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> > **Research Article**

Exploring the Value of Malaysian Intangible asset in Business Environment

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Abstract

In Malaysia, the prospect of an intangible asset (brand) serving as one of an organization's key resources is becoming increasingly broad, it will be impressive if the Malaysian business environment is investigated to explore the value of the intangible asset. In recent years the Malaysian government has shown considerable attention to the establishment of new intangibles in the business environment where it leads to the allocation of RM200 Million for the innovations. The subject intangible asset has become interested especially brand in the Malaysian business environments. Therefore, this study aimed at exploring the value of Malaysian intangible asset (brand) of top 10 valuable brands (intangible asset) in Malaysia to attract attention to intangible asset investment and to also show the contribution of the brand to the enterprise, the study adopted the quantitative research method where secondary data are extracted from the annual valuation report of brand finance for five consecutive years from 2015 to 2020. Exploratory and descriptive analysis was demonstrated using the monetary value, sectors, and brand rating. The result shows that Petronas has become the best value brand (intangible asset) among the top 10 valued brands in the Malaysian business environment with the worth of \$9480, \$10,024, \$10,596, \$11,501, and \$13,318 where brands such as TM, Maxis, Celeb being the 10th with the monetary value of \$1094, \$1080, and \$1273 respectively it was concluded from the result that monetary value of the intangible asset continues to be increasing likewise the contribution to the total enterprises increase.

Keywords: Intangible Asset, Valuation, Value, and Enterprise

Introduction

The term "intangible" refers to something that has no physical existence yet provides the owner with ownership rights and economic benefits. A non-monetary asset that reveals itself through its economic features is known as an intangible asset. They are much more particular than some other assets, with higher asymmetric information and credit risks, as well as less collateral value. Weqar, *et al* (2020) opined that in the modern business era, intangible assets are vital strategic resources and extremely important in creating corporate value and improving company performance. Intangible assets, therefore, play a significant role in the daily operations, growth, and expansion and consequently in

obtaining steady profit. (Awa Felix, *et al.*, 2020). Furthermore, intangible assets have now become the most important component of an organization's intensity and long-term viability. According to researches by Visconti, (2020); Tefera, & Malkin, (2020). Stated that the word Intellectual property is found synonymous with the term intangible asst, in business studies revealed that intellectual property is part of intangible asset. Cherepanova, and Sylka (2021). point out that Intellectual property is a business's resource that is classified under the categorization of an intangible asset by IAS 38.

Hunsaker, (2020), intangible assets such as trademarks, client contracts, innovations, and goodwill account for 70% of all company transactions. This was concentrated in the sense that a key transition from modern culture to a knowledge-based society had occurred. Since businesses are becoming increasingly reliant on intellectual property, there is a need for developments for recognizing and valuing every identified intangible asset in an organization as a component of transactions.

In Malaysia, the prospect of intangible assets serving as one of an organization's key resources is becoming increasingly broad. This may be observed in the Malaysian government's 2013 allocation, which included RM200 million for the establishment of intellectual property (intangible asset) finance initiatives. These allocations serve as a means of assisting businesses in growing and expanding their operations, as well as establishing intellectual property (intangible asset) as a new source of wealth generation in the country (Malaysia Budget, 2013). In some years back Malaysia strives to become a developed and knowledge-based economy by 2020, that year 2020 will be the age to create intangible asset-based finance (Malaysia Budget, 2013). Nalçacigil & Ozyilmaz (2020) stated that it prevailed in today's economy world intangibles are frequently crucial and valuable assets of a corporation, and innovation, technology, and information are leading competitive elements. it will be impressive if the Malaysian business environment is investigated to explore the value of the intangible asset. In recent years the Malaysian government has shown considerable attention to the establishment of new intangibles in the business environment where it leads to the allocation of RM200 Million for the innovations. Some intangible asset categories in the Malaysian business environment are worth and have been calling the attention of the Malaysian economy. Therefore, this paper aimed at exploring the value of business-related intangible assets (brand) within Malaysian business environments to draw attention to the investment in the identified intangible assets. This study will also consider the business category of each performing brand.

