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Initiating form of Intellectual Property Office in Indonesia Based on Dynamic Governance

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ABSTRACT: Indonesia performs worse in innovation outputs than innovation inputs in 2024. This year Indonesia ranks 54th in innovation inputs and Indonesia was included in upper middle-income group together with countries such as China, Thailand, Brazil, Republic of Moldova, South Africa, Jamaica. One of the efforts to become a world-class intellectual property office is the Intellectual Property Office in a country by implementing dynamic governance that has the characteristics of thinking ahead, thinking again, thinking across, able people and agile process. Therefore, in order to implement dynamic governance, it is necessary to study what form of intellectual property office is appropriate that is able to become a world-class intellectual property office, whether in the form of a directorate under the Ministry of Law, whether in the form of an autonomous body or whether in the form of state own enterprise. From the comparison results between Fuzzy VIKOR and Fuzzy TOPSIS, there are almost similarities in determine the appropriate organizational form for managing intellectual property office in Indonesia based on dynamic governance and dynamic capabilities, only different in the first and second options. For Fuzzy VIKOR, the first option is Intellectual Property State-Owned Enterprise, while for Fuzzy TOPSIS, the first option is Intellectual Property Agency. The second option Fuzzy VIKOR is Intellectual Property Agency and second option Fuzzy TOPSIS is Intellectual Property State-Owned Enterprise. The third option for Fuzzy VIKOR and Fuzzy TOPSIS is the same, namely Directorate General of Intellectual Property (DJKI) Ministry of Law RI.

KEYWORDS: Global Innovation Index, Intellectual Property Office, Dynamic Governance, Dynamic Capabilities, Fuzzy VIKOR, Fuzzy TOPSIS

I. INTRODUCTION

The Index is a ranking of the innovation capabilities and results of world economies. It measures innovation based on criteria that include institutions, human capital and research infrastructure, credit, investment, linkages, the creation, absorption and diffusion of knowledge and creative outputs. The GII has two sub-indices: the Innovation Input Sub-Index and the Innovation Output Sub-Index, and seven pillars, each consisting of three sub-pillars. Indonesia ranking in the Global Innovation Index 2024, Indonesia ranks 54th among the 133 economies featured in the GII 2024. The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation. Indonesia ranks 8th among the 34 upper-middle-income group economies. Indonesia ranks 12th among the 17 economies in South East Asia, East Asia, and Oceania. Indonesia GII Ranking (2020-2024) The rankings of Indonesia over the past four years. Data availability and changes to the GII model framework influence year-on-year comparisons of the GII rankings. The statistical confidence interval for the ranking of Indonesia in the GII 2024 is between ranks 53 and 63 (https://www.wipo.int/gii-ranking/en/indonesia/)

Table 1. Indonesia Ranking in The Global Innovation Index (GII)

No.	Year	GII Position	Innovation Inputs	Innovation Outputs
1	2020	85th	91st	76th
2	2021	87th	87th	84th
3	2022	75th	72nd	74th
4	2023	61st	64th	63rd
5	2024	54th	54th	67th

Source: https://www.wipo.int/gii-ranking/en/indonesia/

Indonesia performs worse in innovation outputs than innovation inputs in 2024. This year Indonesia ranks 54th in innovation inputs and Indonesia was included in upper middle-income group together with countries such as China, Thailand, Brazil, Republic of Moldova, South Africa, Jamaica. This position is higher than last year. Indonesia ranks 67th in innovation outputs. This position is lower than last year. Indonesia no clusters in the top 100 S&T clusters of the Global Innovation Index. For Indonesia, 6 indicators have improved in the short-term and 4 indicators have worsened. Global Innovation Tracker The Global Innovation Tracker 2024 shows what is the current state of innovation in, how rapidly is technology being embraced and what are the resulting societal impacts (https://www.wipo.int/gii-ranking/en/indonesia/).

Table 2. The Global Innovation Index (GII): South East Asia, East Asia, and Oceanian

No.	GII rank	Economy	Income group rank	Region rank
1	4	Singapore	4	1
2	6	Republic of Korea	6	2
3	11	China	1	3
4	13	Japan	12	4
5	18	Hong Kong	17	5
6	23	Australia	22	6
7	25	New Zealand	24	7
8	33	Malaysia	2	8
9	41	Thailand	5	9
10	44	Viet Nam	2	10
11	53	Philippines	3	11
12	54	Indonesia	8	12
13	67	Mongolia	7	13
14	88	Brunei Darussalam	50	14
15	103	Cambodia	21	15
16	111	Lao People's Democratic Republic	25	16
17	125	Myanmar	36	17

Source: https://www.wipo.int/gii-ranking/en/rank

Compared to countries in South East Asia, East Asia, and Oceania, Indonesia is ranked 54th in The Global Innovation Index (GII), Indonesia is far behind neighbouring countries such as Singapore (ranked 4th), Republic of Korea (ranked 6th), China (ranked 11th), Japan (ranked 13th), Hong Kong (ranked 18th), Australia (ranked 23rd), New Zealand (ranked 25th), Malaysia (ranked 33rd), Thailand, Vietnam (ranked 44th), and the Philippines (ranked 53rd).

China remains the frontrunner, but other key players previously identified by the GII, such as Indonesia (54th) (entering the top 60), the Philippines (53rd), Türkiye (37th), Viet Nam (44th) and India (39th), ordered by their rank progression in 2024, are also all climbing the ranks. Thailand (41st) is demonstrating increased potential, nearing the top 40 – its best rank since 2009 – and sustaining its progression over the long run. Additionally, Morocco (66th) has emerged as one of the fastest climbers within the top 70 since 2013. These middle-income economies, despite some of them suffering setbacks in their performance in the GII 2021 and 2022 (e.g. Viet Nam, the Philippines and Indonesia), exhibit resilience and strategic long-term focus on innovation, even amid the challenges posed by the economic recovery from the COVID-19 pandemic. Moreover, these economies share common traits: they are all Asian economies; they are emerging markets with potential for rapid growth due to industrialization, urbanization and globalization; all have diverse economic structures; and they are heavily integrated in global value chains and high-tech trade (WIPO, 2024).

