

# Capability, Service Orientation, and Performance in the Investment Management Industry

Kang Duck Lee<sup>a</sup>, Chang Ho Jung<sup>b</sup>, Yong Jin Kim<sup>c\*</sup>

<sup>a</sup> Ph.D. Candidate, Global Service Management, Sogang University, Korea

<sup>b</sup> Ph.D., Graduate School, Kyunghee University, Korea

<sup>c</sup> Professor, School of Business Administration, Sogang University, Korea

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## ABSTRACT

Prior research has emphasized the significant effect of service orientation on organizational performance. However, little research on service orientation has been conducted in the financial field, including the investment management service industry in which high quality service for clients is required. In this paper, we propose a research model that centers on the concept of service orientation as a type of dynamic capability affecting firm performance. The research variables include job competency, risk management capability, operational capability, service orientation, and service performance. We assume that service orientation partially mediates the effects of risk management capability and operational capability on service performance. To test the model, we collected data from 391 fund managers in 86 teams (37 investment management companies) and analyzed it with partial least squares (PLS) method. Each of the 391 fund managers was asked to answer team level measures, which is effective for team level analysis. We find that job competency positively affects both risk management capability and operational capability, which in turn affect service orientation. Risk management capability and operational capability are assumed to directly affect service performance. However, risk management capability does not influence perceived service performance, whereas operational capability does affect it. This result indicates that risk management capability does not directly affect service performance. However, via service orientation, considering that risk management inconveniences customers and is geared to enhance service orientation, service performance is positively affected. Operational capability does not influence service orientation, whereas it affects perceived service performance. This result reveals that operational capability directly affects firm performance. As expected, service orientation significantly affects the service performance perception of fund managers. This study contributes to the literature by introducing service orientation to the financial industry and measures and tests team-level service performance. Our findings also provide insights to practitioners because to enhance team performance, managers must focus on service orientation in addition to operational capability.

*Keywords:* Service Orientation, Investment Management Service, Risk Management Capability, Operational Capability, Resource and Capability

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## I . Introduction

Recently, the global financial market has shown

several changes such as the securitization of banking, diversification, globalization, and the consolidation of information. These changes in the financial envi-

ronment cause a shift in the paradigm of the financial service industry. The information and communication technology (ICT) development has also contributed to the shift by allowing the low cost computerization and the high speed services. However, this trend ironically requires the financial markets to provide clients with higher quality financial services than before (Parasuraman et al., 1985; Voss et al., 2004). To accommodate this trend, many countries have already allowed the business cross-overs of financial institutions by lowering the barriers among financial services. In Korea, with the implementation of the Financial Investment Services and Capital Markets Act (2009), the financial market can provide a comprehensive service to customers. The key concern here is whether such institutions are able to provide a wide range of additional services in order to satisfy customers' needs. Just like other services, financial services have the characteristics of intangibility, heterogeneity, and inseparability which together make hard to keep the quality of financial service consistent and to easily satisfy customers (Barney, 1991; Sirmon and Hitt, 2003).

In practice, financial firms exert a broad range of efforts in order to maintain a competitive advantage over their competitors in the marketplace by providing products and services that customers want through market-oriented best practice. Dotson and Patton (1992) suggest that actively emphasizing services to customers is crucial for a firm that wishes to be more service oriented. In particular, in the context where the scale of the service industry is growing and high quality service for clients is required, service orientation is important for the success of financial service companies (Parasuraman et al., 1985; Smith and Houston, 1982). Service-oriented companies are likely to satisfy their customers through specific service-oriented procedures which

lead to sustainable competitive advantage through the creation of superior services and the delivery of customer satisfaction and firm performance (Hogan et al., 1984; Lytle, 1994; Lytle et al., 1998; Schneider et al., 1980). One thing need noted is that implementing service orientation requires the active involvement of employees and their expertise in providing services (Asif and Sargeant, 2000).

Given the importance of service orientation, many studies have examined the impact of service orientation on customers or employees' satisfaction at an individual level (Brown et al., 2002; Donovan and Hocutt, 2001; Hogan et al., 1984). However, rare are organizational or group level studies on service orientation which is a critical capability for company success (e.g., Service quality, Service value, Organizational commitment, Profitability, etc.). Accordingly, in this study, we propose based on the dynamic capability perspective a research model centering on team level service orientation as a significant factor that influences team performance. Our research questions are as follows.

- (1) What are the key resources and capabilities that affect the team service performance in investment management service firms?
- (2) How would service orientation as a type of dynamic capability work to affect organizational performance?

By answering the research questions, we expect that this study will contribute to the service orientation literature in two ways. Firstly, we identify the key resources and capabilities that influence the performance of teams in financial service institutions. The factors include job competency, risk management capability, operational capability, and service orientation. Secondly, we extend the concept of serv-

ice orientation to the dynamic capability to mediate the effect of other capabilities on service performance. This study also provides the managerial implication that service-oriented operational practice is very important for improving their service performance in the financial field.

This paper is organized as follows. We first present a literature review on job competency, risk management capability, and operational capability as factors that affect service orientation. We then analyze how to make the variables operative and try to identify links among them in order to check the research hypotheses. Following this, we present the research methodology and the results by using the partial least squares (PLS) method. Finally, we discuss our conclusions and make recommendations for management in the context of the investment management service industry.

## II. Literature Review and Theoretical Background

### 2.1. Investment Management Service Industry

The aim of this study is to explore the sustainable competitive advantage of the financial industry, especially with regard to fund managers working in Korean investment management companies. Using resource and capability, we focus on the concept of organizational service orientation.

Investment management is the professional asset management of various securities such as shares, bonds, other securities, and other assets (e.g., real estate) in order to achieve specified investment goals for the benefit of investors (Fabozzi et al., 1995). Investment managers who specialize in advisory or discretionary management on behalf of wealthy pri-

vate investors may often refer to their services as money management or portfolio management, frequently within the context of so-called private banking. Meanwhile, the term "wealth management" means a type of financial planning that provides high-level net worth individuals and families with private banking, estate planning, legal resources, and investment management, with the goal of sustaining and expanding long-term wealth (Gao et al., 2005; Moehlman, 2004; Wu et al., 2010).

Investors may be institutions such as insurance companies, pension funds, corporations, charities, and educational establishments, or private investors who are involved with investment contracts and, more commonly, collective investment schemes (e.g., mutual funds or exchange traded funds). The term "asset management" often tends to refer to the investment management of collective investments, while the more generic term "fund management" may refer to all forms of institutional investment as well as investment management for private investors. The most important function of an investment manager, indeed the fundamental service he or she offers, is expert assistance in the selection of investments through which clients can achieve their investment objectives. Investment managers owe their professional competence to the way that they handle client affairs. For this reason, in an investment firm, the capability of fund manager teams is critical for the firm performance (Bär et al., 2008; Karagiannidis, 2009; Katzenbach and Smith, 1993).

### 2.2. Resource, Capability, and Sustainable Competitive Advantage

The fundamental question in the field of strategic management is as follows: How can organizations gain and sustain competitive advantage over their

competitors? Because of increasing uncertainty and the rapidly changing business environment, the internal resources and capabilities of a firm, rather than the external factors of industry, have become key success factors for sustainable competitive advantage. According to McGrath and MacMillan (2000), leveraging resources and capabilities requires that managers develop a strategy that leads to a competitive advantage.

