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2007, Vol. 32, No. 1, 180–194.

INTRODUCTION TO SPECIAL TOPIC FORUM

VALUE CREATION AND VALUE CAPTURE: A MULTILEVEL PERSPECTIVE

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As an introduction to the special issue topic of value creation, we define value creation in terms of use value and exchange value and discuss some of the key issues related to its study, including the topic of value capture. Although the definition of value creation is common across levels of analysis, the process of value creation will differ based on whether value is created by an individual, an organization, or society. We use the concepts of competition and isolating mechanisms to explain how value can be captured at different levels of analysis.

Value creation is a central concept in the management and organization literature for both microlevel (individual, group) and macrolevel (organization theory, strategic management) research. Yet there is little consensus on what value creation is or on how it can be achieved. Our experiences in serving as guest editors for this Special Topic Forum on Value Creation taught us a great deal, while simultaneously underscoring how much more work is needed before we can fully understand this important concept. In the initial call for papers for this STF, we argued that the concept of value creation was "not well understood." We now see that our opening statement, while accurate, also significantly underestimates many of the conceptual issues involved in studying value creation. More directly, while one would be hard pressed to find a management scholar who would disagree that value creation is important, one also would find it equally difficult to find agreement among such scholars regarding (1) what value creation is, (2) the process by which value is created, and (3) the mechanisms that allow the creator of value to capture the value. With the luxury of hindsight, we now view this lack of agreement about value creation among organizational scholars as one of the most important conclusions from this STF, and we briefly explore what we consider to be three of the most important reasons for the confusion.

First, the multidisciplinary nature of the field of management introduces significant variance in the parties or targets for which new value is created and in the potential sources or creators of value. To illustrate, scholars in strategic management, strategic human resource management (HRM), marketing, or entrepreneurship, for example, may emphasize the creation of value for business owners (Porter, 1985; Sirmon, Hitt, & Ireland, this issue), stakeholders (Post, Preston, & Sachs, 2002), or customers (Kang, Morris, & Snell, this issue; Priem, this issue). Conversely, researchers emphasizing HRM or organizational behavior may emphasize value creation that targets individual employees, employee groups or teams, and organizations (March & Simon, 1958). Scholars from sociological or economic disciplines may focus on value creation in terms of society (Lee, Peng, & Barney, this issue) or nations (Porter, 1990). While not exhaustive, this list does highlight the differences in *targets* or users for whom value can be created.

We appreciate the helpful support of the reviewers and the authors who contributed their time and insights into this special topic form, as well as the tremendous support of Art Brief, former editor, and Susan Pauli, former managing editor. We also thank Qing Cao, Saba Colakoglu, Niclas Erhardt, Mike Pfarrer, and Antoaneta Petkova for their comments on an earlier draft of this manuscript.

Similarly, researchers' formative discipline causes them to focus on different *sources* of value creation. For example, psychology, organizational behavior, and many HR scholars focus on the behavior of individuals or groups. In contrast, organizational theorists, strategic management researchers, strategic HRM scholars, and entrepreneurship scholars often emphasize the organization level; further, some economists, organizational theorists, and sociologists examine the industry or societal level of analysis. Overall, the existence of this plurality in both the targets and sources of value creation introduces a host of challenges to scholars, including the development of a common definition for the term.

A second source of difficulty regarding value creation is that value creation refers both to the content and process of new value creation. On the content side, questions regarding what is value/valuable, who values what, and where value resides highlight the complexity of understanding value creation. The fact that value creation is used just as frequently to refer to the underlying process of creation, how value is generated, and the role, if any, of management in this process underscores this confusion.

Finally, the process of value creation is often confused or confounded with the process of value capture or value retention. However, we argue that value creation and value capture should be viewed as distinct processes, since the source that creates a value increment may or may not be able to capture or retain the value in the long run. Rather, value created by one source or at one level of analysis may be captured at another—a process we call, in this paper, "value slippage." For example, although an individual may create value by developing a new way to perform a particular task in the workplace, other parties, such as organizations or even societies, may benefit more from the value that is created than does the individual creator. Similarly, value created by organizations, possibly through the introduction of a new product or process, may not be wholly captured by them but, instead, may spill over into society as a whole. Thus, we argue that the tendency for scholars to combine value creation and capture into discussions of value creation has, to some extent, also contributed to the level of disagreement and confusion surrounding the term *value creation*.

Addressing all the points of disagreement in researchers' understanding of value creation would, we believe, require a book-size contribution rather than an article. Thus, our purpose in this introductory article is more limited: (1) to propose a general definition for the term *value creation;* (2) to illustrate how the *process of value creation* may vary when undertaken by different sources (and levels of analysis), who tend to also single out different targets of value creation; and (3) to discuss the concept and process of *value capture,* distinguishing it from value creation and showing how this process may vary for the different sources of value creation and levels of analysis.