The Global Innovation Index (GII) is published by the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations. Recognizing that innovation is a key driver of economic development, the GII aims to provide an innovation ranking and rich analysis referencing around 130 economies. Over the last decade, the GII has established itself as both a leading reference on innovation and a "tool for action" for economies that incorporate the GII into their innovation agendas. The World Intellectual Property Organization (WIPO) is the United Nations agency that serves the world's innovators and creators, ensuring that their ideas travel safely to the market and improve lives everywhere. WIPO do so by providing services that enable creators, innovators and entrepreneurs to protect and promote their intellectual property (IP)

across borders and acting as a forum for addressing cutting-edge IP issues. WIPO IP data and information guide decisionmakers the world over. And WIPO impact-driven projects and technical assistance ensure IP benefits everyone, everywhere (https://www.wipo.int/directory/en/urls.jsp)

Here are the national and regional intellectual property (IP) offices around the world as members of WIPO. The granting of IP rights, which are territorial in nature, is a sovereign decision of countries and is governed by national or regional law. As such, national or regional IP offices are the primary resource for securing IP protection in those countries. National and regional IP offices around the world guide users through the process of securing IP rights for inventions, trademarks, designs, and more.

Table 3. Various Forms of National and Regional Intellectual Property Offices in the World

No.	Office Form	Country/Regional
1	Ministry/ Department	Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Austria, Bahamas, Bahrain, Bangladesh, Barbados, Benin, Bhutan, Botswana, Brazil, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Chile, Colombia, Comoros, Congo, Cook Islands, Côte d'Ivoire, Cuba, Cyprus, Czech Republic, Democratic Republic of the Congo, Denmark, Djibouti, Dominica, Dominican Republic, Eritrea, Estonia, Eswatini, Finland, France, Gabon, Gambia (the), Germany, Ghana, Greece, Guatemala, Guinea, Guinea-Bissau, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Israel, Italy, Japan, Jordan, Kazakhstan, Kiribati, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Lebanon, Lesotho, Libya, Lithuania, Luxembourg, Madagascar, Malawi, Maldives, Mali, Malt Uruguay, Marshall Islands, Mauritania, Mauritius, Monaco, Montenegro, Mozambique, Myanmar, Namibia, Nauru, Nepal, Netherlands (Kingdom of the), New Zealand, Nicaragua, Niger, Nigeria, North Macedonia, Norway, Oman, Palau, Panama, Poland, Portugal, Qatar, Republic of Korea, Saint Kitts and Nevis, Samoa, San Marino, Sao Tome and Principe, Senegal, Seychelles, Slovakia, Slovenia, Solomon Islands, Somalia, South Africa, Spain, Sudan, Suriname, Sweden, Syrian Arab Republic, Tajikistan, Thailand, Togo, Tonga, Türkiye, Tuvalu, Uganda, United Arab Emirates, United Republic of Tanzania, United States of America, Uruguay, Uzbekistan, Vanuatu, Venezuela (Bolivarian Republic of), Viet Nam, Yemen, Zambia, Zimbabwe,
2	Agency	Australia, Azerbaijan, Belarus, Bolivia, Bosnia and Herzegovina, Cabo Verde, China, Croatia, Democratic People's Republic of Korea, Ecuador, Egypt, El Salvador, Equatorial Guinea, Ethiopia, Georgia, Guyana, Kenya, Liechtenstein, Mexico, Mongolia, Paraguay, Peru, Republic of Moldova, Russian Federation, Saudi Arabia, Sierra Leone, Sri Lanka, Switzerland, Tunisia, Turkmenistan, Ukraine, ICPIP (Interstate Council on the Protection of Industrial Property)
3	Office	Belgium, Belize, Brunei Darussalam, Canada, Costa Rica, Fiji, Grenada, Holy See, Jamaica, Liberia, Morocco, Niue, Papua New Guinea, Philippines, Romania, Rwanda, Saint Vincent and the Grenadines, Serbia, Singapore, Timor-Leste, Trinidad and Tobago, United Kingdom, EUIPO (European Union Intellectual Property Office), GCC Patent Office (Patent Office of the Cooperation Council for the Arab States of the Gulf)
4	Corporation/ Company	Malaysia, Saint Lucia
5	Organization	Pakistan, OAPI, ARIPO, ASBU, BOIP, EAPO, EPO, UPOV

Source: https://www.wipo.int/directory/en/urls.jsp

There are several forms of national and regional intellectual property offices in the world, namely ministry/department, agency, office, corporation and organization. First, Most national and regional intellectual property offices in the world are managed by ministries/departments, namely countries such as: Argentina, Austria, Brazil, Cambodia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, India, Indonesia, Japan, Kuwait, Lao People's Democratic Republic, Malawi, Myanmar, Netherlands (Kingdom of the), New Zealand, Poland, Portugal, Qatar, Republic of Korea, Spain, Sudan, Sweden, Thailand, Uganda, United Arab Emirates, United States of America, Uruguay, Vanuatu, Venezuela Viet Nam, Yemen, Zambia. Second, in

the form of an agency such as countries: Australia, Belarus, China, Democratic People's Republic of Korea, Ecuador, Egypt, Georgia, Guyana, Kenya, Liechtenstein, Mexico, Mongolia, Paraguay, Peru, Republic of Moldova, Russian Federation, Saudi Arabia, Switzerland, Tunisia, Ukraine. The three are in the form of offices like countries: Belgium, Brunei Darussalam, Canada, Fiji, Grenada, Holy See, Jamaica, Liberia, Morocco, Niue, Papua New Guinea, Philippines, Romania, Rwanda, Saint Vincent and the Grenadines, Serbia, Singapore, Timor-Leste, Trinidad and Tobago, United Kingdom, EUIPO (European Union Intellectual Property Office), GCC Patent Office (Patent Office of the Cooperation Council for the Arab States of the Gulf). Fourth, form a corporation like a country: Malaysia, Saint Lucia. The fifth is in the form of organizations such as Pakistan, OAPI (African Intellectual Property Organization), ARIPO (African Regional Intellectual Property Organization), ASBU (Arab States Broadcasting Union), BOIP (Benelux Organization for Intellectual Property), EAPO (Eurasian Patent Organization), EPO (European Patent Organization), UPOV (International Union for the Protection of New Varieties of Plants) (https://www.wipo.int/directory/en/urls.jsp).

