

The Effects of Organizational Design and Decision Making Process on Organizational Performance



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ABSTRACT: This research was aimed to analyze organizational performance through organizational design and decision making process. Garuda Indonesia was chosen as the case study object of this research, because the condition of organizational design and decision making process were taken through decentralization method. This research result referred that the organizational design and decision making process could affect positively on organizational performance, which in this recent research, the organizational design was proven to deliver positive effects on organizational performance, but only on organic org. form. Garuda Indonesia as a full service airline needed innovation to keep improving and being customer choice, which the strategic decision making was taken through decentralization method according to the dynamic needs in the middle of competitive environment with full of uncertainties.

KEYWORDS: Organizational Design, Decision Making Process, Organizational Performance

I. INTRODUCTION

Organizational design takes an essential position in the management of organizational activities. Without the organizational structure, the organization cannot work and carry out the goals well. According to Burns & Stalker (in Armstrong & Rasheed, 2013), the uncertainties in organizational environment can determine the implementation of organizational design. A mechanistic organization design is applied in an environment that tends to be stable and predictable, where either the market condition or technology does not change throughout the period, while an organic organizational design tends to be flexible, democratic, non-formal, individualism, and supports over changes and innovations (Ottih & Orupabo, in Armstrong & Rasheed, 2013). When the mechanistic and organic organization structures are in contrast, or organizational structure extreme, which the extreme condition and a variety of extreme combination can result the broader insights and concepts concerning to the organizational structure (Jewczyn, N., 2010).

Innovation as a differentiation factor can be performed by the organization to overcome uncertainties. The innovation is affected by environmental variables or contingents, which the variables can direct the organization to search organizational design according to the environment. In fact, there is no the one best way for organizational design in all business lines (Donaldson, in Oshita, Pavao & Borges, 2017). Pereira, Rao & Gessi, in Oshita, Pavao & Borges, 2017) have stated that in contingency theory, an organization is viewed as an opened system and adaptive to the environment, technology, or strategy. Therefore, it is regarded that everything is relative and not absolute in the organization. It is possible that a particular system can be successful and well-implemented in organization A, but not the same when it is implemented in organization B. It is because that either organization A or B has their own different environment (Rakhmawati, 2015). In the contingency theory, the success of organizational performance is depended on the circumstances in and around the organization. The optimal management system applied by an organization is really depended on both internal and external environment. Likewise the decision making, the effectiveness of a solution is influenced by the condition in which the solution is applied (Rakhmawati, 2015).

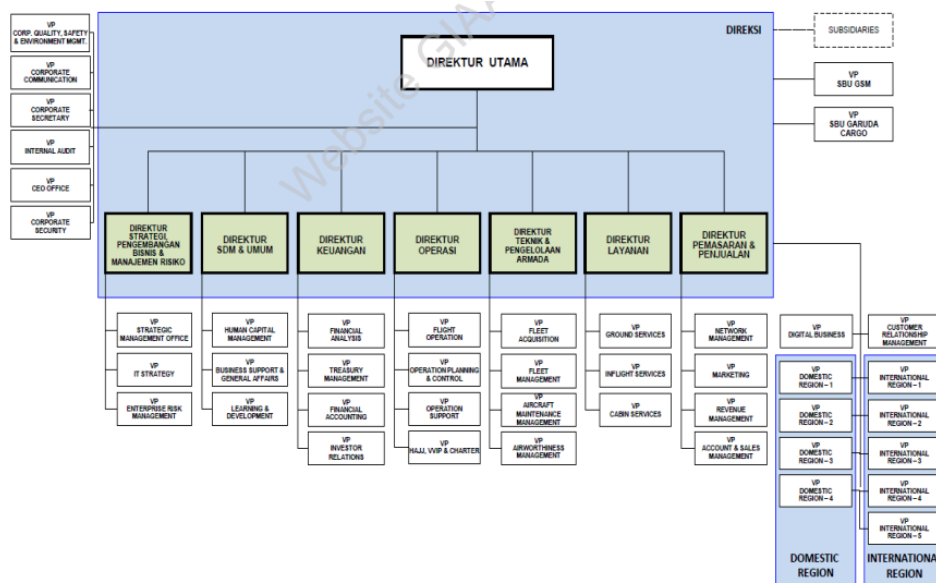
The strategic decision making can define organizational policies, rules, and plans explicitly and formally (Musso & Francioni, 2012). The process of decision making actually represents the main activity performed by managers through consideration about organizational policies and strategies which are affected by environmental factors (Negulescu, 2014). The decision making taken by organizational management is often affected by both internal and external environment conditions. Thus, the frequently changing environmental condition and incomplete and unavailable information turn the organizational decision is

