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Melania Bąk

Wrocław University of Economics

MODELS OF NON-MATERIAL RESOURCES IN ENTERPRISES – THE STRUCTURAL ASPECT

Summary: Non-material resources represent an integral part of assets in a knowledge and information oriented enterprise. Their complexity and diversity result from the different interpretations offered by various scientific disciplines and practitioners. They are subject to an ongoing analysis and investigation in terms of particular components of non-material resources in an enterprise, especially from the perspective of accounting practice which does not offer adequate instruments to present and disclose non-material resources. The analysis of non-material resources, as well as their changes and impact on the value of an enterprise, is possible by means of a model. The objective of the article is to select a representative group of non-material resources' components for the purposes of a model's development, to be applied in a small and medium-sized enterprise and also in a large enterprise, which reflects the reality in a smaller scale and, at the same time, allows for drawing conclusions to be used in developing analytical solutions. The analysis of literature references allows us to conclude that the recommended structures of non-material resources' models, suggested by many authors, are diverse and contain a certain degree of conceptual chaos. They are, however, also convergent in the sense of non-material resources' essence and differ only in the used nomenclature. The proposal of an optimal non-material resources model structure will allow for introducing a certain order in both theoretical studies and practical considerations.

Keywords: model, non-material resources, model structure, optimal model of non-material resources.

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1. Introduction

The abundance of both foreign and domestic literature references regarding non-material resources management in an enterprise confirms the fact that this problem is still very important and up-to-date. Non-material resources are more and more often perceived as a component of contemporary enterprise assets, as a determinant exerting an impact on its financial and business success and also an enterprise market value. Their complexity and diversity, however, do not allow for the establishment of uniform solutions in terms of their definition, systematization, valuation and presentation. Hence the need for an ongoing analysis of the changes occurring within

non-material assets and the study of their impact on the functioning of enterprises in conditions of a market economy.

Analysis of literature references leads to the conclusion that there are many proposals of non-material resources' models which differ between each other in their structure, their concept interpretation or the applied valuation methods. Most probably the structure of models describing non-material resources depends on the form and type of the operations performed by an enterprise, as well as the economic factors functioning in its environment. The article uses an analysis of the literature references and descriptive method. Frequently the structure of models depends on the interpretation of the non-material resources concept by a given model's author, which can be analyzed based on the available abundant literature.

The objective of the article is to suggest the optimal structure of a non-material resources' model (resources understood as invisible assets in accounting), for small and medium-sized enterprises¹ and also large enterprises², based on the analysis of literature references and the practical needs of economic units. The correct structure of non-material resources' model will allow for conducting effective analyses and forecasts in terms of the mutual interdependencies between particular model components and for identifying their impacts on material resources, as well as an enterprise's market value.

2. Non-material resources of an enterprise – characteristics and importance

In the 21st century, non-material resources constitute an important element of assets in knowledge and information oriented enterprises. They are referred to in various ways as non-material value³, non-material assets, intellectual value, intellectual property, intellectual capital or intellectual assets. The interpretation discrepancies referring to particular terms, result from the different approaches to this category of assets occurring in economics, management, finance and accounting. This problem is discussed in greater detail in the article by M. Bąk entitled: "The diversity of concepts and classifications of non-material factors with particular emphasis on the accounting perspective" [Bąk 2010, pp. 346-361].

¹ The Act dated 2nd July 2004 on freedom of economic activity (Journal of Laws No. 173, item 1807 with later amendments) distinguishes a small and a medium-sized entrepreneur. A small entrepreneur is characterized by – an annual employment, within at least one of the two recent financial years which did not exceed 50 employees and an annual net sales which did not exceed the PLN equivalent of 10 mln Euro, or the total balance sheet assets, prepared at the end of one of these years, which did not exceed the PLN equivalent of 10 mln Euro. For a medium-sized enterprise the respective threshold limits are 250 employees, 50 mln Euro or 43 mln Euro.

² A large enterprise was defined as a unit exceeding the threshold values specified for small and medium-sized units (e.g. the number of employees – 250 or more), for example listed companies operating on the international market.