From the “resource-based view,” an organization that already has unique resources can maintain its competitive advantage (Barney, 1991). However, the nature of change is fast and diverse; therefore, organizations need to adapt in order to cope with the changing external environment. According to Helfat and Peteraf (2003), as work on the resource-based view has progressed, it has become clear that it extends not only to the assets of an organization but also to its capabilities (Henderson and Cockburn, 1994). Resources must be valuable and rare in order to create a competitive advantage. However, for a resource to produce a sustainable competitive advantage, it must also be difficult to imitate and non-substitutable (Sirmon and Hitt, 2003). In other words, a resource refers to an asset or a production input (tangible or intangible) that an organization owns, controls, or has access to on a semi-permanent basis.

Prior research has shown that organizational capability is a core competency for the achievement of firm performance (Barney, 1991; Teece et al., 1997). Teece (1994) introduced the concept of dynamic capabilities, which emphasizes two aspects. The first is the shifting character of the environment and the other is the key role of strategic management in adapting, integrating, and reconfiguring internal and external organizational skills and resources toward the changing environment. According to Teece et al. (1997), dynamic capabilities are “the firm’s ability to integrate, build, and reconfigure internal and ex-

ternal competences to address rapidly changing environments” (Helfat and Peteraf, 2003; Teece et al., 1997). An organizational capability refers to the ability of an organization to perform a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular end result (Helfat and Peteraf, 2003). In the investment service industry, organizational performance is determined by the capabilities of fund manager teams which operate independently and thus have their own dynamic capability (Bär et al., 2008; Augier and Teece, 2009).

The theory of dynamic capabilities consists of three elements, namely, processes, positions, and paths. Teece et al. (1997) emphasized that the competitive advantage of a firm lies with its managerial and organizational processes, and is shaped by the firm’s specific asset position and the paths available to it. First, processes represent the internal mechanisms whereby work is performed inside an organization. Processes consist of several factors such as integration and coordination, coherence, learning, interaction and collaboration, and reconfiguration and transformation. Secondly, positions, which show an organization’s internal capabilities, are explained by the internal and external assets that an organization has. These positions are technological, complementary, financial, and institutional assets. Lastly, the paths of an organization show historical achievements and illustrate the organization’s existing capabilities. Paths include variables such as path dependence, technological opportunities, technological cumulativeness, and technological appropriability (Teece et al., 1997).

### 2.2.1. Competence

According to the competency-based approach, the definition of competence cannot be general by nature and yet it is confused when applied within a broad

&lt;Table 1&gt; Process, Positions, and Paths of Dynamic Capability

Elements	Explanations	Factors
Processes	The internal mechanisms that perform work inside an organization	Integration and coordination, coherence, learning, interaction and collaboration, and reconfiguration and transformation
Positions	Internal and external assets of an organization	Technological, complementary, financial, and institutional assets
Paths	The historical achievements of an organization and an illustration of the organization's existing capabilities	Path dependence, technological opportunities, technological cumulateness, and technological appropriability

Note: Teece et al. (1997)

context. In the competency literature, many definitions have emerged (e.g., Boritz, 2003; Boyatzis, 1982; Coleman, 1988; McClelland, 1973; Spencer and Spencer, 1993). No universal definition for competence can be found in the current literature review. Moreover, the definition of the term “competency” adopted by some authors is broad, vague, and arbitrary, thereby making it even more difficult to carry out empirical studies.

McClelland (1973) stated that the predictive validity of the classical way of testing intelligence was limited. He further stated in front of the testing community that testing competence would be better at predicting success. According to Coleman (1988), human capital represents the acquired knowledge, skills, and capabilities of a person that enables unique and novel actions. Further, competency has been conceived of in terms of values and mindsets (Morgan, 1988), as work-related knowledge, skills, and abilities, and as abilities that are needed for non-routine tasks (Campbell, 1988; McClelland, 1973; Nordhaug and Gronhaug, 1994; Swanson, 1990).

Spencer and Spencer (1993), in their book *Competency at Work: Models for Superior Performance*, defined competency as an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation. Boyatzis (1982) identified five types

of competency characteristics consisting of motives, traits, self-concept, knowledge, and skills (Boyatzis, 1982; Spencer and Spencer, 1993). Motives are the things that an individual consistently thinks about or wants and that stimulate action. Motives drive, direct, and select behavior toward certain actions or goals and away from others. Traits are physical characteristics and consistent responses to situations or information. Self-concept is an individual's attitudes, values, or self-image. Knowledge is the information that an individual has in specific content areas. Finally, skill is the ability to perform a certain physical or mental task. Knowledge and skill competencies tend to be visible and in relative terms are surface characteristics, whereas self-concept, trait, and motive competencies are more hidden, deeper, and central to personality.

Competent employees are the main resource of any organization for the acquisition of a competitive advantage. In other words, an organization's best source of competitive advantage lies with its employees. Strategies, business models, products, and services can all be copied by competitors, but talented and competent employees represent a sustainable source of differentiation (Vathanophas and Thaingam, 2007). Boyatzis (1982, p. 97) defined a competency as “an underlying characteristic of a person which results in effective and/or superior performance

in a job.” According to Boyatzis (1982), a job competency represents ability. Thus, an individual’s set of competencies reflects his or her capability. The resource-based view suggests that human resource systems can contribute to sustained competitive advantage by facilitating the development of competencies that are firm-specific, produce complex social relationships, are embedded in a firm’s history and culture, and generate tacit organizational knowledge (Barney, 1991). In the context of investment service firms, the competency of fund manager teams is the most critical resources to determine the firm performance (Bär et al., 2008; Rico et al., 2008). Hence, in this study, we use the term ‘competency’ as one of the characteristics of fund manager teams.

### 2.2.2. Risk Management Capability

Risk is traditionally understood in terms of its role in taming chance by quantifying and controlling uncertainty (Bernstein, 1996; Hacking, 1975). Stirling (2000) has produced a heuristic device linking the cognitive state of four ideal types of risk as follows: 1) probabilistic risk, 2) ambiguity, 3) uncertainty, and 4) ignorance. Risk management capability reflects an organization’s understanding of its risk portfolio and how to manage the risks (Zou et al., 2010). Risks are usually undertaken by all investment management service providers. Further, fund managers that deal with fund management are more likely to confront risk, which can have a negative impact on all other objectives. The risk improvement processes associated with the implementation and development of a risk management plan include risk assessment and/or mitigation activities. The risks can come from various sources such as business, regulation, human resources, workforce representatives, and society.

Risk management is a formal and orderly process of systematically identifying, analyzing, and responding to risks in order to obtain the optimum degree of risk elimination, mitigation, and/or control (El-Sayegh, 2008). Akkirajul et al. (2010) argued that enterprise risk management capability means the process, data, tools, and culture in an organization that enables the management of risks. The ability to carry out each of the different risk management practices depends on a range of organizational and technical capabilities that emerge within organizations in a path-dependent way, structured by the organizations’ inherent learning capabilities and positions (Moss, 2002; Nelson and Winter, 1982). In the investment service firms, risk is commonly managed at the company level, which requires fund manager teams to comply with the company rule as like investment philosophy. However, each team of fund managers implements the procedures of risk management separately which leads to different performance among teams (Barry and Starks, 1984; Karagiannidis, 2009).