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frequently made in either certain or uncertain or risky condition (Negulescu, 2014). The decision making in uncertainty and full of risk conditions is characteristic and form of the complex, unstructured, and unplanned strategic management (Rutherford-Silvers J, 2008; Dragomir, 2012; Stefanescu, 2013). Meanwhile, Ballantyne (2012) in his research has said that the significant component in decision making process is assumption which is used to draw conclusion and decide action and measure that will be performed by the decision makers. The process of decision making is performed by decision makers in an organization to achieve the best organizational performance.

Garuda Indonesia is a service company which works in Indonesian national airline field and commercial air transport service provider for passengers, cargo, and other services relating to air transport in Indonesia. This organization started its commercial operation in 1950 and had a long operational history in Indonesia, moreover, in its history; Garuda Indonesia has been a national flag carrier airline which serves various journey routes either international or domestic flight routes. The figure 1 shows that the organizational structure of Garuda Indonesia is categorized into divisional structure type, which this organizational structure is created through business unit division between semi-autonomous unit and other divisions. Each unit of those divisions has limited autonomy from the holding company. This divisional structure is consisted of three structure types: geographical-based divisional structure, which Garuda Indonesia will divide the division based on the area or region, for instance Eastern Indonesia, Asian area, European area, and many other regional divisions. Second, market-based divisional structure which is indicated by the structure division based on MGT customer relations sub-division that deals with the customers, either in institutional, small, or big scale. The last, product-based divisional structure which in its organizational structure is divided based on operational sub-divisions, for instance cabin service, flight operation, ground operation, and other factors relating to service product exerted by this department (Imam, 2015).

Figure 1. Organization Structure of Garuda Indonesia.



Source: Annual Report Garuda Indonesia, 2019

his research discusses about the effects of organizational design and decision making process on organizational performance through contingency theory approach. The contingency theory approach is aimed to explain that the higher compatibility level between management control and contingent factors as business strategy, internal and external environment would determine the higher level of performance achievement. Conversely, the performance will decrease when the incompatibility level is occurred between organization (management) and contingent factors. The ability to design and choose appropriate management supervision can build harmonization on operational activity, which finally affects the achievement of organizational performance target (Idawati, W., 2011).

The researchers has chosen Garuda Indonesia as the case-study object in the review of organizational structure and decision making effects on organizational performance is because in the decision making related to organizational policies is conducted through decentralization method, in which the decision can be determined by regional leadership except the central policies, so each region will have their own policies or decision which can affect the overall organizational performance. Further, the researches concerning to selection and design of management supervision system which can lead to synchronization of

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organizational contingency factors have not been widely examined in Indonesia, on how the determination or organizational design and decision making process can affect organizational performance.

II. THEORETICAL FRAMEWORK

Organizational Design

Organizational structure defines a formal relation, procedure control, authority, and process of decision making in an organization (Keats & O'Neill, 2001). They have also highlighted the significance of compatibility between organizational structure, as an implementation tool, and organizational strategy. When the organizational structure is incompatible to the organizational strategy will cause inefficiency and obstacle in strategy execution, thus, it should be the structure follows strategy (Alfred, in Tarigan, S., 2009).

According to Burns & Stalker (in Tarigan, S., 2009), two organizational types that are contingent to environmental factors: mechanistic and organic. In a relatively stable environment, the mechanistic organization (high differentiation, high formality, centralization, standardization, strict supervision, and vertical communication) will tend to be more successful than organic organization (high integrity, low formality, decentralization, individual creativity without supervision, and lateral communication). On the contrary, in a changing environment, the organic organization will be more eminent than mechanistic organization. In another contingency theory, Donaldson, in Tarigan (2009) has proposed several contingent factors from organizational structure such as strategy, organizational size, uncertainty, and technology.

