

# High-performers' Required Competencies in Automobile Industry

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## *Abstract:*

The use of competency systems for evaluation, reward, and promotion has become commonplace in many organizations in recent years. Competency development and management are widely regarded as vital tools to enhance competitiveness for organizations. The aim of this research was to distinguish the differences in competencies among high-, medium- and low-performers in the automobile industry. Data were collected from Ford-Right Co., Ltd., a Ford Car dealer in southern Taiwan. In doing so, a large number of required competencies can be reduced into a compact set that focuses on significant competencies of high-performers. Based on the literature, we propose that Ford-Right employees have ten competencies: analytical thinking, flexibility, innovation, leadership, socialization, positive responsibility, implementation, cooperative spirit, communication, and achievement orientation. The results of the MANOVA help us to explore high-performers' required competencies. An empirical study is presented to illustrate the application of the proposed method. Based on our findings, conclusions and implications for management are presented.

*Key words:* competencies, high-performers, automobile industry

## **1 Introduction**

There is a growing understanding that competency development and management are critical instruments to boost competitiveness for organizations. Today, the concept of competencies has been assisted in the identification, selection and development of talents for organizations.

A competency model is a set of success factors, and includes the key behaviors required for excellent performance in a particular role (Schoonover et al., 2000). Furthermore, the competency model can be used to identify the required competencies which employees need to improve performance in their current job or to prepare for other job (Sinnott et al., 2002). There are many opportunities for business practitioners to utilize competency-based approach to improve individual, team and organizational performance. Applying competency models is now a leading strategy used by companies to identify and develop employees' competencies.

In Taiwan, the popularity of competency model as a human resources management tool has continued to

grow in recent years since automobile companies are struggling with a business slump because of increasing oil price and cost. During this period, a decline of sales is predicted and serious losses for them is expected as well. This fact represents an increase in the use of competency-based model to cultivate and integrate employees' knowledge and innovation. In this present study, we target one single automobile selling company – Ford-Right, the exclusive distributor of FORD Lio Ho Motor Company Ltd. in Yulin, Chiayi and Tainan.

The basic design used in this study is to compare data from high-performers against data from typical or average performers in order to determine competencies which predict performance. The data presented here are based on operant assessment of competencies using survey questionnaire, which are then statistically analyzed. Here, we hope to make at least two contributions to the research. First, we distinguish the differences in competencies among high-, medium, and low-performers from Ford-Right Co., Ltd. in the recent two years (2010-2011). Second, a comparison between the data from these two years is provided.

Finally, based upon the findings of this research, conclusions and suggestions are set forth.

## 2 Literature Review

### 2.1 Competencies

When Taylor, the father of modern management, employed time-and-motion studies to estimate productivity, competencies in business field first appeared. However, competencies, in both research and applied practices, have been defined in multiple ways. In our findings, the theory of competencies originally put forward by McClelland (1973) as an alternative to the trait and intelligence approaches in measuring and predicting human performance. In 1982, Richard E. Boyatzis, David McClelland's partner, defined the super performers as "competent managers". Ever since then, the term "competencies" became a popular HRD tool in American, Briton, Canada and Japan, etc.

Spencer and Spencer (1993) summarized their researches in 20 years based on McClelland's methodology and identified five types of competency characteristics, the so-called Iceberg Model, including motives, traits, self-concept, knowledge and skill. Knowledge and skill tended to be visible and relatively surface characteristics of people while self-concept, traits and motives were more hidden, deeper and central to personality. In addition, Fowler et al. (2000) argue that there exist three types of competencies: technological competencies, market-driven and integration competencies. Patanakul and Milosevic (2008) identified five unique competencies to multiple-project managers which were organizational experience, interdependency management, multitasking, simultaneous team management, and management of interproject process.

Although competency has been defined in several ways, its definition can be generalized as an employee's ability to perform the skills required for a specific job (Spencer and Spencer, 1993). It is greatly expected to be a management tool of recruiting, developing, and evaluating highly potential people (Kim and Hong, 2005).

