The Problem of Accounting Disclosure of Intellectual Capital in the Financial Report

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Summary: *Intellectual capital is a key asset in the contemporary knowledge economy. Investors and managers place demands on accountants for the most accurate measurement and disclosure of the value of intellectual capital in reports to estimate future investments and earnings from this asset as accurately as possible. The paper aims to point out the problem of accurate financial reporting on intellectual capital and to show various methods for expressing the value of this capital. Based on the review of the literature, qualitative and quantitative measures are presented as possible solutions for the insufficient presentation of the value of intellectual property.*

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INTRODUCTION

In the new knowledge economy, intellectual assets, rather than physical assets drive innovation, revenues, profit growth rate, and competitive advantage (Seetharaman et al., 2002; Milojević et al., 2023). Managers are constantly focused on finding new models for improving the efficiency and performance of using available resources (human, intellectual, strategic, market, etc.) (Čupić et al., 2023; Nedić et al., 2024). For this reason, information about the value of the company's knowledge and intellectual property becomes of key importance in the investment decision-making process (Dharni & Jameel., 2022), valuing the company and determining further directions of development. As the importance of intellectual resources grows, the accounting profession is faced with serious challenges, primarily because the market-to-book ratio, at one time, was in double digits (Roslender, 2009). This indicated that the real value of IC was not reflected, raising concerns about the smooth functioning of capital markets (Roslender, 2009).

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For these reasons, years ago the current financial accounting framework was criticized for inadequate presentation of the most important assets and resources of today's business, known as intellectual capital (IC) (Seetharaman et al., 2002). Insufficient information about IC creates a problem for both investors and company management. The paper aims to point out the problem of accurate financial reporting on intellectual capital and to show possible ways of expressing the value of this capital.

The paper, in addition to the introduction and conclusion, consists of three parts. In the first part, the importance of IC and the theoretical basis of disclosure of the value of IC will be presented. The second part covers the accounting limitations of the IC value statement, while the third part presents the possible ways of measuring the IC value.

INTELLECTUAL CAPITAL AND THE THEORETICAL BASIS OF REPORTING ON INTELLECTUAL CAPITAL

IC plays a key role in maintaining competitive advantage and creating corporate value (Brüggen et al., 2009; Radonić et al., 2021; Ognjanović & Slavković, 2022), fostering economic growth and social development (Mooneeapen et al., 2022). As a result, investment in IC has grown over the years (Mooneeapen et al., 2022; Brüggen et al., 2009). With the dominance of the knowledge economy, IC is recognized as an integral part of the value-creating process (Nikolaj Bukh, 2003). With the growing importance and dominance of IC in the knowledge economy, there is a need for a more accurate presentation of this asset in financial statements. Clearer and more transparent information about the availability, management and potential of IC companies provide managers a tool for quality management of these assets as well as continuous and qualitative growth (Uliana et al., 2005). In addition, the company's management better understands the extent to which the company's existing intellectual resources are suitable for future growth (Uliana et al., 2005). Accordingly, from a financial accounting and reporting perspective, IC can be defined as intangible assets or resources without physical substance (such as innovation, knowledge, research and development, employee training or customer satisfaction), which underlie the firm's value creation process (Anifowose et al., 2017).

IC, as well as information about intellectual capital disclosure (ICD), has gained more and more importance in recent years (Nikolaj Bukh, 2003). Sharma & Dharni (2017) and Dharni & Jameel (2022) indicate a growing trend of all types of intellectual capital disclosures. ICD is usually made by CEOs, because they control the day-to-day operations of the company and best know the value that IC creates (Yan, 2017). Users of IC reports and information can be divided into two groups: internal and external (Uliana et al., 2005). Internal users are managers who need information about their company's value-adding activities and investments and are interested in the role that IC plays in achieving company goals and as a driver of value (Uliana et al., 2005). External users, which include investors, need useful information about IC in order to reduce

investment risk (Uliana et al., 2005). Accordingly, Figure 1 shows the users of IC reports as well as their ICD motives.

Figure 1 shows IC as a key asset of the knowledge economy, as well as the users of the IC report - investors and managers. These reports provide appropriate information to both types of users (in the form of annual, special and financial reports) and show for what purposes they use them - linking them to strategy, results and other company resources.

