

Intellectual Capital Disclosures in Public Sector Organisations

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This study aims to assess the quality of intellectual capital disclosures in public sector organisations. Disclosure of intellectual capital is assessed from the disclosure of human capital, relational capital and structural capital. A study of public sector organisations was conducted in the Level II Region of Badung Regency in Bali Province. Data were collected using questionnaires sent to educator accountants and public sector accountants. Descriptive statistics, using SPSS 22.0 software, comprised the data-analysis technique used in this study. The study found that the disclosure of entrepreneurial innovation is best practice for human capital disclosure, while the disclosure of backlogs, distribution channels, collaboration, licensing agreements, quality standards and images are best practices for relational capital disclosure. The disclosure of management philosophy, management processes, information/networking systems and financial relations are best practices for structural capital disclosure.

Keywords: *Intellectual Capital Disclosure, Human Capital, Customer Capital, Structural Capital, Public Sector Organisation*

Introduction

For public sector organisations, the disclosure of intellectual capital is essential, as it ensures public accountability and satisfies the information needs of users in a way that enables them to support the decision-making process. The disclosure of intellectual capital allows stakeholders to learn the value of an organisation's economic resources used to carry out operational activities, evaluate the effectiveness and efficiency of it as a reporting entity and help determine the organisation's compliance with laws and regulations. Disclosure is a required form of transparency that supports the creation of accountability in the management of public resources. By identifying, assessing and managing intellectual capital, a public sector

organisation ensures its success, improves its decision making and demonstrates to the public the quality of its management processes (Ramírez, 2010).

The intellectual capital approach can facilitate the learning process in public sector organisations, as it enables public managers to rethink their mission (Kong and Thomson, 2009); give managers the power to know what is known (know-what) and allows them to share what they know (know-how). This is important for public sector organisations, as said organisations must always amass new knowledge and eliminate any knowledge that is deemed unnecessary (Kong, 2009). The higher levels of intangibility in public sector organisations compared to private sector organisations also demand that intellectual property be disclosed (Cinca, Molinero and Queiroz, 2003). As well as this, public sector organisations have high levels of human capital and focus on outputs that are intangible (Wall, 2005). By identifying and assessing intellectual capital, managers of public sector organisations can better manage said capital (Linda & Fitria, 2019).

Nevertheless, existing public sector accounting has been insufficient in terms of its disclosure of intangible assets, including intellectual capital. Numerous inputs and outputs of public sector organisations have led to many activities that cannot be quantified in a monetary sense. Thus, based on existing public sector accounting provisions, the effectiveness of public sector activities is difficult to analyse and evaluate. As a result, the interest of stakeholders in public sector organisations is raised to encompass not only financial assets but also intangible assets in the form of intellectual capital (Merkibayev et al., 2018).

Responding to the situation, this study aims to assess the quality of intellectual capital disclosure in public sector organisations. Public sector organisations are required to disclose intangible assets, especially intellectual capital, so that their sources of competitive advantage that produce value are identified. These sources may include a focus on community members, social responsibility and staff professionalism. If intellectual capital is not disclosed, it may not receive sufficient attention from management (Guthrie & Petty, 2000), whereas public sector organisations must be accountable not only for the funds entrusted to them but also for the outcomes achieved (Hyndman & Anderson, 1991).

Literature Review

Resource-Based Theory

The resource-based theory states that an organisation is a combination of resources and capabilities. The essence of an organisation lies in its ability to create, transfer, use, integrate and exploit knowledge-based assets, which are referred to as intellectual capital (Teece, 1998). Kaplan and David (1996) argue that the resources that determine the future success of an

organisation are intangible. Competitive advantage is derived from resources and capabilities, which are collections of tangible and intangible assets, including organisational management skills, organisational processes and routines, and controlled information and knowledge (Barney, 1991). Resource-based theory associates the potential for high-value creation and company performance with organisational resources and capabilities (Bharadwaj, 2000). The resource-based theory also emphasises the use of internal resources – both tangible and intangible assets – that have been internalised and used effectively by organisations to achieve competitive advantage (Riahi-Belkaoui, 2003). This is in line with the characteristics of intellectual capital that emphasise actions that focus on the creation, implementation and distribution of resources. Thus, the disclosure of intellectual capital helps stakeholders to understand the drivers of organisational value as well as the value creation process.