### 2.2.3. Operational Capability

Resource-based theory posits that a firm’s ability to create and appropriate value stems from differences in the possession of resources (Barney, 1991), as well as the decisions that are made by managers about resource management (Sirmon et al., 2007). Sirmon et al. (2007, p. 273) emphasized that resource management is the comprehensive process of structuring a firm’s resource portfolio, bundling the resources in order to build capabilities, and leveraging the firm’s resources with the purpose of creating value for customers and competitive advantage for the firm. Structuring is based on the acquisition and accumulation of a resource portfolio. The firm can then bundle resources into operational capabilities (Coltman and

Devinney, 2013). Coltman and Devinney (2013) defined operational capability as the capacity of an organization to purposefully bundle its resource base in ways that enable the organization to perform the ongoing task of transforming inputs into outputs. As Helfat and Peteraf (2003, p. 999) explained, “Dynamic capabilities do not directly affect output for the firm in which they reside, but indirectly contribute to the output of the firm through an impact on operational capabilities.”

According to Coltman and Devinney (2013), an operational capability can be considered valuable if it either enables customer needs to be better satisfied (Verdin and Williamson, 1994; Yoon et al., 2013), or if it enables a firm to satisfy needs at lower costs than competitors (Peteraf, 1993). The argument that resources have value in relation to their ability, *inter alia*, to meet customers’ needs is entirely consistent within resource-based theory (Makadok, 2001) and service operations management (Roth and Menor, 2003).

In the investment service firms, although the operational capability of firms holds effective, operational capabilities of fund manager teams are critical in order to increase yield of fund, which allows team level analysis regarding operational capability (Karagiannidis, 2009; Katzenbach and Smith, 1993; Rico et al., 2008).

### 2.3. Service Orientation

Research about the concept of service orientation (e.g., Hogan et al., 1984; Lytle et al., 1998; Schneider et al., 1980) has not reached a commonly agreed conclusion. In general, the service orientation concept refers to offering the best value to customers by discovering service expectations and responding to these by providing a differentiated service that is distinct

from competitors (Heskett et al., 1997; Nam et al., 2009). Service orientation includes the need for employees to cooperate and participate in order to raise customer value (Brown and Mitchell, 1993; Hoffman and Ingram, 1991).

Hogan et al. (1984) defined service orientation as a disposition to be helpful, thoughtful, considerate, and cooperative at the individual level. Further, service-oriented activities affect the attitude and behavior of employees (Bowen and Schneider, 1985; Hofstede et al., 1990). Thus, management need to internally commercialize a service mentality and manage such practices effectively so that the contact employees show attitudes and behaviors that provide a quality service and job satisfaction (Bowen and Schneider, 1985). If employees are part of a solid service culture and receive management support for delivering improved services, this experience will lead to increased job satisfaction (Bowen and Schneider, 1985). In addition, a service-oriented organizational culture can lead to behaviors and attitudes in employees that in turn create higher value and better performance (Saura et al., 2005).

In contrast, Lytle (1994) defined service orientation as “a collection of organizational activities undertaken by service firms designed to secure the creation and delivery of excellent services in strategic response to market information.” Additionally, Lytle et al. (1998) regarded service orientation as an internal design characteristic such as the organizational structure, climate, and culture. This definition reflects the importance to any service firm of providing excellent service, which occurs only when the firm pursues sustainable competitive advantage through the creation of superior services and the delivery of customer satisfaction. Thus, it is important to examine service orientation at the organizational level.

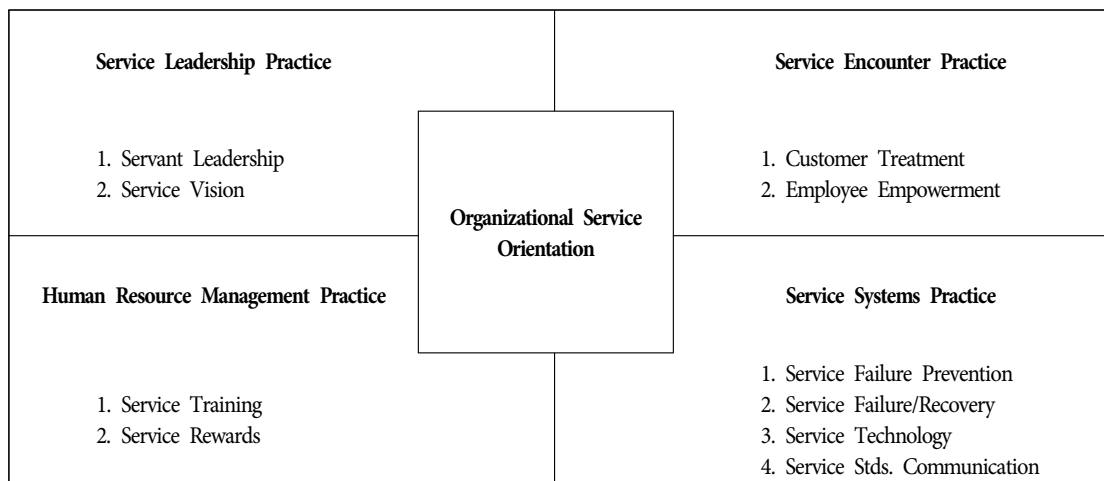
Lytle et al. (1998) developed a scale for measuring

service orientation (the so-called SERV\*OR scale) that mainly captures service practice, in particular service policies and procedures, instead of organizational beliefs or values. According to Lytle and Timmerman (2006), service orientation as an independent variable can be measured using the following 10 dimensions: (1) servant leadership, (2) service vision, (3) customer treatment, (4) employee empowerment, (5) service training, (6) service rewards, (7) service failure prevention, (8) service failure/recovery, (9) service technology, and (10) service standards communication (see <Figure 1>).

On the basis of the study by Lytle et al. (1998), the current study divided traits of organizational service orientation into service leadership, service encounter, human resource management, and service system practices. Service leadership practice is the essential basis for the service behavior formed within organizations and reflects managers' efforts to enhance service and vision (Lytle et al., 1998; Spears, 1998). Service encounter practice refers to the interaction between customers and employees. This con-

cept encompasses employee empowerment and cooperation among colleagues. Human resource management practice refers to recruitment, job training, and service related activities, while service system practice includes the prevention of service failure, service recovery, and smooth communication (Spears, 1998).

According to an organizational orientation noted in recent literature, service orientation is best conceptualized as an organizational predisposition, a strategic organizational affinity, or a preference for service excellence (Lytle and Timmerman, 2006). Service orientation can be thought of as a strategic response to market needs using a distinctive way of implementing the marketing concept and competing by means of outstanding service in order to enhance competitive advantage and customer value through the creation of superior services and the delivery of customer satisfaction, competitive advantage, growth, and performance (Lytle, 1994; Lytle and Timmerman, 2006). Thus, organizational service orientation practices have been used as management policies to achieve a differentiation strategy by meas-



Note: Lytle et al., (1998, p. 464); Lytle and Timmerman (2006, p. 138)

<Figure 1> SERV\*OR Dimensions



uring customers' responses to the provision of high-level service value (Berry et al., 1994; Lynn et al., 2000; Treacy and Wiersema, 1993). Service firms, therefore, should preferably adopt an organizational culture of service orientation practices and have distinct principles for organizational performance (Lytle et al., 1998).

In the investment service industry, organizational service orientation as a meta-structure can influence the orientation of fund manager teams which have their own service orientation as a substructure (Karagiannidis, 2009; Lytle et al., 1998). The team level service orientation is critical for team performance.