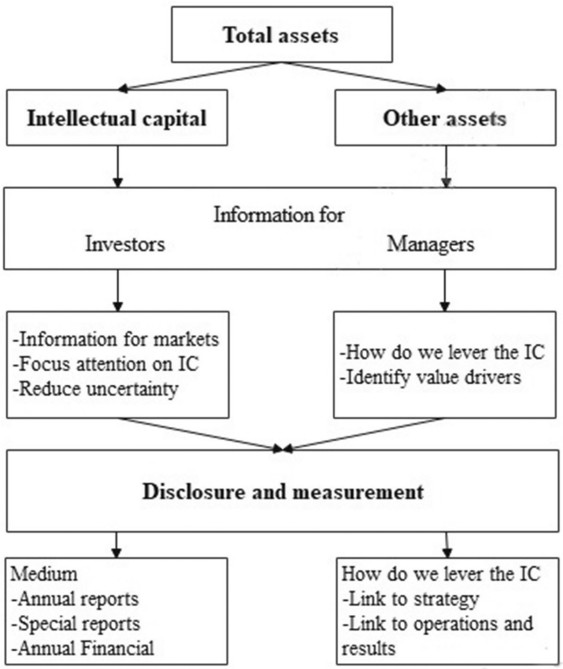

Figure 1: Overview of intellectual capital disclosure

Source: Uliana, E., Macey, J., & Grant, P. (2005). Towards reporting human capital. *Meditari Accountancy Research*, *13*(2), p. 169.

ICD is theoretically supported in the literature. Van der Zahn (2023) states that IC reporting was supported by market-oriented and societal-oriented theories. Market-oriented theories include agency theory, which aims to explain the business relationship between principals (shareholders) and agents (company managers) (White et al., 2007). Namely, shareholders usually lack the professional knowledge and skills that managers generally possess. There is a separation of ownership from management by hiring managers, which aims to improve the efficiency of companies' operations (Yan, 2017). However, the separation of ownership from management in companies creates a moral hazard where managers, as agents of owners (shareholders), act for their own economic interest (White et al., 2007). Second, from societal-oriented theoretical perspectives, legitimacy theory and stakeholder theory provide a theoretical framework in

determining why a firm must disclose IC (Van der Zahn, 2023). Legitimacy theory recognizes that companies operate within a social system that supports the achievement of goals in accordance with social values, so it is necessary to inform the public about all company assets (Van der Zahn, 2023). Stakeholder theory conceptualizes the company as part of a wider social system that is influenced by other social groups in society (Van der Zahn, 2023), so it is necessary to reveal the values of IC in detail.

SPECIFICITY OF THE ACCOUNTING STATEMENT OF INTELLECTUAL CAPITAL

Users of financial statements often interpret and evaluate a company's value based on IC information (Liao et al., 2013). Companies can use the transparency of financial statements to provide insight into their economic potential (Budić, 2023) and to demonstrate that they are carefully managing their intellectual and other assets (Uliana et al., 2005). However, intellectual property investments were rarely included in financial statements in the past (Schiemann et al., 2015; Seetharaman et al., 2002). That is why a good part of the users agree that the reports do not provide all the necessary information or the information is presented in an incomprehensible and unclear way (Liao et al., 2013). Also, the current accounting and financial reporting practices have been criticized by many business leaders and financial analysts, because of "not keeping pace" (Seetharaman et al., 2002, p.130). Van der Zahn (2023) agrees, stating that investors often complain about the consistency, availability, and quality of information disclosure, which limits effective assessments and comparisons for investment decision-making.

Mooneeapen et al. (2022) state that the need to disclose more information about IC to the public has arisen especially after financial scandals and crises. Current accounting standards do not require comprehensive recognition of IC in financial statements (Brüggen et al., 2009) and the laws governing the disclosure of IC information are barely noticeable, which forced the legal disclosure to be modified (Sharma & Dharni, 2017). The main reasons for inadequate ICD are that property rights to control IC are unclear, future earnings from intellectual investments are uncertain, and the value of IC often relies on unknown contextual factors (Schiemann et al., 2015). As a result, there is a growing level of information asymmetry between companies and users of financial statements (Brüggen et al., 2009). In addition, Yan (2017) states that the lack of ICDs rules make CEOs' statements always quite subjective and without justification, leading to agency problems. CEOs can manipulate disclosures to show the good health of their IC, which will harm the interests of shareholders (Yan, 2017).

Given that it is difficult to standardize the expression of IC values, voluntary reporting of IC was given as one of the suggestions (Mamun & Aktar, 2020). Reducing information asymmetry between the company and external information users is one of the main reasons for voluntary ICD (Brüggen et al., 2009). Accounting literature often argues that voluntary disclosure of financial and non-financial information about IC investments

replaces scant recognition of intangible assets in financial reporting (Schiemann et al., 2015). However, practice has shown that voluntary disclosure of information prevents stakeholders and investors from properly assessing the firm's future ability to create value as well as clearly assessing investment risk (Mitchell Williams, 2001). This is supported by Schiemann et al. (2015), stating that empirical research on the determinants of voluntary ICD does not recognize any relationship with the mandatory disclosure of intangible assets, which may create a problem if the exact value does not show this capital.

As reasons for an increasingly large and transparent ICD, Anifowose et al. (2017) state that IC is the most relevant component in value creation processes (1); there is a growing demand for IC information (2) and the role of the ICD in increasing the relevance and reliability of financial reporting (3). As motives that drive companies to accurately and transparently disclosure information about IC Brüggen et al. (2009) and Sharma & Dharni (2017) state the following:

- Provision of quantitative information to stakeholders;
- More accurate reporting of IC by companies creates trust among employees and other stakeholders;
- Cleary ICD can help increase the relevance of financial statements. Failure to provide relevant information on intellectual capital can lead to the losing of the company's financial position and loss of competitiveness in the long term;
- Development of better measures to measure IC.