Literature Review

Intangible Assets

Research studies have shown that most of the current intangible asset concepts are residual from the concept of the general asset. The International Valuation Standards Council (IVSC) stated that an intangible asset is a non-monetary asset that manifests itself by its economic properties. It does not have physical substance but grants rights & economic benefits to its owner. The International Accounting Standards Board (IASB) also defines intangible assets as identifiable non-monetary assets without physical substance. At the same time, Oxford Dictionaries defines, among general asset meanings, an asset as a "property owned by a company or individual that is considered to be worthwhile and available to meet liabilities, liabilities or obligations". These broad definitions of the assets are similar to that of the Financial Accounting Standards Board (FASB) which describes the asset as a "probable future economic gain from past transactions or events, which is acquired or regulated by a specific individual". An intangible asset is often described as 'economic resources without a physical presence,' taking the idea of a general asset from above and making it more precise (Nichita, 2019). Similarly, it was describing intangible assets by applying a distinction in 'intangible assets: valuation and economical benefits': 'The resource that we can see, experience, taste, purchase, sell, etc. Everything else is an immaterial asset" (Visconti, 2020). Again, IASB approved the following concepts of intangible assets in IAS 38: "An intangible asset is an identifiable nonmonetary asset without physical substance." And for an asset or item to be considered or regarded as an intangible asset, it must meet certain criteria. These criteria include the concept of an intangible asset, as well as the definition of an asset. An intangible asset must be able to be measured and have identifiable characteristics. For identification, an object or property must be divided from the entity and the characteristics of identification or identifiability of the intangible property, whether or not the rights are transferable, separable from of the intangible property, transferred or exchanged licensed either individually, or together with a connected contract, the asset, liability or separable. The other condition for an intangible asset to meet the recognition criteria is that the subject intangible asset in question must be capable of producing future economic benefit and have a reliable attribute in cost measurability. Therefore, if any subject or item does not meet both the definition and the recognition criteria to be an intangible asset, it will be considered a non-intangible asset. Jardon, and Martinez-Cobas, (2021). Klagge, (2014) also put forward the definition of the essence of intangible assets as follows: Assets, in general, are things, objects, or resources over which a body or entity has complete control, which is due to previous investments and have the potential to earn benefits in the future. He goes on to say that the recognizable feature of intangible assets was taken from the International Financial Reporting Standards (IFRS) Foundation's (IFRS 3 issue of March 31, 2004). The term intangible assets in business are a type of asset that does not have a physical form capable of been transfer and generate economic benefits. Intangible assets, on the other hand, must meet the general requirements of an asset and be recognizable under the law. Bruna, & Nicolò, (2020). the intangible asset comes with another name intellectual capital which is defined as the possessed knowledge, experience applied in processes, organizational technology, customer relationship, and professional skills.

Categories of Malaysian Intangible Assets

The International Valuation Standard IVSC (2007), the Board of Valuers, Appraisers, Estate Agents and Property Managers Malaysia (BOVAEP), Malaysian Valuation Standard MVS (2018), the International Accounting Standard (IAS 3) Scheme 2007, and the Intellectual Property Corporation of Malaysia (MyIPO), categorizes intangible asset into the following classes:

- i. Marketing-Related Intangible Assets: Primarily seen in the marketing and advertising of goods and services including goodwill, brand, trademarks, advertising, corporate logos, jingles, and brand names that are recognized with the government and used to distinguish specific businesses and products. It is also seen in collective marks, service marks, certification marks, trade names, trade dress (package or shape, design unique color), newspaper mastheads, non-competing agreements, Noncompetition agreements, and internet domain names.
- ii. Customer-related intangible assets: Intangible assets associated with customers or suppliers they are: order books, service or supply agreements, customer relationships, order to production backlog, customer lists, customer contract, and the related customer relationships, non-contractual customer relationships.
- iii. Artistic intangible assets/copyright: These assets, which arise from the right to royalties from artworks, give its owner its exclusive right to duplicate and sell artistic works. such as literary works, songs or movies, books, films, drawings, photographs, plays, non-contractual copyright protection, magazines, newspapers, operas and ballets other literary works, musical works such as compositions and lyrics.
- iv. Contract-based intangible assets: emanate from non-contractual rights or contractual to use patented technology, databases, unpatented technology formulae, licensing or royalty agreements, software, industrial designs, advertising, construction, standstill agreements, lease agreements, service or supply contracts, franchise agreements, operating and broadcast rights,