Table 1 portrays the different dimensions of value creation, including the different academic disciplines that focus on this concept, the primary sources and levels of analysis that create value, and the targets most commonly associated with these sources. Further, Table 1 also is concerned with the process of value capture such that the arrows within the table depict the potential for value slippage whereby the value creation process undertaken by one source, at one level of analysis, produces value that may be captured by a different source operating at another level of analysis. We now examine the columns of our structuring matrix in greater detail, starting with value creation, and provide an illustration for each source or level of analysis.

WHAT IS VALUE CREATION?

To understand value creation, it is first important to define the concept. Bowman and Ambrosini (2000) introduce and differentiate two types of value at the organizational level of analysis: use value and exchange value. We broaden their definitions to deal with multiple levels of analysis and to focus specifically on value creation. Accordingly, *use value* refers to the specific quality of a new job, task, product, or service as perceived by users in relation to their needs, such as the speed or quality of performance on a new task or the aesthetics or performance features of a new product or service. As Bowman and Ambrosini (2000) note, such judgments are subjective and individual specific. They label the second type of value *exchange value,* which we define as either the monetary amount realized at a certain point in time, when the exchange of the new task, good, service, or

TABLE 1
Dimensions of Value Creation

Level of Analysis or Source of Value Creation	Academic Lens	Target or User of Value	Creation Process	Value Capture Process	Article
Society	• Sociologists • Economists • Ecologists	• Individuals • Organizations • Government	• Innovation and new firm creation • Competition • Capital investment • Incentives • Laws and regulations	• Factor conditions • Demand conditions • Supporting industry infrastructure • Firm strategy and rivalry	Lee, Peng, & Barney
Organizations	• Strategic management • Organization theory • Strategic HRM	• Consumer • Society	• Invention • Innovation • R&D • Knowledge creation • Structure and social conditions • Incentives, selection, and training	• Rare, inimitable, nonsubstitutable resources • Intangible resources	• Sirmon, Hitt, & Ireland • Kang, Morris, & Snell • Priem
Individuals	• Psychology • Organizational behavior • HRM	• Consumers • Client • Organization	• Knowledge creation • Search • Ability • Motivation • Training	• Network position • Unique experience • Tacit knowledge	Teppo & Hesterly

Note: Dashed arrow (·····→) indicates value slippage; solid arrow (——→) indicates value capture.

product takes place, or the amount paid by the user to the seller for the use value of the focal task, job, product, or service.

Viewed together, these definitions suggest that value creation depends on the relative amount of value that is subjectively realized by a target user (or buyer) who is the focus of value creation—whether individual, organization, or society—and that this subjective value realization must at least translate into the user's willingness to exchange a monetary amount for the value received. Here we state two important economic conditions that may be necessary for value creation activities to endure. First, the monetary amount exchanged must exceed the producer's costs (money, time, effort, joy, and the like) of creating the value in question, at least for the single point in time when the exchange occurs. Second, the monetary amount that a user will exchange is a function of the perceived performance difference between the new value that is created (from the new focal task, product, or service) and the target user's closest alternative (current task, product, or service). In general, without these excesses, neither the user nor the creator of value would be willing to repeatedly engage in these activities over the long term.

Having defined value creation, we now explain how use value and exchange value are determined by relying on the work of Amabile (1996), who employs the concepts of *novelty* and *appropriateness* to explain how creative acts are evaluated by judges. She notes, "A product or response will be judged as creative to the extent that it is both a novel and appropriate, useful, correct or valuable response to the task at hand" (1996: 35). Thus, we suggest that the level of new value creation will depend on a target user's subjective evaluation of the novelty and appropriateness of the new task, product, or service under consideration. The greater the perceived novelty and appropriateness of the task, product, or service under consideration, the greater the potential use value and exchange value to the user.

Amabile (1996) highlights three important conditions of this definition that are also relevant to value creation. First, it is important to recognize that, in order to evaluate the novelty of a new task, product, or service, users must possess specialized knowledge of both the focal entity and what alternatives exist at a given time so that a comparison of novelty and appropriateness and, hence, value can be made. Second, a

user cannot evaluate appropriateness without an understanding of the meaning of the new task or product in a specific context. Third, the evaluation of novelty and appropriateness of a creative task or product cannot be done independently of the social or cultural context in which it is introduced.

