

Industrial Engineering and Operations Management Perspectives: A Research in Management on Leadership

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Abstract

This paper elaborates and conducts research in Management on Leadership from perspectives of Industrial Engineering (IE) and Operations Management (OM), known as IEOM. Prior to discuss Leadership concept, then IEOM concept is discussed with highlight on Management that is applicable to the Engineering, as it has been researched by Chelsom, Payne and Reavill (2005). The objective of this paper is to discuss the importance of Leadership toward the IEOM. This paper relates concept, theoretical aspects and managerial implications of Leadership within unit analysis of individual, company and nation toward global benefit. The empirical study refers to situation of last 5 Years, including Year 2013. As scope of the problem and in the scope of a nation, Indonesia, during last 5 until 10 years, has been experiencing fluctuation in Leadership as compared with other nations within global setting. The discussion in this paper comprises view point of Leadership Classics, the main references are research of McMahon (2010), discussing the Leadership Classics of Confucius from 500 BC, Machiavelli from 1532, and modern aspects by Lewin, White & Lippitt (1939) until recent modern research of 1990s until 2000s. The Methodology in this paper refer to Neuman (2013 and 2011) and Creswell (2009).

Keywords

Industrial Engineering, Operations Management, Leadership, Malcolm Baldrige, Indonesia

Introduction

This paper elaborates and conducts research in Management on Leadership from perspectives of Industrial Engineering (IE) and Operations Management (OM), known as IEOM. Prior to discuss Leadership concept, then IEOM concept is discussed with highlight on Management that is applicable to the Engineering, as it has been researched by Chelsom, Payne and Reavill (2005).

The Methodology in this paper refers to Neuman (2013 and 2011) and Creswell (2009). The objective of this paper is to discuss the importance of Leadership toward the IEOM. This paper relates concept, theoretical aspects and managerial implications of Leadership within unit analysis of individual, company and nation toward global benefit.

The empirical study refers to situation of last 5 Years, including Year 2013. As scope of the problem and in the scope of a nation, Indonesia, during last 5 until 10 years, has been experiencing fluctuation in Leadership as compared with other nations within global setting. In term of Indonesia, this paper discusses the two aspects of Planning and Strategic Management are the ground for further elaboration of this paper, pertaining: i. Organizing for Stability, ii. The discussion of Leadership and other variables/construct in silo and/or integrated perspective. iii. Furthermore, this paper share the same purpose according to related Variables/Constructs. Precisely, beside Leadership, the other Variables/Constructs in this paper are: Strategic and Value Creation, Effective Decision Making, Organizational Behavior, and Human Capital Strategy toward Sustainable Competitive Advantage. Manajemen Penyelenggaraan Negara (MPN), known as State Government Management (SGM) in Indonesia refers to the overall periods of the following Former Presidents and President of Indonesia from the beginning to the present position:

- 1). The late Ir. Soekarno,
- 2). The late Soharto,
- 3). B J Habibie,

- 4). The late Abdurrahman Wahid (Gus Dur),
- 5). Megawati Soekarno Putri,
- 6). Susilo Bambang Yudhoyono (SBY).(Current President).

The discussion and background of this paper refers to all periods of those 6 (Former) President(s). **Yet, the focus will be on** the period of President SBY and the incoming new election in 2014 and its newly elected President. Precisely, the question arises into “Who will be the Next Indonesian President” as indicated in Figure 1.



Figure 1. General Election 2014 and Its Newly Elected President

Furthermore, the discussion still refers to the title of this paper, and its elaborated discussion of “Manajemen Penyelenggaraan Negara (MPN), known as State Government Management (SGM) and discussion of Leadership, Power and Conflict through the Lens of Political Parties, Violence and Corruption, that distract the main responsibilities of Leader to serve People toward Indonesia Progress in term of Business Climate, Economic Growth, Competitiveness, Sustainability and Sustainable Competitive Advantage”

Literature Review

The discussion in this paper comprises view point of Leadership Classics, the main references are research of McMahon (2010), discussing the Leadership Classics of Confucius from 500 BC, Machiavelli from 1532, and modern aspects by Lewin, White & Lippitt (1939) until recent modern research of 1990s until 2000s.

Furthermore, This session of Literature Review on this paper, other than Performance aspect of Malcolm Baldrige Criteria, has discussion focus on the Planning, Strategic Management, Organizing for Stability, Leadership and other variables/constructs that are chosen in this paper. The systematical writing in this session commences with those Leaderships and Variables/Constructs, and followed by other discussions, including Pupo and Martin (2012), and Rodriguez and Navarro (2004).