Indonesia has ratified various international agreements in the field of Intellectual Property Rights, such as the Paris Convention for the Protection of Industrial Property Rights, the Berne Convention for the Protection of Copyright, and the WIPO Convention on Industrial Designs. In Indonesia, registration of Intellectual Property Rights is voluntary, except for patents and industrial designs. In Indonesia, protection of Intellectual Property Rights is only given to works that have been registered. In Indonesia, protection of Intellectual Property Rights is implemented by the Directorate General of Intellectual Property under the Ministry of Law of the Republic of Indonesia. The US Chamber Global Innovation Policy Centre reveals Indonesia's areas of strength and weakness in Intellectual Property (IP) protection. Indonesia's strengths include establishing cooperation with Japan to strengthen IP protection. Second, the availability of online administrative assistance for copyright infringement. Third, good coordination at the cabinet level and coordination of the framework for implementing IP. Meanwhile, its weaknesses include Indonesia having to strengthen the success requirements targeting biopharmaceutical patents. Second, localization barriers in the 2016 patent law that include technology transfer requirements for all patented technologies and processing them in Indonesia. Third, the history of using compulsory licenses for commercial and non-emergency purposes. Fourth, the challenges of the copyright environment with high levels of piracy and finally, the fifth, limited participation in international IP agreements. The majority of countries are building a more efficient foundation for IP policies. Like Indonesia, Thailand and Vietnam have long-term programs to strengthen coordination between government agencies responsible for implementing IP protection (https://kabar24.bisnis.com/read/20180214/16/738944/ini-kelemahan-perlindungan-kekayaan-intelektual-di-indonesia).

Intellectual property (IP) is currently a major issue as one of the drivers of a country's economic growth. In Indonesia, the management of IP is the task and function of the Ministry of Law and Human Rights through The Directorate General of Intellectual Property as the Intellectual Property Office (IPO). The Directorate General of Intellectual Property dynamic capabilities in managing IP policies influence the level of innovation and economic growth in Indonesia. While Indonesia's innovation ranking continues to improve, it has not yet entered the group of the top 10 most innovative countries (world-class intellectual property office) according to the World Intellectual Property Organization (WIPO). To achieve its mission of becoming a world-class IP office, The Directorate General of Intellectual Property faces two main challenges, such as, first, the problem of economic growth related to IP and the role of The Directorate General of Intellectual Property as an Intellectual Property Office managing intellectual property governance. Second, the implementation of all seven elements defined by WIPO to measure a country's level of innovation has not been fully optimized. To address these challenges and enhance its dynamic capabilities, The Directorate General of Intellectual Property needs to leverage collaboration with the private sector, civil society, and the public to reconstruct its dynamic governance towards becoming a world-class intellectual property office. An assessment of The Directorate General of Intellectual Property dynamic capabilities based on WIPO's seven elements is needed to identify areas for improvement and policy recommendations. One of the efforts to become a world-class intellectual property office is the Intellectual Property Office in a country by implementing dynamic governance that has the characteristics of thinking ahead, thinking again, thinking across, able people and agile process. Therefore, in order to implement dynamic governance, it is necessary to study what form of intellectual property office is appropriate that is able to become a world-class intellectual property office, whether in the form of a directorate under the Ministry of Law, whether in the form of an autonomous body or whether in the form of state own enterprise.

II. LITERATURE REVIEW

Today, all countries in the world face an environment full of uncertainty and rapid and unpredictable change. The progress achieved now does not guarantee survival in the future. It could be that a set of principles, policies and practices that were initially good, static governance and maintaining the status quo will eventually lead to a stagnant and undeveloped state. No amount of careful planning will guarantee the relevance and effectiveness of governance if government institutions do not have

the capacity to learn, innovate and change in the midst of a global environment that is constantly changing and difficult to predict. Another challenge facing the world today is the rapid technological innovation, which has resulted in many policies becoming obsolete quickly and opening up new opportunities. Likewise with the changing conditions in society itself, where more and more of them are getting better education and interacting intensively with global developments, which ultimately demands involvement in the process of formulating and implementing various state policies. No less important are the various problems in society that are increasingly complex, with increasingly unpredictable impacts and increasingly complex causal relationships, requiring multi-perspective solutions and coordination from multi-agencies (Neo, 2019; Neo & Chen, 2007).

To face these various challenges, the Government becomes a central element. The Government through its institutions plays a role in creating a framework for relations between the government, society and the business world, as well as conditions to facilitate or, conversely, hinder the sustainability of development and economic growth. Although the Government does not directly create industrial competition, it can play a role as "a catalyst and a challenger in shaping the context and institutional structure that stimulates business to gain competitive advantages". This is where dynamic governance is needed. The government through its dynamic institutions can enhance the development and prosperity of a country by constantly improving and adapting the socio-economic environment in which people, business and government interact". The government can influence and control economic development through various policies, regulations and institutional structures that provide incentives or restrictions on various ongoing activities. In other words, the ability to continuously improve and adapt is a fundamental capacity that the government needs to have if it wants to have sustained economic development and prosperity (Neo & Chen, 2007).

Singapore's experience shows that government institutions can be dynamic through the use of a foundation of cultural values and beliefs that synergize with strong organizational capabilities to create a dynamic governance system that allows for continuous change. The synergy of these two aspects is very important. Dynamic governance as the output of the synergy of these two elements is very dependent on the efforts of leaders to organize social and economic interactions to achieve the desired national goals. Sustainable economic and social development will only occur when there is "leadership intention, cognition and learning which involve continual modification of perceptions, belief structures and mental models, particularly when confronted with global development and technological change". Therefore, the two main obstacles to the realization of dynamic governance are the inability to deal with environmental changes and to make the institutional adjustments needed to remain effective (Neo & Chen, 2007).

Dynamic governance, which is the expected outcome, is realized when adaptive policies are implemented. Adaptation of this policy is not done passively, but proactively through various innovations, contextualization and implementation. The basis of the process of producing dynamic governance is the foundation of cultural values owned by the nation. These cultural values will in turn influence behaviour. Three dynamic capabilities, namely thinking ahead, thinking again, and thinking across, facilitate adaptive policies. These capabilities must be embedded and manifested in the strategy and policy process (making policy choices, implementation and evaluation) of government institutions so that they continue to learn, innovate and adapt to change. How do the various elements interact in realizing dynamic governance? Figure 1 shows a framework for dynamic governance with the interrelationships between its elements (Neo & Chen, 2007).

