



Talent Risk, Company Agility, and Competitive Advantage in Asian Automotive Industry

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Abstract: Several Asian countries today face talent risk and talent shortage especially in engineering- and technology-related fields within high-tech industries such as automotive component manufacturing and automobile industry. This situation can lead to the loss of competitiveness and business sustainability. Limited automobile companies have strategies to cope with talent risk, which involves increasing workforce agility and enables the companies to quickly adapt themselves to disruptive changes. Those companies can reduce the impact from negative consequence of people risk. In this context, this study investigated the relationships between talent risk, competitive advantage, and agility in the Asian automotive industry. The data collection was collected from 12 automobile companies in Thailand, Malaysia, and Indonesia. The analysis was delivered in two phases; a quantitative step was the data collected were subjected to confirmatory factor analysis and simple path analysis; and a qualitative step as the results were confirmed through in-depth interviews with executives and managers. The study revealed that talent risk has a positive relationship with competitive advantage and agility mediates the relationship between talent risk and competitive advantage. Our findings imply that the Asian automotive industry should focus on building an agile workforce to reduce the impact of talent risk on competitiveness.

Keywords: Talent management; Talent risk; Agility; Talent supply; Competitiveness

1. Introduction

Manpower Group (2013) and Hay Group's (2015) surveys revealed that about 45% of employers believe that skills shortage can jeopardize effective business operations, and only 35% can recruit the right talents owing to the limited key talent supply. According to employers, people risk and talent shortage may hinder business growth and effective operation. The substantial talent shortage in Asian automotive companies has led to talent war and talent uprising in the automotive industry (www.Adecco.co.th/Adecco-news-detail.aspx?id=1585&c=1).

The Asian automotive industry faces an extreme talent shortage of engineers and technicians. Several automobile companies are therefore focusing on building their academy and investing in developing their talents from within. For example, Toyota company has established its own academy to develop their staffs' capabilities in the engineering and technology fields to cope with talent critical shortages, which increase their firm's competitiveness. This situation showed Toyota is equipped and has enhanced its agility to cope with the industry critical talent shortage. McCann et al. (2009) described "agility" as the capacity to move quickly to avoid any adverse result of the change. Concerning to Toyota, the company would be able to respond swiftly to talent shortages and maintain its business competitive advantage over its competitors. At the same time, other firms gradually prepare themselves to deal with talent risks. Apart from building skills, many companies have also identified the risks associated with talents to eliminate or reduce talent risk factors. Moreover, management-level employees, such as the chief executive officers (CEOs), business leaders, and human resource (HR) managers, have to work together to assess the external and internal factors contributing to talent risk (Nagpal, 2013). This study aimed to investigate talent risk and related key factors in the Asian automotive industry by selecting automobile companies that have a production with production base in Asia as the units of study.

2. Literature Review

2.1 Purposes of the Research

1. To investigate the relationship between talent risk and competitive advantage
2. To investigate the mediating effect of agility in the relationship between talent risk and competitive advantage

2.2 Talent Risks

Nagpal (2013) explored the talent agenda worldwide by interviewing CEOs, business leaders, and HR executives. He found that most executives let HR Play an essential role in the talent agenda. Talent management is a strategic activity aligned with the firm's business strategy that aims to attract, develop, and retain talented employees at each level of the organization (Hatun, 2010, 2013).

Nagpal indicated that the talent plan belongs to the CEOs or business leaders because they can directly drive a talent strategy. He proposed three fundamental principles in this regard. First, organizations need to profoundly investigate both external and internal factors that impact on their talents. Second, talent strategies must be right executed to avoid and eliminate talent risk. Third, all critical positions must be owned and reviewed by CEOs or business leaders. Moreover, the CEOs or business leaders must involve in the talent management process, which includes attracting, developing, and retaining their critical talents. The companies capable of attracting and retaining the most talented and suitable individuals can provide a sustainable competitive advantage to their stakeholders.

Nagpal (2013) proposed in his previous study on 11 talent risk variables which include market opportunity, talent attraction, employee vintage, management ability, etc. He classified the 11 variables from three distinct points of view. The first point, called market maturity, represent the external factors. For the second and third points called organizational readiness and organizational aspiration, respectively, describe the internal factors.