Textbooks and Referred Journals in Leadership

The first focus of reference pertaining Leadership refers to Bass (2008); in The Bass Handbook of Leadership, as indicated in Figure 2. Especially in term of Transformational and Transactional Leader.

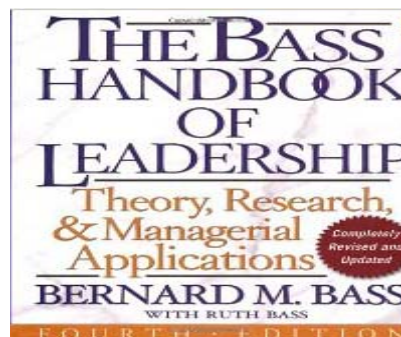


Figure 2 The Bass Handbook of Leadership

e conflict. Precisely, Unit relationship conflict.

The path diagram illustrates the relationships between five variables. The paths and their standardized coefficients are as follows:

- Leader Moral Identity Symbolization to Ethical Leadership: .44***
- Leader Moral Identity Symbolization to Unit Unethical Behavior: -.08
- Leader Moral Identity Symbolization to Unit Relationship Conflict: -.04
- Leader Moral Identity Internalization to Ethical Leadership: .22†
- Leader Moral Identity Internalization to Unit Unethical Behavior: -.20*
- Leader Moral Identity Internalization to Unit Relationship Conflict: -.17*
- Ethical Leadership to Unit Unethical Behavior: -.78***
- Ethical Leadership to Unit Relationship Conflict: -.09
- Unit Unethical Behavior to Unit Relationship Conflict: -.59***

Red arrows highlight the significant paths from Leader Moral Identity Symbolization to Unit Unethical Behavior, Ethical Leadership to Unit Unethical Behavior, and Unit Unethical Behavior to Unit Relationship Conflict.

The path diagram shows the following standardized coefficients:

- Leader Moral Identity Symbolization** to **Ethical Leadership**: .04
- Leader Moral Identity Symbolization** to **Unit Unethical Behavior**: -.24**
- Leader Moral Identity Symbolization** to **Unit Relationship Conflict**: .18
- Leader Moral Identity Internalization** to **Ethical Leadership**: .19**
- Leader Moral Identity Internalization** to **Unit Unethical Behavior**: -.36***
- Leader Moral Identity Internalization** to **Unit Relationship Conflict**: -.30***
- Ethical Leadership** to **Unit Unethical Behavior**: -.35***
- Ethical Leadership** to **Unit Relationship Conflict**: -.04***
- Idealized Influence** to **Unit Unethical Behavior**: .30*
- Idealized Influence** to **Unit Relationship Conflict**: .34**
- Interpersonal Justice** to **Unit Unethical Behavior**: -.32**
- Interpersonal Justice** to **Unit Relationship Conflict**: .38*
- Informational Justice** to **Unit Unethical Behavior**: .13
- Informational Justice** to **Unit Relationship Conflict**: .24
- Correlation between Symbolization and Internalization**: .28***

As indicated in previous session, Rodriguez and Navarro (2004) has brought up the research on Bibliometric. This journal is beneficial for the further research as related to this paper research, through the following authors:

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Rank	Document cited	1980–2000 <i>n</i> = 870		1980–86 <i>n</i> = 165		1987–93 <i>n</i> = 324		1994–2000 <i>n</i> = 381	
1	Porter (1980)	266	30.6%	41	24.8%	121	37.3%	104	27.3%
2	Rumelt (1974)	166	19.1%	40	24.2%	83	25.6%	43	11.3%
3	Porter (1985)	135	15.5%	0	0.0%	60	18.5%	75	19.7%
4	Chandler (1962)	131	15.1%	35	21.2%	56	17.3%	40	10.5%
5	Williamson (1975)	131	15.1%	13	7.9%	62	19.1%	56	14.7%
6	Nelson and Winter (1982)	114	13.1%	0	0.0%	40	12.3%	74	19.4%
7	Pfeffer and Salancik (1978)	107	12.3%	19	11.5%	38	11.7%	50	13.1%
8	Miles and Snow (1978)	105	12.1%	20	12.1%	52	16.0%	33	8.7%
9	Cyert and March (1963)	103	11.8%	25	15.2%	41	12.7%	37	9.7%
10	Thompson (1967)	103	11.8%	27	16.4%	43	13.3%	33	8.7%
11	Hofer and Schendel (1978)	101	11.6%	39	23.6%	44	13.6%	18	4.7%
12	Wernerfelt (1984)	95	10.9%	1	0.6%	15	4.6%	79	20.7%
13	Barney (1991)	88	10.1%	0	0.0%	5	1.5%	83	21.8%
14	Lawrence and Lorsch (1967)	88	10.1%	22	13.3%	35	10.8%	31	8.1%
15	Andrews (1971)	80	9.2%	18	10.9%	34	10.5%	28	7.3%
16	Penrose (1959)	76	8.7%	3	1.8%	22	6.8%	51	13.4%
17	Ansoff (1965)	75	8.6%	28	17.0%	30	9.3%	17	4.5%
18	Williamson (1985)	72	8.3%	0	0.0%	28	8.6%	44	11.5%
19	Scherer (1980)	67	7.7%	5	3.0%	27	8.3%	35	9.2%
20	Quinn (1980)	66	7.6%	10	6.1%	40	12.3%	16	4.2%
21	Prahalad and Hamel (1990)	64	7.4%	0	0.0%	19	5.9%	45	11.8%
22	Dierickx and Cool (1989)	63	7.2%	0	0.0%	7	2.2%	56	14.7%
23	Jensen and Meckling (1976)	63	7.2%	2	1.2%	26	8.0%	35	9.2%
24	Weick (1969)	61	7.0%	6	3.6%	26	8.0%	29	7.6%
25	March and Simon (1958)	59	6.8%	10	6.1%	24	7.4%	25	6.6%
26	Mintzberg (1978)	58	6.7%	7	4.2%	39	12.0%	12	3.1%
27	Bower (1970)	50	5.7%	13	7.9%	21	6.5%	16	4.2%
28	Child (1972)	50	5.7%	8	4.8%	19	5.9%	23	6.0%
29	Aldrich (1979)	49	5.6%	6	3.6%	24	7.4%	19	5.0%
30	Barney (1986)	49	5.6%	0	0.0%	7	2.2%	42	11.0%
31	Hannan and Freeman (1984)	47	5.4%	0	0.0%	18	5.6%	29	7.6%
32	Lippman and Rumelt (1982)	47	5.4%	1	0.6%	20	6.2%	26	6.8%
33	Mintzberg <i>et al.</i> (1976)	46	5.3%	14	8.5%	21	6.5%	11	2.9%
34	Burns and Stalker (1961)	45	5.2%	14	8.5%	20	6.2%	11	2.9%
35	Cohen and Levinthal (1990)	45	5.2%	0	0.0%	6	1.9%	39	10.2%
36	Hambrick and Mason (1984)	45	5.2%	0	0.0%	26	8.0%	19	5.0%
37	Rumelt (1984)	45	5.2%	0	0.0%	13	4.0%	32	8.4%
38	Buzzell <i>et al.</i> (1975)	44	5.1%	23	13.9%	17	5.2%	4	1.0%
39	Tushman and Anderson (1986)	44	5.1%	0	0.0%	15	4.6%	29	7.6%
40	Hannan and Freeman (1977)	43	4.9%	3	1.8%	21	6.5%	19	5.0%
41	Schendel and Hofer (1979)	43	4.9%	16	9.7%	18	5.6%	9	2.4%
42	Palepu (1985)	42	4.8%	0	0.0%	21	6.5%	21	5.5%
43	Rumelt (1991)	41	4.7%	0	0.0%	7	2.2%	34	8.9%
44	Christensen and Montgomery (1981)	40	4.6%	4	2.4%	28	8.6%	8	2.1%
45	Wrigley (1970)	40	4.6%	19	11.5%	16	4.9%	5	1.3%
46	Peteraf (1993)	39	4.5%	0	0.0%	0	0.0%	39	10.2%
47	Porter (1987)	39	4.5%	0	0.0%	19	5.9%	20	5.2%
48	Rumelt (1982)	39	4.5%	5	3.0%	28	8.6%	6	1.6%
49	Teece (1982)	38	4.4%	0	0.0%	16	4.9%	22	5.8%
50	Caves and Porter (1977)	37	4.3%	4	2.4%	15	4.6%	18	4.7%

Note: *n* = number of articles published in every period.

It is interesting to relate the top 30 authors in the above table, as relate to the discussion of strategy in general. Yet, it is still relevant to the discussion of this paper, as actually a lot of authors in the above table is cited in this paper as well.

