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STRATEGIES FOR PROTECTING INTELLECTUAL RESOURCES IN A COMPANY

Key words

Company, intellectual resources, protection, strategy.

Abstract

Presently, innovations and advanced technologies are the basis for the development of companies in Poland. Their creation and growth require not only expenditures and advanced and extensive organizational structures, but also exploratory and executive behavioural skills of their employees. Thanks to these skills, intellectual resources are created. The purpose of this paper is to present strategy for protecting intellectual resources in the company. In these deliberations, the authors present their model for the protection of intellectual resources that, in practical perspective, is a component of the broadly understood business development strategy. The point of reference for the purpose and scope of the paper was research conducted in the period from May to July 2015 on a sample of 137 companies classified into small and medium-sized enterprises (SMEs).

Introduction

Presently, innovations and advanced technologies are the basis for the development of companies in Poland [14]. Their creation and growth require not only expenditures and advanced and extensive organizational structures, but also exploratory and executive behavioural skills of their employees. These skills determine the development of resources in the organization, primarily intellectual resources. In our view, these skills have been classified as organic (primary) intellectual resources or acquired (secondary) intellectual resources. Each of the mentioned groups of resources is subject to protection, which should be strategic for a contemporary company. Strategies for protecting intellectual resources will be the subject of both theoretical and practical deliberations. In these deliberations, the authors present their model for the protection of intellectual resources that, in practical perspective, is a component of the broadly understood business development strategy. The authors believe that the proposed issues belong to the research stream related to intellectual entrepreneurship. This stream has not been sufficiently described and examined, while the issues themselves are extremely up-to-date, especially for SMEs that are looking for new paths of development. These paths include traditional and non-traditional forms, e.g., using cheap raw materials and cheap labour, and non-advanced technologies. Today, traditional factors are slowly, but consistently ousted by knowledge, information, know how, etc. These resources (termed as intellectual resources) require a given protection strategy to be adopted. The point of reference for the purpose and scope of this paper was research conducted in the period from May to July 2015 on a sample of 137 companies classified into small and medium-sized enterprises (SMEs).

1. Characteristics and topology of intellectual resources in the company

The literature presents various divisions of a company's resources. According to the classic approach, resources are divided into capital and work. Capital is defined as any physical property of the company, while work is defined as employees with their experience, knowledge, and skills. This approach, owing to its universality, has not become outdated [10].

The division of resources into four categories is often encountered: a) financial capital – funds currently owned by the company and any possibilities of raising funds; b) physical capital – tangible elements of the company's property; c) human capital – skills, experience, intellectual potential and personal traits of employees; and, d) organizational capital – characteristics and attributes of the company, such as organizational structure, internal regulatory systems, image, internal relations, organizational culture, management style and relations between the company and its environment [13]. An equally frequently encountered classification of resources is their division into material (visible – tangible; these

are physical, financial resources and employees) and intangible (invisible – created by resources without a clearly specified form, and not found in the company's records; they include patents, licenses, databases, contracts and competences and skills of employees and of the company).

According to other classifications, tangible resources, human resources and intangible resources are distinguished [11]. Tangible resources are natural resources, being a gift of nature, and capital resources in the form of physical and financial resources. Human resources are traits and competences of employees. On the contrary, intangible resources are, on the one hand, implemented by people – their competences and, on the other hand, by the company itself – in the form of, e.g., licenses, patents, and know-how.

The above classifications of resources do not directly contain the category of ”intellectual resources”. It may be believed that this category is identified with the notion of human capital and intellectual capital of the company or as intangible resources. In the literature related to strategic entrepreneurship, intellectual resources are distinguished as equivalent with other company's resources. For instance, M.J. Dollinger in his book *Entrepreneurship, Strategies and Resources* [6] distinguishes six types of resources: physical, reputational, organizational, financial, intellectual and human, and technological resources. According to Dollinger, intellectual and human resources include the following: knowledge in the field of management, trainings, experience, challenging, observing, creativity, vision, the individual intelligence of employees, and their social competences [6]. The authors fully share the idea that intellectual resources have a strategic importance for the development of a company and have a critical importance for the creation and maintenance of competitive advantages.