2.3 Organizational Practices and Workforce Agility

Despite the increasing attention on workforce agility in the context of a dynamic business environment, there is still unclear of accurate definition and sufficient theories about workforce agility (Breu et al., 2001; Sherehiy, 2008; Alavi et al., 2014). Several researchers defined workforce agility either as a specific ability, attitude, or behavior that is demonstrated or required by employees in a volatile global business environment. Considering workforce agility as an ability of the workforce, Kidd (1994) commented that workforce agility involves two main elements: the power of the force to respond to changes in proper ways and in due time and the ability of the workforce to exploit differences and take advantage of them as opportunities.

2.3.1 Agility

McCann et al. (2009) explored the relationship between agility, resiliency, and environmental turbulence in 471 North American companies. His research findings showed a positive relationship between skills and performance, and resiliency and performance, and turbulence acts as a moderator in this relationship (Figure 1).

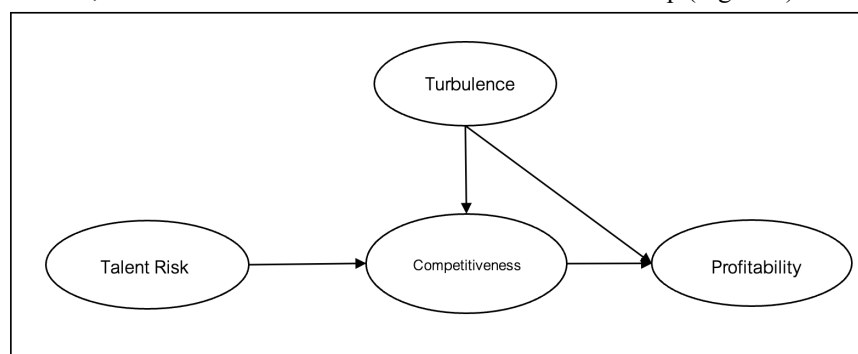


Figure 1: Profitability Path Model

This finding indicates that companies with a high level of agility and resiliency have a more competitive advantage and are profitable even when they face a high level of environmental turbulence. The study, therefore, established a correlation between the measurements of agility, resiliency, and environmental turmoil. Agility will measure the capacity

of responsive action on business environmental changes, while environmental turbulence will measure the level of perceived turbulence experienced by the managers.

There are many methods to build agility, such as investing in-company training and development, empowering organization development, and increasing workforce mobility. Many researchers have reported that agility is the critical success factors for firms dealing with high exposure to talent risk. When organizations know which risk factors impact their talents, they can effectively manage them (Guangrong et al., 2013; Dries and Swisher, 2013; Gochman and Storfer, 2014).

2.4 Talent Risk and Competitive Advantage

Talents are the most essential resources in production, and talent supply is imperative to building long-term business growth and sustainability. Therefore, many companies try to adopt a people strategy to retain their critical talents by identifying the organization's purpose, investing in talent development, and embedding company culture to engage their critical talents.

Furthermore, Jiangwei (2009) studied core competitiveness in small- and medium-sized companies in China and found that talents significantly contributed to core competitiveness and talent shortage reduced competitiveness. Jiangwei also stated that talent shortage and competitiveness are interrelated; that is, firms that lose their competitiveness are likely to face talent shortage because talents tend to leave such firms; conversely, talent shortage would also result in firms losing their competitiveness. Although China holds first place in the world population, the country is also one of the high talent-risk countries facing talent shortage and a talent war in several leading industries.

Several researchers have measured and identified critical variables of the competitive advantage, which include high-profit growth rate, high sales revenue growth rate, low operating costs, increasingly higher market share, organization reputation, and employee commitment. According to Porter's (1985) competitive strategy, there are two primary sources of sustainable competitive advantage: cost advantage and product differentiation (Gierczak, 2014; Mylonakis, 2014; Ahmad et al., 2014; Li and Liu, 2014; Gleissner et al., 2013; Hsu, 2013).