construction permits, use rights such as timber cutting, drilling water, air, mineral, service contracts such as mortgage servicing contracts and employment contracts.

v. Technology-based intangible assets: specifically, intangible assets may be defined as patents that provide exclusive rights to produce or sell new inventions patented technology, unpatented technology, computer software and mask works, databases, including title plants, and trade secrets, such as secret formulas, processes, and recipes.

Attributes of Intangible Asset

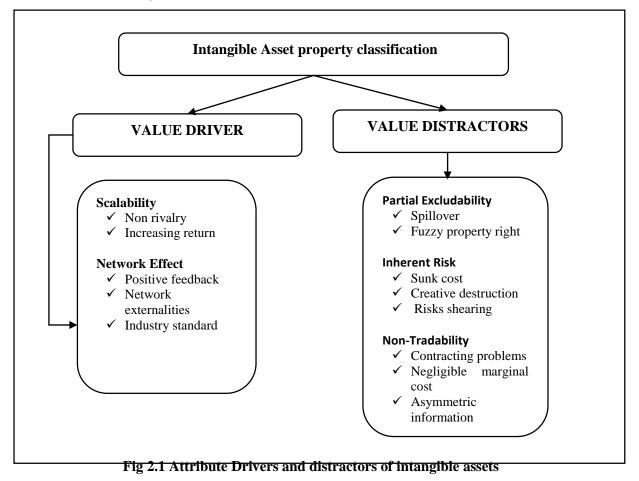
In addition to the aforementioned, IAS 38, BOVAEP, MVS (2018) International Valuations standard (2007), Royal Institute of Chartered Surveyors RICS (2020), American Institute of Chartered Accountant AICPA (2021)., Reilly and Schweihs (2016) state that an intangible asset must include the below-mentioned properties to have a quantifiable value from an economic analysis or valuation perspective:

a. Economic attributes and properties of Intangibles

There has been a lot of discussion on the definition of intangible values regarding their economic nature (Lev, 2001). It was concluded that, from the economic point of view, intangibles have a set of properties indicating their contribution to the value of a company. These properties may be classified into two different categories:

- i. Value drivers, which enhance the company's value.
- ii. Value distractors, which restrict or destroy value.

This categorization states that intangibles are associated both with benefits and costs, which must be carefully considered and balanced when it comes to their management. Figure 8 summarizes drivers and distractors including more detailed attributes.



Source: Montagna and Cantamessa, (2015).

Scalability

i. Non-rivalry refers to the absence of opportunity cost when pursuing the potential of intangibles. Intangibles may be used in a variety of repetitive and modern applications without losing their value. Tangible objects, on the other hand, fight for various alternatives: their deployment with one circumstance precludes them from being used in another, resulting in opportunity cost. Ferrari, for example, may leverage its brand on automobiles, social media, and merchandise. a production line that is used in manufacturing a particular brand cannot be used for another operation at the same time without losing its profit-generating potential, and a production line used to manufacture a specific model cannot be used for another operation at the same time without losing its profit-generating potential. The non-rivalry feature enables intangibles to generate growing profits, which are boosted further by the absence of manufacturing capacity and scale economies: Intangibles, unlike physical goods, are only limited by the size of the market in which they are used (Lev, 2001).