³ Balance Law uses the term of "intangible assets".

The problems related to non-material assets refer mainly to developing the characterizing definitions and criteria, classifications, valuation methods, presentation and disclosure forms. All the listed areas require more detailed identification and the investigation of rational solutions to be satisfactory for all the involved environments and especially accounting which is subject to accusations about the absence of solutions in terms of non-material resources⁴.

Among many reasons influencing the exclusion of non-material resources from the accounting system (except intangible assets provided for by the Accounting Act and IFS 38) the following can be listed:

- their complex and invisible form,
- the absence of established and commonly adopted identifying criteria which do not negate the existing accounting rules. Developing changes in the resource qualifying criteria (e.g. the criterion of liability instead of ownership right and the control criterion) could serve as a solution,
- the variety of valuation methods, the application of which does not solve the problem of valuation from an accounting perspective since it is still working on a new valuation parameter in the form of fair value,
- the absence of the possibility for the presentation in financial reporting and searching for other presentation forms in reporting.

Among the characteristics of non-material resources not presented in accounting (i.e. invisible), the following resources can be distinguished: knowledge-based, lacking physical form, not entirely identifiable, unique for every enterprise, cover different categories of a diverse nature (e.g. company reputation, employees' skills), they are mostly divisible and can be used simultaneously in different places, they are capable of creating cause-effect connections between particular non-material and material categories, they can become a source of future profit and competitive advantage, their development is time consuming, they represent a deepening gap between an enterprise market value and its balance value [Bak 2010, p. 351]. Non-material resources represent long-term resources and are not subject to valuation until the sale of an enterprise [Daum 2003, p. 17].

Based on the analysis of literature references and the approaches developed by different scientific disciplines, a conceptual chaos can be observed which is manifested, among others, by using diverse terms in the construction of models for non-material resources which results in different interpretations of the underlying concepts. For example, intellectual capital is identified with intangible assets or interpreted without reference to intangible assets, or non-material resources are interpreted only at the level of intangible assets. Depending on the accepted interpretation, in the opinion of different authors, the model sub-structure of enterprise non-material resources can be diversified.

⁴ The Accounting Act and IAS 38 regulate only a part of the intangible assets presented in the accounting records and financial statements. These are acquired property rights, acquired goodwill, costs of completed development work.

Beyond any doubt, such status results in the occurrence of conceptual errors, for example intellectual capital is a general term for intangible assets, while non-material value (intangible assets) stands for an enterprise's intellectual capital.

From the perspective of accounting it is correct to interpret non-material resources as invisible assets in the context of the balance method which distinguishes invisible assets and their intellectual capital. The balance method is based on interpreting economic activities in line with two different presentations, strictly related to the nature of the business. The dual aspect of economic resources allows for their presentation in an objective perspective (assets) and a subjective one (capital). Invisible assets cannot be analysed solely in a subjective system, as is done in other sciences (e.g. management), since it limits their interpretation to the capital perspective only. The balance method allows for interpreting invisible assets in an objective perspective, i.e. invisible (non-material) assets and in a subjective one, i.e. invisible (intellectual) capital. For example, the close relation between invisible assets and intellectual capital can be analysed based on the brand and the capital this brand has established [Kłeczek 2006, p. 24]. Customer behaviour, in terms of a brand, results from the associations developed by customers in relation to this brand. If these associations have a positive influence on customer behaviour towards brand products, a positive brand capital is observed. In an opposite situation a negative brand capital is created. The discussed associations do not construct any brand capital if they do not impact on customer behaviour related to brand products. To sum up, the size of brand capital depends on the changes which occurred in the minds of customers and their behaviour, as well as on the marketing activities performed by the enterprise.

Analysis of assets in knowledge-based enterprises allows us to conclude that in the process of their value creation, the interest in traditional assets components has shifted to invisible assets and their intellectual capital. Such a change of focus to the advantage of invisible resources is especially noticeable among the users of information derived from accounting/financial reporting [Abeysekera 2008, p. 3].