Assuming as the starting point the broadly understood notion of intangible resources, the authors propose the following classifications of intellectual resources: organic (primary) intellectual resources, and acquired (secondary) intellectual resources.

Organic (primary) intellectual resources are the founders' knowledge and experience, market contacts, the talent and behavioural skills of employees, brand names (logo, name), trademark, website, patents, and corporate culture.

The listed resources are primary and basic assets, which enable the creation of the company and commencement of business activities. These are resources that may be used in many places at the same time. They are not depreciated during use, but they usually are enriched and strengthened in the process of organizational development. The discussed resources are a unique foundation to organize and coordinate any processes in the company, in accordance with the vision or mission adopted by the founders.

On the contrary, acquired (secondary) intellectual resources are resources that are created as a result of the company's activities in the process of the conversion of primary resources into specific outcomes, assuming the form of, e.g., works (copyright), art performances (ancillary rights), inventions (patents), utility

models, industrial models, brand names, geographical indications, new plant varieties, mask works, databases, and non-disclosed information (trade secrets, know-how, recipes, processes, technologies, organizational techniques, etc.) (Table 1).

These forms, as intangible products of the human mind, are components of intellectual resources, being decisive for the company's potential and its competitive position on the market.

It should be emphasized that inventions and brand names hold a particular position in intellectual resources. Resources may occur both at the stage of organizing the company and in the course of its activities. An invention patent may be a direct decisive factor for starting business activity or it may be a result of these activities. Therefore, innovativeness can be regarded as an intellectual resource with a dual character, i.e. as an organic or acquired resource.

Table 1. Organic and acquired intellectual resources in the company

Organic (primary) intellectual resources	Acquired (secondary) intellectual resources
– founders' knowledge and experience, – market contacts, – talent and behavioural skills of employees, – brand names (logo, name)*, – trademark, – website, – patents*, – corporate culture	– new knowledge, – copyright, – ancillary rights, – inventions (patents)*, – utility models, – industrial models, – brand names*, – geographical indications, – rights to new plant varieties, – mask works, – databases, – non-disclosed information (trade secrets, know-how, recipes, processes, technologies, organizational techniques, etc., trade secrets), – license agreements, – cooperation networks

* Patents and brand names in the company are dual. Depending on the business development stage, they are either organic (primary) resource or acquired (secondary) resource.

Source: Authors.

In the authors' opinion, the presented classification of intellectual resources in a company has practical importance, since it makes it possible to conduct a comprehensive identification and analysis of resources held by the company. This, in turn, enables their protection and development based on a properly selected strategy.

2. Protection of intellectual resources in the company

Protection of the organization's intellectual resources may be implemented by various actions (strategies) and at various levels of business management.

Usually, companies know or foresee the competitive strength of their intellectual resources and the necessary scope of their protection. However, due to the skill of the protection of intellectual resources, it may be necessary to determined what should be protected by the organization in an institutional manner (by registering in the national Patent Office or the Office for Harmonization of Internal Market-OHIM) and what should be kept by concluding confidential agreements within the company [9]. The first type of activities is termed an external strategy, while the protection of intellectual resources in the form of business secrets is termed an internal strategy. Apart from these two dichotomous strategies, a third one is termed a mixed strategy. It consists in the simultaneous use of the external and internal strategy. The selection of one of these strategies depends on many factors [8] and the key ones are as follows:

- The subjective value of intellectual resources,
- The expenditures and cost of resource protection
- Risk and competition on the market,
- The fluctuation of human resources, and
- The period of intellectual resource restoration.

Protection of all intellectual resources at the disposal of the company (both primary and secondary resources) has no economic and market (strategic) substantiation. This protection generates excessive costs, and, at the same time, forces changes in business management [5]. The authors believe that the company's management must make a deliberate choice of a strategy for protecting intellectual resources that justifies business development and acquisition of competitive advantage.