3. Conceptual Framework

This study combines Nagpal's concept and McCann et al.'s agility framework. Some talent risk variables in the Asian context include education policy, talent mismatch, and internal branding. All the above three variables are not included in Nagpal's concept, and thus, this study will add them all to this conceptual framework. Therefore, the conceptual framework (Figure 2) will be composed of two parts. The first part expresses 12 talent risk variables and the second part shows the relationship between independent variables (talent risk), dependent variables (competitive advantage), and mediators (agility).

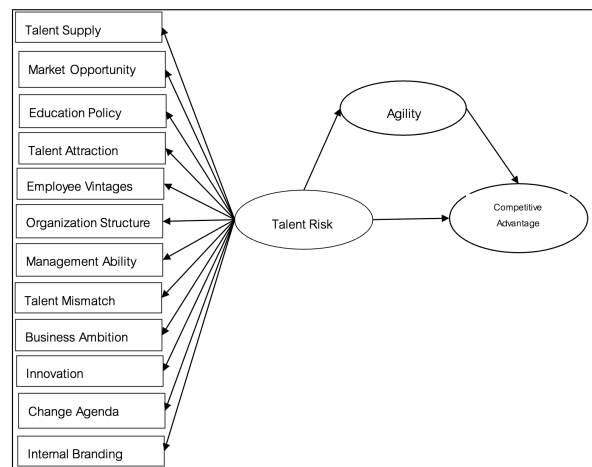


Figure 2: Conceptual Framework

3.1 Hypotheses

Talent resources are one of the key production factors and whenever companies face talent shortage, they lose their competitive advantage. Thus, the researcher proposed the following hypothesis.

Hypothesis 1: Talent risk has a negative relationship with a competitive advantage. Companies with high talent risk may lose their competitive advantage; unless they are can adopt good talent strategy, it will help reducing their talent risk effect. Hence, the researcher proposed the following hypothesis.

Hypothesis 2: Agility mediates the relationship between talent risk and competitive advantage.

4. Research Methodology

This study employed the mixed method research methodology, which combines both quantitative and qualitative methods. The mixed-method methodology differs depending on the forms of data collection and data analysis. Here the researcher used the explanatory sequential mixed method process, which involves collecting the quantitative data, analyzing the data to obtain results, and then using the results to plan the qualitative phase. The qualitative phase helps explain the quantitative data results in detail. The survey collection was collected in the first step and therefore followed up with qualitative executive interviews to help explain the survey responses. The study is therefore separated into two steps as follows:

First Step

In this phase, the relation between several variables; talent risk, agility, environmental turbulence, and competitive advantage; were examined. Confirmatory factor analysis was employed to confirm all talent risk factors by distributing 420 questionnaires with a 7-point Likert scale. The 7-point Likert scale used in this study to increase the variance in the measures. Moreover, simple path analysis used to investigate the relationship between talent risk, agility, environmental turbulence, and competitive advantage.

Second Step

In this phase, the results confirmed through in-depth interviews. Qualitative data were conducted through executive in-depth interviews with top managers of 12 automobile companies and experts from the automobile industry. A total of 15 people were interviewed through the open question technique.

4.1 Population and Sample

The automotive industry in Thailand, Malaysia, and Indonesia comprises producers and dealers. The producers manufacture or assemble automobiles in Thailand and sell them in either domestic or overseas markets. The dealer only imports car and sells them in Asian markets. As mentioned earlier, the Thailand automobile industry faces a talent shortage, mainly engineers and technicians involved in the production process. This study focuses on 12 such Asian automobile companies. This sampling method is called judgment sampling. It is based on nonprobability as the sample is selected based on the researcher's judgment. However, the researcher must be confident that the chosen model represents of the entire population. The researcher selected automobile companies with a production base in Thailand, Malaysia, and Indonesia.

The respondents of this study are company executives and managers. This study distributed 1000 questionnaires among 12 automobile companies representing the entire automobile industry, and 420 completed questionnaires returned for analysis. A sample size of 420 is large enough to obtain a less standardized root mean square residual (SRMR) and a more comparative fit index (CFI).