The organizational structure has a lot of effects and significant for both individual and organization. The type of organizational structure has quite a big impact on leadership style, organizational performance, innovation, employee trust, work satisfaction level, perceived justice, and individual work performance (Ağar et al., 2012; Mehrabi, et al., 2013).

Decision Making Process

Papadakis (2006) has asserted that the process of strategic decision making is one of important topics in strategy research throughout two last decades. The decision making is a process to take the best choice or as measure choice of available alternative set according to certain criteria or strategy (Wang, Wang, Patel & Patel, 2004). The decision making process is determined by decision making strategy taken by decision makers is when the set of decision alternatives have been identified, and the more alternative sets and chosen criteria will determine the more ideal decision (Wang & Ruhe, 2007). The strategic decision making explains organizational policies, rules, and plans explicitly and formally (Musso & Francioni, 2012). A number of researchers have found that the strategic decision making process can formally affect positively on organizational performance (Papadakis, et al., 1998).

The decision making process usually represents main activities performed by managers by considering the organizational policies and strategies under the effects of environmental factors (Negulescu, 2014). Then, with the condition of changing environment and sometimes incomplete and unavailable information, the organizational decision is frequently made either in certain condition, uncertain condition or full of risks condition (Negulescu, 2014). It is crucial for an organization to have right people to support the organizational success and achievement (Musso, 2011).

Organizational Performance

Organizational performance is defined as the result of a set of individual decisions made by management in a sustainable situation (Helfert, 1996, in Delfi, 2007). The good organizational performance represents organizational competence to maintain its position competitively with other competitors and apply good strategies sustainably (Sekliuckiene & Hopeniene, 2011). Also, they have written in their research that in a travel agency, it is important for the organization to build competence sustainably from the entity or organizational member in order to confirm that the service process runs well and the organization is able to achieve the best performance.

Avci, et al. (2011) have discussed that the construct of strategic orientation, strategic position, competitive position, and competitive strategy which will affect the organizational performance by exerting non-financial performance measurement tools including to customer satisfaction, customer loyalty, employee satisfaction, employee turnover, and organizational image either for external or internal organization.

Based on the explanation above, the researchers then propose these following hypotheses:

- H1A : Mechanistic Org. Form affect positively on Decision Making Process
- H1B : Organic Org. Form affect positively on Decision Making Process
- H1C : Mechanistic Org. Form affect positively on Organizational Performance
- H1D : Organic Org. Form affect positively on Organizational Performance
- H2 : Decision Making Process affect positively on Organizational Performance

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The conceptual framework in this research is illustrated below:

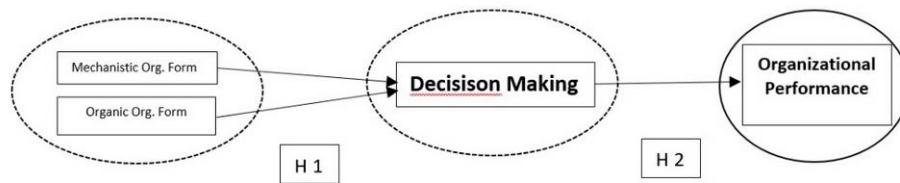


Figure 2. Conceptual Framework

III. RESEARCH METHODS

This research was aimed to examine the effects of organizational design and decision making process to the organizational performance with a case study in PT Garuda Indonesia. The analysis unit in this research were manager and senior manager of Garuda Indonesia. This research explained the respondent perception on an interrelation between organizational design, decision making process, and organizational performance through questionnaire. Total targets of this research were 138 people and the total respondents who have filled online questionnaire completely were about 51 respondents.