From among the mentioned key factors affecting the selection of the strategy for protecting intellectual resources, special attention is paid to the fluctuation of human resources and the period of intellectual resource restoration. These factors are not fully described in literature; however, in the authors' opinion, they have a substantial impact on the development and use of intellectual resources in a company. The company's management should limit the process of human resource fluctuation, since creativity, knowledge and creative skills of employees make it possible to create and continuously enrich intellectual resources at the disposal of the company. Some possibilities of restricting this process include; promoting, adequate remuneration, or co-participation in profits under property rights to intellectual property. E. Bendyk aptly describes this issue, by stating the following The inventors – the creators of technical solutions need investors to implement them. *The investor, to engage in a new technology, must have the possibility to assess that the*

inventor offers a real solution, rather than a humbug. The inventor must be certain that if they reveal their idea they will not lose control over it. For the inventor and the investor be able to cooperate, advanced "soft infrastructure" is necessary: efficient system of intellectual property rights protection and culture of mutual trust, resulting from locally binding standards and values [1].

On the other hand, when it comes to the period of intellectual resource restoration, the resources requiring particular protection are resources whose creation required substantial expenditures and many years of work. According to R. Hall, the knowledge of employees, networks of relations and contacts, or databases require a few to a dozen or so years to be fully restored [7].

On the whole, the selection of the strategy for protecting intellectual resources is closely related to the level of strategic business management [3]. In strongly centralized companies, the protection of intellectual resources is the domain of the company's management. On the other hand, in the strongly decentralized companies, intellectual resources are protected under a strategic business unit. In the first case, responsibility for protection rests directly with the president of the board or an appointed deputy for intellectual resource protection. Typical of this solution is the existence of one centre that manages the protection of all intellectual resources held by the company. This solution is characteristic for the companies producing a homogeneous assortment for local markets.

Protection of intellectual resources under the strategic business unit means the decentralization of decisions regarding what and how it should be protected. This solution is adopted by companies that are strongly diversified and that operate on many diverse markets [12].

The issues of the protection of intellectual resources, especially the selection of an adequate protection strategy, cannot be analysed separately from human resources the company has at its disposal. E. Catmull asks a direct question: *What is more valuable: good ideas or good employees?* [4]. In the opinion of the authors of this paper, the answer to this question is obvious: the sources of ideas are people – employees. They are the ones who, either individually or as a team ("team of brain men"), using their creativity, generate new ideas that are the basis for solutions classified as intellectual property (inventions, utility models, industrial models, etc.). The authors of this paper agree with E. Catmull who claims the following: *Ideas are not separate beings, floating freely somewhere in the space, fully formed and independent on people who only have to capture them and then implement them. Ideas do not act in this way. They are forged as a result of tens thousands of particular decisions made frequently by dozens of people. …People are standing behind the ideas. It applies to all products; for example, iPhone is not a single idea – a lot of ideas concerning both hardware and software are standing behind it. Nevertheless, people have a tendency to unit perception of objects and treat each of them as a solitary island which exists independently from the rest. It should be repeated again: in each creative*

project, the most important element are people – the way they are working, their capacity and values they profess [4].

In connection with the above, the authors of this paper believe that the selection of an appropriate strategy for protecting intellectual resources must take into account human factors whose activity determines the creation of these resources. Therefore, reference can be made to a parallel protection of creative employee teams and the protection of intellectual resources created by these teams. In other words, these are ”both sides of the same coin”.

3. Strategies for protecting intellectual resources applied in companies – case study

The issues of protecting intellectual resources in the companies were some of research issues implemented in the research conducted in 2015 (May–July 2015) on a sample of 137 companies, classified to small and medium-sized enterprises (SMEs) in Lower Silesia, the purpose of which was to assess the condition and level of the protection of intellectual property in this group of companies.

The obtained survey results made it possible to separate, for a detailed analysis, companies that, in the opinion of the authors, have in place procedures and actions indicating advanced strategies for protecting intellectual resources. When regarding organizational and legal forms, these are capital partnerships with limited liability with more than 50 employees. They operate in the sector of production and are located in large urban agglomerations.