In combination, these three conditions highlight the subjective and context-specific nature of the value creation process. Different targets or users may arrive at different conclusions about the novelty and appropriateness of a new task, product, or service depending on their individual knowledge levels and the context in which they are embedded. Note that one important consequence of this subjective and context-driven definition of novelty and appropriateness is that there will be competing views of what is valuable among different users of value. This suggests that the producer or source of value creation must understand the relative knowledge of potential users and the context in which the evaluation of novelty and appropriateness will take place.

We propose that the definition of value creation, as well as how users will evaluate the novelty and appropriateness of the new task, product, or service, will be consistent across disciplines and levels of analysis. However, what "value" is created, how it is perceived as valuable (use and exchange value), and the process through which that value is created are likely to vary considerably, depending on the source/level of analysis that produces the value and the theoretical perspective advanced by the discipline that studies the focal source/level of analysis. We begin our discussion of the process of value creation by first looking at the individual's role as value creator, and we then move to organizational and societal levels of analysis.

HOW IS VALUE CREATED? THE PROCESS OF VALUE CREATION

There are at least two possible ways to conceptualize the process of value creation: (1) a single universal conceptualization and (2) a contingency perspective that explicates how value is created from the vantage point or perspective of a particular source. We endorse the contingency perspective by proposing that answering the question of how value is created requires one to define the source and targets of value creation and the level of analysis. We posit that when the individual is the unit of analysis, the focal process is the creative acts displayed by individuals and a select set of individual attributes, such as ability, motivation, and intelligence, and their interactions with the environment. When the organization is the source of value creation, issues regarding innovation, knowledge creation, invention, and management gain prominence. Finally, at the societal level, the level of entrepreneurship and macroeconomic conditions in the external environment, including laws and regulations restricting or encouraging innovation and entrepreneurship, come into play. Later in this paper, we take a similar contingency perspective on the process of value capture.

The Individual As a Source of Value Creation

Individuals create value by developing novel and appropriate tasks, services, jobs, products, processes, or other contributions perceived to be of value by a target user (e.g., employer, client, customer) relative to the target's needs and when the monetary amount realized for this service is greater than what might be derived from an alternative source producing the same task, service, job, and so forth. The value created may be from any new task, service, or job that provides greater utility or lower unit costs for the user over the closest alternative. For example, an employee working for a manufacturer may develop a faster or more consistent method to produce fabricated parts, thus lowering unit costs, or may create a higher-quality part, which subsequently yields a higher unit price.

Only one paper in this STF, by Felin and Hesterly, focuses on the individual level of analysis; the authors contend that our understanding of the value creation process must begin at the individual level of analysis. Emphasizing knowledge creation as an aspect of value creation, they argue that value creation must be understood by focusing on the initial knowledge conditions of individuals in the value creation process.

It is interesting that none of the papers in this volume explore individual creativity as a source of value creation. Amabile (1996)—consistent with Felin and Hesterley (this issue)—suggests that creation of something of value can be predicted based on individuals' characteristics and

on the interaction between individuals and their environment. Similarly, Locke and Fitzpatrick (1995) argue that individuals must possess abilities such as knowledge, intelligence, and mental acuity or flexibility in order to create. In addition, Amabile (1996) highlights the role of intrinsic motivation that is produced from the individuals' enjoyment of the work itself, as opposed to alternative rewards provided by others—for example, recognition, money, or status. She states, "The intrinsically motivated state is conducive to creativity, whereas the extrinsically motivated state is detrimental" (1996: 107). Thus, we argue that individuals create value by acting creatively to make their job/service more novel and appropriate in the eyes of their employer or some other end user in a particular context.

The Organization As a Source of Value Creation

Moving to the organizational level of analysis, in his book on competitive advantage, Porter (1985) contends that new value is created when firms develop/invent new ways of doing things using new methods, new technologies, and/or new forms of raw material. Thus, when the organization is the unit of analysis, innovation and invention activities impact the value creation process. Damanpour (1995) suggests that innovative organizations introduce new products or services or new management practices related to the products or services. The new products, services, or practices arise from the innovation process, which Van de Ven, Polley, Garud, and Venkataraman (1999) argue consists of an intentional effort to develop a novel idea, involving significant market, technical, and organizational ambiguity; regarding a commitment of collective effort over an extended period of time; and requiring more resources than are currently held by the parties involved. Further, the literature suggests that firms are more likely to innovate when they face uncertain environments (Brown & Eisenhardt, 1997), enjoy slack resources (Van de Ven, Venkataraman, Polley, & Garud, 1989), are managed by entrepreneurial managers (Brown & Eisenhardt, 1998), have large social networks (Smith, Collins, & Clark, 2005), and have the organizational capacity to combine and exchange knowledge into new knowledge (Nahapiet & Ghoshal, 1998; Smith et al., 2005).