For the qualitative method, the number of interviewees varies depending on the study area. However, most researchers have interviewed 15 to 30 people (Trotter, 2012; Marshall et al., 2013). In this study, there were 15 interviewees, which included executives and top managers in 12 automobile companies and some experts in the automobile industry.

5. Data Processing and Analysis

This study analysis separates into two parts.

1. To confirm the relationships between talent risk factors and talent risk, and; to check whether all aspects belong to talent risk using confirmatory factor analysis
2. To investigate the relationship between talent risk, agility, environmental turbulence, and competitive advantage.

This phase will use data from the questionnaires and employ Structure Equation Modeling and Simple Path Analysis to investigate these relationships.

5.1 Data Analysis

For the data analysis, 1000 questionnaires were sent to 12 automobile companies in Thailand, Malaysia, and Indonesia. However, only 420 questionnaires were returned to the researcher. There are 61 items in the questionnaire, including demographics data, talent risk, agility, and competitive advantage. This questionnaire used the 7-point Likert scale to measure the respondents’ opinions ranging from 1 = Entirely Disagree to 7 = Entirely Agree. The validity of the questionnaire was used the Index of Item-Objective Congruence (IOC). While reliability test, researcher used Cronbach’s alpha test for the analysis and outcome showed the result of the overall score of Cronbach’s alpha test above 0.9 that was greater than 0.700. Therefore, the questionnaire accepted as reliable for use in this study (Table 1).

Table 1: Structure Equation Modeling (SEM) Criteria

Index	Criterion	Result	Result
Average Path Coefficient (APC)	P>0.05	P<0.001	Sig.
Average R Squared (ARS)	P>0.05	P<0.001	Sig.
Average block VIF (AVIF)	Acceptable if <=5, ideally <= 3.3	1.564	Fit
Average full collinearity VIF (AFVIF)	Acceptable if <=5, ideally <= 3.3	1.561	Fit
Goodness of Fit (GoF)	Small >=0.1, Medium >=0.25, Large >=0.36	0.393	Fit
Sympson’s Paradox Ratio (SPR)	Acceptable if >=0.7, ideally >= 1.0	0.750	Fit

The direct and indirect effects of the research path model are shown in Figure 3. There are two direct effects and one indirect effect. The results are as follows:

Path 1; Talent Risk -----> Competitive Advantage

There is only a direct effect between talent risk and competitive advantage, which is a negative relationship between both variables with a path coefficient = 0.36.

Path 2; Talent Risk ----->Agility

There is only a direct effect between talent risk and agility, which is a positive relationship between both variables with a path coefficient = 0.67.

Path 3; Talent Risk -----> Agility -----> Competitive Advantage

There are both a direct and indirect effects. Regarding direct effect, a negative relationship exists between talent risk and competitive advantage with a path coefficient = -0.36. Regarding the indirect effect, agility mediates the relationship between talent risk and competitive advantage with a path coefficient = 0.068. Therefore the total effect (direct effect + indirect effect) between talent risk and competitive advantage is, -0.36+0.068 = -0.292

The results showed that the higher the talent risk of companies, the lower their competitive advantage. However, if their agility is high, they may be able to quickly perceive the talent risk and reduce its impact. However, from statistical findings, most Asian automobile companies have medium agility, and face high talent risk; therefore, the talent risk cannot be mitigated. Agility is the key factor that helps reduce the impact of talent risk. This entails that the Thailand automobile industry needs to build its workforce agility to cope with the increasing competitiveness prevalent today.