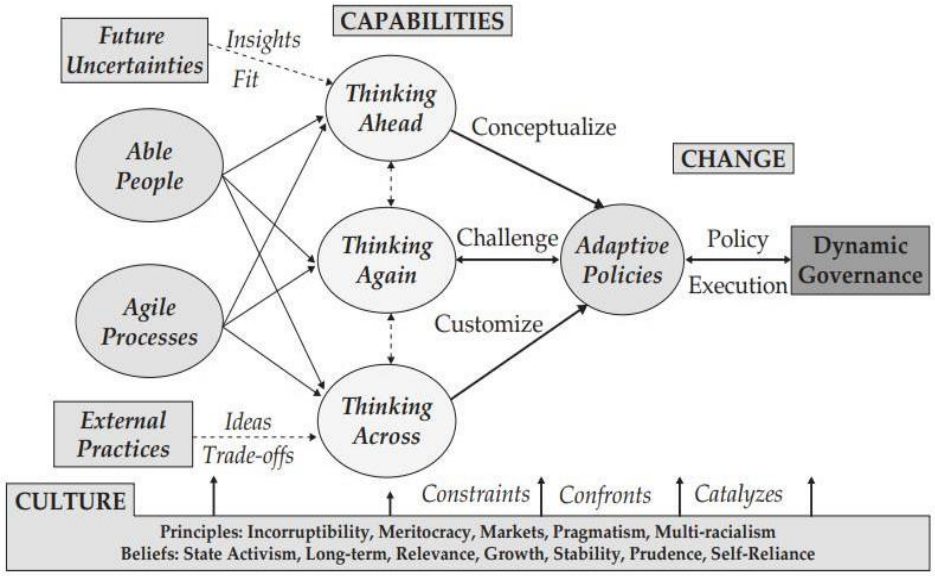

Figure 1. Dynamic Governance Model

Think ahead capability is basically the ability to identify environmental developments, understand their future consequences for economic and social goals, and identify appropriate investment strategies and choices that enable all elements of society to exploit new opportunities and overcome potential threats. The process of thinking ahead involves: a) exploring and anticipating future trends and developments that have a significant impact on policy goals, b) understanding how these developments will affect the achievement of current goals, and testing the effectiveness of existing strategies, policies and programs, c) strategizing what options can be used to deal with emerging threats and exploit new opportunities, and d) influencing key decision makers and stakeholders to consider emerging issues and engaging them in strategic conversations about the responses to be taken (Neo & Chen, 2007).

Think again capability involves the ability to assess the performance of existing strategies, policies and programs, and then redesign them to achieve better results. The process of thinking again involves: a) reviewing and analysing actual performance data and understanding public feedback, b) investigating the underlying causes of feedback or observed facts, information and behaviour, whether to meet or identify missed targets, c) reviewing strategies, policies and programs to identify characteristics and activities that are working well or not, d) redesigning policies and programs, in part or in whole, so that their performance can be improved and goals achieved, and e) implementing new policies and systems so that citizens are better served and enjoy meaningful results (Neo & Chen, 2007).

Think across capability is the ability to learn from the experiences of others, so that good ideas can be adopted and adapted to internal conditions so that goals can be achieved better. Think across capability involves the process of: a) searching for new and interesting practices adopted and implemented by others in approaching similar problems, b) reflecting on what they did, why and how they did it, and the lessons they learned from the experience, c) evaluating what might apply to the local context, considering unique conditions and circumstances, and what will be accepted by the local population, d) finding new relationships between ideas and new combinations of different ideas that create innovative approaches to emerging problems, and e) adapting policies and programs to suit local policy requirements and citizen needs (Neo & Chen, 2007).

To have dynamic governance capability, there are two main pillars, namely capable human resources and agile and responsive processes. Governance systems are greatly influenced by the external environment through future uncertainty and also various practices carried out by other countries. Dynamic governance is achieved through various policies that are continuously adapted to changes that occur in the surrounding environment. Policy adaptation is not a passive reaction to pressures that come from outside, but is a proactive action through innovation with new ideas that are input into various policies for better results; contextualization of these new ideas to gain support from the community; and implementation or execution of its policies as a manifestation of dynamic governance. Local wisdom values - cultural values, beliefs, institutional arrangements and customs - will influence behaviour. This local wisdom is manifested in informal norms and conventions. In turn, it will play an important role in the process of change and adaptation of various policies (Neo & Chen, 2007).

Table 4. Dynamic Governance: Concept, Dimension, Sub Dimension

Concept	Dimension	Sub Dimension
Dynamic Governance (Neo, & Chen, 2007)	Able People	Talent Selection
		People Development
		Leadership & People Retention
	Agile Process	Anticipating the Future
		Allocating Financial Resources
		Applying Sistemic Discipline
Dynamic Capability (Neo & Chen, 2007)	Thinking Again	Exploring & anticipating
		Perceiving & Testing
		Strategizing
		Influencing
	Thinking Ahead	Understanding & probing
		Reviewing & analyzing
		Redesigning
		Implementing
	Thinking Across	Search & research
		Discovering & experimenting
		Evaluating
		Customizing

Sources: Neo & Chen (2007).

Singapore's experience shows that assumptions about the primacy of economic growth, the need for global relevance and the important role of the state in creating the conditions for growth, influence thinking and approaches to governance. Policy choices made are shaped by cultural values of integrity, meritocracy, independence, pragmatism and prudent financial management. In realizing dynamic governance, the role of leaders is very important. In doing so, it is not only relying on charisma and one's own efforts, but also by building organizational capabilities so that knowledge and resources can be systematically utilized to solve various problems (effective action). What is needed to realize dynamic governance is a new learning and thinking process, the design of various policy options, analytical decision-making, rational selection of policy options and effective implementation of policies. This is where the role of leaders becomes very important. What is needed is a leader who thinks creatively and innovatively and works hard to provide the right setting to realize dynamic governance. Efforts to improve institutional performance need to be initiated by organizational leaders. To be able to make the right decisions and choices requires organizational leaders who have "necessary motivation, attitude, values, intellect, knowledge and skills to envision the future, develop strategic options and select paths that give the institution the greatest scope for survival and success" (Neo & Chen, 2007).

Dynamic governance is the result of a strong intention and ambition of leaders to ensure the sustainability of society. The quality of leadership needed is dynamic leadership with the ability to manage various elements in an integrated manner amidst continuous change through clear strategies, intelligent management, continuous learning, and seeking adaptive and relevant paths, as well as effective policy execution. Systematically building the capabilities of all involved people and processes to ensure that new, innovative ideas are accommodated in realistic policies, projects and programs, and consistently coordinating all organizational activities to lead to the achievement of goals. In essence, dynamic governance occurs when "policy-makers constantly think ahead to perceive changes in the environment, think again to reflect on what they are currently doing, and think across to learn from others, and continually incorporate the new perceptions, reflections and knowledge into their beliefs, rules, policies and structures to enable them to adapt to environmental change". This dynamic capability is the secret key to Singapore's success for more than four decades. Dynamic governance can be realized sustainably when "there is a long-term commitment to and investments in building each of the elements in the system and designing the necessary linkages for them to work as a whole". It should also be underlined that "the interdependent, interacting and reinforcing flows" is the heartbeat of dynamic governance. Without it, there will never be dynamic governance (Neo & Chen, 2007).