Here again, the focus is on how the target user benefits from the new product or service. From this perspective, Priem (this issue) suggests that value creation involves innovation that establishes or increases the consumer's valuation on the benefits of consumption (increases use value). Similarly, we argue that, at the organization level, the value creation process includes any activity that provides a greater level of novel and appropriate benefits than target users or customers currently possess, and that they are willing to pay for.

A second body of literature in the field of strategic management—dynamic capabilities—also has examined how organizations create value by focusing on how firms can create new advantages as existing ones are worn away by environmental changes. For example, Teece, Pisano, and Shuen contend that firms build advantages by distinctive organizational processes, asset positions, and evolutionary paths that allow them to "integrate, build, and reconfigure internal and external competencies" (1997: 516). Conversely, Eisenhardt and Martin (2000) argue that dynamic capabilities are more commonplace and readily identifiable processes and routines that pertain to how resources are acquired, integrated, and reconfigured. Zollo and Winter (2002) and Winter (2003) further suggest that such capabilities are the activities that generate and modify operating routines to create new advantages. Dynamic capability scholars have also begun to empirically identify the factors that lead to the creation of new advantages, including product and process development (Helfat, 1997), organizational evolution (Brown & Eisenhardt, 1997; Rindova & Kotha, 2001), and managerial capabilities and cognition (Adner & Helfat, 2003; Tripsas & Gavetti, 2000). Much of this literature is focused on factors internal to the firm and emphasizes knowledge creation, learning, and entrepreneurship in creating new advantages. Yet, in our view, the dynamic capabilities literature on creating new advantages currently neglects the importance of the target users, their perceptions, desires, and alternatives, as well as the context in which users are embedded.

A third stream of organizational-level literature has paid increased attention to the process through which new organizational knowledge is

generated and, hence, value created. Presumably, such new knowledge can lead to greater value for target users. In particular, Nahapiet and Ghoshal (1998) suggest that the social connections of individuals within the firm will provide greater information and knowledge that can be used by organizational members to combine and exchange this information in a way that produces new organizational knowledge. Smith et al. (2005) found that social networks of organizational members were positively related to the knowledge creation capability and that this capability itself was an organizational-level concept that was positively related to firm innovation. Thus, it may be that social networks that are externally directed to detect the needs of customers and product/service users have greater potential for novel and appropriate product/service innovations.

A final body of literature that is also relevant to the organization as a source of value creation is strategic HRM research. Strategic HRM researchers have examined the role of management in the process of value creation quite extensively. Practices identified from this body of research have been found to both build employee skills and motivate them to work toward organizational value creation (Wright & McMahan, 1992). Strategic HRM research, for example, has demonstrated that use of high-investment HRM systems that include practices that develop employee skills, enhance the motivation to work toward organizational objectives, and provide the discretion needed to quickly take appropriate actions to achieve organizational goals is related to a variety of important outcomes, such as employee turnover (Guthrie, 2001; Huselid, 1995), organizational commitment (Whitener, 2001), operational performance (Youndt, Snell, Dean, & Lepak, 1996), and financial performance (Delery & Doty, 1996; Huselid, 1995).

Extending this logic to a knowledge-based context, Kang et al. (this issue) suggest that firm success rests on the firm's ability to offer new and superior customer value, which, in turn, depends on its ability to explore and exploit employee knowledge that can become the basis of important innovations that create value for targeted customers. Kang et al. recognize, however, that firms' ability to leverage employee knowledge requires that they design HR systems that encourage entrepreneurial activity among employees resulting in exploratory innovation, as well as cooperative employee activities that exploit and extend existing knowledge for competitive advantage.

To this point, our discussion has implied that the target or user of value is almost exclusively an internal or external customer of the organization. Yet we would be remiss if we allowed the reader to believe that the customer is the exclusive target or user of value creation. Rather, many potential targets for value creation exist at the organizational level. For example, researchers focusing on corporate social responsibility examine the actions of organizations that are intended to further social good, beyond the interests of the firm and what is required by law (McWilliams & Siegel, 2001). Similarly, in their book on stakeholder analysis, Post et al. (2002) suggest that the purpose of the organization is to create value in many different ways for many different targets, including earnings for owners, pay for employees, benefits for customers, and taxes for society. Further, these authors send a strong message to organizations regarding their broad responsibilities in creating value and wealth, and they note that "the corporation (organization) cannot—and should not—survive if it does not take responsibility for the welfare of all of its constituents and for the well-being of the larger society within which it operates" (2002: 16–17).

