the benefits a company delivers to customers; the benefits relative to those competitive offerings; and the key benefits truly valued by customers. They contend that the third approach is preferable, as customers will perceive the supplier as highly focused on relevant benefits. Determination of value that organization could deliver for customers ensures attraction of the new customers, their satisfaction and retention. However, the higher customers’ interest for quality; license to consume and distinctiveness leads to higher investments to relations management and, in turn, to costs. The value that customers deliver to the organization in terms of profit obtained for customers over customer lifetime value should be measured as well. This means that value creation for customers and value creation for organization functions in different directions and organization needs to evaluate the breakeven point that ensures that the particular level of investments to customer attraction, satisfaction and retention that meets targeted economic value for organization itself.

Employees have an interest in keeping their jobs, but also increasingly, in having a safe and healthy work environment that allows them to develop and construct their identities and to express themselves in meaningful ways through their work. It is also of great importance that employees have a close and relevant relationship to their organizations in order to act as good ambassadors in the environment (Christensen et al., 2008). Employee (managers’) value can also be considered from two perspectives – the value employees (managers) deliver to the organization, and the value the organization delivers for employees. Employees are active participants in the process of value creation for customers. The motivation to create value depends on the satisfaction of the employees that, in turn, depends on managers, their aims, entrepreneurship features and leadership style. Attraction, satisfaction and retention of qualified employees and managers are critical for extended cycle of value creation process. Turnover of employees has negative impact for business
processes and determines additional costs of employees’ recruitment and coaching. Changes in management team usually determine changes in routines, leadership style and sometimes-organizational culture. The value the organization delivers to the employee has been discussed in some detail within the organizational behaviour literature. Social exchange theory suggests that there is expectation and preference for balance in relationships. Mutual beneficial behaviour creates feeling of obligation. If organization creates benefit for workforce, the employees will be more likely to support organization and its goals.

Suppliers and alliance relationships can both be viewed as enterprise partners. Suppliers typically provide physical resources or services to a business. Alliance partners are also a form of supplier. However, they typically supply competences and capabilities that are more knowledge-based. Suppliers have to live up to their customers’ claims and expectations in order to keep their business profits. Consequently, they have to present themselves as attractive and innovative market actors by adopting corporate branding, strategic communication and reputation instruments from large corporations (Morsing et al., 2008). In this context the suppliers seek commitment, long-lasting relationships and inclusion. The organizations interest is reliability of the supplier, partnership in the value creation process and particular level of integration of strategies, goals, activities and systems.

The concept of shareholder value is well developed since the ownership shifted from individual ownership to wider context as far as board managers were concerned with value creation goals and investors were interested in economic value of future returns. The increasing power and influence of financial markets have driven the companies’ boards to regard the creation of shareholder value as their primary business focus. The stock market’s reaction to bad management and corporate governance practices following business crises and scandals can often be risky business for investors (Maak, 2008). On the one hand, investors’ stake is related to risk minimization; responsible investment that leads to particular level economic returns, measured using such metrics as economic value added (EVA), shareholder value (SVA) and market value added (MVA). On the other hand, issue of value the shareholders deliver to organization seems to be of less interest in academic literature. However the benefits organization gets from loyal shareholders is important as well. The leaders of the world in terms of high customer loyalty and retention are privately owed; mutual companies or public companies sustain the high level of shareholders loyalty that use the result of the value delivered for organization.

Development of the framework of value measurement system

Conceptual level

At conceptual level, contextual and organizational stakeholder groups shape the design of value measurement system. Impact of stakeholders for value measurement system could be determined by two variables: the level of complexity and the synergy of benefits the stakeholders and the organization get in the process of value creation (see Figure 1). The level of complexity depends on the inconsistency of the stakeholder aims shaped by the business environment. Furthermore, the critical point is that benefits for organization and the benefits for stakeholders usually move in different directions and the breakeven point and the level of trade-off should be evaluated.

Analysing government and state’s regulators as a contextual stakeholders group, the complexity level could be evaluated in terms of stability of state’s political and legislative systems, predictability of business environment, the level of uncertainty and or (risk) of business environment, competitive rules, tax system, accounting standards. The higher is the level of state’s political and legislative system’s stability, clear business and competitive rules, rules, tax system accounting standards shapes predictable space for value creation and reliability of value measurement. The synergy of benefits the stakeholders and the organization get in the process of value creation means that predictable organization’s future activities and results, low risk and capital costs lead to balanced cash flows that in turn means stability of labour market, technological advancement, economic stability and growth, tax revenues and balanced state’s budget.