### 2.2 High-Performers' Required Competencies

In the case of performance management, the use of competency assessments appears to be fairly widespread (Lawler and McDermott, 2003). Several

studies have proposed various competency models in an attempt to help organizations enhance their employees' competencies. A competency model usually comprises a list of required competencies. However, all these required competencies do not share the same importance (Lee, 2010). To effectively implement competency development, it is important to distinguish the differences in competencies between high-performers and others. In doing so, organizations can put most focus on the most significant competencies. Once such high-performers' required competencies are identified, essential competency applications can be designed and developed.

Ryan et al. (2009) used a common framework and methodology across different organizations to compare data from outstanding performers against data from average or typical performers in order to determine competencies which predict performance. The results indicate that, while some competencies such as achievement orientation and team leadership are consistently linked to performance in their studies. Likewise, Wu et al. (2010) employed T-tests to analyze competency data from high-performing employees and low-performing employees. Six core competencies were identified for high-performing employees, namely problem solving, pressure tolerance, market sensitivity, planning, analyzing, and crisis handling. Unlike the previous studies, Jayan (2006) focused on emotional competencies and performance and analyzed how emotional competencies distinguish among low, medium and high managerial performances.

## 3 Methodology

### 3.1 Research Framework and Hypotheses

Based on the literature review and our research objectives, the conceptual framework of this study is illustrated in Figure 3.1.

The purpose of this study is to explore the required competencies of high-performers in the automobile industry. We believe that the 10 competencies are all required but of different importance. Hence, this study proposes that there are certain differences in competencies among high-, medium and low-performers; and, there are certain required competencies for high-performers which may be distinguishable. In order to make the generalization of the relationship between competencies and

performance, we chose to collect the recent two-year data for analysis. Here we present the hypothesis:

Hypothesis 1: There are significant differences in competencies between high- and low-performing employees in 2011.

Hypothesis 2: There are significant differences in competencies between high- and low-performing employees in 2010.

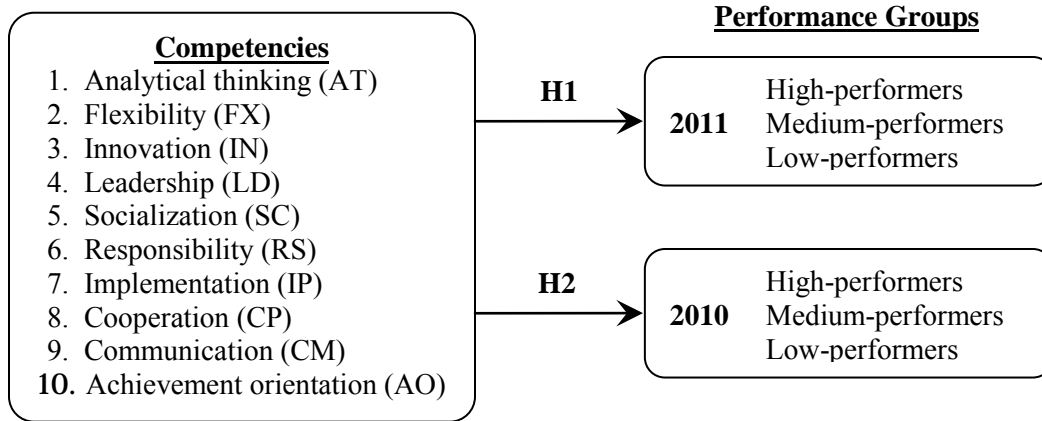


Figure 3.1 Research Framework

### 3.2 Instruments

#### Competencies Measures

The survey instrument on which this study is based was adopted from a Job Bank in Taiwan and was conducted via online questionnaires in which the respondents were asked to indicate their degree of agreement by using a five-point Likert-type scale ranging from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree) to 5 (strongly agree). The competency instrument measures 10 competencies, including analytical thinking, flexibility, innovation, leadership, socialization, positive responsibility, implementation, cooperative spirit, communication, and achievement orientation.

In addition, correlations were computed to confirm whether 10 competencies have strong inter-correlations. The correlation matrix for the salesperson competencies are presented in Table 3.1, indicating a strong correlation between every two competencies except the correlation between analytical thinking and flexibility and the correlation between flexibility and responsibility.