By definition, various stakeholders have different views as to what is valuable because of unique knowledge, goals, and context conditions that affect how the novelty and appropriateness of the new value will be evaluated. Moreover, they may have competing interests and viewpoints on what is valuable. For example, investors may favor any value-creating activities that add to short-term profits, whereas environmentalists may prefer only those value-creating activities that preserve the environment. Thus, a stakeholder approach requires that organizations take a broader and a longer-term view regarding the targets of value creation. This perspective, in our opinion, is important because it suggests that there will be different and perhaps competing viewpoints among users on what is valuable and, thus, that organizations must direct time and effort toward recognizing and, to some degree, reconciling these differences.

In summary, our discussion of the individual and the organization as sources of value creation clearly shows that the process of value creation varies depending on the perspective that researchers adopt. Thus, any discussion of value creation must clearly articulate both the target of the value and the party that produces the value and is intended to benefit from it (the source). We now broaden our discussion of sources beyond the individual and the organization by focusing attention on society, specifically governments, which strive to create value for the overall benefit of society.

Society As a Source of Value Creation

At a societal level, the process of value creation can be conceived in terms of programs and incentives for entrepreneurship and innovation intended to encourage existing organizations and new entrepreneurial ventures to innovate and expand their value to society and its members. Joseph Schumpeter (1934) highlighted the interdependent nature of the marketplace, arguing that it was the result of continuous innovation and technical progress. If firms fail to innovate, their positions are eroded by competitors who offer new innovations that appeal to the market. To avoid this erosion, firms must continually strive to introduce new products, methods, and initiatives. Indeed, Schumpeter (1942) argued that the innovation of firms in pursuit of profits is *the* key source of market expansion and economic growth.

In addition to receiving value from the innovation and entrepreneurship of private firms, Porter argues that society and government can do a number of things to inspire innovation and entrepreneurship in a society:

> The central goal of government policy toward the economy is to deploy a nation's resources (labor and capital) with high and rising levels of productivity . . . productivity is the root cause of a nation's standard of living. To achieve productivity growth, an economy must be continually upgrading. This requires relentless improvement and innovation (1990: 617).

Porter details how state and federal macroeconomic policy can affect factor and demand conditions, industry structure, and even related industries that drive innovation and competition in a society. Government creates value through laws and regulations and through services that provide structure and stability and assurances of quality, lawful behavior, and national support. Indeed, Porter (1990) suggests that invention and entrepreneurship are at the heart of any nation's advantage. To support this proposal, he describes how the U.S. government's creation of a favorable economic environment for the medical products industry, one including strong product demand conditions from a large, affluent, and progressive population, a supportive infrastructure of medical schools and hospitals, and ongoing financial support for medical innovations, caused entrepreneurs to flock to the United States to start medical products businesses. As a consequence, the medical products industry is very strong in the United States and creates much value for society as a whole by providing jobs, tax benefits, and infrastructure for related businesses and services.

Similarly, Lee et al. (this issue) focus on the specific role of government policy on bankruptcy law as a source of value creation for society. Taking a real options theory perspective, they suggest that "entrepreneurial friendly" bankruptcy laws will promote greater entrepreneurial development. From a societal perspective, the researchers argue that one might view each entrepreneurial firm as an option that society must decide whether or not to exercise. By passing and enforcing liberal bankruptcy laws that facilitate the failure of relatively hopeless entrepreneurial firms while enabling the survival of those with the potential for a strong future, governments create value for society as a whole.

At the societal level, value creation is a somewhat different process than at the individual or organizational level, since sources may act intentionally or unintentionally to create value for society at the same time they are creating value for themselves. For example, new and successful entrepreneurial ventures create value for society as well as for themselves by providing more jobs, tax revenues, and potentially more and better products and services for consumers and a higher standard of living for society (Lee et al., this issue). In combination, our discussion of the value creation process for individuals, organizations, and society shows that it is fairly unique across the three sources and cannot be described in general terms that ignore the nature of the source and the target users. Value creation at the individual level involves creativ-

ity and job performance, at the organizational level it may mean innovation and knowledge creation, and at the societal level it may involve firm-level innovation and entrepreneurship, as well as policies and incentives for entrepreneurship.