Intellectual Capital in Public Sector Organisations

To apply the theory of intellectual capital in the private sector to the public sector, it is necessary first to consider the differences between the two sectors. The public sector has different organisational goals and provides intangible services using intangible resources and assets (Cinca, Molinero & Queiroz, 2003). Furthermore, Cinca, Molinero and Queiroz (2003) state that the process of management innovation in the public sector tends to be slower compared to the private sector; however, in relation to intellectual capital, the public sector can adopt the practice of measuring and recording intangible assets faster than the private sector. This is due to the fact that the resources used by the public sector are mostly intangible, and its output is mostly in the form of intangible services. However, due to a lack of competition and rising monopolistic tendencies, the development of new measurement and recording practices remains stunted.

Cinca, Molinero and Queiroz (2003) also state that the objectives of public sector organisations are mostly intangible. These objectives include creating environmental security and raising the cultural interest of a population. The objectives of private sector organisations are more profit-oriented and centre on the creation of value for shareholders. The purpose of public sector organisations is to provide high-quality services to users. In private sector organisations, social responsibility and environmental actions are emphasised to improve the *image* of the organisation. This is in contrast to public sector organisations, where commitment to these causes is not a marketing ploy but rather a *fundamental objective*. A higher level of management control and transparency is needed in public sector organisations when compared to the private sector. In the public sector, there is less of a need to quantify information, and organisations are required to provide information that meets the needs of external users, including information on compliance with statutory provisions, management control and economic indicators.

A study conducted by Kaufmann and Schneider (2004) shows that there is no agreed definition of intellectual capital. In the same vein, Bounfour (2003) states that researchers and analysts have not yet reached an agreement on the definition of intangible investment and its constituent elements. Most definitions of intellectual capital include the element of organisational knowledge and recognise that intangible assets can provide benefits in the future. Stewart (1997) describes intellectual capital as intellectual knowledge, information, intellectual property and experience that can be used to create well-being. Thus, intellectual capital can be described as the value generated from resources that are not found on conventional balance sheets (Mouritsen, Bukh & Bang, 2005; Sveiby, 1997).

Intellectual capital comprises the invisible assets of an organisation, including employee competence (education, skills, experience) and capacity to act in various situations; internal structure (patent structure, management, concepts, models, research and development capabilities, software); and external structure (external image, relationships with customers, brands, suppliers) (Sveiby, 1997). Other researchers, such as Petty and Guthrie (2000), Edvinsson and Malone (1997), Rodgers (2003), Roos et al. (1997) and Stewart (1997) separate intellectual capital into three groups including external capital, internal capital and human capital.

Internal capital is also known as organisational capital, structural capital or internal relations. This type of intellectual capital refers to the knowledge inherent in organisational structures and processes, including research and development, patents, technology and systems (Petty and Guthrie, 2000). External capital is also referred to as customer capital, relational capital and external relations. External capital is related to customer and supplier relationships, trademarks, brand names and reputations (Petty & Guthrie, 2000). Human capital is also known as employee competency and refers to the knowledge and routines of the organisation's members, including their competencies, training, education, and experience and value characteristics (Petty & Guthrie, 2000).

Ramírez (2010) states that the different objectives of the private and public sector lead to differences in intellectual capital for the two sectors. For example, customer and brand value in the private sector determines the external capital and external structure of an organisation in this sector. However, the customers of the public sector are citizens. Although the concept of citizens in the public sector is similar to the concept of customers in the private sector, because there is no competition (i.e. citizens have no choice but to use public sector services), the indicators used are also different. Different types of indicators, such as the percentage of customers lost to competitors, cannot be measured in public sector organisations. In the public sector, uniqueness is found in both human capital and internal capital.

Cinca, Molinero and Queiroz (2003) classify intangible assets in the public sector as internal structural capital, external structural capital, human capital and social and environmental commitment. The internal structural capital comprises innovation, know-how, corporate culture and communication. The external structural capital consists of services, organisational image and transparency. Human capital consists of employee harmony, routine training and employee maintenance. Social and environmental commitment includes social commitment and environmental commitment.