III. RESEARCH METHOD

The research method used is a quantitative method with data collection by distributing web-based questionnaires to experts about Intellectual Property Organization in Indonesia with samples that are adjusted and match the Fuzzy VIKOR technique (Visekriterijumsko Kompromisno) and Fuzzy TOPSIS technique (Technique for Order Preference by Similarity to Ideal Solution). A web-based questionnaire was developed for data collection, which was then distributed to thirty experts. The first part of the questionnaire consisted of demographic questions and the second part consisted of assigning weights to various criteria based on expert opinions. The final part of the questionnaire consisted of ranking various alternatives against the proposed criteria based on expert opinions. A five-point scale of linguistic variables was used for the evaluation of the criteria. Experts were asked to select the alternative that was most important to implement and had the lowest barriers to implementation. A total of five alternatives were ranked based on 18 criteria with priorities set by the participants in the ranking form. The thirty experts consisted of: a) User community: individuals, companies, industry relating to intellectual property licensing; b) Lecturers from reputable academic institutions, with the criteria for each academic expert, set at a minimum of five years of teaching experience with three international publications, c) Managerial level of Directorate General of Intellectual Property (DJKI) Ministry of Law; d) Professional, bureaucrats, politicians, consultants

A five-point scale of linguistic variables was used for the evaluation of the criteria, namely:

Value	Linguistic Variables
1	Very Low
2	Low
3	Medium
4	High
5	Very High

The alternative decision choices taken by the experts are:

Value	Alternative
A1	Intellectual Property Agency
A2	Intellectual Property State-Owned Enterprise
A3	Directorate General of Intellectual Property (DJKI) Ministry of Law RI

There are several criteria or indicators from dynamic governance and dynamic capabilities to determine the appropriate organizational form in managing intellectual property office in Indonesia, which is carried out by experts based on linguistic variables:

Value	Criteria
	Able People (Dynamic Governance):
C1	Talent Selection
C2	People Development
C3	Leadership & People Retention
	Agile Process (Dynamic Governance):
C4	Anticipating the Future
C5	Allocating Financial Resources
C6	Applying Systemic Discipline
	Think Again (Dynamic Capabilities):
C7	Exploring & Anticipating
C8	Perceiving & Testing
C9	Strategizing
C10	Influencing
	Thinking Ahead (Dynamic Capabilities):
C11	Understanding & Probing
C12	Reviewing & Analysing
C13	Redesigning
C14	Implementing
	Thinking Across (Dynamic Capabilities):
C15	Search & Research
C16	Discovering & Experimenting
C17	Evaluating
C18	Customizing

Fuzzy VIKOR (Vise Kriterijumska Optimizajica I Kompromiso Resenje)

The VIKOR method was first introduced by Serafim Opricovic in 1998. The development of the VIKOR method is used as one of the Multi Criteria Decision Making (MCDM) methods that aims to solve problems faced by decision makers. The VIKOR method is focused only on ranking and selecting a set of alternative criteria that can conflict with each other to make decisions in obtaining final decisions. The use of VIKOR for automatic summarization is done by simulating a case to be processed, to produce a ranking order based on alternative rankings. The following are the working steps of the VIKOR method (Siregar, V & Rochmawati, N. 2023):

a. Create a matrix of alternative decisions and criteria (F) with the equation below:

$$F = \begin{matrix} A_1 \\ A_2 \\ \vdots \\ A_n \end{matrix} \begin{bmatrix} C_{x1} & C_{x2} & \cdots & C_{xn} \\ x_{11} & x_{12} & \cdots & x_{1n} \\ x_{21} & x_{22} & \cdots & x_{2n} \\ \vdots & \vdots & \vdots & \vdots \\ x_{m1} & x_{m2} & \cdots & x_{mn} \end{bmatrix}$$

Where F is the decision matrix, A1 is the i-th alternative, i = 1,2,3..m is the alternative sequence number and Cj is the j-th criterion, j= 1,2,3..m is the criterion sequence number, and Xij is the alternative response to the criterion.

b. Determine the weight for each criterion (W) with the equation below:

$$W = \sum_{j}^{n} =_1 W_j = 1$$

Where Wj is the criteria weight and j = 1,2,3 is the criteria sequence number.

c. Create a normalization matrix (N) by determining the maximum and minimum values to obtain the ideal solution for each criterion. N with the equation below Where Wj is the criteria weight and j = 1,2,3 is the criteria sequence number:

$$N_{ij} = \frac{(f_j^+ - f_{ij})}{(f_j^+ - f_j^-)}$$

Where fij is an alternative response to the criteria, f+j is the maximum value in one criterion, F- is the minimum value in one criterion.

d. Calculating the normalization matrix Weight (F*)

This weight normalization is done by multiplying the criteria weight (W) by the normalized data value (N), the equation is as follows:

$$F_{ij}^* = W_j \, . N_{ij}$$

Where F*ij is the result of normalizing the weights of the alternatives and criteria, Wj is the weight value of the criteria and Nij is the normalized data value of the alternatives and criteria.

e. Calculating the utility measure (S) and regret measure (R) of each alternative, with the equation below:

$$S_i = \Sigma_j^n =_1 \; W_j \frac{(f_j^+ - f_{ij})}{(f_j^+ - f_j^-)}$$

$$R_i = maxj \left[\frac{(f_j^+ - f_{ij})}{(f_j^+ - f_j^-)}\right]$$

Where Si is the maximum group utility and Ri is the minimum individual regret, both of which are utility measures taken from the furthest and closest points as ideal solutions.

f. Calculating the VIKOR Index with the following equation:

$$Q_i = v \left[\frac{(S_i - S^-)}{(S^+ - S^-)}\right] + (1 - v)\left[\frac{(R_i - R^-)}{(R^+ - R^-)}\right]$$

Where S- = min Si, S+ = max Si, and R- = min Ri, R+ = max Ri and V = 0.5. The smallest / lowest Qi value is the best result.

g. Performing a compromise solution with 2 conditions, the first condition is Acceptable Advante using the equation below:

$$Q(A_2) - Q(A_1) \geq DQ$$
$$DQ = \frac{1}{(m-1)}$$

Where A2 is the second alternative in the Q ranking and A1 is the alternative with the best order in the Q ranking while DQ, where m is the number of alternatives.