Network effects

- i. The potential for intangibles to be used repeatedly might result in a network effect similar to that seen in product innovation. This network is formed when an industry-standard emerges that adds value to a product by requiring it to adhere to the standard. (Cantamessa and Montagna, 2015).
- ii. The network effect's advantages grow in proportion to the size of the network (as more parties engage with one another), and it may also result in a positive feedback loop, where earnings generate more profits, resulting in a sustained competitive advantage.
- iii. Positive externalities can result from a larger network: "Every time someone adopts a product that is compatible with the standard, it produces a positive externality on the whole stock of existing consumers." The bigger the number of users who embrace a conforming good, the more possible linkages there are, and the greater the economic worth of the item to each user."
- iv. Montagna and Cantamessa (2015), Consider the well-known text messaging application i.e Whatsapp, which has established a new communication standard based on internet networks. The successful implementation of the standard has resulted in a positive externality that has greatly increased the financial value of the company, which was sold for \$19.3 billion in 2014 against an initial investment of a few million dollars. As a result, network effects highlight the strategic importance of intangibles: setting a standard for a given industry generates a competitive edge and barriers to entry (Montagna and Cantamessa, 2015).

Partial excludability

- i. The proprietor of an intangible value may not even be able to prohibit other entities from profiting from the intangible. Take, for example, an employee's expertise: when the person quits the firm, he takes his knowledge with him to the new entity. The company's only way to keep this expertise is to codify it and make it accessible to other workers. (Montagna and Cantamessa, 2015).
- ii. Spillover effects occur when rivals can get know-how while avoiding the constitutional immunity of a company's patent. (Lev, 2001).

Inherent risk

- i. Mostly on other hand, intangibles possess extremely fluctuating prices, making it impossible to measure and quantify their utility.
- ii. Companies, on the other hand, invest vast sums of money in development processes that involve a significant proportion of intangible value. Because of the uncertainty surrounding the intangible component's future commercial performance, these sunk expenses pose a significant risk. (Montagna and Cantamessa, 2015).

Non-tradability

- i. Because it is difficult to value intangibles, the marketplaces on which they may be exchanged are typically tiny or non-existent.
- ii. non-tradability is also linked to difficulties in writing contracts with standardized characteristics and rebuilding the item's pricing structure (Grüber, 2014). In summary, a company that wants to profit from intangible values must be able to set a market standard by leveraging positive network externalities, minimizing inherent risks associated with the intangible as much as possible, and protecting its profit potential with comprehensive legal and internal protection to avoid partial excludability. Of course, in today's competitive and more linked economy, where information and skills are easily transferrable and accessible to anybody, this is difficult to do.0
- **b.** Transferability/separability, having all the potentiality of generating an economic return, the asset should be capable of being able to transfer in actual or by right (Visconti, 2020). Transferability/separability, refers to, capable of being separated or parted from the organization and sold, transferred, licensed, rented, or exchanged, either individually or in combination with a linked contract, identified asset, or obligation, regardless of whether the entity itself is separable plans to do so (IVSC, 2007).
- **c.** Identifiability: Chen *et al*, (2018) stated that the subject asset must able to be identified by any of its characteristics. IVSC (2007) explained that intangible asset arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or other rights and obligations.
- d. Controllable: in this regard, control refers to (ability/power to obtain benefits from the asset); Intangible asset to valued, that should have the attribute of generating economic benefit and it is identifiable and controllable either in physical on by other factors. (Reilly & Schweihs, 2016).

BRAND FINANCE

The goal of Brand Finance, which was founded in 1996, was to bridge the gap between marketing and finance. have been assisting businesses and organizations for over 20 years. various types of businesses to link their brands to their bottom lines. this valuation firm is recognized as the world's premier independent brand valuation firm. Brand finance. are based in the city of London and operate in over 20 countries. Every year, they put 5,000 of the world's most well-known brands to the test, to determine which are the most powerful and valuable. The Marketing Accountability Standards Board (MASB) has approved brand finance's brand value rankings through the Marketing Metric Audit Protocol (MMAP), a systematic approach for validating the relationship between marketing measurement and financial performance.