Further, the issue of different stakeholders and competing interests makes the issue of value creation very complex and also points to the importance of capturing value. For example, once an organization is fairly successful in creating large amounts of value for its customers, and in return realizes exchange value from this success, questions arise among stakeholders and broader society about the appropriate levels of value that should be returned to the firm, as opposed to other stakeholders, particularly employees who often invest significant amounts of expertise, effort, commitment, and time under an exchange relationship initiated at a prevalue realization state. Similarly, other stakeholders, such as suppliers and society in general, may typically raise concerns about the fairness of value distribution and try to gain a greater share of the returned value. Consider the experience of Wal-Mart, ranked as the number 1 Fortune 500 company in the world for two years running. It is not surprising that the firm has increasingly come under fire from stakeholders who question the appropriateness of the firm's level of value capture—for example, union relations, legal discrimination charges, charges of monopolistic practices from competitors, and complaints from employees about the level of wages and benefits.

Thus, we argue that value creation requires more than simply understanding what the employer, customer, or society is willing to pay for. Instead, one must recognize the existence of multiple targets—whether intended as such or not—who exist in concert, not in isolation. One must also consider the knowledge of potential users and the context in which they make evaluations about the new value that has been created. For these reasons, we turn now to a discussion of the process of value capture.

VALUE APPROPRIATION: HOW IS VALUE CAPTURED?

In the strategic management literature, scholars have made a distinction between value creation and value appropriation, recognizing that, in some cases, organizations that create new value will lose or have to share this value with other stakeholders, such as employees, competitors, or society (Coff, 1999; Makadok & Coff, 2002). Recall the earlier distinction between exchange value and use value (Bowman & Ambrosini, 2000). Value slippage—that is, when the party creating the value does not retain all the new value that is created—occurs when use value is high while exchange value is low. Slippage obviously provides little incentive for a source to continue creating value in the long term. Thus, it is important to understand the nature of the value-capturing process.

We propose that two key concepts operate across all levels of analysis to determine which party captures the new value that is created: *competition* and *isolating mechanisms*. As we have noted, as increments in the novelty and appropriateness of a focal task, product, or service increase, the use value and the monetary exchange value will also increase. The creation of appropriate and novel tasks, products, or services will often yield a situation where there is limited supply and high demand. Competition will thus ensue, as other suppliers of the task, product, or service seek to replicate the new value that was created and participate in the profits. A consequence of competition (increased supply) is that exchange value (price) will decline to the point where supply equals demand. At this point, the value that was created must be shared with other competitors who will market the task, product, or service to other users. As other competitors enter the market, they may create a situation of high use value but low monetary exchange value for the original source. Competitors may also be unable to retain value as end users benefit from the lower prices brought by increased competition.

Further, it is important to note that competition is not limited to the organizational level; rather, competition is likely to extend to all levels of analysis in determining how much new value is captured by the creator. For example, competitive and homogeneous labor markets where individual capabilities are virtually the same and in large supply allow organizations to benefit by keeping labor costs low. This limits the value that any one employee can capture by constraining his or her bargaining power (Coff, 1999).

Similarly, competition among firms allows society to benefit by keeping prices low. In fact, there is a circular or codependent relationship between competition and value creation such that competition will result from value creation activities, but value creation also will be a consequence of competition. At the individual level, there is evidence that competition increases the search for creative solutions to produce additional value (Bloom & Sosniak, 1981). At the organizational or societal level, Schumpeter's (1942) concept of "creative destruction" comes into play as an explanation for how firms succeed and markets advance through the processes of innovation and competition. Basically, creative destruction denotes a process whereby higher levels of competition drive firms to become more innovative by introducing new products (referred to as new combinations) that create value, only to lose the value to competitors who replicate or imitate the products. As a result, the heterogeneity of tasks, products, and services that is created by continuing innovation provides a stable base of employment, education, tax support, community service, and the like that also stimulates growth and development at the societal level (Scherer & Ross, 1990; Schumpeter, 1942).

Thus, competition can explain how value slips away from the creator to be shared with other competitors and users. For example, an individual may create significant value for him/herself by developing a new way of performing a job for an employer or a service for a customer. Conceptually, this individual may extract or capture all the value in the form of high salary or other benefits because there are no substitutes or competitors. In short, the individual may enjoy high bargaining power because of the presence of isolating mechanisms. This capture is indicated in Table 1 by the arrow denoting "value capture."

Over time, however, it is unlikely that the employer will, or can, allow an employee to capture all the value accrued from the process, product, or service (note the arrow going up to the second row, indicating "value slippage"), because the organization typically also makes a significant investment in the value creation activity, even though the employee may have developed it. For example, the organization often allows the employee to develop the new value during work time, to use work tools and equipment in the development, to receive manufacturing and marketing assistance in developing a prototype for the idea and effectively promoting the resulting product or service to existing and former customers, and even to utilize existing distribution channels to get it to the customer.