Fuzzy TOPSIS (Technique for Others Preference by Similarity to Ideal Solution)

The TOPSIS method is able to rank selected alternatives. Where the best selected alternative not only has the shortest distance from the positive ideal solution, but also has the longest distance from the negative ideal solution. A positive ideal solution is defined as a solution that maximizes the benefit attribute and minimizes the cost attribute, while a negative ideal solution is defined as a solution that minimizes the benefit attribute and maximizes the cost. The TOPSIS method is one of the methods that can help the optimal decision-making process to solve decision problems practically. This is because the concept is simple and easy to understand, the computation is efficient and has the ability to measure the relative performance of decision alternatives in a simple mathematical form. In general, the procedure of the TOPSIS method follows the following steps (Sugiarto, H. 2021):

a. Determining the normalized decision matrix

$$r_{ij} = \frac{x_{ij}}{\sqrt{\Sigma_{i=1}^m x_{ij}^2}}$$

with i = 1,2…,m and j = 1,2,…,n.

b. Calculating the weighted normalized decision matrix

$y_{ij} = w_i r_{ij}$

c. Calculating the positive ideal solution matrix and the negative ideal solution matrix

$A^+ = y1+, y2+, \ldots yn+$

$A^- = y1-, y2-, \ldots yn$

d. Calculate the distance between the value of each alternative with the positive ideal solution matrix and the negative ideal solution matrix.

$$D_i^{+} = \sqrt{\sum_{j=1}^{n} (y_i^{+} - y_{ij})^2}$$

$i = 1,2, \ldots m$

$$D_i^{-} = \sqrt{\sum_{j=1}^{n} (y_{ij} - y_i^{-})^2}$$

$i = 1,2,\ldots m$

e. Calculate the preference value for each alternative

$$V_i = \frac{D_i^-}{D_i^- - D_i^+}$$

IV. RESULTS AND DISCUSSION

D From the results of the distribution of web-based questionnaires made for data collection, which were then distributed among thirty experts, validity and reliability tests were carried out. The following are the test results:

Table 3. Results of Validity Test and Reliability Test of the criteria/indicators using IBM SPSS Statistics Version 26

		CRITERIA																	
Alternative	Key Person:	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18
A1	Expert1	4	4	4	5	4	5	5	5	5	5	5	4	4	4	4	4	4	4
A3	Expert2	4	4	4	4	4	4	4	5	5	5	4	4	4	5	5	4	4	4
A2	Expert3	3	3	3	4	4	3	3	5	3	3	3	3	3	3	3	3	3	3
A2	Expert4	5	3	5	5	5	3	5	5	4	5	4	5	4	5	4	5	5	5
A1	Expert5	4	3	4	4	4	4	4	5	4	4	5	5	5	4	4	5	5	5
A2	Expert6	5	4	5	5	5	5	4	5	4	4	4	4	4	5	5	5	5	4
A1	Expert7	4	3	4	4	4	4	3	3	4	3	3	3	3	4	3	3	3	4
A3	Expert8	3	3	3	4	4	4	3	4	4	4	3	3	4	3	3	3	3	3
A1	Expert9	4	5	4	4	4	4	4	5	4	4	5	5	4	5	4	5	4	5
A2	Expert10	5	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
A1	Expert11	5	4	5	4	4	4	5	4	4	5	5	5	5	5	4	4	4	4
A3	Expert12	4	4	3	3	4	3	3	3	2	3	4	4	3	4	4	4	3	3
A3	Expert13	4	2	5	3	3	3	5	5	3	4	5	4	4	4	4	5	5	4
A1	Expert14	4	2	4	5	4	5	5	5	4	4	5	4	4	4	4	4	5	4
A2	Expert15	3	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4
A1	Expert16	4	3	4	5	4	5	5	4	4	4	4	3	4	3	4	4	4	4
A3	Expert17	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
A2	Expert18	4	3	5	4	4	4	4	5	4	5	5	5	5	5	4	5	4	4
A1	Expert19	4	3	4	3	4	3	3	4	4	4	4	4	4	4	4	4	3	4
A3	Expert20	5	4	5	4	4	4	3	5	4	4	3	4	4	4	4	4	4	5
A2	Expert21	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
A3	Expert22	4	3	5	4	4	4	4	5	4	4	4	4	4	4	4	4	4	4
A3	Expert23	5	4	4	4	4	4	5	5	4	4	5	4	5	4	4	4	4	4
A1	Expert24	4	2	5	4	3	3	4	5	4	4	4	4	3	4	4	5	5	4
A2	Expert25	4	2	5	3	4	4	2	4	3	4	4	3	3	3	3	3	4	4
A2	Expert26	5	4	4	5	3	5	5	5	4	4	5	4	4	4	4	4	4	5

A2	Expert27	4	3	4	3	4	4	4	5	3	5	5	5	5	4	4	5	5	5
A3	Expert28	4	2	4	3	3	3	5	3	3	3	3	4	3	4	1	3	2	2
A3	Expert29	4	4	5	4	3	3	4	5	4	4	4	5	5	5	4	4	4	4
A1	Expert30	4	3	4	5	4	5	5	5	4	5	5	5	5	5	4	4	5	3
Anti-image Correlation		.781a	.697a	.662a	.532a	.571a	.555a	.748a	.749a	598a	647a	895a	.724a	844a	.705a	.691a	.798a	.849a	565a
Cronbach's Alpha if Item Deleted		.923	.931	.926	.924	.926	.922	.923	.922	.922	.918	.918	.920	.918	.921	.919	.921	.920	.921
Validity Test																			
KMO and Bartlett's Test																			
Kaiser-Meyer-Olkin Measure of Sampling		.699																	
Bartlett's Test of Sphericity		391.207																	
Approx. Chi-Square:																			
	Df	153																	
	Sig.	.000																	
Reliability Statistics																			
Cronbach's Alpha	N of Items																		
.926	18																		

Validity Test using Kaiser-Mayer-Olkin Measure of Sampling Adequacy (KMO MSA) Value and KMO and Bartlett's Test output table is useful to know the feasibility of a variable, whether it can be further processed using this factor analysis technique or not. The method is to look at the KMO MSA (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) value. If the KMO MSA value is greater than 0.50, then the factor analysis technique can be continued. Based on the output above, it is known that the KMO MSA value of the eighteen criteria/indicators is 0.699> 0.50 and the Bartlett's Test of Sphericity (Sig.) Value is 0.00 <0.05, then the factor analysis in this study can be continued because it has met the requirements. There is a strong relationship or correlation between the criteria/indicators. This is indicated by the Anti-image Correlation value between the criteria/indicators being greater than 0.50. Thus, eighteen criteria/indicators can be declared valid.

From the output table above, it is known that there are N of Items (the number of items or questionnaire questions) there are 18 items with a Cronbach's Alpha value of 0.926. Because the Cronbach's Alpha value of 0.926> 0.60, then as the basis for decision making in the reliability test above, it can be concluded that the 18 or all questionnaire question items for the criteria/indicators are reliable or consistent. The output table above provides an overview of the statistical values for the 18 questionnaire question items. Note in the "Cronbach's Alpha if Item Deleted" column in this table, the Cronbach's Alpha value is > 0.60, so it can be concluded that the 18 questionnaire question items related are reliable.