3. The essence of a model and its application based on the accounting system

A human being constantly strives to learn more about the surrounding reality and tries to present it by means of systems and models⁵ in the conducted research. A systemic model usually represents a simplified version of reality, in its external form it should be similar to the system, however, its internal structure can be different.

⁵ According to G. Gordon "a model is defined as a set of information about a system collected in order to investigate it" [Gordon 1974, p. 22]. L.A. Sieniawski refers to a model as "an abstract or material representation of a given object (system) or its part, constructed in a way which allows for analysing it and providing information about this object. The similarity between a model and an object can be of a spatial, physical and/or mathematical nature [Sieniawski 1980, p. 143].

A model is based on the adopted assumptions, terms and interdependencies allowing to describe (to model) a particular aspect of reality.

A model is a hypothetical design of thought offering a simplified picture of the studied portion of reality in which unimportant, for a particular research purpose, elements, properties or relations are eliminated [*Wielka Encyklopedia PWN*, p. 551]. A theoretical model designed in this way is applied in science owing to its heuristic usefulness in the process of creating laws, theories and scientific explanations. Models are helpful in understanding and anticipating future phenomena and also used to reduce the complexity of the studied problems by facilitating their analysis, cognition and designing.

In economic science, homomorphic models (similar to the original version) are applied more frequently because economic reality in economic sciences can be described only with a certain simplification. Depending on the research needs and the given object of interest, in terms of its model representation, the reality can be simplified in a way which ensures that conducting research and drawing conclusions can be used in the course of further scientific and practical implementation.

Economic models can be grouped according to different criteria [Brzezina 1998, p. 115]: presentation forms: verbal, graphic, mathematical, econometric, cybernetic, accounting; their construction objective: explanatory, decision oriented and prognostic; abstraction type: statistical and dynamic, deterministic and probabilistic, open and closed, microeconomic and macroeconomic.

The theory of accounting takes advantage of models used for the chart of accounts system's miniaturization, making it possible to observe and model, on a smaller scale, the course of economic events occurring in an enterprise. At the beginning of the 20th century many accounting models were developed, mainly in Europe, which resulted from the application of different accounting theories. Models of one or two rows of accounts were identified and could be presented in line with a personalistic or materialistic approach [Biadacz 2013, pp. 78-79].

Accounting models illustrate the crucial assumptions of accounting theory in a synthetic way. Depending on the adopted level of abstraction, accounting models reflect the reality at a different approximation level, whilst always presenting its adequate generalization. The concept of an accounting model was introduced by W. Brzezina, while the authors of basic accounting models constructed in Poland are T. Peche, M. Gmytrasiewicz, K. Szymański and W. Brzezina.

Accounting theory and practice applies two, three, four and five-account models. They are useful in conducting scientific experiments and allow to present accounting rules within a didactic process in a simplified way, eliminating the detailed solutions which occur in practice.

T. Peche developed a five-account accounting model and separated the following accounts: *Claims*, *Material values*, *Nominal values*, *Capitals and reserves* and also *Results*. He used them to reflect the economic reality of an entity within the framework of a limited, to the minimum, accounting records. As T. Peche correctly points out,

models have to be of a universal nature because they are not constructed for the strict purposes of an enterprise accounting theory, but a unit accounting theory, typical for different types of economic entities [Peche 1991, p. 187]. In order to justify the application's usefulness of accounting models, T. Peche listed the following reasons:

- the generalized model form allows us to disregard the detailed accounting solutions provided for in the charts of accounts by simplifying the picture of the accounting system and facilitating the application of a model solution to all the units,
- an accounting model, due to its unitary nature, reflects the property relations of any single unit.

The generally applied accounting models refer to the traditionally interpreted assets in the form of resources and their flows. In recent years the approach to the scope of enterprise assets has been significantly transformed, mainly under the influence of the market economy and globalisation processes. Therefore both theorists and practitioners representing different scientific disciplines are, more and more often, taking up research covering the non-material resources of an enterprise. Analysis of the existing non-material resources (in terms of their structure) and the proposal of an optimal model for small and a medium-sized enterprise and also large enterprises, may facilitate the better understanding of the components presented as non-material resources.