#### Performance Measures

Ford-Right has developed a list of key performance indicators (KPIs) for performance evaluation. Ford-

Right quarterly evaluates their employees. Each quarter, the scores of these indicators are summarized to represent the single generic item of “overall employee performance.” Every year, overall performance was averaged from data of these four quarters and ranked. Employees’ scores are ranked as A, B, C to D. In order to analyze the differences in competencies among employees, we classified the employees into three performance groups: high-performers (A), medium-performers (B and C) and low-performers (D).

### 3.3 Sampling

With an attempt to investigate the required competencies of high-performers in the automobile industry, we targeted one single automobile company for this research – Ford-Right, the exclusive distributor of FORD Lio Ho Motor Company Ltd. in Yulin, Chiayi and Tainan. There are approximately 300 employees, including 140 salespersons and 160 administrative and maintenance staff.

At the beginning of December 2011, 300 employees were required to complete the online survey. By the end of December 2011, a total of 117 cases were collected. These 117 respondents are grouped by their performance in 2011 and 2010. The details are presented in Table 3.2.

	AT	FX	IN	LD	SC	RS	IP	CP	CM	AO
AT	1									
FX	.132	1								
IN	.405***	.413***	1							
LD	.299***	.439***	.697***	1						
SC	.313***	.475***	.529***	.592***	1					
RS	.487***	.114	.404***	.355***	.337***	1				
IP	.344***	.210*	.392***	.422***	.267**	.551***	1			
CP	.240**	.192*	.250**	.466***	.339***	.280**	.287**	1		
CM	.297***	.477***	.374***	.492***	.571***	.469***	.369***	.239*	1	
AO	.300***	.574***	.402***	.489***	.449***	.418***	.431***	.187*	.438***	1

\*\*\* Significant at 0.001 level; \*\* Significant at 0.01 level; \* Significant at 0.05 level.

Table 3.1 Correlation Matrix

2011			2010		
Group	No. of cases	Percentage	Group	No. of cases	Percentage
High-performers	19	16.24%	High-performers	38	32.48%
Medium-performers	81	69.23%	Medium-performers	55	47.01%
Low-performers	17	14.53%	Low-performers	24	20.51%

Table 3.2 Performance Groups

## 4 Empirical Results

The scores obtained by the three performance groups (high-, medium, and low-performers) on competencies are taken for analysis and the results of MANOVA, the mean and the standard deviation for different variables are given in Table 4.1 to Table 4.4. The results show significant differences among these three groups on certain competencies.

### 4.1 Differences in Competencies among High-, Medium- and Low-Performers in 2011

The study used MANOVA to reveal the difference in competencies among three performance groups. The MANOVA results as shown in Table 4.1 indicate significant differences among the groups on eight competencies in 2011: analytical thinking, innovation, leadership, socialization, responsibility, implementation, communication and achievement orientation. A close examination of means scores of competencies by post hoc tests is illustrated in Table 4.2, indicating that high-performers have significantly higher scores on the following competencies, including

analytical thinking, leadership, socialization, responsibility, communication and achievement orientation. Hence, Hypothesis 1 is partially supported.

Competencies	F-value	Sig.
Analytical thinking	4.475	.013*
Flexibility	1.228	.297
Innovation	3.153	.046*
Leadership	5.497	.005**
Socialization	3.447	.035*
Responsibility	3.459	.035*
Implementation	3.588	.031*
Cooperation	1.553	.216
Communication	3.750	.026*
Achievement orientation	7.318	.001***

\*\*\* Significant at 0.001 level; \*\* Significant at 0.01 level; \* Significant at 0.05 level.