The strategy for protecting intellectual resources applied in these companies is similar to the process (model) covering the following stages:

- The identification of objects of protection (intellectual resources), namely the answer to the question: What are we protecting?
- Analysis of the methods of protecting intellectual resources, namely the answer to the question: How are we protecting them?
- The selection of the scope of the protection of intellectual resources (domestic, European and international) is, na answer to the question: Wwhic procedure to choose?
- The cost of the protection of intellectual resources is the answer to the question: How much should be spent on protection?

The case of one of the examined companies, which produces noise level measuring devices, seems particularly interesting. This company has its own R&D department that hires not only constructors, but also design specialists who design the external appearance of devices sold on the domestic and European market. Intellectual resources held by the company are identified as inventions and industrial models. The adopted protection of these resources consists of patent and protection rights to industrial models. Several patents owned by the company have a domestic range, and two are European patents.

The costs of the adopted protection of intellectual resources are paid from funds from license profits, since the company has signed four license agreements with partners to use their equipment. This practice is an element of the adopted and implemented business model in the company in which receipts from licenses are reinvested in the creation of new intellectual resources.

The process of protecting intellectual resources in the discussed company also includes actions involving "non-institutional protection" (*know-how*). Some solutions, classified as inventions, are not reported by the company to the Patent Office but protected as "business secrets". The purpose of these activities is to acquire a competitive advantage. The patent dilemma concerning *know-how* often can be difficult to solve, and the decision always depends on an individual case and accompanying circumstances. In practice, many solutions cannot be effectively kept confidential. It applies, among others, to inventions from the field of mechanics and the operation of machines. The founder and the manufacturer of noise level measuring devices must take into account the fact that the availability of the product on the market will allow all the buyers, especially experts in technology, to learn the essence of the solution by, e.g., reverse engineering. In this case, an effective protection can be obtained only by reporting the invention to the Patent Office. At this point, it should be emphasized that many solutions cannot be covered by patent protection, because they lack a sufficient technical character. Therefore, know-how protection is the only reasonable method of protecting held resources.

Summary

The protection of intellectual resources in the company is its key development factor. Therefore, the owners and managers of companies who intend to rely on their intellectual resources (a paradigm of the 21st-century company) must notice any signs of innovation, and promote and support employees generating new, innovative solutions. Accepting risk and wise experimenting, i.e. involving low costs, predictable risk and acceptable uncertainty, are indispensable. To enlarge the potential of intellectual resources, it is necessary to shape innovative attitudes. At the same time, it is necessary to adopt a defined strategy for protecting intellectual resources generated by innovative employees. In practice, it means that the strategy for protecting intellectual resources must become a core for business development. The case study described in this paper indicates that, with a small investment, it is possible to prepare a creative and effective strategy for protecting intellectual resources.

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Strategie ochrony zasobów intelektualnych w przedsiębiorstwie

Słowa kluczowe

Przedsiębiorstwo, zasoby intelektualne, ochrona, strategia.

Streszczenie

Innowacje i zaawansowane technologie są obecnie podstawą rozwoju przedsiębiorstw w Polsce. Ich powstawanie i wzrost wymagają nie tylko nakładów finansowych czy zaawansowanych i rozbudowanych struktur organizacyjnych, ale również odkrywczych i wykonawczych umiejętności behawioralnych pracowników. Dzięki tym umiejętnościom powstają zasoby intelektualne. Celem pracy jest przedstawienie strategii ochrony zasobów intelektualnych w przedsiębiorstwie. W rozważaniach tych przedstawimy własny i oryginalny model strategii ochrony zasobów intelektualnych, który w wymiarze praktycznym stanowi komponent szeroko rozumianej strategii rozwoju przedsiębiorstwa. Punktem odniesienia do tak sformułowanego celu i zakresu pracy były badania przeprowadzone w okresie od maja do lipca 2015 roku na próbie liczącej 137 przedsiębiorstw zaliczanych do grupy małych i średnich (MŚP).