Each questionnaire instrument in this research was made similarly by using 5 Likert scales referring to the original questionnaire source articles. The measurement scale for organizational design, decision making process, and organizational performance variables used Likert scales 1-5 (1: highly disagree, 2: disagree, 3: neutral, 4: agree, and 5: highly agree). The questionnaire item for the reverse variable of environmental uncertainty, score 0 was given for the response "highly agree" and score 5 for response "highly disagree". The respondent profiling in the questionnaire helped more detailed analysis on questionnaire result, covering to these aspects" (1) gender, (2) age, (3) educational background, (4) work period at Garuda Indonesia, and (5) years of service at Garuda Indonesia.

The questionnaire was designed online in order to ease the questionnaire design or completeness through its features, so it prevented the questionnaire to be saved when some questions have not answered yet, it was aimed to avoid missing data during data processing. The data processing exerted SmartPLS program in 3.2.9 version with an analysis orientation on prediction direction.

IV. RESULTS AND DISCUSSION

The descriptive analysis result on respondents has referred that the majority of respondents were male managers (80,4%) and majority were 45 - <55 years old (49,0%). Most of respondents have bachelor degree (58,8%) and years of service > 10 years (58,8%). Next, the research result showed that the sample proportion with terms of service for 1 - <5 years is more than the sample proportion with terms of service in the other structural positions (47,1%).

Three factors have been evaluated in the process which was aimed to assess a relationship between indicators and constructs: Composite Reliability (CR), Average Variance Extracted (AVE), and Factor Loadings (Hair, et al., 2014). The Average Variance Extracted (AVE), Outer Loading, and Composite Reliability (CR) were used to measure Discriminant and Convergent Validity and Reliability Test. Based on the table 3, AVE score for decision making process, mechanistic org. form, organic Org. Form and organizational performance variables have the lower scores that the accepted level, 0.5. While, CR score for the indicators which were used to measure mechanistic Org. Form, organic org. form, and organizational performance were satisfying with score of > 0,70, which it was referred that the organization has a good internal consistency.

The coefficient of determination (R2) was used to measure predictive accuracy of proposed models, which in this research, R2 value on decision making process 0.427 and organizational performance value 0.533 which were indicated that the independent variables were predictors of dependent variable.

Table 1. Respondent's Descriptive Profile

Characteristic	Frequency	Percentage	
Gender	Male	41	80.4%
	Female	10	19.6%
	Total	51	100.0%
	25 - <35 Years	19	37.3%

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Age	35 - <45 Years	7	13.7%
	45 - <55 Years	25	49.0%
	Total	51	100.0%
Educational Degree	Diploma	5	9.8%
	S1	30	58.8%
	S2	16	31.4%
	Total	51	100.0%
Work Period	>10 Years	30	58.8%
	1 - <5 Years	8	15.7%
	5 - <10 Years	13	25.5%
	Total	51	100.0%
Period During Structural Position	>10 Years	12	23.5%
	1 - <5 Years	24	47.1%
	5 - <10 Years	15	29.4%
	Total	51	100.0%

Table 2. AVE, Composite Reliability dan R-Square

	AVE	Composite Reliability	R Square
Decision Making Process	0.333	0.677	0.427
Mechanistic Org. Form	0.367	0.750	-
Organic Org. Form	0.394	0.899	-
Organization Performance	0.427	0.786	0.533

The research indicators were stated as valid when they have loading factors more than 0,5 to the targeted construct. On the table 4, the loading factors in almost all indicators were valid and have fulfilled convergent validity except a few of indicators in decision making process and mechanistic org. form.

Table 3. Outer Loading Indicator

	Decision Making Process	Mechanistic Org. Form	Organic Form	Org.	Organization Performance
DM1	0.861				
DM10	0.558				
DM11	0.303				
DM2	0.739				
DM3	-0.150				
DM4	0.848				
DM5	-0.689				
DM6	0.089				
DM7	0.211				
DM8	0.439				
DM9	0.715				
KO1					0.635
KO2					0.662
KO3					0.783
KO4					0.578
KO5					0.587
OD1			0.549		
OD10			0.693		

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OD11		0.583
OD12		0.504
OD13		0.812
OD14		0.617
OD15	0.815	
OD16	0.828	
OD17	0.753	
OD18	0.098	
OD19	0.804	
OD2		0.598
OD20	-0.069	
OD21	0.073	
OD22	0.595	
OD3		0.538
OD4		0.622
OD5		0.574
OD6		0.701
OD7		0.740
OD8		0.610
OD9		0.566

Path coefficient was used to illustrate the relationship among constructs that have been hypothesized in the model by exerting bootstrapping (Hair, et al., 2011). The hypothesis test was aimed to identify t-statistic value of >1,96. Thus, the effects among variables were significant. Moreover, the analysis result on table 5 would show that from five hypotheses that have been proposes in this research, one hypothesis was approved.