### III. Research Model and Hypotheses

#### 3.1. Research Model

A successful service-oriented firm with core competencies and capabilities need to assign its highest priority to the customer-based provision of services in order to satisfy customers' needs. Likewise, any

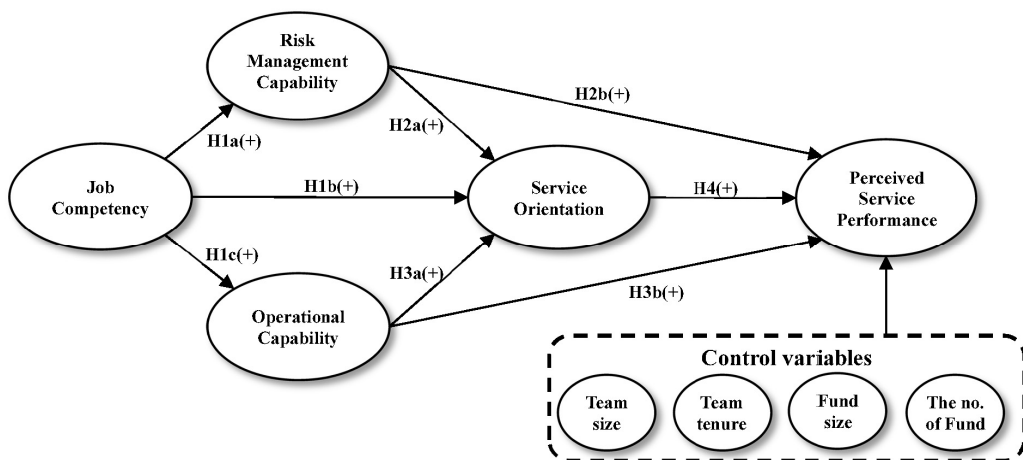
service firm is desired to view its service as a critical asset in order to attain value creation, sustainable competitive advantage, corporate growth, and profitability (Barney, 1991; Helfat and Peteraf, 2003; Teece et al., 1997). Based on the literature review and interpreting the capabilities at team level, we developed a research model as depicted in <Figure 2>.

<Figure 2> shows the sequential model of the link between capabilities, service orientation, and perceived service performance. To prevent conceptual ambiguity, we discuss this model in the concrete context of investment management service. This research model has four independent variables, job competency, risk management capability, operational capability, and service orientation, and has a dependent variable of perceived service performance.

#### 3.2. Hypotheses

##### 3.2.1. Core Competency and Capability

Prahalad and Hamel (1990) contended that an organization should focus on developing core com-



<Figure 2> Proposed Research Model

petencies that help it to create enduring customer satisfaction. Teece et al. (1997) extended this discussion of core competencies to include capabilities. They argued that firms should not be viewed as a portfolio of assets (internal competencies) but as a set of mechanisms by which customer-pleasing capabilities are selected and built. This discussion leads to the following hypothesis.

*H1a: The job competency of fund managers will positively affect risk management capability's enhancement of service orientation and firm performance.*

The human resources formed by institutional support and culture have significant value as the factors determining superiority over competitors (Wu et al., 2009). The resource-based view explains that retention of superiority is achieved only when businesses create values in a unique way that cannot be easily copied by competitors, thereby implying the importance of investment in and support for a company's human resources. In this sense, encouraging human resources to perform service-oriented behaviors and achieve a positive performance by creating a service-oriented culture at the organizational level is essential in service industries. This discussion leads to the following hypothesis.

*H1b: The job competency of fund managers will positively affect service orientation as a type of dynamic capability.*

The perspective of competence and capability can help managers to identify the capabilities that are critical to their customers and the competencies that support these capabilities (Watts et al., 1993). Externally focused flexible capabilities can be viewed as connections among corporate, marketing, and

manufacturing strategies (Kathuria and Partovi, 1999; Watts et al., 1993). Internally focused flexible competencies provide the processes and infrastructure that enable a firm to achieve the desired levels of flexible capability.

Parry (1996) argued that competency refers to the process of achieving performance and combines job knowledge, technology, and attitude in order to raise organizational performance by influencing the behavior of the organization's members. Accordingly, the competency of human capital is regarded as an important factor for excellent performance in dynamic service firms. This discussion leads to the following hypothesis.

*H1c: The job competency of fund managers will positively affect operational capability's enhancement of service orientation and firm performance.*

### 3.2.2. Capability, Service Orientation, and Perceived Performance

Firms need to accumulate, combine, and exploit their resources to create value (Sirmon and Hitt, 2003). However, very few studies examine how firms and managers should transform their resources to create value (Priem and Butler, 2001). The processes that take place in the development of capabilities to create customer value (Sirmon et al., 2007) identify the role of the capabilities' configuration design (the so-called mobilizing process), which requires an understanding of the markets and customer needs; the integration of capabilities to generate new configurations (the coordinating process); and the use of the configuration of the capabilities (the deploying process).

Dynamic capability theory focuses on a firm's ability to face rapidly changing environments, create

and renew resources, and change the resources mix (Ambrosini and Bowman, 2009; Teece et al., 1997). As Loosemore et al. (2006) indicated, many organizations operate at different levels of maturity for different types of risk. Managing different types of risk well is a capacity that builds capability and enhances a firm's competitive advantage. Capabilities are the capacity to manage a firm's risks by using its resources to achieve performance and satisfy customers. These are likely to relate to the objectives of service orientation and refer to a firm's superior ability to understand and satisfy customers (Sirmon et al., 2007). This discussion leads to the following hypothesis.

*H2a: The risk management capability of a team will positively affect service orientation as a type of dynamic capability.*

According to Gao et al. (2013), risk management capability building is defined as the process of creating or enhancing employee and organizational abilities through learning, knowledge, and skills exchange in order to perform risk management tasks with the aim of managing risks effectively and attaining organizational objectives. According to Akkirajul et al. (2010), enterprise risk management refers to the capability to use processes, data, and tools to manage and control diverse risks in accordance with the long-term strategies of firms. Risk management capability, therefore, is a kind of organizational ability used to create the performances of an organization and its teams. This discussion leads to the following hypothesis.

*H2b: The risk management capability of a team will positively affect perceived service performance.*

Krasmikov and Jayachandran (2008) represented operational capability as the skills and knowledge that enable a firm to be efficient and flexible, thereby using resources as fully as possible. In other words, operational capability focuses on performing organizational activities efficiently and flexibly with a minimum wastage of resources and is based on processes that have been benchmarked and codified. In this regard, many firms have pursued total quality management and international organization for standardization programs to enhance quality and efficiency (Krasmikov and Jayachandran, 2008).

Lytle et al. (1998) regarded service orientation as an internal design characteristic such as organizational structure, climate, and culture. Operational capability is related to organizational structure, climate, and culture because it effectively utilizes internal resources and enhances internal processes. This discussion leads to the following hypothesis.

*H3a: The operational capability of a team will positively affect service orientation as a type of dynamic capability.*

Zollo and Winter (2002) focused on dynamic capabilities that modify an organization's operating routines. In other words, Zollo and Winter (2002, p. 340) emphasized organizational learning as a source of dynamic capability, which they defined as "a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness." This definition suggests that, like operational capabilities, dynamic capabilities consist of patterned organizational behavior (Helfat et al., 2009). The operating routines relate to operational capability and the process of organizational behavior regarding the

pursuit of performance. From the resource management perspective of Sirmon and Hitt (2003) and Sirmon et al. (2007), operational capability literature addresses resource investment and deployment decisions work in concert to affect firm performance (Sirmon and Hitt, 2009). This discussion leads to the following hypothesis.