Textbooks and Referred Journals in Strategic and Value Creation

Chatain and Zemsky (2011) elaborated the discussion of Value Creation and Value Capture. It is assumed by this paper, that in order to have the Value Creation. It is indispensable to have Value Capture, through the Strategic Management.

Textbooks and Referred Journals in Effective Decision Making

Haris (2012) elaborated the Decision Making in term of Determinant Factors, as illustrated in the following figure 5:

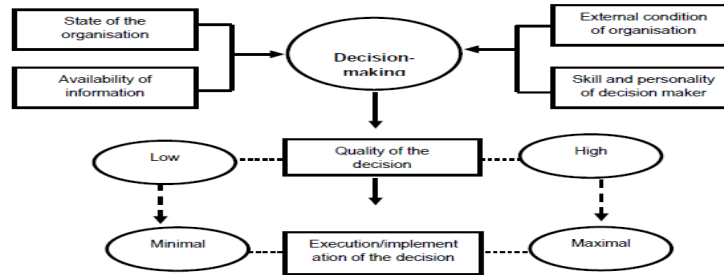


Figure 5 Determinant Factors of Effective Decision Making

Furthermore, Riel et al (2003) elaborated the Antecedents of Decision Making, In the following figure 6:

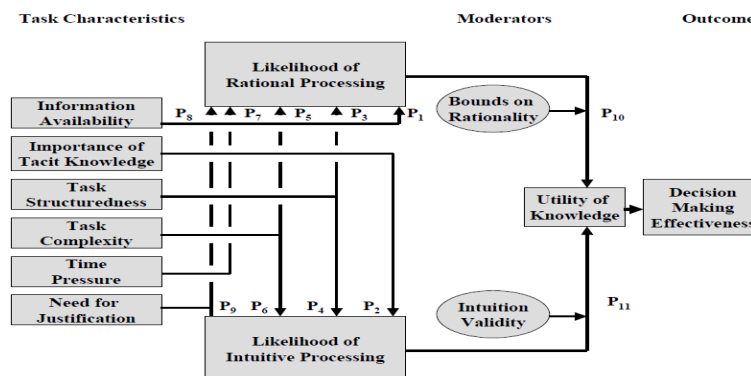


Figure 6 Antecedents of Decision Making

Textbooks and Referred Journals in Organizational Behavior

Giberson et al (2009) related the Organization with Leadership, as it is indispensable for this paper pertaining Leadership and its variables/constructs. Precisely, by the time it is dealing with culture and its organizational behavior.

Textbooks and Referred Journals in Human Capital Strategy

Dimba (2010) elaborated the discussion on Human Resources as eventually can be linked toward the Human Capital Strategy. In particular, in Dimba (2010) research, it related the performance, that in this paper Leadership has influence on its variables/constructs that relate to performance and eventually competitive advantage and its competitive advantage.

Textbooks and Referred Journals in Sustainable Competitive Advantage

Taleghani et al (2012) elaborated the Competitive advantage in Figure 7, from view point of Innovation. This model can be referred as the link between Leadership, Strategic Management, Value Creation, Organizational Behavior, Human Capital Strategy and Sustainability that is originated from the Leader and Innovation.

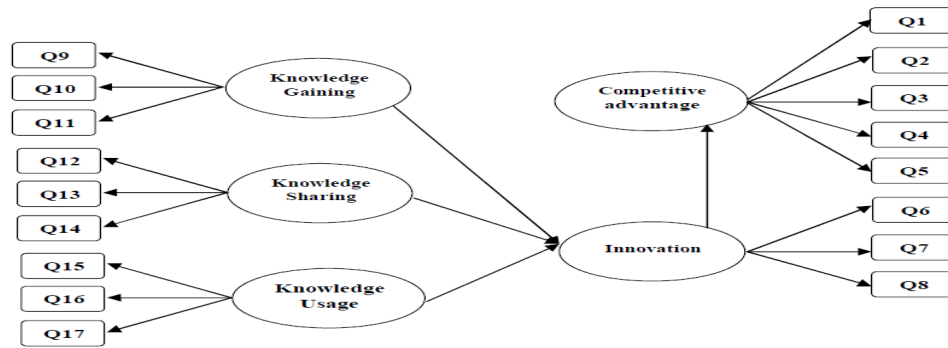


Figure 7 Innovation and Competitive Advantage

Literature Review and Organization Stability

Robbins and Coulter (2011) in their textbook, elaborated the mentioned this topic pertaining the Organization.