However, in some cases, competition is limited and supply does not equal demand, resulting in the potential for greater value capture by the creator. As an explanation for how these scenarios transpire, we introduce a second factor originating in biology: isolating mechanisms. An isolating mechanism is any knowledge, physical, or legal barrier that may prevent replication of the value-creating new task, product, or service by a competitor. In essence, isolating mechanisms operate across levels of analysis to limit value slippage, thus enabling the sources of value creation to capture the majority of the value created. The existence of an isolating mechanism raises the potential bargaining power of the creator of value to retain this value, although the nature of the isolating mechanism may be quite different at different levels of analysis.

Value Capture at the Individual Level of Analysis

At the individual level, many different attributes may serve as a basis for the development of isolating mechanisms that enable the source of value creation to capture value, including individuals' unique position in a social network (Burt, 1992), the nature of their relationship with selected others in the organization, and their specialized expertise or knowledge, particularly tacit knowledge obtained from the performance of the new task or creation of the new product or service. Clearly, if others cannot easily imitate the process used by the originating source to create value, it is more likely that the source will be able to capture the resulting value.

As an example, the owner of a machine tool company tells the story of how all his "in process" inventory was backed up because one close tolerance finishing operation required unique craft "know-how" that was difficult if not impossible to find in the open labor market. This owner hired many different machinists to perform the job, only to learn that they could not perform the task and created scrap and high

costs. One day, the owner hired an older machinist with much experience who created a new and unique way of completing the finishing task with virtually no scrap creation and a high level of efficiency. The owner was happy, and the machinist commanded a high salary. The new machinist single-handedly addressed the tool company's long-term production problem, and the owner was able to expand his business. Before long, however, there was too much inventory for the experienced machinist to process. Thus, the owner asked the older machinist if he would help train another machinist so that production could be increased. The machinist refused, stating, "If I help you train other employees, you won't need me." He then asked for and received another raise. The stalemate between owner and mechanic continued, and, as might be expected, their personal relationship soured. At some point, and perhaps ironically because of the machinist's own value-creating activities, the owner was able to buy a high-technology machine that essentially performed the same high-quality work as the machinist at a lower cost in the long term. The owner of the machine tool company no longer needed the machinist.

This example illustrates the importance of personal attributes that serve as isolating mechanisms when individuals are the source of value creation and the way in which these attributes allow individuals to enhance their bargaining power to capture value from the employer, at least until the point where new technology or other processes limit the individuals' effectiveness. Note that it was the struggle between the machinist and employer in our example over who captured the value that motivated the owner to find a new source of value. As such, the example also illustrates the competition between the owner and the employee for the exchange value of the machinist's activities. Without the new technology (also a new source of value), the machinist would continue to capture the value.

Value Capture at the Organizational Level of Analysis

At the organizational level of analysis, researchers have looked internally within organizations to better understand how value is captured. The concepts of value chain and value chain analysis, for example, directly focus on the ways in which firms may configure their primary and support activities to maximize and sustain competitive advantage (Porter, 1985). Moreover, researchers adopting a resource-based view of the firm (Barney, 1991) have focused attention on identifying the types of resources that can act as isolating mechanisms against potential competitors. Barney (1991) argues that resources may serve as isolating mechanisms and limit competition in cases where they are rare, inimitable, nonsubstitutable, and valuable. Schumpeter (1942) also addresses this issue, arguing that if profits from an innovation (creative) are great enough, competitors will find a way to replicate the innovation (destruction). Such replication may occur by stealing away key employees, preempting key resources, reverse engineering, or leapfrogging technology. Subsequently, as competitors replicate, value will slip away from the creating firm to competitors, consumers, and society (through the low prices emerging from competitive markets).

Sirmon and colleagues (this issue) identify the process of resource management as a critical mechanism through which value may be captured once created. Specifically, they propose that organizations must take actions that (1) structure the resource portfolio, (2) bundle resources to build capabilities, and (3) leverage capabilities to exploit market opportunities. By doing so, they can simultaneously create and exploit value for customers as well as owners. Thus, at the organizational level of analysis, value may be captured by the use of resources with attributes that make them difficult to imitate, through the source's own use of creative destruction before competitors can use the innovation, and through methods of resource management.

Value Capture at the Societal Level of Analysis

At the societal level, Porter (1990) identifies isolating mechanisms that allow a nation to capture value. He suggests that nations will retain the value they create (not lose it to other societies) when they have unique factor or resource advantages, strong demand conditions, related and supporting industry infrastructure, and competitive markets. These serve as isolating mechanisms for a particular society.