*H3b: The operational capability of a team will positively affect perceived service performance.*

### 3.2.3. Service Orientation and Perceived Service Performance

The most appropriate description of service orientation is as an organizational capability. Service orientation has been shown to have a significant influence on organizational performance (Homburg et al., 2002; Kohli and Jaworski, 1990; Lynn et al., 2000; Lytle et al., 1998; Narver and Slater, 1990). Performance is a complex and contestable concept because it has different meanings for different industries or sectors, which are determined by the organization and context (Carter, 1991). Performance measurement is defined as the process of quantifying action, where measurement is the process of quantification, and action leads to performance (Neely et al., 2005). Service performance focuses on the value of an organization that determines how it is performing. Though difficult to conceptualize and measure, organizational orientations directly influence organizational performance.

An organizational orientation such as service orientation has been shown to have a significant influence on organizational performance (Lytle and Timmerman, 2006). The organizational service orientation literature has identified that there is a positive correlated link between service and financial

performance in a variety of Western firms (Schneider and Bowen, 1995; Wright et al., 1997). Bowen et al. (1989) suggested that companies using service orientation have a stake in the successful implementation of a competitive strategy to improve customer satisfaction. As Homburg et al. (2002) emphasized, competitive differentiation can be a basis for sustainable competitive advantage and higher company profitability. Thus, service orientation need to be understood as a major vehicle in which fund managers have established differentiation among competing investment firms (Bowen et al., 1989; Lytle et al., 1998). This discussion leads to the following hypothesis.

*H4: Service orientation, as a type of dynamic capability, will positively affect perceived service performance.*

<Table 2> shows the operational definitions and measurement items of the constructs.

## IV. Research Methodology

### 4.1. Measurement Instrument

In this study, the constructs were measured using multi-item scales adapted from the literature. The measures in this study can be grouped into six categories: job competency, risk management capability, operational capability, service orientation, perceived service performance, and demographic characteristics. Each measurement was made using a five-point scale (1, strongly agree to 5, strongly disagree). We included four control variables as team size, team tenure, fund size, the number of funds for team-level analysis in the context of investment management service.

&lt;Table 2&gt; The Operational Definitions and Measurement Items of the Constructs

No.	Constructs	Operational definitions	Measurement items	Reference
1	Job Competency (JC)	HR capital's ability consists of motives, traits, self-concept, knowledge, and skills in order to raise organizational performance	Insight, Subjectivity, Excellence, Expertise	Boyatzis, 1982; McClelland, 1973; Parry, 1996; Spencer and Spencer, 1993
2	Risk Management Capability (RMC)	The capability regarding the processes, data, tools, and culture in the organization that enables the management of risks	RM response process, RM coverage, RM preciseness and responsibility, RM guide, RM appropriate feedback	Akkirajul et al., 2010; Gao et al., 2013; Moss, 2002; Nelson and Winter, 1982; Zou et al., 2010
3	Operational Capability (OC)	The capacity of team to purposefully bundle its resources in order to perform the ongoing task of transforming inputs into outputs	Internal research process of team, Adoption of research result, Application of role of team, Fairness of team	Coltman and Devinney, 2013; Katzenbach and Smith, 1993; Rico et al., 2008; Sirmon and Hitt, 2003; Zollo and Winter, 2002
4	Service Orientation (SO)	A collection of organizational activities undertaken by service firms designed to secure the creation and delivery of excellent services	Orientation toward easily read reports, Orientation toward the principle of good faith	Bowen et al., 1989; Hogan et al., 1984; Lytle, 1994; Lytle and Timmerman, 2006; Schneider et al., 1980
5	Perceived Service Performance (PSP)	The perception of the value of an organizational service's ability to perform and achieve expected results	The brand equity, The rate of return, Future growth, Differentiation	Neely et al., 2005; Schneider and Bowen, 1995; Wright et al., 1997

#### 4.2. Data Collection

We collected data from 37 South Korean firms involved in the investment (asset) management service, with about 90 teams (working 450 fund managers in his/her teams) among them. The survey was conducted during May through June 2014. Of 450 questionnaires, 402 were returned, giving a response rate of 89.3%. Among the returned questionnaires, eleven were removed because of incomplete responses and the remaining 391 individual responses representing 86 teams were used for analysis. The respondents were asked to rate their degree of agreement using a five-point Likert scale.

For team-level analysis, we needed to transform the individual-level scale into team-level before per-

forming the statistical analysis. Following previous studies (Stewart and Barrick, 2000), we adopted the mean method to aggregate the individual-level scale into the team-level. We aggregated all of team members' scores to calculate the mean score for each team.

We controlled for team size, team tenure, fund size, and the number of funds because these variables have frequently been identified as factors that may influence strategic investment decision processes and team performance (e.g., Hambrick and D'Aveni, 1992; He et al., 2007; Miller et al., 1998; Rico et al., 2008). Team size was the number of members each team on an investment company (Hambrick and D'Aveni, 1992; Simon et al., 1999). Team tenure was the average number of months fund managers had worked for their teams (Atkinson et al., 2003). Fund size (net

assets) as a significant predictor of performance like team tenure was also known to affect fund performance (Atkinson et al., 2003). We also use the number of funds offering as a control variable. A large number of funds are able to reduce expenses, since it incurs those expenses for a group of funds rather than for each fund separately. Thus, a lot of funds offerings may create economies of scale (Malhotra et al., 2007).

The data obtained from the survey were used for frequency analysis. Among the 391 respondents in the individual-level, managers and assistant managers

represent 44.3% (173), and 51.9% (203) have five years or fewer service. 55.0% of respondents most often manage funds in the form of stocks, 18.9% manage bonds, and 56.6% of fund managers administer assets of KRW 500 billion or less (see <Table 3> for demographic information). In the team-level, 89.5% (77) of teams consist of 3-6 members. The average of team tenure represent 99.7% (80) have up to 10 years. Each fund manager team operated funds of average KRW 500 billion or below (53.4%) and the number of fund, 10 or below (60.5%).

<Table 3> Demographic Information of Individual Respondents<sup>a</sup>

Position of respondents	Frequency	%	Years of service	Frequency	%
Assistant manager	91	23.3	Up to 1 year	43	11.0
Manager	82	21.0	Up to 5 years	160	40.9
Deputy general manager	48	12.3	Up to 7 years	52	13.3
General manager	41	10.5	Up to 10 years	48	12.3
Team manager	74	18.9	Over 10 years	69	17.6
Director/Executive	31	7.9	No response	19	4.9
No response	24	6.1			
Total	391	100.0	Total	391	100.0
Type of funds	Frequency	%	Scale of funds	Frequency	%
Stocks (shares)	215	55.0	KRW 100 billion or below	98	25.1
Bonds	74	18.9	KRW 500 billion or below	123	31.5
Money market fund (MMF)	11	2.8	KRW 1 trillion or below	50	12.8
Alternative investments (AI)	43	11.0	KRW 5 trillion or below	54	13.8
Another	14	3.6	Over KRW 10 trillion	4	1.0
Stocks, bonds	1	0.3	No response	62	15.9
Stocks, another	3	0.8			
Stocks, AI	5	1.3			
Bonds, MMF	8	2.0			
Bonds, MMF, another	1	0.3			
AI, another	1	0.3			
Stocks, bonds, AI	1	0.3			
No response	14	3.6			
Total	391	100.0	Total	391	100.0

Note: a. N=391

<Table 4> Demographic Information of Team<sup>a</sup>

Team size	Frequency	%	Team tenure	Frequency	%
1	1	1.2	Up to 5 year	28	32.5
2	3	3.5	Up to 7 years	27	31.4
3	10	11.6	Up to 10 years	25	39.1
4	28	32.5	Over 10 years	6	7.0
5	27	31.4			
6	12	14.0			
7	5	5.8			
Total	86	100.0	Total	86	100.0
Fund size of team	Frequency	%	# of funds of team	Frequency	%
KRW 100 billion or below	7	8.1	5 or below	17	19.8
KRW 500 billion or below	39	45.3	10 or below	35	40.7
KRW 1 trillion or below	20	23.3	20 or below	22	25.6
KRW 5 trillion or below	20	23.3	Over 20	12	13.9
Total	86	100.0	Total	86	100.0

Note: a. N=86

#### 4.3. Common Method Variance Test

This study has the potential for a common method variance problem because the survey collected data from the same respondents and asked about the dependent variables and the independent variable at the same time. According to Podsakoff and Organ (1986), if a single strong factor emerges or the first factor loads significantly on all items, common method variance is most likely present in the data. In addition, if there is a common method variance problem, the analysis result will indicate a single factor or general factor that explains most of the total variance. Such a problem can have a significant effect on the validity of the measurement results.