Methodology

A study of public sector organisations was conducted in the Level II Region of Badung Regency in Bali Province. In this study, primary data were obtained from respondents – namely, educator accountants and public sector accountants, who both represent public sector stakeholders. Descriptive statistics were used to conduct the data analysis, and SPSS 22.0 software was used. In terms of the respondents, educator accountants provide accounting education services to the public. These services include research services, accounting development and teaching. Educator accountants were chosen as respondents for this study due to their in-depth understanding of intellectual capital from an accounting perspective. In addition, educator accountants are stakeholders whose information needs must be fulfilled by public sector organisations. Public sector accountants were chosen as respondents for this study due to their understanding of the information that should be presented in the reports of public sector organisations.

In total, 24 items were adopted from the Schneider and Samkin (2007) measure of intellectual capital, which is comprised of human capital, relational capital and structural capital. Nine items are used to measure human capital – namely, know-how, employee education programmes, employee vocational qualifications, cultural diversity, entrepreneurial innovation, equal employment opportunities, employee compensation plans, training programmes and joint activities. Eight items are used to measure relational capital – namely, taxpayer databases, taxpayer satisfaction, backlogs, distribution channels, collaborations, licensing agreements, quality standards and images. Structural capital is measured using seven items – namely, intellectual property, management philosophy, management processes, organisational culture/values, information/networking systems, financial relations and promotional tools.

We sent questionnaires to 12 educator accountants and 12 public sector accountants to determine the extent to which these intellectual capital items are disclosed in the reports of public sector organisations. The questionnaire used a five-point rating scale ranging from 0 (should not be disclosed), to 1 (should be disclosed but is of minor importance), to 2 (of



intermediate importance), to 3 (should be disclosed and is very important) to 4 (is essential to disclose this item) (Schneider & Samkin, 2007).

The 24 items adopted from Schneider and Samkin (2007) were also used to measure the quality of intellectual capital disclosure in public sector organisations. In this study, we asked public sector accountants to describe the practice of disclosing intellectual capital in the organisation in which they work. Firer and Williams's (2015) six-point scale (zero to five) was used to measure the quality criteria and assess intellectual capital disclosure, where 0 = non-disclosure (item's disclosure does not appear in the annual report); 1 = immaterial (item is not material to the financial success of organisation); 2 = obscure (item is discussed in a limited manner or to review the value of other topics or themes); 3 = descriptive (the item that clearly shows its effect on public sector organisations or policies); 4 = quantitative/monetary (item is clearly defined in monetary terms or in actual physical quantities); and 5 = quantitative/monetary and descriptive (item is clearly defined in monetary terms or in actual physical quantities, and descriptive statements are presented).

Discussion/Analysis

Of the 12 educator accountants to whom we presented the questionnaires, only six responded to the questionnaire. Of the 12 public sector accountants who represented public sector organisations, 11 responded to the questionnaire. Thus, the response rate was 70.83%. Based on the respondents' answers, the weight given by each respondent was obtained, as shown in Table 1.



If an intellectual capital item obtained a high score, then a greater level of importance is indicated, thus meaning that the item should be disclosed in an annual report. The different weights in Table 1 show that each respondent – representing different stakeholders – has different concerns. Seven intellectual capital items have high mean values – namely, entrepreneurial innovation and equal opportunities in employment (in human capital); backlogs, distribution channels and images (in relational capital); and management philosophy and management processes (in structural capital). Tables 2, 3 and 4 show the frequency of weighting given by respondents for each intellectual capital item as well as the mean value of the weighting.

Table 2: Respondents Response, Disclosure Index and Level of Importance for Human Capital

No.	Intellectual Capital Factor		Frequency					Mean	Median	Level of Importance
			0	1	2	3	4			
1	Know-how	Employee knowledge	1	1	3	6	6	2.82	3.00	Intermediate important
2	Employee education programmes	Current education/programs programmed by public sector organisations	1	1	5	2	8	2.88	3.00	Intermediate important
3	Employee vocational qualifications	Training, seminars, workshops, courses, and other similar activities participated by employees	0	2	5	3	7	2.88	3.00	Intermediate important
4	Cultural diversity	Information on employee characteristics (area of origin, level of education, age, sex, etc.)	2	0	6	4	5	2.59	3.00	Intermediate important
5	Entrepreneurial innovation	Orientation on cost efficiency and effectiveness in achieving the objectives of public sector organisations	0	0	2	8	7	3.29	3.00	Very important
6	Equal employment opportunities	Opportunity to obtain the same career development for each employee	0	1	1	8	7	3.24	3.00	Very important
7	Employee compensation plans	Details of employee remuneration	2	1	5	4	5	2.59	3.00	Intermediate important
8	Training programmes	Training programs run or provided by public sector organisations	1	0	7	3	6	2.76	3.00	Intermediate important
9	Joint activities	Training programs run or provided by public sector organisations	0	3	5	4	5	2.59	3.00	Intermediate important