Table 4. Path Analysis & Hypothesis Result

Hypothesis	Path	Original		
		Sample	T- Statistic	Result
H2	Decision Making Process --> Org. Performance	0.019	0.115	Not Approved
H1A	Mechanistic Org. Form -> Decision Making Process	0.344	1.013	Not Approved
H1C	Mechanistic Org. Form -> Org. Performance	0.309	1.757	Not Approved
H1B	Organic Org. Form -> Decision Making Process	0.363	1.497	Not Approved
H1D	Organic Org. Form -> Org. Performance	0.465	3.195	Approved

The hypothesis test result referred that organic org. form could affect positively on organizational performance (H1D was approved) which supported the theory in preliminary studies. The organizational structure has the most effects and significant for both individual and organization. The type of organizational structure has the biggest impact on leadership style, organizational performance, innovation, employee trust, work satisfaction level, perceived justice, and individual work performance (Ağar et al., 2012; Mehrabi, et al., 2013). The research on appropriate organizational design was a need for business executors in aviation industry in order to produce and yield the most valuable performance.

Garuda Indonesia has implemented organic organizational form in which the decision making relating to policies was taken through decentralization method, the decision was determined by regional leaderships except to central policies, so each region has their own policies or decisions that could affect overall organizational performance.

The outer model was used to evaluate the relation between indicators and construct in order to ensure that the research indicators were valid. Three aspects have been evaluated in this process were composite reliability (CR), average variance extracted (AVE), and factor loadings (Hair, et al., 2014).

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V. CONCLUSION

The organizational design and decision making process could affect positively on organizational performance, which in this recent research, the organizational design was able to give positive effects on organizational performance, but only in organic organizational form – decision making – organizational performance). Garuda Indonesia as a full-service airline needed innovation to keep improving and being a customer choice, in which the strategic decision making was taken in decentralization method according to the dynamic needs in the midst of uncertain competitive environment.

The implications of this research are expected to complement literatures concerning to organizational design and structure, especially aviation industry in Indonesia which has not been widely examined scientifically and add enhance insights on the need of decentralization in order to pursue the higher organizational performance. The limitations of this recent research are related to the research methods and research scope in only one organization. The researchers suggest to the next researchers to conduct a research on several organizations for the best implementation of organizational design.