Source: Brand Finance, (2020)

Methodology

This study aimed as exploring the value of Malaysian intangible assets in the capital market environment, the employed quantitative research designs this study is focusing on the value of the brand in Malaysia as intangible assets. Secondary data are collected from the Brand Finance annual report for analysis. The descriptive and exploratory research design was also adopted. Various intangible assets were described using monetary value, asset categories, asset rating based on Marketing Metric Audit Protocol, and ranking, chat was also used in depicting and exploring the value of the intangible asset. The study collected data for the duration of 5years which half-decade from the year 2015 to the year 2020 to strengthened the fact in the study, and to make the research achievable the study will consider the 10 top brands out of the 100 brands in the Malaysian capital market. It became convenient to use the panel data in exploring the aim of this study because panel data minimize estimation biases that may arise from aggregating into single time series, the data detect and measure statistical effect measure that pure time series or cross-sectional data can't, it also contain more information, more variability, and efficiency than pure time-series data or crosssectional data, and lastly, the data will also be we in modeling the common individual or group behavior (Abbas, *et. al.*, 2021).

Result and Discussion

The valuation analysis carried out by Brand Finance in 2015 presented the results below in exploring the value of the Malaysian valuable intangible asset (brand) showing the brand (intangible asset) name, monetary value, sector, brand rating, and ranking.

Table 4.1: Year 2015 Malaysian Most Val	luable Intangible Asset (Brand)
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Brands (Intangible Monetary	Sector	Brand	Ranking
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Assets)	Value		Rating	Positions
Petronas	\$9,480M	Oil & Gas	AA	1
Genting	\$2,918M	Casino & Gambling	AA-	2
Maybank	\$2,243M	Banking	AA+	3
CIMB	\$1,964M	Banking	AAA-	4
YTL	\$1,914M	Engineering & Construction	A+	5
Sime Darby	\$1,699M	Food Sector	AA-	6
Maxis	\$1,315M	Tele- Communication	AA	7
Tenaga Nasional	\$1,244M	Utility Sector	AA-	8
DiGi	\$1,108M	Tele-Communication	AA	9
ТМ	\$1,094M	Tele-Communication	AA	10

Source: Finance Brand Annual Valuation Report

Table 4.1 above shows the descriptive valuation ranking of the top ten brands (intangible assets) in Malaysia. The descriptions are shown best on the monetary value of the intangible asset likewise the ranking, where the brand of Petronas from the oil and gas sector ranked the 1st with the monetary value of \$9,480 million. This is followed by Genting from the casino and gambling sector, which came 2nd, with the monetary value of \$2,918 million. Maybank and CIMB from the banking sector came 3rd and 4th at \$2,243 million and \$1,964 million respectively. YTL from the engineering and construction sector came 5th at \$1,914 million. While Sime Darby from the food sector came 6th at the value of \$1,699, Maxis (telecommunication sector) came 7th at \$1,315 million. Following close was Tenaga Nasional from the utility sector coming at 8th with the monetary value of \$1,108 million and \$1,094 million respectively.

	Reference	2015	2016	2017	,	2019	2020
Brand Name		2015	2010	2017	2018	2019	2020
	Base 2014						
Petronas	\$9,160M	\$320	\$544	\$572	\$905	\$1,817	\$1,897
Genting	\$2,494M	\$424	\$78	\$183	\$38	\$1,417	\$579
Maybank	\$2,036M	\$207	\$195	\$498	\$612	\$1,049	\$727
CIMB	\$2,041M	\$127	\$248	\$178	\$58	\$124	\$263
YTL	\$1,772M	\$142	\$19	\$427	\$6	\$100	\$100
Sime Darby	\$1,496M	\$203	\$30	\$586	\$243	\$340	\$22
Maxis	\$1,414M	\$99	\$235	\$289	\$93	\$56	\$187
Tenaga	\$1,490M	\$246	\$57	\$396 🛉	\$41	\$866 🛉	\$15
Nasional		+	+	1	1	1	+
ТМ	\$1,051M	\$43	\$7	\$114	\$15	\$100	\$100
DiGi	\$895M	\$213	\$100	\$100	\$20	\$318	\$481