The society as a contextual stakeholder could be evaluated in terms of commitment and trust to state’s policy and sustainable development, level of inequality, and poverty. The higher is the level of trust and commitment to state’s policy and sustainable development and the lower is the level of inequality, poverty in the state’s predictable value creation space and reliability of value measurement. The benefits to the society are determined as infrastructure, education, health care system and high living standards. At the same time organization gains from qualified and motivated labour force and economic growth because of high level of consumption.
Figure 1 Framework of value measurement system
Customers are the most controversial organizational stakeholders. From customer point of view consumption leads to economic, emotional and social satisfaction (features of products, the level of services quality, brand and etc.). However, from the corporate point of view, value creation for the customer means additional costs and, in turn, lower returns for organization. Therefore, the balance between investments in value creation for customers and the benefits for organization should be evaluated. Furthermore, the behaviour and expectations of customers shape the predictability of organization’s development orientation to long term vs. short term goals, low vs. high perceived risk and investments’ returns. Predictability of customers’ behaviour and expectations could be evaluated in terms of tendencies to consume or to save in particular situation.

Employees are the most important internal drivers of value creation. Managed and sustainable development of labour force leads to innovations and effective processes that, in turn, create value for customers and organization itself. Unpredictable development of labour force could lead to economic, emotional and social satisfaction, but may not ensure the sustainable value creation of the organization. From the strategic point of view of it means that critical value creation factors could be missed and at the same time it does not lead to managed and sustainable development of organization. Furthermore demotivated employees could destroy the value by a single decision.

External stakeholders are suppliers, financial institutions and other partners that take part in the supply chain. Supply chain describes the flow of goods, services and information from initial sources of goods and services to the delivery of products to customers, regardless of whether those activities occur in the same organization or in others. The quality of the relations and stability of partnership depends on the consistency of partners’ goals and harmonization of the transaction systems. Clearer transacts and relations lead to stable partnership, economic, emotional and social satisfaction for all participants in the supply chain and the lower level of complexity and vs.

Shareholders are the most important external drivers of value creation. Their expectations and perceived risk could be enabling or limiting factor of the prosperity of an organization. From one point of view, their economic, emotional and social satisfaction depends on the external environment and economic conditions. Furthermore shareholder orientation to long vs. short term goals shape organizations’ strategies, goals, level of leadership and entrepreneurship. The more stable business environment is, the less risky and entrepreneurial investment and expected returns are. Orientation to long term goals leads to low perceived risk and investment returns, while the orientation to short term goals leads to high-perceived risk and investment returns.

Instrumental level

The theoretical background introduces the main concepts applied in research and establishes links between the modern shareholder theory and the measurement system. Presented analysis revealed the heterogeneity of value conceptions and value understanding from different stakeholders’ point of view. Value measurement system is an instrument for governance, achievement of goals and performance management. Modern conception of value determines that value measurement system depends on organization’s context or external environment. Creation or development of value measurement system is a significant challenge to company’s managers. Managers need to reach a trade-off between the various interests of different stakeholders; it means that there is not one singular corporate goal. Nowadays performance should achieve more goals than just maximizing shareholders’ wealth. Stakeholder approach determines the understanding of the organizational and contextual value factors, as the drivers of measurement processes and the level of interpretation of the results. The measurement system and processes depend on valuation perspectives (organizational or contextual) and selected stakeholders’ type (“dynamic and interactive” or „static and controlled”).

Value measurement system, its structure, measurement aspects and measures are directly influenced by stakeholders’ type, their goals, relationships between them and expected benefit. Table 1 presents value measurement system patterns according stakeholder groups. Selection of the main stakeholders depends on the organization’s type (corporate or public), goals (economic, emotional and social satisfaction) and governance type (contract, corporate, socio-political, network). Complexity of interaction of different stakeholders depends on the number of interest groups and on the level of inconsistence of their goals. Stakeholder goals and their complexity determine the complexity of the measurement system, measured aspects and measures.