The respondents assessed that there are several intellectual capital items in human capital that should be disclosed. This is shown in Table 2. Entrepreneurial innovation has the highest score, with a mean value of 3.29; 47.06% of respondents said that entrepreneurial innovation should

be disclosed and were very important, while 41.18% of respondents considered entrepreneurial innovation an essential item to be disclosed. Only 11.76% of respondents felt that entrepreneurial innovation was of intermediate importance in terms of disclosure. The high score for entrepreneurial innovation evidences the importance, for stakeholders, of its disclosure in public sector organisations.

Equal employment opportunities have the second-highest score, with a mean value of 3.24 (see Table 2). As many as 47.06% of respondents believed that equal employment opportunities should be disclosed and as an item, it is of much importance in the annual reports of public sector organisations. In total, 41.18% of respondents considered equal employment opportunities an essential item to be disclosed. However, 5.88% of respondents considered equal employment opportunities an item of only intermediate importance. Even 5.88% of other respondents think that even though equal opportunities in employment should be disclosed, they are minor important.

Table 3: Respondent Response, Disclosure Index and Level of Importance for Relational Capital

No.	Intellectual Capital Factor		Frequency					Mean	Median	Level of Importance
			0	1	2	3	4			
10	Taxpayer database	Taxpayer database	3	0	4	5	5	2.53	3.00	Intermediate importance
11	Taxpayer satisfaction	Taxpayer satisfaction	1	4	2	6	4	2.41	3.00	Intermediate important
12	Backlogs	Information relating to public sector organisation projects that have been completed/just started	0	1	2	7	7	3.18	3.00	Very important
13	Distribution channels	Information about how services/products of public sector organisations reach users	0	2	2	7	6	3.06	3.00	Very important
14	Collaborations	Collaboration by public sector organisations	1	1	4	3	8	2.94	3.00	Intermediate important
15	Licensing agreements	Licensing agreements implemented by public sector organisations	2	1	2	7	5	2.82	3.00	Intermediate important
16	Quality standards	Compliance with quality assurance programs/standards	1	0	4	6	6	2.94	3.00	Intermediate important
17	Images	Reputation services of public sector organisations	0	1	3	7	6	3.06	3.00	Very important

Table 3 shows that several items of intellectual capital within relational capital should be disclosed and are of utmost importance. Backlogs, distribution channels and images are considered to be items of intellectual capital that have the highest mean, with scores of 3.16, 3.06 and 3.06, respectively. As many as 41.18% of respondents considered backlogs an essential item to be disclosed, while 41.18% of respondents considered backlogs to be very important; 11.76% of respondents considered backlogs to be of intermediate importance, and 5.88% considered it of minor importance.

As many as 41.18% of respondents believed that distribution channels should be disclosed in annual reports and were very important, while 35.29% of respondents considered distribution channels to be essential in annual reports. However, 11.76% of respondents considered distribution channels of minor importance, and others (11.76%) considered distribution channels to be of intermediate importance.

For the images item, 41.18% of respondents believed it to be very important; 35.29% of respondents considered it is essential, while 17.65% considered it of intermediate importance. The remaining 5.88% considered it of minor importance.

Table 4: Respondent Response, Disclosure Index and Level of Importance for Structural Capital

No.	Intellectual Capital Factor		Frequency					Mean	Median	Level of Importance
			0	1	2	3	4			
18	Intellectual property	Details of patents, copyrights, trademarks owned by public sector organisations	1	1	3	6	6	2.88	3.00	Intermediate important
19	Management philosophy	Proof of a statement of vision/mission of a public sector organisation	0	1	3	4	9	3.41	4.00	Very important
20	Management processes	Management processes in public sector organisations	0	1	2	8	6	3.12	3.00	Very important
21	Organisational culture/values	Attitudes, experiences, beliefs and values in public sector organisations	2	2	5	5	3	2.29	2.00	Intermediate important
22	Information/net working systems	Development, use, application and impact of information systems	0	1	4	8	4	2.88	3.00	Intermediate important
23	Financial relations	Relationships between public sector organisations and financial providers/recipients	1	0	5	6	5	2.82	3.00	Intermediate important
24	Promotion tools	Advertisements carried out by public sector organisations to introduce the services provided or it regions	1	2	4	5	5	2.65	3.00	Intermediate important