In the long-term, while investigating the relations between a non-material resources model structure and a structure of a material resources model (e.g. following T. Peche's model), it is possible to observe a certain approximation of these two parts of a contemporary enterprise's assets, analyzed from an accounting perspective.

4. Examples of structures of selected non-material resources models

The structures of models presenting non-material resources are quite diverse. Firstly, it results from the existing conceptual and interpretative chaos. Secondly, every author of a subsequent model aspires to develop his/her own proposal of a model structure, not always paying attention to the interpretative sense of the suggested model components. Hence, there is not one universal model relevant to non-material resources. The multitude of model structures offered for non-material resources has a destructive effect and does not facilitate a uniform standard development for the purposes of non-material resources, satisfactory for different environments (e.g. managers and accountants). This should be considered when developing an optimal model of non-material resources for small and medium-sized enterprises and large ones, taking into account their different characteristics,

While constructing a non-material resources' model, it is crucial to consider how non-material resources are interpreted – as invisible assets (assets oriented pre-

sentation), as intellectual capital (capital oriented presentation), or as non-material assets and their intellectual capital (assets and capital oriented perspective). Owing to the large number of proposals for non-material resources' models which function in literature references, the structures of only the selected models relevant for non-material resources are presented in Table 1, having considered a different (often chaotic) interpretation of the discussed concept.

Table 1. The structure of selected models for non-material resources (considering a different interpretation of the concept)

Author	The structure of selected models for non-material resources
1	2
Intellectual capital = non-material assets	
OECD (Organization for Economic Cooperation and Development)	The economic value of two intangible categories covering the following enterprise assets: organizational (structural) capital and human capital.
H. Sullivan	Intellectual capital: human capital, intellectual assets, assets subject to commercialisation, structural non-material assets.
G. Ross, J. Ross	Intellectual capital: the sum of hidden assets, not presented in financial statements, referring to personnel skills and their work effects which remain within the company.
K.M. Wiig	Intellectual capital is comprised of the assets created as the result of intellectual activities, from acquiring new knowledge (learning) through invention to establishing valuable relations with others.
A. Brooking	Intellectual capital: human assets, infrastructural assets, intellectual property assets.
Intellectual capital	
W. Brukowitz, R.L. Williams	Human capital (competencies, mutual relations, leadership and development), organizational capital (processes, infrastructure, culture, management), market capital (relations with customers, suppliers, market oriented competencies, other relations), innovation-specific capital (advancement processes, service, technology).
E.K. Sveiby	Human capital, internal structural capital, external structural capital.
L. Edvinsson, M.S. Malone	Human capital and structural capital (customer capital and organizational capital). Organizational capital represents the capital of innovation and the capital of processes.
J.H. Daum	Human capital, structural capital, partnership capital, customer capital.
Skandia	Human capital, customer capital, organizational capital.
M. Bratnicki J. Struzyna	Intellectual capital is divided into two basic parts: the first represents invisible resources and processes and is responsible for organizational and social capital, whereas the second one reflects human knowledge and creates human capital. This division refers to both the unconscious and conscious (thinking) parts of intellectual capital.
M.J.M. Viedma	Human capital, structural capital, relations capital.

Tabela 1, cd.

1	2
Non-material assets	
R. Reilly R. Schweihs	Non-material assets: marketing and customer related, engineering and production related, human resources related, finance related, data processing related, copyrights related, contractor related, location related, goodwill related.
Sveiby (Intangible asset monitor)	Non-material assets: personnel competencies, internal structure, external structure.
J.A. Cohen	Competitive advantage, market share, added value, efficiency, customer loyalty.
D. Andriessen	Non-material assets: hidden skills and knowledge, collective values and standards, presented technology and knowledge, basic processes and management strategies, resources.
J. Low, P.C. Kalafut	Non-material values: leadership, strategy implementation, communication and disclosure, brand value, reputation, networks and alliances, technologies and processes, human capital, workplace organization and culture, innovation, intellectual capital, flexibility.
G. Urbaneck	Non-material assets: brand, technological non-material assets, human capital, customer relations, organizational culture and leadership, reputation, relations with partners and networks.