In order to confirm this, we used Harman's single factor test (Podsakoff and Organ, 1986). We set all the measurement items as one factor and tested by

using unrotated principal components factor analysis in the SPSS software package. The results showed that the single factor did not account for a majority of the variance (38.2%). Thus, no general factor is apparent and the data is not contaminated by common method bias.

#### 4.4. Measurement Reliability and Validity

We examined the factor structure and the measurement reliability by using exploratory factor analysis with Varimax rotation (IBM SPSS Statistics 20). The items were loaded onto each designated construct, and the results showed that all item loadings are above the cut-off of 0.6 (Hair et al., 1998). The reliability of each of the constructs was tested by Cronbach's alpha, and these results showed that all values are greater than 0.6. We also examined compo-

site factor reliability and average variance extracted (AVE), which is a measure of the shared variance in a latent variable, using PLS Graph 3.0 (Chin, 1998; Chin et al., 2003).

All constructs showed a satisfactory level of internal consistency. The Cronbach's alpha coefficients and the composite factor reliability indices are in the 0.806 - 0.941 range, which is above the recommended cut-off of 0.7 (Barclay et al., 1995; Chin, 1998; Chin et al., 2003; Nunnally, 1978). The average variance extracted

for all constructs exceeds the cutoff of 0.5, which indicates that the explained variance of each construct is higher than the unexplained (Fornell and Lacker, 1981). The measurement test results show that there is solid construct reliability (See <Tables 5>).

#### 4.5. Convergent and Discriminant Validity

We examined convergent validity with average variance extracted (AVE) and discriminant validity

<Table 5> Reliability Measures for the Measurement Model

Constructs	Observed variables	Mean	S.D.	Factor loading	T-value	Cronbach's alpha	Composite reliability	Average variance extracted
Job Competency (JC)	JC1	2.042	0.440	0.896	49.769	0.908	0.936	0.784
	JC2	2.163	0.434	0.848	9.057			
	JC3	2.080	0.442	0.936	76.730			
	JC4	1.999	0.422	0.859	22.067			
Risk Management Capability (RMC)	RMC1	2.245	0.500	0.863	34.918	0.921	0.941	0.760
	RMC2	2.184	0.462	0.875	29.094			
	RMC3	2.320	0.485	0.898	36.686			
	RMC4	2.428	0.481	0.865	19.955			
	RMC5	2.071	0.489	0.856	26.838			
Operational Capability (OC)	OC1	2.322	0.511	0.878	33.759	0.872	0.913	0.725
	OC2	2.120	0.450	0.873	22.992			
	OC3	2.352	0.521	0.833	20.967			
	OC4	2.256	0.485	0.821	20.939			
Service Orientation (SO)	SO1	2.371	0.486	0.921	53.145	0.806	0.912	0.838
	SO2	1.913	0.455	0.910	47.520			
Perceived Service Performance (PSP)	PSP1	3.042	0.777	0.789	10.724	0.812	0.883	0.654
	PSP2	2.743	0.647	0.842	26.553			
	PSP3	2.621	0.494	0.804	14.068			
	PSP4	2.861	0.549	0.800	13.396			



using PLS Graph 3.0. Table 6 shows that all the diagonal values are greater than any of the off-diagonal values, which indicates that discriminant validity is secured. Convergent validity is good enough when constructs used in a model have an AVE greater than 0.5 (Fornell and Lacker, 1981). All constructs in the structural model show a solid convergent and discriminant validity (See <Tables 6>).

Discriminant validity is secured when the square root of the AVE for each construct is greater than the correlation value of the construct with other constructs. To check the convergent and discriminant validity, cross-loadings among the items and constructs were examined. Even though there are high cross-loadings across the dependent variables as expected, no item cross-loading is greater than the item loading to the target construct (see <Appendix 2> for more details).

#### 4.6. Structural Model Result and Test of Hypotheses

In general, covariance-based structural equation

modeling develops various model fit indices when the suitability of a model is emphasized. Principal component-based PLS, however, does not. Nevertheless, recently introduced overall fit indices reflect the characteristics of the PLS. As noted by Wetzels et al. (2009), the AVE for each latent variable equals the corresponding communality index. Thus, the average AVE for a model can be used instead of the average communality index. Wetzels et al. (2009) also proposed the following thresholds for the goodness of fit (GoF): small = 0.1, medium = 0.25, and large = 0.36. The authors assumed a minimum average AVE of 0.5 and used Cohen's thresholds for small, medium, and large effect sizes. The formula for calculating the GoF proposed by Wetzels et al. (2009) then becomes:

$$GoF = \sqrt{AVE * R^2}$$

Note: Wetzels et al., (2009)

$$GoF_{small} = 0.1, GoF_{medium} = 0.25, GoF_{large} = 0.36$$

The GoF for six models based on each path was verified. All of the models have reasonable fitness

<Table 6> Analysis of Discriminant Validity and Correlation Matrix<sup>a</sup>

	Mean	S.D.	AVE	TS	TT	FS	NF	JC	RMC	OC	SO	PSP
TS <sup>c</sup>	4.547	1.214	1.000	1.000								
TT	75.850	32.256	1.000	0.361	1.000							
FS	7158.534	7572.207	1.000	0.062	0.208	1.000						
NF	11.306	8.135	1.000	0.008	0.167	0.411	1.000					
JC	2.250	0.254	0.784	0.103	0.037	0.189	0.177	<b>0.886<sup>b</sup></b>				
RMC	2.271	0.483	0.760	0.166	0.148	0.151	0.105	0.557	<b>0.872</b>			
OC	2.262	0.492	0.725	0.028	0.013	0.100	0.073	0.699	0.603	<b>0.851</b>		
SO	2.142	0.470	0.838	0.091	0.212	0.119	0.114	0.730	0.627	0.670	<b>0.916</b>	
PSP	2.817	0.617	0.654	0.042	0.185	0.015	0.125	0.592	0.409	0.566	0.594	<b>0.809</b>

Note: a. N=86 (teams)

b. Bolded diagonal elements are the square root of average variance extracted (AVE)

c. Control variables: TS(Team size), TT(Team tenure), FS(Fund size), NF(The number of funds)

in the range of 0.520 to 0.631. The test results are shown in <Table 7>.