It should be noted that the creation or development of the value measurement system is limited by the competence of top managers, financial resources and time perspective.
Table 1. Instrumental level of value measurement system

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Conception of valuation</th>
<th>Organization’s point of view</th>
<th>Impact on organization’s value</th>
<th>Stakeholders point of view</th>
<th>Impact on stakeholder’s benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government and state’s regulators</td>
<td>Economics, evolutionary economics</td>
<td>Business environment, risk</td>
<td>Growth, interest ratio, inflation ratio, labour productivity</td>
<td>Economic growth</td>
<td>Debt-to-GDP, tax revenues, balance, labour productivity, unemployment ratio</td>
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<td>Debt-to-GDP, tax revenues, balance, labour productivity, unemployment ratio</td>
</tr>
<tr>
<td>Society</td>
<td>Public management, Economics, Marketing</td>
<td>Living standard (lifestyle and values), consumption</td>
<td>Price index, demand of products or services</td>
<td>Human and sustainable development inequality, poverty</td>
<td>Minimum and average monthly wage, Human development index (HDI), Gini coefficient</td>
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</tr>
<tr>
<td>Other external stakeholders</td>
<td>Strategic management, supply chain management, operational management, Relationship management</td>
<td>Availability of resources (non-financial and financial)</td>
<td>Transactional cost, terms and forms of payment</td>
<td>Cost, profit and cash flows</td>
<td>Business and partnership development</td>
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<td>Cost, profit and cash flows</td>
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</tr>
<tr>
<td>Employees/managers</td>
<td>Human resource management, Relationship management</td>
<td>Staff efficiency, staff satisfaction</td>
<td>Innovations of products, management, communications, efficiency, employee satisfaction index</td>
<td>Innovations, operation cost, sales and cost level, profitability and liquidity</td>
<td>Employee’s value, Employee’s satisfaction</td>
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<td>Employee’s value, Employee’s satisfaction</td>
</tr>
<tr>
<td>Customers</td>
<td>Marketing, Relationship management</td>
<td>Customer satisfaction and trust, customer equity</td>
<td>Share of spending, repeat purchase, loyalty, customer satisfaction index</td>
<td>Market share, sales volume and growth, profitability (customer lifetime, customer equity, nonfinancial outcomes)</td>
<td>Customer’s value</td>
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<td>Customer’s value</td>
</tr>
<tr>
<td>Shareholders</td>
<td>Accounting, Strategic management accounting, Finance management</td>
<td>Corporate value, Capital adequacy, Stability of company</td>
<td>BV, DCF, MVA, EVA, etc.</td>
<td>Cost of equity, growth of company, investment amount, profit, company value</td>
<td>Total shareholder return, share value, quality of investment and portfolio value</td>
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Conclusions and implications for future research

Heterogeneity of value conception could be determined in terms of variety of theories it is derived from. Financial management aims to measure and manage shareholders value; marketing theories pay attention to customers’ value, labour economy and human resource management points out the understanding of employee value. The shift to a broader perception of organizational roles and responsibilities beyond profit maximization developed recognition of value and benefits for society.

Modern stakeholder theory is based on assumptions that interest groups could be conceptualized as „dynamic and interactive” or „static and controlled” categories. The shift indicates a move from a static and instrumental perception of stakeholders as groups who can be „managed”, towards a notion of stakeholders as groups involved in dynamic interaction with post-bureaucratic and networked organizations.

The main stakeholders could be classified into two broad interactive groups: contextual and organizational. Contextual stakeholders are society, government and state’s regulators. They are passive in relation to a particular organization’s activities and value creation, but shape the external environment and business conditions. The organizational ones are shareholders, customers, suppliers and employees. The organizational stakeholders are active in relation to particular organization’s activities and value creation process. The complexity of interaction between different stakeholders depends on the number of interest groups and on the level of inconsistency of their goals. The complexity level of the aims and interests of those groups and the intensity of interaction between them determine the place where value could be created.

Value measurement at conceptual level could be analysed as a set of objective and subjective factors, which determine the understanding of value and its components, the assumptions for measurement process and the level of interpretation of the results. Its structure, measurement aspects and measures are directly influenced by stakeholder type, their goals, relationships between them and expected benefit. From instrumental point of view, measurement system and processes depend on valuation perspectives (organizational or contextual) and the selected groups of main stakeholders („dynamic and interactive” or „static and controlled”).

Theoretical framework of value measurement system and its instrumental realization should be tested empirically. The empirical validation could be realized combining quantitative and qualitative methods. The factors that shape the complexity level of relations between different stakeholder groups and relations between different value components should be evaluated empirically at the conceptual level. The perspectives and aspects of measurement and a set of measures should be validated at instrumental level as well. The limitations of the developed framework of value measurement system are the variety of value components, valuation perspectives and measures that complicate the correctness of the research methods and reliability of their application. The complex database is limited as well.

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