Source: author's compilation based on: [Ujwary-Gil 2009, p. 37; Low, Kalafut, 2006, p. 53-186; Viedma 2001, pp. 148-165; Edvinsson, Malone 2001; Kasiewicz, Rogowski, Kicińska 2006, p. 93; Cohen 2005, p. 27; Urbaneck 2008, pp. 42-43; Daum 2003, p. 17].

Table 1 presents three groups of models for non-material resources. The first group refers to intellectual capital in terms of non-material assets, the second group limits the interpretation to intellectual capital, whereas the third group focuses attention on non-material assets.

The correct interpretation of non-material resources should not be limited solely to non-material assets or intellectual capital, or to the interchangeable application of intellectual capital/non-material resources concepts (such an interpretation is mainly responsible for conceptual chaos). Non-material resources should be analyzed in the category of invisible (non-material) assets which reflects the relations assets = liabilities (capital), where "(...) capital constitutes the homogenous energy included in heterogeneous assets" [Nita 2009, p. 29].

The study of literature references allows for the observation that in cases of all the suggested non-material resources' models, human capital is distinguished and understood as the skills, experience and loyalty of different level employees in an enterprise. The subsequent components, replicated in the analyzed models, represent customer capital (also referred to as relations capital) and organizational capital (also known as structural capital). More extensive diversity is present in the names used for models covering non-material assets, even though the meaning of the suggested

structure is similar in nature to that of intellectual capital. For example, such elements are distinguished as employees' competencies, internal structure (referring to organizational culture and innovation) and external structure (covering contacts with customers/contractors, brand and reputation).

In order to develop an optimal and overall model structure for the non-material resources of an enterprise, the positions listed below positions of the following nature were recommended:

- marketing oriented: brand, reputation, image, identity,
 - relations oriented: relations with clients,
 - organizational nature: organizational culture, innovation,
- and also the human factor – employees who exert an impact on the above distinguished non-material resources and take care of their mutual relations.

5. A proposal for the optimal structure of a model for non-material resources in an enterprise

In the course of in-depth analysis of literature references, a representative group of non-material resources' components was distinguished, which covers: brand, customer relations, organizational culture, innovation, identity, reputation, image and employees. Each of the listed non-material resources' components, from an accounting perspective, should be interpreted as a non-material asset and its intellectual capital. The quality and involvement of assets influence the value of intellectual capital, which is released as the good resulting from the operating (active) assets.

The individual components are interdependent, related to each other and mutually complementary (e.g. a brand influences customer relations and company reputation) and create a compact set of information about the part of assets which is invisible and undisclosed in accounting records and the financial statement, which is of major importance for the market value of an enterprise.

Table 2. The model of non-material resources for small and medium-sized enterprises and also large enterprises

The proposal of the structure of a non-material resources model	
Small and medium-sized enterprises	Large enterprises
Brand	Brand
Customer relations	Customer relations
Image	Organizational culture
Employees	Innovation
	Identity
	Reputation
	Image
	Employees

Source: author's compilation.

Table 2 presents two proposals of non-material resources' models for small and medium-sized enterprises and also for large ones.

Non-material resources still represent a mystery to many enterprises, since their potential, power and market value impact are still not completely known. The absence of the obligation and possibility for their valuation and disclosure in the available forms of presentations result in the marginalization non-material resources, especially by small companies. Small companies and mainly those which present their accounting records in the form of tax records (e.g. tax revenue and expense book), do not attach as much attention to the importance of non-material resources as large enterprises do, presenting much higher economic awareness and the defined strategic goals constitute the challenge to be implemented in the future.