Table 4 shows that management philosophy and management processes are items within structural capital that should be disclosed and of high importance in the reports of public sector organisations. As many as 52.94% of respondents considered management philosophy an essential item to be disclosed, while 23.53% believed it very important to be disclosed. As many as 17.65% of respondents considered the management philosophy of intermediate importance. However, 5.88% of respondents believed that although these items should be disclosed, they were minor important.

In total, 35.29% of respondents deemed the management process to be an essential item; 47.06% of respondents believed the item to be very important. For 11.76% of respondents, it was only of intermediate importance, while 5.88% of respondents considered it of minor importance.

Based on the responses of public sector accountants from public sector organisations in the Level II Region of Badung Regency in Bali Province, the achievement of disclosure of intellectual capital items is shown in Tables 5, 6 and 7. The tables also show the number of organisations that achieved the score (frequency). The mean score shows the average score for all organisations that disclosed intellectual capital items. The level of importance shows the importance score allocated to each item of intellectual capital by the respondents. There is a significant difference between the mean score expected by stakeholders and the mean score achieved by public sector organisations, shown by the level of importance printed in bold. If a public sector organisation obtains a high score of three, four or five for the disclosure of an intellectual capital item that is considered important by stakeholders, then the disclosure of said intellectual capital item is deemed the best practice for intellectual capital disclosure. Conversely, if a public sector organisation obtains a low score of one or two for the disclosure of an intellectual capital item that is considered relatively necessary for disclosure (indicated by the weight allocated by public sector stakeholders), then said the organisation does not meet best practices for the disclosure of intellectual capital.

Table 5 illustrates the frequency analysis for the intellectual capital disclosures of public sector organisations in the Level II Region of Badung Regency in Bali Province. Entrepreneurial innovation is the item with the highest mean score (4.00) in the human capital group, with 45.45% of public sector organisations achieving a high score. This level of disclosure exceeded the best practices of stakeholders, who rated this item as being very important. Meanwhile, other human capital items – namely, employee compensation plans and equal employment opportunities, are poorly disclosed, as indicated by the low mean scores, meaning that these two items did not meet stakeholder best practice levels of disclosure.

Table 5: Frequency Analysis of Human Capital

No.	Human Capital	Frequency						Mean Score	Level of Importance
		0	1	2	3	4	5		
1	Know how	3	2	0	3	1	2	2.27	Intermediate important
2	Employee education programmes	2	2	0	3	1	3	2.73	Intermediate important
3	Employee vocational qualifications	3	0	1	3	1	3	2.73	Intermediate important
4	Cultural diversity	3	1	0	4	1	2	2.45	Intermediate important
5	Entrepreneurial innovation	1	0	0	1	4	5	4.00	Very important
6	Equal employment opportunities	2	1	1	3	1	3	2.82	Very important
7	Employee compensation plan	5	0	1	3	0	2	1.91	Intermediate important
8	Training programmes	4	0	0	4	1	2	2.36	Intermediate important
9	Joint activities	2	0	1	5	0	3	2.91	Intermediate important

Other human capital items that did not meet stakeholder expectations are know-how, employee education programmes, employee vocational qualifications, cultural diversity, training programmes and joint activities. Many organisations did not disclose these intellectual capital items in annual reports. For example, three organisations did not disclose know-how, employee vocational qualifications or cultural diversity; two organisations did not disclose employee education programmes, equal employment opportunities or joint activities; one organisation did not disclose entrepreneurial innovation; five organisations did not disclose employee compensation plans, and four organisations did not disclose training programmes. In contrast, stakeholders consider these items to be of intermediate importance in terms of whether they should be disclosed, thus meaning that these items did not meet stakeholders' best practice levels of disclosure.

Table 6 illustrates the frequency analysis for relational capital disclosures achieved by public sector organisations in the Level II Region, Badung Regency in Bali Province.