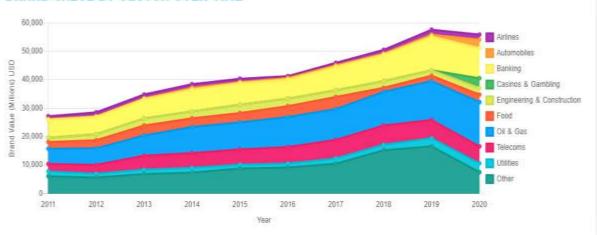
The above table 4.2 shows the Yearly increments/ decrease monetary follow of Malaysian brand value, the table contains the most performing brand in the Malaysian capital market in this study. 2014 was used in this study as the year to determine whether the monetary value of the brand is increasing or decrease the green one headed arrow show increases in the brand value while the one head headed Limon color arrow is indicating the decrease of the monetary value of the brand, the table also contained the yearly calculated incremental value of the decreased value in the dollar. This table contains information exploring the value of the brand in the Malaysian capital market

Brand	Reference	2015	2016	2017	2018	2019	2020
Name	Base 2014	Ranking	Ranking	Ranking	Ranking	Ranking	Ranking
Petronas	\$9,160M	1	1	1	1	1	1
Genting	\$2,494M	2	2	2	3	2	3
Maybank	\$2,036M	3	3	3	2	3	2
CIMB	\$2,041M	4		5	7	5	7
YTL	\$1,772M	5	4	8	12	12	12
Sime	\$1,496M	6	6	4	4	4	5
Darby							
Maxis	\$1,414M	7	10	9	8	9	8
Tenaga	\$1,490M	8	7	6	6	5	4
Nasional							
ТМ	\$1,051M	10	8	12	9	11	11
DiGi	\$895M	9	11	11	8	10	10

	Table 4.3:	Yearly	[•] Malaysian	brand	ranking
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Table 4.3: above is showing the yearly ranking of Malaysian brands based on the monetary value, the table shows that Petronas has been raking the 1st throughout the study, where Genting maintained the 2nd rank brand in Malaysia throughout the half-decade except the year 2017 and 2020 where Maybank took over the 2nd from Genting., Maybank was ranked the 3rd for the 3 years, all the brands are been ranked accordingly throughout the half-decade.

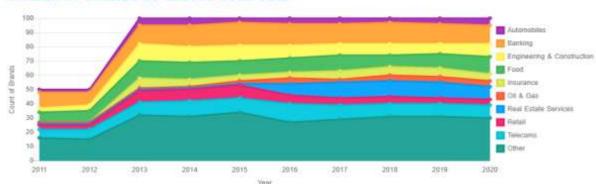
BRAND VALUE BY SECTOR OVER TIME



Source: Brand Finance (2020)

The above result is showing Malaysia brand value by sectors the result in the above chart is indicating that is not about how many intangible assets are in the sector by how reputable is there, the result also indicates the value of a reputable intangible asset (brand) which is more valuable than other

hundreds of the unreputable brand (intangible asset), for example, the result of the value of an intangible asset (brand) of Petronas from oil and gas sector indicates that is more valuable than an intangible asset (brand) from other sectors, thus indicating the role and the value of the intangible asset in the business environment PETRONAS brand have become the most valuable intangible asset (brand) in Malaysia. The value of this intangible asset has a specific contribution percentage to the total enterprise.



NUMBER OF BRANDS BY SECTOR OVER TIME

Source: Brand finance (2020)

It was captured in the result of the analysis that there about one hundred reputable and valuable intangible assets (brand) the largest number of intangible assets (brand) from automobile, banking, engineering and construction, food, insurance, Oil & Gas, Real estate, retail, telecom constituted the sectors of top100 reputed and valuable intangible asset (brand) in Malaysia.

