

DIFFERENT APPROACHES TO MEASURING INTANGIBLE ASSETS

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1. Introduction

In a growing body of literature there is no consensus in giving the definition of what intangible assets are, how to measure them, or how to best quantify its contribution to outcome (either current or future). This article gives the author's analysis on which assets in contemporary researches refer to intangible assets. And then a detailed discussion is presented on how each of intangible assets can be measured basing on different views.

2. What are intangible assets?

According to Teplova [2006] intangible assets or intellectual capital (IC) can be divided into four groups (diagram 1): human intangible assets, marketing intangible assets, infrastructure intangible assets and intellectual property.

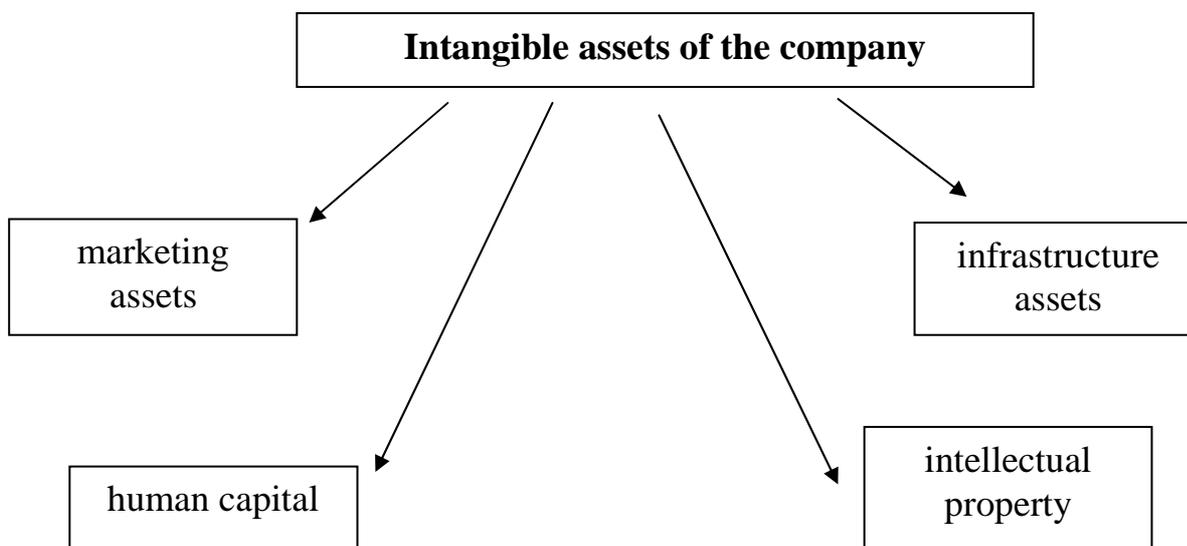
To human intangible assets personal characteristics of owners and management and their business reputation, overall qualification of personnel, possession of entrepreneurial and managerial skills, business relationships with customers and government agencies are referred.

Brands, trademarks determining customer loyalty can be referred to as marketing intangible assets. In some researches customer loyalty is referred to as marketing intangible assets, but brands, trademarks are classified as infrastructure intangible assets.

Corporate culture, methods of personnel management, model of human interaction, information and software technology used by the company are referred to as infrastructure intangible assets.

Intellectual property consists of two components: objects of copyright ownership and industrial property.

Diagram 1. Intangible assets of the company



In foreign researches intangibles such as copyrights, trade names, the value of the brand name, product differentiation, good-will arising from product reputation, R&D capital, human capital, relationship capital and organizational capital without division into groups are classified as intangible assets. Foreign researchers pay more attention to intangible assets measurement.

In my opinion, domestic researchers focus on classification intangibles rather than on defining measurable intangibles and estimate these intangibles according corporate strategy.

The notion of organizational capital is not new in foreign literature; however, it still has varied significance. Sadowski and Ludewig [2003] state that there are at least two different understandings of this notion, one, which considers organizational capital similar to human as interconnected with the individuals and the other school which refers to organizational capital as embodied in and linked to the organization rather than the individuals. In this context organizational capital has been defined as the order that organization imposes on itself [Sadowski and Ludewig (2003)], a collective resource-business practice, processes, designs and also compensation systems which can be conceptualized as an extra, often unmeasured factor of production responsible for abnormal firm performance due to degree of uniqueness [Lev and Radhakrishnan (2003)].

Human capital means that company uses the maximum amount of knowledge of their employees or that maximum number of staff has the knowledge, can benefit the company.