REFERENCES

- 1) Annual Report PT Garuda Indonesia (Persero) Tbk. 2019.(access on 11 Juli 2021).
- 2) Ağar. 2012. The Relationship Between Organizational Structure And Job Involvement In Labour And Technology Intensive Industrial Enterprises: A Comparative Analysis Based on a Field Study, *International Journal of Business and Commerce*, 2 (2), 2-20
- 3) Amstrong, O and Rasheed, A. 2013. Structural Dimensions and Functions of Structure Influencing Agribusiness Enterprises: Mechanistic Vs Organic Systems Approach. *IOSR Journal of Business and Management (IOSR-JBM)*. ISSN: 2278-487X. Volume 6, Issue 6.
- 4) Avci, U., Madanoglu, M. and Okumus, F. 2011. Strategic Orientation and Performance of Tourism Firms: Evidence from a Developing Country. *Tourism Management*, 32, 147-157.
- 5) Ballantyne, S. (2012). Leadership Decisionmaking Utilizing A Strategic Focus To Enhance Global Achievement. *Journal of Management & Marketing Research*, 1, 1-6.
- 6) Board Manual Human Capital PT Garuda Indonesia Tbk. 2019. https://www.garuda-indonesia.com/content/dam/garuda/pdf/investorrelations/corporategovernance/Board_Manual.pdf. (access on 11 Juli 2021).
- 7) Dragomir. 2012. Causes generating risks in business management. *Review of General Management*, Volume 12, Issue 2, pp. 160-166.
- 8) Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- 9) Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- 10) Idawati, W. 2011. Pendekatan Teori Kontigensi Dalam Prespektif Pengambilan Keputusan Manajemen. *Jurnal Akuntansi Bisnis*, Vol 4 No. 1 P 54-67.
- 11) Imam, M. 2015. Analisa Desain dan Struktur Organisasi PT. Garuda Indonesia (Persero) Tbk. <https://mohdimam.wordpress.com/2015/05/28/analisa-desain-dan-struktur-organisasi-pt-garuda-indonesia-persero-tbk/> (access on 10 Juli 2021).
- 12) Jewczyn, N. 2010. Assessing Mechanistic and Organic Organizational Structures: Measuring Organizational Uncertainty and Determining an Organization's Proper Structure. *Journal of Business Management and Entrepreneurship*, Vol. 1 Issue 6.
- 13) Mehrabi J., Alemzadeh M., Jadidi, M. 2013. Explaining the Relationship between Organizational Structure and Dimensions of Learning Organizations (Case study: Education Organization in Borojerd County and the Related Departments). *International Journal of Academic Research in Business and Social Sciences*, 3 (4), 116-128.
- 14) Musso F and Francioni, B. 2012. The Influence of Decision-Maker Characteristics On The International Strategic Decision-Making Process: An SME Perspective. *Procedia – Social and Behavioral Science* 58. Musso, J. (2011). *Forward, Planning in Reverse : A Viable Approach to Organizational Leadership*. Lanham, MD : Rowman & Littlefield Publisher.
- 15) Negulescu. 2014. The Quality of Decision Making Process Related to Organizations Effectiveness. *Procedia Economics and Finance* 15.
- 16) Oshita, Pavao dan Borges. 2017. Analysis of The Organizational Structure of Enterprises of Technological Basis with Projects Without Incubators. *International Journal of Innovation (IJJ Journal)*, Vol 5 Issue 2.

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- 17) Papadakis, VM. 2006. Do CEOs Shape The Process of Making Strategic Decisions? Evidence From Greece. *Management Decision*, Vol 44 No. 3 pp 367-394. Emerald Group Publishing Limited.
- 18) Purwati, A dan Zulaikha, S. 2006. Teori Kontinjensi, Sistem Pengendalian Manajemen Dan Outcomes Perusahaan: Implikasinya Dalam Riset Masa Kini Dan Masa Yang Akan Datang. *Performance*, Vol: 4 No.1 September 2006.
- 19) Rahmawati, T. 2015. Mengenal Contingency Theory: It All Depend Theory.
- 20) <http://smtp.lipi.go.id/berita431-Mengenal--E2-80-9CIt-All-Depends-Theory-E2-80-9D.html> (access on 20 Oktober 2021)
- 21) Rutherford-Silvers J. 2008. The risk management process, tools, and techniques in Risk Management for Meetings and Events. A volume in *Events Management*, pp. 24–52.
- 22) Sekliuckiene and Hopeniene. 2011. Strategic Position of Lithuanian Travel Services Companies: Response To The Tourism Trends. *Social Sciences* 71 (1) : 24-33.
- 23) Stefanescu. 2013. Risk Management In Economic Crisis. *Review of General Management*, Volume 18, Issue 2, p.90-97.
- 24) Tarigan S. 2009. Antecedent Keberhasilan Eksekusi Strategi: Sebuah Model dan Proposisi Berdasarkan Studi Kasus di Industri Telekomunikasi.
- 25) Wang, Wang, Patel & Patel. 2004. A Layered Reference Model of The Brain (LRMB). *IEE Transactions on System, Man and Cybernetics*. Vol 36 No 2.
- 26) Wang, Y., & Ruhe, G. R. 2007. The Cognitive Process of Decision Making. *International Journal of Cognitive Informatics and Natural Intelligence*, 1(2), 73-85.