Conclusion

with the perceived information on the role and value of the intangible asset in the Malaysian settings the half-decade result of the most valuable Malaysian intangible asset (brand) it can be concluded that the monetary value of the intangible asset continues to be increasing likewise the contribution to the total enterprises increase with this it enough indicating that intangible asset (brand) and other related are investment medium that will contribute immensely to the economic development.

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References

- [1] Abbas, H. S. M., Xu, X., Sun, C., Ullah, A., Nabi, G., Gillani, S., & Raza, M. A. A. (2021). Sustainable use of energy resources, regulatory quality, and foreign direct investment in controlling GHGs emissions among selected Asian economies. *Sustainability*, 13(3), 1123.
- [2] Awa Felix, N., Okwo, M. I., & Obinabo, C. R. (2020) Effect of Intangible Assets on Corporate Performance of Selected Commercial Banks in Nigeria (2012-2018).
- [3] Board of Valuers, Appraisers, Estate Agents and Property Managers Malaysia (BOVAEP)
- [4] Brand Finance, (2020) The Largest Brand Value Database In The World: UK London https://brandirectory.com/rankings/malaysia/2018/table
- [5] Bruna, M. G., & Nicolò, D. (2020). Corporate reputation and social sustainability in the early stages of start-ups: A theoretical model to match stakeholders' expectations through corporate social commitment. *Finance Research Letters*, 35, 101508.

- [6] Cantamessa, M., Montagna, F., (2015), "Management of innovation and product development: Integrating business and technological perspectives", Springer, p. 72
- [7] Chen, W., Los, B., & Timmer, M. P. (2018). Factor incomes in global value chains: The role of intangibles (No. w25242). National Bureau of Economic Research.
- [8] Cherepanova, V., & Sylka, I. (2021). Functional management of the intellectual property of industrial enterprises: organizational and methodological aspect.
- [9] Grüber, S., (2014), "Intangible Values in Financial Accounting and Reporting: An Analysis from the Perspective of Financial Analysts", Springer, p. 44
- [10] International Accounting Standard (IAS 3) Scheme (2007),
- [11] International Valuation Standard IVS (2007),
- [12] Jardon, C. M., & Martinez-Cobas, X. (2021). Measuring intellectual capital with financial data. *Plos one*, 16(5), e0249989.
- [13] Klagge E. J (2014) Intangible Assets And Market Success: A Study Of Fortune 500 Firms: College For Financial Planning
- [14] Lev, B., (2001), "Intangibles: Management, Measurement, and Reporting", Brookings Institution Press, Washington D.C., p. 21
- [15] Malaysia Budget, 2013
- [16] Malaysian valuation standard MVS (2018)
- [17] Malkin, A. (2020). The made in China challenge to US structural power: industrial policy, intellectual property, and multinational corporations. *Review of International Political Economy*, 1-33.
- [18] Nalçacigil, E., & Özyilmaz, P. C. A. F. (2020). The Effect Of Information Management And Innovation On Business Performance. *Current Studies In Social Science*, 119.
- [19] Nichita, M. E. (2019). Intangible assets–insights from a literature review. *Journal of Accounting* and Management Information Systems, 18(2), 224-261.
- [20] Reilly, R. F., & Schweihs, R. P. (2016). Guide to intangible asset valuation. John Wiley & Sons
- [21] Royal Institute of chartered surveyor report (2020)
- [22] Tefera, C. A., & Hunsaker, W. D. (2020). Intangible assets and organizational citizenship behavior: A conceptual model. *Heliyon*, 6(7), e04497.
- [23] Visconti, R. M. (2020). *The Valuation of Digital Intangibles: Technology, Marketing, and the Internet*. Springer Nature.
- [24] Weqar, F., Sofi, Z. A., & Haque, S. I. (2020). Nexus between intellectual capital and business performance: evidence from India. *Asian Journal of Accounting Research*.