Other than this book, the journal by Widodo (2011) has also elaborated the discussion on view point of Quality from this figure 8:



Figure 8 Quality, Organization Stability and Organizational Performance

Methodology

The Methodology in this paper refer to Neuman (2013 and 2011) and Creswell (2009). The objective of this paper is to discuss the importance of Leadership toward the IEOM. This paper relates concept, theoretical aspects and managerial implications of Leadership within unit analysis of individual, company and nation toward global benefit. The empirical study refers to situation of last 5 Years, including Year 2013. As scope of the problem and in the scope of a nation, Indonesia, during last 5 until 10 years, has been experiencing fluctuation in Leadership as compared with other nations within global setting.

Results and Discussions

Leadership and other variables/constructs in Integrated Perspective

Integrated Perspective, is viewed from two aspects: First, Leadership in term of the figure of the person himself or herself. Second, Leadership in term of the styles of himself or herself. Both aspects will provide leverage for other 5(five) variables/constructs. In this paper the Leader figure relates to the figure of President SBY. The focus in the current situation, as Muhammad Nazarrudin, as treasurer, has involved other Partai Demokrat (PD) important person, to be dragged into the turbulence of Political Party and Corruption; not to mention possible violence. It is deemed indispensable to refer to **Bass (2008)** Handbook pertaining Leadership, so that President SBY can refer to Bass' work in Figure 2, on Leadership, in particular in the topic of Presidential Leadership and Conflict Resolution. Further reference on Leadership, can refer also to Stewart (2006) that compared the work of Bass, Burns, Avolio and Leithwood.

Case Study: This paper on Leadership and its 5 Variables and Constructs

As considering the listed models in this paper through the literature review and their model, then the compilation of this model is developed. In Figure 9, Other considerations including the Lens of Political Parties, Violence and Corruption generate impact vice et versa toward the Leadership, Power and Conflict and the Starting Point. The end result refers to the Sustainable Competitive Advantage, with the common link among them, as illustrated in Figure 10, in term of other variables/Constructs of *Strategic and Value Creation*, *Effective Decision Making*, *Organizational Behavior*, and *Human Capital Strategy*.

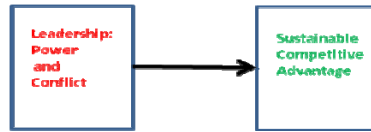


Figure 9 Starting Point and Ending Point of Model



Figure 10 Variables and Constructs between Starting and Ending Point of Model



Figure 11 Proposed Model Number 1

- The distinctive feature of this model that HCS is placed in the center of this model, and plays an active role in sculpturing the OB that eventually impact the SCA. It is important to highlight that this HCS is influenced by both SVC and EDM, that is, in turn, influenced by LPC.

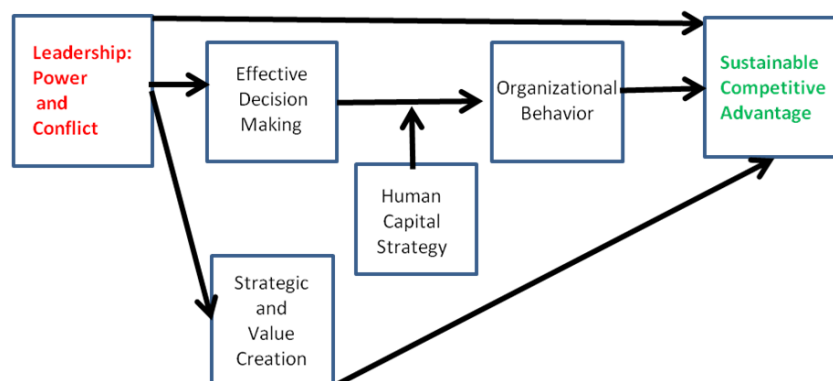


Figure 12 Proposed Model Number 2

- The distinctive feature of this model that HCS is placed in the center of this model, and plays an active role in as moderating the EDM and OB, that eventually impact the SCA. Unlike model 1 in Figure 11, this HCS is NOT influenced by both SVC and EDM, that is, in turn, influenced by LPC. Furthermore, the SVC is DIRECTLY influencing the SCA.