Fuzzy VIKOR

There are several criteria or indicators to determine the appropriate organizational form for managing intellectual property office in Indonesia based on dynamic governance and dynamic capabilities, which is carried out by experts based on linguistic variables. The Fuzzy VIKOR method is used to determine the appropriate organizational form for managing intellectual property office in Indonesia. To facilitate the analysis, the Fuzzy VIKOR calculation uses Microsoft Excel (Indonesian version). The steps taken in calculating Fuzzy VIKOR are determining the weight, creating a normalization table R, calculating the S value, calculating the R value, comparing the S value and the R value, determining the index value and the last step is determining the ranking value.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
VIKOR METHOD																			
	CRITERIA																		
ALTERNATIVE	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	
A1	4,10	3,20	4,20	4,30	3,90	4,20	4,30	4,50	4,10	4,20	4,50	4,20	4,10	4,20	3,90	4,2	4,2	4,1	

A2	4,20	3,30	4,40	4,20	4,20	4,10	3,90	4,70	3,80	4,30	4,30	4,20	4,10	4,20	4,00	4,3	4,3	4,3	
A3	4,10	3,20	4,20	3,70	3,70	3,60	4,00	4,40	3,70	3,90	3,90	4,00	4,00	4,10	3,70	3,9	3,7	3,7	
WEIGHT	3	2	1	3	1	2	2	1	3	1	3	2	1	1	2	3	1	1	33
W=1	0,09	0,06	0,03	0,09	0,03	0,06	0,06	0,03	0,09	0,03	0,09	0,06	0,03	0,03	0,06	0,09	0,03	*0,03	1,00
NORMALIZATION																		*=S8/$T$8	
	*=((MAX(B$5:B$7)-B5))/((MAX(B$5:B$7)-MIN(B$5:B$7)))																		
	*1,00	1,00	1,00	0,00	0,60	0,00	0,00	0,67	0,00	0,25	0,00	0,00	0,00	0,00	0,33	0,25	0,17	0,33	
R	0,00	0,00	0,00	0,17	0,00	0,17	1,00	0,00	0,75	0,00	0,33	0,00	0,00	0,00	0,00	0,00	0,00	0,00	
	1,00	1,00	1,00	1,00	1,00	1,00	0,75	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	
CALCULATING THE VALUE OF S																			
	*=B$9*B12																	*=SUM(B17:S17)	
	*0,091	0,061	0,030	0,000	0,018	0,000	0,000	0,020	0,000	0,008	0,000	0,000	0,000	0,000	0,020	0,023	0,005	0,010	*0,286
S	0,000	0,000	0,000	0,015	0,000	0,010	0,061	0,000	0,068	0,000	0,030	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,184
	0,091	0,061	0,030	0,091	0,030	0,061	0,045	0,030	0,091	0,030	0,091	0,061	0,030	0,030	0,061	0,091	0,030	0,030	0,985
CALCULATING THE VALUE OF R																			
	*0,091	*=MAX(B17:S17)																	
R	0,068																		
	0,091																		
		*=+T17																	
ALTERNATIVE	VALUE OF S	VALUE OF R																	
A1	*0,286	**0,091	**=+B22																
A2	0,184	0,068																	
A3	0,985	0,091																	
MIN	0,184	*0,068	*=MIN(C27:C29)																
MAX	0,985	**0,091	**=MAX(C27:C29)																
DETERMINING INDEX VALUE																			
	*=((B27-$B$30)/($B$31-$B$30)*0,5)+((C27-$C$30)/($C$31-$C$30)*0,5)																		
		RANKING																	
	*0,5634	*2	*=RANK(B35;$B$35:$B$37;1)																
Q	0,0000	1																	
	1,0000	3																	
	Rank																		
1	: Intellectual Property State-Owned Enterprise																		
2	: Intellectual Property Agency																		
3	: Directorate General of Intellectual Property (DJKI) Ministry of Law RI																		

Initiating form of Intellectual Property Office in Indonesia Based on Dynamic Governance

Based on Fuzzy VIKOR calculations to determine the appropriate organizational form for managing intellectual property office in Indonesia based on dynamic governance and dynamic capabilities, the results obtained are that the first choice is Intellectual Property State-Owned Enterprise, second: Intellectual Property Agency, third: Directorate General of Intellectual Property (DJKI) Ministry of Law RI.

Fuzzy TOPSIS

In addition, this study aims to determine the appropriate organizational form for managing intellectual property office in Indonesia based on dynamic governance and dynamic capabilities using the Fuzzy TOPSIS method. The steps taken in calculating Fuzzy TOPSIS are determining the cost or benefit for 18 criteria, creating a normalized matrix R, creating a weighted normalized matrix Y, determining the positive ideal solution (A+), determining the negative ideal solution (A-), determining the distance between weighted values of positive and negative ideal solutions, determining the preference value and determining the ranking value.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
TOPSIS METHOD																			
	CRITERIA																		
ALTERNATIVE	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C 12	C 13	C 14	C1 5	C 16	C 17	C 18	
A1	4,10	3,20	4,20	4,30	3,90	4,20	4,30	4,50	4,10	4,20	4,50	4 ,20	4, 10	4 ,20	3, 90	4 ,2	4 ,2	4, 1	
A2	4,20	3,30	4,40	4,20	4,20	4,10	3,90	4,70	3,80	4,30	4,30	4 ,20	4, 10	4 ,20	4, 00	4 ,3	4 ,3	4, 3	
A3	4,10	3,20	4,20	3,70	3,70	3,60	4,00	4,40	3,70	3,90	3,90	4 ,00	4, 00	4 ,10	3, 70	3 ,9	3 ,7	3, 7	
	COST	BENEFIT	BENE FIT	BENE FIT	COS T	BENE FIT	COST	COST	BEN EFIT	BEN EFIT	COST	C OST	C OST	B ENE FIT	C OST	B ENE FIT	C OST	B ENEF IT	
WEIGHT	3	2	1	3	1	2	2	1	3	1	3	2	1	1	2	3	1	1	33
CREATING A NOMALIZED MATRIX -R-			**=SQRT((B5^2)+(B6^2)+(B7^2))																
DIVIDER	**7,16	5,60	7,39	7,06	6,82	6,89	7,05	7,85	6,70	7,17	7,35	7 ,16	7, 04	7 ,22	6, 70	7 ,17	7 ,06	7, 00	
	0,57	0,57	0,57	0,61	0,57	0,61	0,61	0,57	0,61	0,59	0,61	0 ,59	0, 58	0 ,58	0, 58	0 ,59	0 ,60	* 0,59	*=S5 /S$11
R	0,59	0,59	0,60	0,60	0,62	0,60	0,55	0,60	0,57	0,60	0,59	0 ,59	0, 58	0 ,58	0, 60	0 ,60	0 ,61	0, 61	
	0,57	0,57	0,57	0,52	0,54	0,52	0,57	0,56	0,55	0,54	0,53	0 ,56	0, 57	0 ,57	0, 55	0 ,54	0 ,52	0, 53	
CREATE A WEIGHTED NORMALIZED MATRIX (Y)																			
																		=S12$$ $9	
	1,72	1,14	0,57	1,83	0,57	1,22	1,22	0,57	1,83	0,59	1,84	1 ,17	0, 58	0 ,58	1, 16	1 ,76	0 ,60	* 0,59	
Y	1,76	1,18	0,60	1,79	0,62	1,19	1,11	0,60	1,70	0,60	1,76	1 ,17	0, 58	0 ,58	1, 19	1 ,80	0 ,61	0, 61	
	1,72	1,14	0,57	1,57	0,54	1,05	1,13	0,56	1,66	0,54	1,59	1 ,12	0, 57	0 ,57	1, 10	1 ,63	0 ,52	0, 53	
POSITIVE IDEAL SOLUTION																			
	*=IF(B$8="BENEFIT";MAX(B$17:B$19);(MIN(B$1																		