3. How to measure it?

When considering measurement issues controllability (of assets) as well as transferability of ownership are used to categorize intangibles, in this regard intangibles range from those that could be easily controlled and sold by the firm to those that neither could be sell nor control. Intangibles such as copyrights, brand, and trade names face less measurement problems, since they can be bought and sold. However, other intangibles like human capital, relationship capital, or organizational capital varies along with the ability of the firm to sell them, which it turn make the measurement task more difficult.

There are some questions that arise when we try to measure intangibles.

First, determine the appropriate unit of observation. In international researches unit of observation varies from business line, establishment level to firm level data. Teplova [2006] marks out more units, such as creditors, investors etc.

Teplova [2006] states that specific composition of intangibles for each firm imposed constraints on measurement intangible assets and depend on task that is carried by chosen unit.

The next question is who should be surveyed: workers, managers or human resource workers?

Through the literature, the measurement of intangible asset like organizational capital was carried out by two alternative procedures: a composite variable based on data gathered through surveys [Black and Lynch (2002)], or by isolating its productivity contribution [Sadowski and Ludewig (2003)].

To measure organizational capital we have chosen to focus on some of the elements that can be shown. This does not mean to be an exhaustive list of all elements of organizational capital but rather the starting point that is representative. Black and Lynch [2002] suggest dividing organizational capital into three broad components – workforce training, employee voice and work design.

What do they think about each component?

Workforce training raises the productive capacity of the firm. Spillover effects for training may depend on the organizational structure of the firm much more in which these investments in human capital are made.

Newer forms of organization involve giving employees more input into the production process and greater opportunities to improve efficiency.

Examples of practices in third component include the number of levels of management within the firm, the existence and diffusion of job rotation, benchmarking.

The training measure is a range of formal training.

The employee voice measure is primarily the right of workers to voice complaints under some form of due process rather than other types of direct employee participation in decision of making within the firm. In general measures are used including the existence of TQM system, the percentage of production or frontline workers meeting in groups.

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The human capital is measured as the proportion of new products in total sales.

In high-tech industries used another method of measurement. In these industries frequent change of product range takes place. The sharp rises in the quality of new products compensate lower prices on out of date products. If we compare the cost of new products and the sale price of the old product, the first will be much higher, and their difference is the valuation of the novelty of new products.

There is another point of view on measurement of human capital through evaluation of seniority, experience and staff turnover. The indicators characterizing the level of professional staffing company, include the following:

- age composition of employees;
- qualification of staff;
- average length of service in the specialty;
- number of employees working directly with customers.

Infrastructure intangible assets measure through evaluation stocks of knowledge. All knowledge of the firm are divided into following components:

- technical (results of research, development, testing, know-how, production technology, other trade secrets, etc.);
- market (copyrights, trade name, trademark, advertising, warranty, registration of trademarks, designs, etc.);
- knowledge and skills (knowledge base, technical, educational, reference, statistical and legal literature, quality standards, technical specifications, guidance documents, requirements and system security; manufacturing license, information systems, etc.).

The basic rule for valuation of each component is to test them for possession market value. It means that each component:

- contribute to the fact that the products (services) of the firms have advantages over products of other firms;
- valuable to other companies;
- there are firms which ready to pay extra for getting the knowledge.

The greater the economic power of customers and clients, the greater marketing capital the firm has.

In domestic researches methods of determining the cost of marketing capital consists of several stages:

- Determination of the projection period. Period should be associated with the cyclical nature of company's business, its system of planning;
- Conduct a survey of profits and cost-of-service regular customers and newcomers to the company;

- Knowing the value of profit for customer per year and the average percentage of profits from the use of fixed assets of the company (according to their elimination and renewal), we can calculate the "total cost" to consumers each year and for the entire forecast period.

The following conclusions can be drawn from the present study.

Intangible assets should not be measured by indicators such as the amount of money spent on their development. Value of intangible assets can be determined according to corporate strategy but not the amount of money spent on their creation, or how much they cost by themselves. If intangible assets are fully consistent with the strategy, then, their value to the organization increases substantially. On the contrary, if the intangible assets do not meet the company strategy, even if a large sum of money were spent on their development, value of these intangible assets would be incomparably small.

4. Conclusion

This paper has shown that there is neither a single definition nor a single method to measure intangibles.

This is an important issue for future research.

First, we should consider a different set of intangibles for different industries. In different industries (consumer-product industries, high-tech industries) different intangibles are likely to be important. In consumer-product industries marketing intangible assets are likely to be important (has strategic importance for the firm). In high-tech industries R&D capital is likely to be important.

Second, treating intangibles as investments means connecting investments with innovations: innovation product, process, organizational or marketing. Therefore, a firm can make investments focusing on measuring these intangibles and choose the appropriate corporate strategy.

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