Small companies mainly concentrate on proper customer relations, taking care of company image, brand establishment and company personnel. The limited role of non-material resources in small enterprises results from their characteristics, among which the following can be listed [Zadrożny, Wrzosek 2006, p. 2]: achieving income (here and now), the absence of developed strategic future plans, organizational structure limited to the minimum, small size of employment and refraining from investment in employees, small market share, meeting the needs of a small number of clients, business area limited to the local market, reduced financial and innovative possibilities. Small companies take care of their image to a limited extent, which can result from the absence of knowledge about marketing opportunities. A small group of customers and suppliers influences direct contacts which do not require any particular activities aimed at establishing customer relations. Their adjustment capacity to changing market conditions results from a flexible (uncomplicated) organizational structure and the ability to react quickly to change. They investigate their opportunities for cheaper production and maintaining the proper quality of their products/services.

Large enterprises are much more aware of non-material resources' importance for an enterprise's functioning. Hence, the structure of non-material resources recommended for them constitutes the entire package of components in which every element is equally important. Large enterprises establish and strengthen their brand and customer relations in great detail, take care of their image, reputation and identity (recognisability), create internal structures (organizational culture and innovation) and also invest in acquiring educated and experienced personnel, as well as taking care of their employees' professional development at all levels.

Table 3 presents the mutual relations between particular components of a (full) model of non-material resources. Feedback should be considered in these relations, for example the company brand influences customer relations and customer relations influence the brand.

The model of non-material resources in an enterprise is not closed. The sequence (importance) of particular components of non-material resources is probably quite diverse depending on the scale and type of performed economic operations, the

organizational and legal form and the specific nature of the sector. In-depth analysis of the above statement validity will be verified in the course of further analytical studies.

Table 3. Mutual relations in the model of non-material resources

Model components	Brand	Customer relations	Organizational culture	Innovation	Identity	Reputation	Image	Employees
Brand		x	x	x	x	x	x	x
Customer relations	x		x	x	x	x	x	x
Organizational culture	x	x		x	x	x	x	x
Innovation	x	x	x		x	x	x	x
Identity	x	x	x	x		x	x	x
Reputation	x	x	x	x	x		x	x
Image	x	x	x	x	x	x		x
Employees	x	x	x	x	x	x	x	

Source: author's compilation⁶.

While investigating mutual relations between the particular components of non-material resources their characteristics should be considered (Table 4), as well as the macroeconomic and microeconomic factors which create them.

The model of non-material resources in an enterprise is not isolated and does not function by itself. If the particular components of non-material resources are supposed to exist and become subject to changes when establishing an enterprise's value, they have to enter into relations with material resources. Hence, the components of non-material resources exert an impact on the level of income earned and the costs incurred by an enterprise. A strong brand influences higher demand and an increase of sales income, while customer relations do not require large costs which have to be covered in the process of winning new clients.

Analysis of the relations between the components of non-material resources covered by the discussed model should take advantage of the role played by the macroeconomic and microeconomic factors present in an enterprise's environment which influence them [Sudoł 2006, p. 43]. Among macroeconomic factors the following, among others, can be listed: domestic economic policy, economic growth determinants (e.g. GDP growth rate), fiscal policy and foreign trade. Microeconomic factors are represented by: customer preferences and tastes,

⁶ Due to the limitations of this study, the detailed characteristics of the mutual relations between the components of non-material resources will be analyzed in the course of the future research studies conducted by the author.

Table 4. The characteristics of non-material resources

Non-material resources	Selected characteristics
Brand	Awareness of its existence, recognition, stability based on value, impact on customer behaviour, customer satisfaction – loyalty, mediagenic appeal.
Customer relations	Customer confidence, customer satisfaction, stability of contracts, information policy and distribution, adaptation to customer expectations, establishing stable relations – purchase repeatability, customer segmentation.
Organizational culture	Compliance with company strategy, compliance with standards/law, organizational structure, information policy, interpersonal behaviour – ethical, work efficiency, proper relations between employees and management.
Innovation	Ensuring the continuity of operations, rational use of resources, creativity, diversity, innovative activities, risk acceptance.
Identity	Company recognition, identification, presentation, employee behaviour.
Reputation	Credibility, meeting the promises made, confidence – meeting expectations, business responsibility, ethical and overt behaviour.
Image	Reliability, solidity, confidence, recognition, sustainable socio-environmental policy.
Employees	Entrepreneurship, individuality, flexibility, creativity, loyalty, empathy.