	7:B$19)))																		
A+	*1,72	1,18	0,60	1,83	0,54	1,22	1,11	0,56	1,83	0,60	1,59	1,12	0,57	0,58	1,10	1,80	0,52	0,61	
NEGATIVE IDEAL SOLUTION																			
	**=IF(B$8="BENEFIT";MIN(B$17:B$19);(MAX(B$17:B$19)))																		
A-	**1,76	1,14	0,57	1,57	0,62	1,05	1,22	0,60	1,66	0,54	1,84	1,17	0,58	0,57	1,19	1,63	0,61	0,53	
DISTANCE BETWEEN THP WEIGHTED VALUES OF POSITIVE AND NEGATIVE IDEAL SOLUTIONS																			
	*=SQRT(((B$22-B17)^2+((C$22-C17)^2+((D$22-D17)^2+((E$22-E17)^2+((F$22-F17)^2))))))																		
			**=SQRT(((B17-B$25)^2+((C17-C$25)^2+((D17-D$25)^2+((E17-E$25)^2+((F17-F$25)^2))))))																
	D1+	*0,054	D1-	**0,262															
	D2+	0,095	D2-	0,217															
	D3+	0,259	D3-	0,084															
PREFERENCE VALUE																			
	*=E29/(E29+C29)		RANK																
	V1	*0,830	**1	**=RANK(C34;$C$34:$C$36;0)															
	V2	0,697	2																
	V3	0,246	3																
	Rank:																		
1	: Intellectual Property Agency																		
2	: Intellectual Property State-Owned Enterprise																		
3	: Directorate General of Intellectual Property (DJKI) Ministry of Law RI																		

Based on the Fuzzy TOPSIS calculation to determine the appropriate organizational form for managing intellectual property office in Indonesia based on dynamic governance and dynamic capabilities, the results obtained are the first choice is Intellectual Property Agency, second: Intellectual Property State-Owned Enterprise, third: Directorate General of Intellectual Property (DJKI) Ministry of Law RI. The following is a comparison table between Fuzzy VIKOR and Fuzzy TOPSIS to determine the appropriate organizational form for managing intellectual property office in Indonesia based on dynamic governance and dynamic capabilities.

Table 4. Comparison of Fuzzy VIKOR and Fuzzy TOPSIS Results

Ranking	Fuzzy VIKOR	Fuzzy TOPSIS
1	Intellectual Property State-Owned Enterprise	Intellectual Property Agency
2	Intellectual Property Agency	Intellectual Property State-Owned Enterprise
3	Directorate General of Intellectual Property (DJKI) Ministry of Law RI	Directorate General of Intellectual Property (DJKI) Ministry of Law RI

Initiating form of Intellectual Property Office in Indonesia Based on Dynamic Governance

From the comparison results between Fuzzy VIKOR and Fuzzy TOPSIS, there are almost similarities in determine the appropriate organizational form for managing intellectual property office in Indonesia based on dynamic governance and dynamic capabilities, only different in the first and second options. For Fuzzy VIKOR, the first option is Intellectual Property State-Owned Enterprise, while for Fuzzy TOPSIS, the first option is Intellectual Property Agency. The second option Fuzzy VIKOR is Intellectual Property Agency and second option Fuzzy TOPSIS is Intellectual Property State-Owned Enterprise. The third option for Fuzzy VIKOR and Fuzzy TOPSIS is the same, namely Directorate General of Intellectual Property (DJKI) Ministry of Law RI.

The Directorate General of Intellectual Property has the task and function of protecting Intellectual Property office in Indonesia. However, the Directorate General of Intellectual Property still does not have adequate capacity to protect Intellectual Property Rights effectively. This is due to limited human resources and budget. Law enforcement of Intellectual Property Rights in Indonesia is still ineffective. This is due to various factors, such as lack of public awareness of the importance of Intellectual Property Rights, limited human resources and budget, and lack of cooperation between law enforcement officers and the community. In Indonesia, Intellectual Property Rights have not been fully utilized to drive the economy. This is due to various factors, such as lack of public awareness of the importance of Intellectual Property Rights, limited access to financing, and lack of effective legal protection (Salma, et. al, 2024).

V. CONCLUSIONS

One of the efforts to become a world-class intellectual property office is the Intellectual Property Office in a country by implementing dynamic governance that has the characteristics of thinking ahead, thinking again, thinking across, able people and agile process. Therefore, in order to implement dynamic governance, it is necessary to study what form of intellectual property office is appropriate that is able to become a world-class intellectual property office, whether in the form of a directorate under the Ministry of Law, whether in the form of an autonomous body or whether in the form of state own enterprise. From the comparison results between Fuzzy VIKOR and Fuzzy TOPSIS, there are almost similarities in determine the appropriate organizational form for managing intellectual property office in Indonesia based on dynamic governance and dynamic capabilities, only different in the first and second options. For Fuzzy VIKOR, the first option is Intellectual Property State-Owned Enterprise, while for Fuzzy TOPSIS, the first option is Intellectual Property Agency. The second option Fuzzy VIKOR is Intellectual Property Agency and second option Fuzzy TOPSIS is Intellectual Property State-Owned Enterprise. The third option for Fuzzy VIKOR and Fuzzy TOPSIS is the same, namely Directorate General of Intellectual Property (DJKI) Ministry of Law RI.

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