Table 6: Frequency Analysis of Relational Capital

No.	Relational Capital	Frequency						Mean Score	Level of Importance
		0	1	2	3	4	5		
10	Taxpayer database	3	1	1	2	1	3	2.55	Intermediate important
11	Taxpayer satisfaction	5	1	1	1	0	3	1.91	Intermediate important
12	Backlogs	1	0	1	2	3	4	3.64	Very important
13	Distribution channels	2	0	1	2	2	4	3.27	Very important
14	Collaborations	1	0	0	2	0	2	3.20	Intermediate important
15	Licensing agreements	2	0	1	3	1	4	3.18	Intermediate important
16	Quality standards	2	0	0	2	2	4	3.40	Intermediate important
17	Images	2	0	0	4	1	3	3.10	Very important

The analysis shows that in public sector organisations, backlogs, distribution channels, collaboration, licensing agreements, quality standards and images have high mean scores (> 3.00). Thus, these items meet best practice levels. However, the low level of disclosure is shown to taxpayer satisfaction (mean score of 1.91), so it did not meet best practices. In total, 45.45% of public sector organisations in the Level II Region of Badung Regency in Bali Province did not disclose taxpayer satisfaction levels. This is in contrast to the views of public sector stakeholders, who consider this item to be of intermediate importance. Stakeholders consider taxpayer databases an item of intermediate importance. However, the mean score for taxpayer databases is low (2.55), thus indicating that stakeholder expectations were not fulfilled and that it did not meet best practices for disclosure.

Table 7 illustrates the frequency analysis for relational capital disclosures achieved by public sector organisations in the Level II Region of Badung Regency in Bali Province.

Table 7: Frequency Analysis of Structural Capital

No.	Structural Capital	Frequency						Mean Score	Level of Importance
		0	1	2	3	4	5		
18	Intellectual property	5	0	0	1	1	4	2.45	Intermediate important
19	Management philosophy	1	0	0	4	0	6	3.82	Very important
20	Management processes	0	0	1	4	2	4	3.82	Very important
21	Organisational culture/values	1	1	1	4	1	3	3.09	Intermediate important
22	Information/networking systems	1	0	0	5	2	3	3.45	Intermediate important
23	Financial relations	2	1	0	2	3	3	3.09	Intermediate important
24	Promotion tools	4	1	1	2	1	2	2.09	Intermediate important

Most structural capital items have been disclosed by public sector organisations in the Level II Region of Badung Regency. These items include management philosophy, management processes, information/networking systems and financial relations. These items all exceeded stakeholder expectations and have a mean score of more than 3.00. It did meet the best practice of intellectual capital disclosure. In total, 54.54% of public sector organisations reached the maximum value (score of five) in management philosophy disclosure. This means that the disclosure of items was clearly defined in monetary terms or actual physical quantities and that descriptive statements were provided.

A low mean score indicates that an item is below stakeholder expectations. Intellectual property received a score of 2.45, while promotional tools received a score of 2.09. These scores are worrying, as stakeholder expectations for intellectual property and promotional tools are high and of importance in terms of their inclusion in annual public sector reports. Thus, the two items did not meet best practice levels of disclosure, and the significant difference between the mean score achieved and the level of importance ascribed to the items indicates an information gap.

Conclusion

To conclude, some disclosures of intellectual capital items from the areas of human capital, relational capital and structural capital have met stakeholder expectations. In this regard, some disclosures achieved high scores, meaning that they were clearly defined in monetary terms or actual physical quantities and that descriptive statements were provided. It was found that the disclosure of entrepreneurial innovation is the best practice within human capital disclosure.



The disclosure of backlogs, distribution channels, collaboration, licensing agreements, quality standards and images are the best practices within relational capital disclosure. The disclosure of management philosophy, management processes, information/networking systems and financial relations are the best practices within structural capital disclosure.

The results of this study have practical implications for public sector organisations. It is essential for said organisations to disclose intellectual capital so that stakeholder expectations can be met. Items within the area of human capital that should be subject to more disclosure are know-how, employee education programmes, employee vocational qualifications, cultural diversity, employee compensation plans, training programmes and joint activities. Taxpayer databases and taxpayer satisfaction are two items in the area of relational capital that should be subject to more disclosure. Meanwhile, in terms of structural capital, public sector organisations need to improve their disclosure of intellectual property and promotion tools.