Source: author's compilation.

price changes, demand for substitutive and complementary goods, marketing as the domain of human activity (4P), labour market (e.g. qualifications of workers) and customer behaviour.

Therefore if the state ensures favourable trade conditions for economic entities, the development of operations can be observed which influence brand strengthening and positive market image establishment, as well as the investments made in new technologies and employees. The next example refers to the basic market forces of demand and supply. Demand for goods depends on a brand, image and reputation and also on the quality of the offered goods which persist under the impact of the innovations applied. Supply is most frequently established under the influence of employees' skills, applied technologies, the existing image, the brand and customer relations.

To sum up, in the process of an optimal model for non-material resources development, the structure of these resources is of great significance because it determines the object of the study in a complex way. The mutual relations between the particular components of non-material resources in an enterprise are also crucial since they result from the direct and indirect impact of economic factors and the economic operations carried out in the course of the performed business activities.

6. Conclusions

Analysis of non-material resources' components (understood as invisible assets made up of non-material assets and intellectual capital) in an enterprise and their mutual relations, allows for drawing the following conclusions which can support the cognitive process relevant to the part of assets neither presented nor disclosed in an accounting system. Certain cognitive possibilities are offered by the model of non-material resources which reflects the reality at a smaller scale and allows for working out a model type of solution covering all units. However, in the case of a different awareness level presented by economic units in terms of non-material resources, it is best to distinguish two models, one for small and medium-sized enterprises and the other for large enterprises. The starting point for developing an optimal model of non-material resources is its proper structure where both conceptual chaos and diverse interpretations are eliminated.

The dual perception of the essence of non-material resources allows for their interpretation from the perspective of accounting, which can initiate work on developing the standard relevant for non-material assets and their intellectual capital. Each activity in this matter should be observed as a positive one, since non-material resources represent an integral part of a contemporary enterprise's assets and thus cannot be isolated from the traditional assets presented from both a tangible and financial perspective. The subsequent step to take, in the course of an enterprise reality modelling, should be the development of a model combining non-material and material rules and only then will it be possible to analyze and mutually compare both the balance and market value of an enterprise.

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MODELE ZASOBÓW NIEMATERIALNYCH W PRZEDSIĘBIORSTWACH – ASPEKT STRUKTURALNY

Streszczenie: Zasoby niematerialne są integralną częścią majątku przedsiębiorstwa ukierunkowanego na wiedzę i informację. Ich złożoność i różnorodność przyczyniają się do odmiennych interpretacji przez różne dyscypliny naukowe i praktyków. Wciąż trwa analiza i poznanie poszczególnych składników zasobów niematerialnych przedsiębiorstwa, szczególnie z punktu widzenia rachunkowości, której instrumentarium nie jest przygotowane do prezentowania i ujawniania zasobów niematerialnych. Analiza zasobów niematerialnych i ich zmian oraz wpływu na wartość przedsiębiorstwa jest możliwa za pomocą modelu. Celem artykułu jest wyróżnienie reprezentatywnej grupy składników zasobów niematerialnych dla modelu, zastosowanego w małym i średnim oraz dużym przedsiębiorstwie, który odzwierciedla rzeczywistość w mniejszej skali, jednocześnie umożliwiając formułowanie wniosków służących analitycznym rozwiązaniom. Studia nad literaturą przedmiotu pozwalają stwierdzić, że proponowane struktury modeli zasobów niematerialnych przez wielu autorów są różnorodne, zawierają w sobie pierwiastek chaosu pojęciowego. Są też zbieżne w sensie istoty zasobów niematerialnych, różnią się tylko zastosowanym nazewnictwem. Propozycja optymalnej struktury modelu zasobów niematerialnych pozwoli wprowadzić pewien porządek do badań teoretycznych i rozważań praktycznych.

Słowa kluczowe: model, zasoby niematerialne, struktura modelu, optymalny model zasobów niematerialnych.