An additional motive of comprehensive ICD is beneficial to investors and other external stakeholders, as it reduces investor uncertainty regarding the assessment of future cash flows and capital prices (Schiemann et al., 2015).

MEASURING THE VALUE OF INTELLECTUAL CAPITAL AND INFLUENCING FACTORS ON THEIR DISCLOSURE

The accounting profession was faced with the challenge of identifying, measuring and disclosure of IC following accounting standards and to make the best use of scarce investment funds in an efficient capital market (Roslender, 2009). The complexity of IC measurement is complicated by the fact that accounting standards do not allow full recognition and disclosure of IC components, due to the difficult standardization of "soft", intangible values (Brüggen et al., 2009). That is why there is a constant debate among theorists and practitioners about how to include the value of IC in the financial report, for investors to assess the contribution of this capital to the success of a business (Uliana et al., 2005).

The presentation of the value of IC is different from tangible assets. In the case of tangible assets, the presentation of balance sheet positions is based on historical cost. Invested assets are exchanged for cash, with sales taking place at a higher price to realize

a profit (Roslender, 2009). In the case of fixed assets, such as buildings, machinery, and equipment, their constant reduction in value is calculated through depreciation (Roslender, 2009). Intangible assets are not purchased in the same way as tangible assets (Roslender, 2009) and this is the main limitation of the value statement of these assets. Some other characteristics of IC make it difficult to display it in reports: IC does not lose its value over time, on the contrary, its value increases over time (1); most ICs are created within companies (2); a subjective evaluation of the IC occurs (3) (Roslender, 2009).

Considering the problem of expressing the value of IC, in the literature disclosure practices can be classified into two categories: quantitative (hard information) and qualitative (soft information) (Dharni & Jameel, 2022). Quantitative disclosures are based on the definition of appropriate disclosure indices, calculated based on the frequency of presentation of certain IC categories in reports (Roslender, 2009). Qualitative disclosures help investors bridge the gap between financial statements and the economic reality of a company's operations, leading to less information asymmetry (Dharni & Jameel, 2022). They are usually evaluated by professionals and individuals who are thoroughly familiar with the contribution of IC to the development of the company.

Literature indicates that ICD is positively influenced by various factors such as: company size, company profitability, level of IC (Susanto et al., 2019); board composition (Yan, 2017); type of industry (Mamun & Aktar, 2020), and company size (Brüggen et al., 2009). Sharma & Dharni (2017) adds that ICDs tend to increase as the size of the organization increases. Liao et al. (2013) conclude that in older and larger companies, ICD increases in the post-adoption period. The same authors conclude that high-tech firms have a higher frequency of disclosure of customer capital, organizational capital, human capital, and IC than the traditional sector. The results of previous research also indicate the negative impact of certain factors on ICD - ownership concentration, leverage, and listing age (Susanto et al., 2019).

CONCLUSION

The significance of ICD for both investors and company management is undeniable. Investors without IC information cannot estimate future earnings or possible risks when making investment decisions in certain companies. On the other hand, managers cannot set optimal resource allocation and sustainable business development plans without an accurate presentation of IC values in financial reports. However, accounting practice has not yet fully resolved the problem of presenting IC precisely because of its intangible nature. This creates information asymmetry between investors and managers. Because of voluntary ICD, managers often use these situations to show the value of IC in the best way. On the other hand, investors do not know how reliable this information is, so they do not know exactly how to assess the value of investments. To alleviate this problem, the literature suggests qualitative and quantitative measures of IC evaluation.

It should be emphasized that individual components of intangible assets are not complicated to calculate, such as concessions, patents, licenses, software, goodwill, and intangible assets leased. The problem is to express the value of the brand, and the value of human capital. Also, the accounting profession must specifically address the issue of reporting the value of investments in the various components of intellectual property.

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Problem računovodstvenog iskazivanja intelektualnog kapitala u finansijskim izveštajima

Rezime: *Intelektualni kapital je ključna imovina u savremenoj ekonomiji zasnovanoj na znanju. Investitori i menadžeri postavljaju zahteve računovođama za što tačnijim merenjem i iskazivanjem vrednosti intelektualnog kapitala u izveštajima kako bi što preciznije procenili buduće investicije i prinose od ove imovine. Cilj rada je da ukaže na problem preciznog finansijskog izveštavanja o intelektualnom kapitalu i da prikaže razne metode izražavanja vrednosti ovog kapitala. Na osnovu pregleda literature, predstavljene su kvalitativne i kvantitativne mere kao moguća rešenja za nedovoljno prikazivanje vrednosti intelektualne svojine.*

Ključne reči: *intelektualni kapital, iskazivanje intelektualnog kapitala, računovodstveni standardi*