This study only used primary data obtained from the questionnaires sent to respondents. Further research should be conducted using secondary data, where content analysis is conducted of the annual reports of public sector organisations. The study also involved only a small number of respondents, thus limiting the generalisability of the results. A larger number of respondents should be consulted in future studies to meet the generalisability criterion.

REFERENCES

- BARNEY, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- BHARADWAJ, A. S. (2000). A resource-based perspective on information technology capability and firm performance: an empirical investigation. *MIS Quarterly*, 24 (1), 169–196.
- BOUNFOUR, A. (2003). *The management of intangibles. The organisation's most valuable assets*. London: Routledge.
- CINCA, C. S., MOLINERO, C. M., & QUEIROZ, A. B. (2003). The measurement of intangible assets in public sector using scaling techniques. *Journal of Intellectual Capital*, 4(2), 249–275.
- EDVINSSON, L., & MALONE, M. S. (1997). *Intellectual capital: realising your company's true value by finding its hidden brainpower*. New York, NY: Harper Collins.
- FIRER, S., & WILLIAMS, S. (2005). Firm ownership structure and intellectual capital disclosures. *South African Journal of Accounting Research*, 19(1), 1–18.
- GUTHRIE, J., & PETTY, R. (2000). Intellectual capital: Australian annual reporting practices. *Journal of Intellectual Capital*, 1(3), 241–251.
- HYNDMAN, N., & ANDERSON, R. (1991). Public sector accounting-looking beyond financial reporting. *Management Accounting*, 69(9), 50–52.
- KAPLAN, R. S., & DAVID, P. (1996). Using the Balanced Scorecard as a strategic management system. *Harvard Business Review*. (July-August), 1–14.
- KAUFMANN, L., & SCHNEIDER, Y. (2004). Intangibles. A synthesis of current research. *Journal of Intellectual Capital*, 5(3), 366–388.
- KONG, E. (2009). Facilitating learning through intellectual capital in social service non-profit organisations. *International Journal of Learning*, 16(2), 533–550.
- KONG, E., & THOMSON, S. B. (2009). An intellectual capital perspective of human resource strategies and practices. *Knowledge Management Research & Practice*, 7(4), 356–364.
- LINDA, M. R., & Fitria, Y. (2019). The effect of intellectual capital on job satisfaction of bank employees. *Edición Especial*, 35(19).



- MERKIBAYEV, T., Seisenbayeva, Z., Bekkozhanova, G., Koblanova, A., & Alikhankyzy, G. (2018). Oppositions in the conceptual and linguistic category of time. *Opción*, 34(85-2), 116-148
- MOURITSEN, J., BUKH, P. N., & BANG, H. K. (2005). Understanding intellectual capital in an innovative medium-size firm: the case of Maxon Telecom. *Australian Accounting Review*, 15(2), 30–39.
- PETTY, R., & GUTHRIE, J. (2000). Intellectual capital literature review. Measurement, reporting and management. *Journal of Intellectual Capital*, 1(2), 155–176.
- RAMÍREZ, Y. (2010). Intellectual capital models in Spanish public sector. *Journal of Intellectual Capital*, 11(2), 248–264.
- RIAHI-BELKAOUI, A. (2003). Intellectual capital and firm performance of U.S. multinational firms: a study of the resource-based and stakeholder views. *Journal of Intellectual Capital*, 4(2), 215–226.
- RODGERS, W. (2003). Measurement and reporting of knowledge-based assets. *Journal of Intellectual Capital*, 4(2), 181–190.
- ROOS, J., ROOS, G., DRAGONETTI, N. C., & EDVINSSON, L. (1997). *Intellectual capital. Navigating in the business landscape*. London: Macmillan Business.
- SCHNEIDER, A., & SAMKIN, G. (2007). Working Paper Series.
- STEWART, T. A. (1997). *Intellectual capital: the new wealth of organizations*. New York: Doubleday.
- SVEIBY, K. E. (1997). *The new organizational wealth. Managing & measuring knowledge-based assets*. San Francisco: Berrett-Koehler.
- TEECE, D. J. (1998). Capturing value from knowledge assets: the new economy, markets for know-how, and intangible assets. *California Management Review*, 40(3), 55–80.
- WALL, A. (2005). The measurement and management of intellectual capital in the public sector. Taking the lead or waiting for direction? *Public Management Review*, 7(2), 289–303.