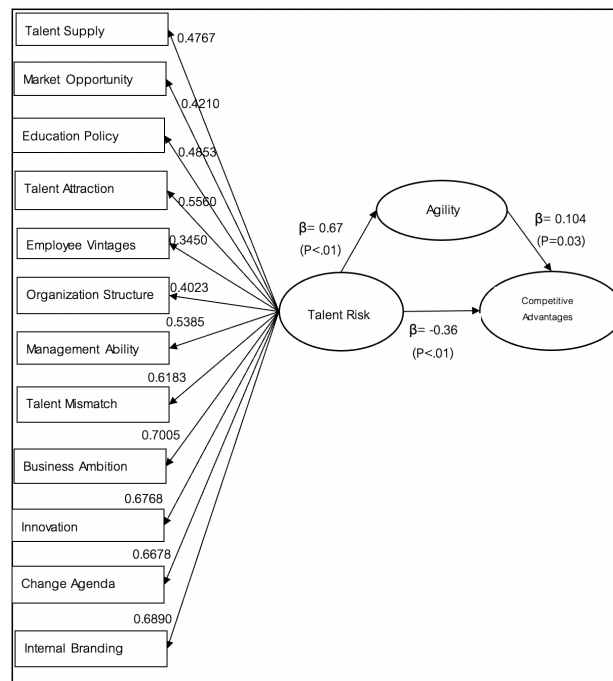


Figure 3: Statistical Output

6. Discussion

The research findings revealed that a negative relationship exists between talent risk and competitive advantage in the Asian automotive industry, which reiterates the fact that talents are valuable assets and key success enablers for a company. For the firm with able to retain critical talent therefore can increasing long-term a company's productivity and contribute to long-term sustainability with gaining more competitive advantage over their competitors (Mathur, 2015). Hence, it is imperative that companies pay attention to attracting, engaging, and retaining their key talents to avoid damaging business impact.

The study finding was in line with Jiangwei (2009), who reported that talent shortage reduces competitiveness. However, Jiangwei studied only one talent risk variable, talent shortage. The talent shortage in Jiangwei's study aligns with talent supply in this research. Ritesh (2014) and Serban and Andanut (2014) indicated that talents were the most valuable assets for sustainable competitive advantage (Rabbi et al., 2015). The Asian automotive industry and other companies worldwide should invest in resources to create their unique talent program to speed up their talent identification and talent development programs which tailored to fit with their crucial talent group. Additionally, the top management and line managers should commit to working together on talent management programs. They should oversee and monitor the talent dashboard and review any talent risk that may happen in the future.

This study ascertained that agility mediates the relationship between talent risk and competitive advantage. Skills can reduce the impact of talent risk because it has a positive correlates with a competitive advantage. Moreover, this research finding corresponded to McCann et al.'s (2009) study, which reported that agility has a significant positive correlation with profitability and competitiveness. They concluded that companies should aim to build an agile workforce to deal with business risk in markets and to maintain competitive advantage (Lundby and Caligiuri, 2013; Sherehiy and Karwowski, 2014; Alavi et al., 2014).

There is very minimal empirical research in the area of talent risk. In the Asian automotive industry, most companies have a medium level of agility—they manage daily operations, such as machine breakdown, factory accidents, or any fundamental production risk, very well; therefore, most have programs, policies, and plans to cope with unexpected situations. Most automobile companies learn agility through their experiences in day-to-day handling problems.

However, there are also other unpredictable global phenomena like the economic crisis, COVID-19 pandemic, natural disasters, or political uncertainty the companies may have to face. Therefore, the Asian automotive industry should adopt an agile workforce at all levels to deal with dynamic changes in markets, maintain competitive advantage, and be resilient

to cope with uncertainty. Companies should work on creating agility by adopting new learning methods and new working methods (Alves et al., 2012).

7. Conclusion

This study established a negative relationship between talent risk and competitive advantage in the Asian automotive industry and found that agility could reduce the impact of talent risk on the competitive advantage of automobile companies. Therefore, to maintain a competitive advantage, automobile companies should focus on building agility to cope with uncertainty and associated risks, including people risk.