Table 4.1 MANOVA Test of Competencies for High-, Medium- and Low-Performers in 2011

Competencies	High (N=19)	Medium (N=81)	Low (N=17)	Post-Hoc:
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	Mean	SD	Mean	SD	Mean	SD	Duncan
Analytical thinking	3.5345	.40462	3.3762	.51509	3.1719	.52417	(12,23)
Innovation	3.4344	.42567	3.3526	.45746	3.1743	.46875	(12,3)
Leadership	3.4508	.49927	3.4209	.48319	2.9990	.71903	(12,3)
Socialization	3.5734	.63861	3.2365	.46959	3.1562	.64649	(12,23)
Responsibility	3.8518	.41118	3.7643	.38907	3.5791	.46977	(12,23)
Implementation	4.0082	.59046	3.9508	.49099	3.6826	.55995	(12,3)
Communication	3.6203	.58174	3.2675	.51778	3.2585	.42229	(1,23)
Achievement orientation	3.8447	.51652	3.6253	.36444	3.3925	.50044	(12,23)

Table 4.2 Post Hoc Test of Competencies for High-, Medium- and Low-Performers in 2011

#### 4.2 Differences in Competencies among High-, Medium- and Low-Performers in 2010

The MANOVA results for 2010 are shown in Table 4.3. The results indicate that there are significant differences among the groups on certain competencies in 2010, including analytical thinking, leadership, socialization, communication and achievement orientation. Post hoc tests in Table 4.4 show that high-performers have significantly higher scores on the following competencies: analytical thinking, leadership, socialization, communication and achievement orientation. As a result, Hypothesis 2 is also partially supported.

Table 4.3 MANOVA Test of Competencies for High-, Medium- and Low-Performers in 2010

Competencies	F-value	Sig.
Analytical thinking	3.942	.022*
Flexibility	2.776	.067
Innovation	0.792	.455
Leadership	4.963	.009**
Socialization	3.762	.026*
Responsibility	0.664	.517
Implementation	2.465	.090
Cooperation	1.624	.202
Communication	4.757	.010*
Achievement orientation	8.197	.000***

\*\*\* Significant at 0.001 level; \*\* Significant at 0.01 level; \* Significant at 0.05 level.

Competencies	High (N=38)		Medium (N=55)		Low (N=24)		Post-Hoc: Duncan
	Mean	SD	Mean	SD	Mean	SD	
Analytical thinking	3.3979	.45583	3.1206	.50631	3.3759	.54040	(12,3)
Leadership	3.3717	.71988	3.2751	.74717	2.9321	.56822	(12,3)
Socialization	3.4580	.76461	3.1888	.56048	3.1024	.53089	(12,23)
Communication	3.5143	.57557	3.3452	.54364	3.1821	.44807	(12,23)
Achievement orientation	3.7057	.55335	3.6050	.58692	3.3115	.36883	(12,3)

Table 4.4 Post Hoc Test of Competencies for High-, Medium- and Low-Performers in 2010

#### 4.3 Comparison between Research Results in 2011 and 2010

Referring to Table 4.2 and Table 4.4, it is clear that high-performers have significant higher competencies scores on analytical thinking, leadership, socialization, communication and achievement orientation both in 2011 and 2010. Hence, it makes sense to consider

these five competencies as high-performers' required competencies in the automobile industry.

### 5 Discussion and Conclusions

Applying competency models for identifying and developing employees' competencies is now a leading strategy in business practices. A number of studies have proposed various competency models. Such a

competency model usually contains a list of required competencies; however, these competencies do not necessarily share the same importance. Because high-performers usually have decisive roles in organizations, it is more important to identify key competencies they possess.

This study by using a survey questionnaire distinguishes high-performers' required competencies. The statistical results, based on MANOVA and post hot tests, indicate that (1) six competencies differentiate high-performers and others in 2011 namely analytical thinking, leadership, socialization, responsibility, communication and achievement orientation; (2) five competencies differentiate high-performers and others in 2010 which are analytical thinking, leadership, socialization, communication and achievement; (3) five required competencies are identified based on data from 2011 and 2010 which are analytical thinking, leadership, socialization, communication and achievement orientation.

Based on the findings, some implications are attained. In practice, it is difficult to development too many competencies at the same time. Evidence from Table 4.2 and Table 4.4 indicates that high-performers have competencies scores on analytical thinking, leadership, socialization, communication and achievement orientation. Consequently, it makes sense to reduce a large number of competencies into a compact set, the required competencies of high-performers.

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