In addition, the evaluation of the average fitness of the structural model with the PLS method used the value of R-squared.  $R^2$  values are useful factors for evaluating effect size (Cohen and Cohen, 1983).

$$Cohen's f^2 = \frac{R^2}{(1 - R^2)}$$

Note: Cohen, and Cohen, (1983)

$$f^2_{small} = 0.02, f^2_{medium} = 0.13, f^2_{large} = 0.26$$

Thus, we performed a structural model result test of the hypotheses with PLS Graph 3.0, which provides path coefficients,  $t$ -values, and  $R$ -squared values as the model fit indices. The resampling size for bootstrapping was 500. The explanatory power of a structural model is evaluated by  $R^2$  values for dependent constructs. In this study,  $R^2$  value for perceived service performance, the dependent variable, is 0.427 ( $f^2 = 0.745$ ) and those for service orientation, risk management capability, and operational capability are 0.622 ( $f^2 = 1.646$ ), 0.311 ( $f^2 = 0.451$ ), and 0.488 ( $f^2 = 0.953$ ) respectively and have large effect size.

With regard to the results of the hypothesis test, job competency positively affects risk management capability (H1a: path coefficient 0.557,  $t = 7.489$ ),

service orientation (H1b: path coefficient 0.444,  $t = 4.547$ ) and operational capability (H1c: path coefficient 0.699,  $t = 14.943$ ). The results indicate that job competency is an influential factor with regard to risk management capability and operational capability in the investment management context.

As expected, risk management capability positively affects service orientation (H2a: path coefficient 0.256,  $t = 3.032$ ). Interestingly, risk management capability does not affect perceived service performance (H2b: path coefficient 0.014,  $t = 0.101$ ), whereas operational capability leads to enhanced perceived service performance (H3b: path coefficient 0.329,  $t = 3.022$ ). Nevertheless, enhancing risk management generally has a negative effect for achieving service performance of organizational goals. The result of the test reveals that there is no relation between risk management capability and perceived service performance. H3a is also rejected because operational capability does not influence service orientation (path coefficient 0.204,  $t = 1.940$ ). The path between service orientation and perceived service performance is accepted positively and significantly (H4: path coefficient 0.339,  $t = 2.834$ ). Finally, team size, team tenure, fund size, the number of funds, as control variables do not affect to perceived service performance.

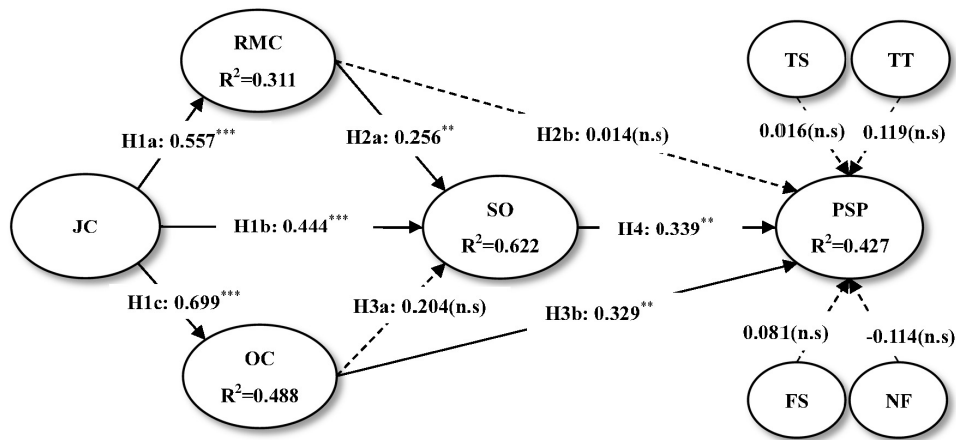
<Table 7> The Result of GoF

Models	Path of each model	GoF	Result
Model 1.	JC → RMC → PSP	0.520 ( > 0.36)	Large
Model 2.	JC → RMC → SO → PSP	0.557 ( > 0.36)	Large
Model 3.	JC → SO → PSP	0.631 ( > 0.36)	Large
Model 4.	JC → OC → SO → PSP	0.620 ( > 0.36)	Large
Model 5.	JC → OC → PSP	0.574 ( > 0.36)	Large
Model 6.	JC → RMC / OC → SO → PSP	0.590 ( > 0.36)	Large

Note:  $GoF_{small} = 0.1$ ,  $GoF_{medium} = 0.25$ ,  $GoF_{large} = 0.36$

The results of the research show that job competency and risk management capability have a positive impact on organizational service orientation rather than operational capability. Operational capability, however, does not affect service orientation. Our study analyses the influence of service orientation on the perceived service performance of fund

managers. We empirically test our hypotheses in the investment management service industry. Based on recent awareness of resources and capabilities, service orientation in an organizational context is one of the most critical issues for any organizational improvement activities. The result of this research is shown in <Figure 3> and <Table 8>.



Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$   
 JC: job competency; RMC: risk management capability; OC: operational capability; SO: service orientation; PSP: perceived service performance; Control variables: TS: team size; TT: team tenure; FS: fund size; NF: the number of fund

<Figure 3> Results of Structural Model Test

<Table 8> Results of Structural Model Test

Hypothesis	Path			Path coefficient	T-value	Results
H1a	JC	→	RMC	0.557***	7.489	Accepted
H1b	JC	→	SO	0.444***	4.547	Accepted
H1c	JC	→	OC	0.699***	14.943	Accepted
H2a	RMC	→	SO	0.256**	3.032	Accepted
H2b	RMC	→	PSP	0.014	0.101	Rejected
H3a	OC	→	SO	0.204	1.940	Rejected
H3b	OC	→	PSP	0.329**	3.022	Accepted
H4	SO	→	PSP	0.339**	2.834	Accepted

Note: \*  $t_{0.05} = 1.960$ , \*\*  $t_{0.01} = 2.576$ , \*\*\*  $t_{0.001} = 3.291$

## V. Conclusion, Implications, and Limitations

A successful service-oriented firm with core competencies and capabilities need to assign its highest priority to the customer-based provision of services in order to satisfy customers' needs. Likewise, any service firm is desired to view its service as a critical asset in order to attain value creation, sustainable competitive advantage, corporate growth, and profitability (Barney, 1991; Helfat and Peteraf, 2003; Teece et al., 1997). The aim of this study is to explore the sustainable competitive advantage of the investment management service industry by examining 391 fund managers in 86 teams (37 investment management companies) in Korea. Using resources and capabilities, we focus on the concept of organizational service orientation. Through a review of literature to assess the service orientation effect on the perception of fund managers' service performances. And then we construct a model and hypotheses on the supposition that organizational service orientation enhances performance (Lytle, 1994; Lytle and Timmerman, 2006).

The results show that fund managers' job competency (human resource management practices) positively affects risk management capability, operational capability, and service orientation. By enhancing the job competency of fund managers who take decisions to create portfolios to manage clients' wealth, investment management will contribute to increased performance. In other words, job competency directly influences organizational process, procedure, climate, and performance (Parry, 1996).

Interestingly, risk management capability does not appear to influence perceived service performance directly, whereas operational capability affects the perception of fund managers' service performance. Risk management capability, however, is an influen-

tial factor, which in turn enhances organizational service orientation, while operational capability does not. The results reveal that risk management capability does not directly affect service performance, but through service orientation, because risk management causes inconvenience to customers and is geared to enhancing service orientation, it positively affects service performance. As we expected, operational capability does not affect service orientation, which in turn positively affects perceived service performance. Although service orientation is regarded as an internal characteristic such as organizational structure, climate, and culture (Lytle et al., 1998), operational capability does not necessarily have a direct impact on organizational culture and climate for service-oriented behavior.

Importantly, the study's results verify that organizational capabilities such as competency, operational capability, and service orientation lead to increased firm performance. Therefore, service orientation is likely to concern organizational capability and practice (Lytle, 1994; Lytle and Timmerman, 2006). These findings are mostly consistent with the literature regarding the effects of service orientation on organizational performance (Homburg et al., 2002; Kohli and Jaworski, 1990; Lytle et al., 1998; Narver and Slater, 1990).