References

- Ahmad, A., Bosua, R., & Scheepers, R. (2014). Protecting organizational competitive advantage: A knowledge leakage perspective. *Computers & Security*, 42, 27–39.
- Alavi, S., Abd. Wahab, D., Muhamad, N., & Arbab Shirani, B. (2014). Organic structure and organizational learning as the main antecedents of workforce agility. *International Journal of Production Research*, 52(21), 6273–6295 [CrossRef](#)
- Alves, A. C., Dinis-Carvalho, J., & Sousa, R. M. (2012). Lean production as promoter of thinkers to achieve companies' agility. *The Learning Organization*, 19(3), 219–237.
- Beechler, S., & Woodward, I. (2009). The global “war for talent”. *Journal of International Management*, 15,(3), 273–285. [CrossRef](#)
- Dries, N. (2013). Talent management, from phenomenon to theory: Introduction to the Special Issue. *Human Resource Management Review*, 23(4), 267–271.
- Gierczak, B. (2014). Management Methods and Concepts for Building Competitive Advantage in Hospitality Companies. *Polish Journal of Sport & Tourism*, 21(3), 178–183.
- Gleissner, W., Helm, R., & Kreiter, S. (2013). Measurement of competitive advantages and market attractiveness for strategic controlling. *Journal of Management Control*, 24, 53–75. [CrossRef](#)
- Gochman, I., & Storfer, P. (2014). Talent for Tomorrow: Four Secrets for HR Agility in an Uncertain World. *People & Strategy*, 37(2), 24–28.
- Guangrong, D., De Meuse, K., & King Yui, T. (2013). The Role of Learning Agility in Executive Career Success: The Results of Two Field Studies. *Journal of Managerial Issues*, 25(2), 108–131.
- Hays Asia Salary Guide (2015).
- Hatum, A. (2010). Next generation talent management: Talent Management to Survive Turmoil. Palgrave Macmillan. [CrossRef](#)
- Hatum, A. (2013). The new workforce challenge: How Today’s Leading Companies Are Adapting to the Future. Palgrave Macmillan. [CrossRef](#)
- Hsu, P. (2013). Commodity or competitive advantage? Analysis of the ERP value paradox. *Electronic Commerce Research and Applications*, 12(6), 412–424. [CrossRef](#)
- Jiangwei, S. I. (2009). Study on the Core Competitiveness of Small and Medium-Sized Enterprises. *Orient Academic Forum* (pp. 585–589).
- Kock, N. (2015). WarpPLS 5.0 User Manual, 50
- Li, D., & Liu, J. (2014). Dynamic capabilities, environmental dynamism, and competitive advantage: Evidence from China. *Journal of Business Research*, 67(1), 2793–2799. [CrossRef](#)
- Lundby, K., & Caligiuri, P. (2013). Leveraging organizational climate to understand cultural agility and foster effective global leadership. *People & Strategy*, 36(3), 26–30.
- Mathur, P. (2015). Achieving competitive advantage through employees. *International Journal of Arts, Humanities and Management Studies*, 1(9), 66–71.
- McCann, J., Selsky, J., & Lee, J. (2009). Building agility, resilience and performance in turbulent environments. *People & Strategy*, 32(3), 44–51.
- Michaels, E., Handfield-Jones, H., & Axelrod, B. (2001). *The war for talent*. Harvard Business Press.
- Mylonakis, I. (2014). Sustained competitive advantage of the firms through HRM. *Global Education Journal*, 2014 (4), 111–118.
- Nagpal G. (2013). *Talent Economics: The Fine Line Between Winning and Losing the Global War for Talent* (1st ed). Kogan Page Limited.

- Nulty, D. (2008). The adequacy of response rates to online and paper surveys: what can be done?. *Assessment & Evaluation in Higher Education*, 33(3), 301–314.
- Porter, M. E. (1985). *The competitive advantage: creating and sustaining superior performance*. Free Press.
- Rabbi, F., Ahad, N., Kousar, T., & Ali, T. (2015). Talent management as a source of competitive advantage. *Journal of Asian Business Strategy*, 5(9), 208–214.
- Ritesh, J. (2014). Important and impact of human resource planning in effectiveness and competitiveness of an organization. *International Journal of Research*, 1(7), 531–538.
- Serban, A., & Andanut, M. (2014). Talent competitiveness and competitiveness through talent. *Procedia Economics and Finance*, 16, 506–511.
- Sherehiy, B., & Karwowski, W. (2014). The relationship between work organization and workforce agility in small manufacturing enterprises. *International Journal of Industrial Ergonomics*, 44(3), 466–473. [*CrossRef*](#)