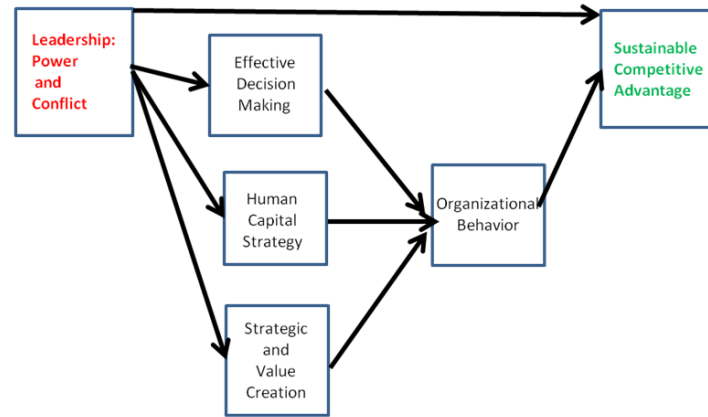


Figure 13 Proposed Model Number 3

Furthermore to relate the 3(three) proposed models, and the situation of this paper, the following aspects is depicted further, from the viewpoint of distinctive feature.

- The distinctive feature of this model 1 of Figure 11, that HCS is placed in the center of this model, and plays an active role in sculpturing the OB that eventually impact the SCA. It is important to highlight that this HCS is influenced by both SVC and EDM, that is, in turn, influenced by LPC.
- The distinctive feature of this model 2 of Figure 12, that HCS is placed in the center of this model, and plays an active role in as moderating the EDM and OB, that eventually impact the SCA. Unlike model 1 in Figure 11, this HCS is NOT influenced by both SVC and EDM, that is, in turn, influenced by LPC. Furthermore, the SVC is DIRECTLY influencing the SCA.
- The distinctive feature of this model 3 of Figure 13, that HCS is *no longer* placed in the center of this model, as it is replaced by OB. In this model, OB is influenced by EDM, HCS and SVC. Eventually this OB influence SCA and Yet, LPC still influence directly SCA.

Conclusions

This paper elaborates and conducts research in Management on Leadership from perspectives of Industrial Engineering (IE) and Operations Management (OM), known as IEOM. Prior to discuss Leadership concept, then IEOM concept is discussed with highlight on Management that is applicable to the Engineering, as it has been researched by Chelsom, Payne and Reavill (2005). The objective of this paper is to discuss the importance of Leadership toward the IEOM. This paper relates concept, theoretical aspects and managerial implications of Leadership within unit analysis of individual, company and nation toward global benefit. The empirical study refers to situation of last 5 Years, including Year 2013. As scope of the problem and in the scope of a nation, Indonesia, during last 5 until 10 years, has been experiencing fluctuation in Leadership as compared with other nations within global setting. In Indonesia, There are valuable lesson learnt from the “Manajemen Penyelenggaraan Negara (MPN)”. Lesson learnt from the past, since the period of President Soekarno, until the journey of Political Parties in Indonesia, including during President SBY are valuable lessons for Indonesia. Precisely, the valuable lessons for Government of Indonesia and People as Citizen of Republic Indonesia; including for the future generations, in short term for the General election 2014 and its future next President.

The fluctuated situation of Political Parties can be originated from several aspects, including the number of Political Party that involved in the Parliament from many parties in 1955, until the narrowed down number of 3 parties (as the result of merged parties) in 1971-1997, and returning to many parties in 1999 and 2004. Those factors and not limited to them, contributed to the characteristics of “Manajemen Penyelenggaraan Negara (MPN)”, no matter who is the President at that period; that eventually generate impact in term of Leadership, Power and Conflict. Further discussion is needed, in term of to what extent the Leadership (President) contribute further to the situation. As discussion develops into the deployment of Planning and Strategic Management; it is indispensable to highlight the definition and stand point of both terminologies and their backgrounds toward viewpoint.

As future research other than highlight the word of Performance of Malcolm Baldrige Criteria, and in both Planning and Strategic Management; it is commendable for future research and further model development, that further improve the 3 proposed models. The two aspects are needed, in term of the lesson learnt for the baseline for future for both period after 2014 and beyond, in particular Lesson learnt from the past, since the period of President Soekarno, until the journey of Political Parties in Indonesia, including during President SBY are valuable lessons for Indonesia to achieve the ultimate goals.

Above all, it is expected that no matter the source and situation of Political Parties, Violence and Corruption, the President of Republic Indonesia is not distracted **from the main responsibilities as President** to serve People toward Indonesia Progress in term of Business Climate, Economic Growth, Competitiveness, Sustainability and Sustainable Competitive Advantage”

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Biography

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