This study provides important insights into the relationships among job competency, organizational capability, service orientation, and service performance. First, the job competency of human capital can enhance process capabilities such as risk management, operational capability, and service orientation. Intensive training with regard to fund managers' competency is necessary in order to increase firm performance in investment management. Second, risk management is an efficiency factor that affects service orientation and is therefore an important capability;

nevertheless, it does not have a direct connection with performance (Akkirajul et al., 2010; Moss, 2002; Nelson and Winter, 1982). In addition, service-oriented management is needed for investment management performance because the operational capabilities of job accomplishment and the team decision-making process strongly influence performance improvement rather than risk management (Barry and Starks, 1984; Katzenbach and Smith, 1993). In the context of investment management service, operational capabilities of investment (asset) management team are considered important capabilities in order to increasing yield of fund, as well as individual operational skills of the fund managers (Karagiannidis, 2009; Katzenbach and Smith, 1993). Finally, in much of the service-oriented performance literature, service-oriented activities and processes are shown to associate positively with perceived service performance by achieving higher performance (Lytle, 1994; Lytle and Timmerman, 2006). Therefore, in order to improve service performance through service orientation, investment management organizations should arrange their management systems to take account of service-oriented processes, provide service training, and pursue ways to objectively develop their service processes.

This research has meaningful practical implications that initially test service perception about investment management processes and service orientation by targeting fund managers of Korean investment companies. In Korea, about 600 fund managers work in investment and asset management companies; thus, we have gained significant results by col-

lecting data, 86 teams from around 400 of them (about 65%). However, despite its implications, this research has several limitations that need to be addressed. First, the sample consists of respondents from the investment management industry, which is part of the financial industry. Therefore, the generalizability of the results may be limited to employees in particular categories. Accordingly, subsequent studies could conduct comparative analyzes of other business areas of the financial industry. Second, we did not consider further appropriate measurement items about service orientation, whereas prior research on service orientation separated the concept of service orientation into servant leadership, service vision, customer treatment, employee empowerment, service training, service rewards, service failure prevention, service failure/recovery, service technology, and service standards communication (Lytle and Timmerman, 2006). Further research should measure items related to prior service orientation research. Finally, when we constructed the model for testing the hypotheses about service performance, we considered only one side of qualitative assessment factors such as job competency, capability, and service orientation, and did not examine quantitative factors such as financial data, firm size, and rate of return. Moreover, Lytle and Timmerman (2006) determined the causal relationship between service orientation and administrative performance (return on assets and product performance). Accordingly, further research should be conducted to measure firm performance and should include financial/non-financial data.

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## &lt;Appendix A&gt; Measurement Items for Constructs

Constructs	Item	Measurement Items	References
Job Competency (JC)	JC1	Insight of fund managers	Boyatzis, 1982; McClelland, 1973; Parry, 1996; Spencer and Spencer, 1993
	JC2	The subjectivity of fund managers	
	JC3	The excellence of fund managers	
	JC4	The expertise of fund managers	
Risk Management Capability (RMC)	RMC1	Risk management response process	Akkirajul et al., 2010; Gao et al., 2013; Moss, 2002; Nelson and Winter, 1982; Zou et al., 2010
	RMC2	Risk coverage management	
	RMC3	Risk precision and responsibility	
	RMC4	Risk management guide	
	RMC5	Appropriate risk management feedback	
Operational Capability (OC)	OC1	Internal research process of team	Coltman and Devinney, 2013; Katzenbach and Smith, 1993; Rico et al., 2008; Sirmon and Hitt, 2003; Zollo and Winter, 2002
	OC2	Adoption of research result	
	OC3	Application of role of team	
	OC4	Fairness of team	
Service Orientation (SO)	SO1	Orientation toward easily read investment reports	Bowen et al., 1989; Hogan et al., 1984; Lytle, 1994; Lytle and Timmerman, 2006; Schneider et al., 1980
	SO2	Orientation toward the principle of good faith	
Perceived Service Performance (PSP)	PSP1	Brand Equity	Neely et al., 2005; Schneider and Bowen, 1995; Wright et al., 1997
	PSP2	The rate of return	
	PSP3	Future growth	
	PSP4	The differentiation of service	

<Appendix B> Cross-Loading Table

Variables	JC	RMC	OC	SO	PSP
JC1	<b>0.896</b>	0.530	0.683	0.661	0.560
JC2	<b>0.848</b>	0.424	0.514	0.552	0.395
JC3	<b>0.936</b>	0.514	0.695	0.705	0.631
JC4	<b>0.859</b>	0.496	0.561	0.654	0.486
RMC1	0.465	<b>0.863</b>	0.555	0.507	0.350
RMC2	0.485	<b>0.875</b>	0.574	0.533	0.353
RMC3	0.513	<b>0.898</b>	0.509	0.595	0.330
RMC4	0.502	<b>0.865</b>	0.542	0.551	0.403
RMC5	0.461	<b>0.856</b>	0.448	0.545	0.347
OC1	0.672	0.502	<b>0.878</b>	0.548	0.458
OC2	0.630	0.483	<b>0.873</b>	0.546	0.496
OC3	0.517	0.508	<b>0.833</b>	0.523	0.506
OC4	0.554	0.559	<b>0.821</b>	0.658	0.470
SO1	0.663	0.587	0.620	<b>0.921</b>	0.586
SO2	0.675	0.561	0.605	<b>0.910</b>	0.500
PSP1	0.540	0.260	0.410	0.467	<b>0.789</b>
PSP2	0.559	0.380	0.510	0.575	<b>0.842</b>
PSP3	0.474	0.412	0.517	0.485	<b>0.804</b>
PSP4	0.312	0.236	0.364	0.361	<b>0.800</b>

◆ About the Authors ◆

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**Kang-Duck LEE**

Kang-Duck LEE is Ph. D. candidate of Global Service Management at Sogang University, since 2012, he graduated school of business administration, and lastly got MBA at Sogang University in 2011. His research area is on service system, service design, service innovation, service orientation and knowledge management. His recent research is about service innovation as interaction and knowledge sharing based on ICT relatedness in healthcare service sector and service orientation as a type of dynamic capability of organization.

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**Chang-Ho JUNG**

Chang-Ho JUNG is Ph. D. of pension and finance at Kyung Hee University. He graduated from the MBA at business School of Sogang University. Currently, he works as team manager of retirement pension center in the ShinHan Investment Corp. His interesting area of research is a qualitative assessment of pension funds, retirement pension plan, and risk management.

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**Yong Jin KIM**

Yong Jin KIM is Professor of Global Service Management and MIS at Sogang University. He was on the faculty of the State University of New York at Binghamton before he joined Sogang University. He has served as a chair of several committees for Korean government including strategic technology development committee and new growth driver development committee. His research interest is in knowledge management and service innovation including process innovation, information systems success, e-business support systems and their success, and information technology valuation. His recent research focuses on the understanding of the factors affecting firm performance from knowledge management and service systems perspective. He has published over 50 papers since 2002 in the top quality journals such as MIS Quarterly, Communications of the ACM, Information and Management, Decision Support Systems, International Journal of Information Management, and Communications of AIS. He also has plenty of industry experience with information systems integration projects. He serves academia as Senior Editor for JITTA and Information Systems Frontiers, Associate Editor for EJIS, and on the editorial board of Journal of Global Information Management.

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