Extending this logic to other levels of society, we suggest that societies, states, or communities having specific resource advantages—for example, a unique natural resource, healthy and growing markets that are supported by a thriving business infrastructure, and competitive and innovative markets—will be able to capture more value for their citizens than will those lacking these conditions. Thus, communities that are located near major research universities will benefit from having a large pool of talented workers. Societies with large urban populations will have greater demand conditions then will rural communities. Communities with a thriving business community will likely develop a more efficient business infrastructure then will those where there is little business growth. Finally, societies having highly competitive markets and strong rivalries will likely produce more competitive firms than will those having low levels of competition. All in all, value creation activities (innovation and entrepreneurship) in societies with these conditions will have clear advantages over those in societies without such conditions.

By focusing on competition and isolating mechanisms, we can begin to see how value is captured at different levels and why it sometimes slips away from the initial value source. In the case of the individual, we believe personal attributes such as specialized knowledge and abilities, one's unique place within social networks, and one's specialized relationships with others in the organization all may serve as isolating mechanisms enhancing bargaining power and enabling one to capture the majority of the value one has created. At the organizational level, we propose that, in the long term, competitors also offer a serious threat to the firm's ability to capture the value that it has created but that the manner in which the firm structures its resource base and the characteristics of its resources themselves, in terms of value in meeting challenges, inimitability, and rarity in the profiles of other firms, may all work to enhance the firm's ability to capture value. Finally, at the societal level, nations, states, and communities also experience challenges from other societies that may compete for the value they have created. Several factors may serve as isolating mechanisms for these entities, including the presence of unique factor or resource advantages, strong demand conditions, related and supporting industry infrastructure, and competitive markets. Thus, the process of value capture varies according to the initiating source or level of analysis, yet at each level of analysis, both competition and isolating mechanisms play important roles in shaping value capture, even though the manner in which competition and isolating mechanisms operate plays out differently across these levels of analysis.

We suspect that value slippage may move both up and down levels of analysis, depending on the type of isolating mechanism and the level at which it operates. Thus, value created by an individual may be captured by the organization or society; conversely, an enterprising entrepreneur may be able to solely capture the value created by a well-intentioned public initiative for entrepreneurship initiated at the societal level.

DISCUSSION

We began our discussion with a basic conclusion that gained considerable support from our experience as the guest editors for this STF—namely, that considerable disagreement and confusion remain among scholars on the nature of value creation. In identifying reasons for this disagreement, we suggested that they result, in part, from differences in the formative disciplines of researchers, as well as confusion regarding the specific sources and targets of the value creation being studied. Yet our own research and thinking about the topic of value creation led us to propose a fairly general definition of value creation as the difference between use and exchange value that can apply to all levels of analysis (Bowman & Ambrosini, 2000). However, we also believe that the *process* of value creation itself is a contingency phenomenon varying substantially with respect to the activities undertaken, the target users focus on as "buyers" of use value, and the underlying theoretical foundation. Subsequently, we devoted much of this article to exploring the nature of value creation as it operates, differentially we argue, at the level of individual, organizational, and societal sources.

In the course of our editorial decisions and thinking about value creation, however, we found ourselves repeatedly facing the question of whether a particular source or creator would be able to capture the primary share of the re-

sulting value. For this reason, we also awarded significant attention to the process of value capture. While in some cases the source is able to capture the excess between exchange value and use value, often there is value slippage such that the excess created between use value and exchange value is shared among multiple parties or stakeholders. Ultimately, we concluded that, much like the value creation process, value capture varies considerably, depending on the particular source that directs the process and the level of competition and isolating mechanisms surrounding the value that is created.

Throughout this article, we discussed multiple levels of analysis, targets, and theoretical perspectives in order to develop and provide support for our central argument that both the value creation and the value capture processes are contingency phenomena that are highly dependent on the source that initiates the activity. We also referenced particular articles within the STF that address issues of value creation or capture. Clearly, our ideas require additional conceptual thought and development in order to determine their validity. We sincerely hope that they will stimulate the reader's involvement in this process. Toward this end, we devote the remainder of this article to identifying those research directions we believe to be most fruitful for the process of building greater agreement among scholars on the topic of value creation and also enhancing our understanding of the phenomenon as both an outcome and a process.

To begin, given the importance of a multilevel perspective for both value creation and capture, we encourage research that examines how these processes work across levels of analysis. As noted above, different stakeholders may have different views as to what is valuable because of differing knowledge, goals, and context conditions that affect how the novelty and appropriateness of the new value will be evaluated. Moreover, individuals, organizations, and society may have competing interests and viewpoints about what is valuable. An important area of focus for value creation research is to examine how sources balance the potential tensions of different targets of value creation. Are certain targets more or less important for value capture? Is there a certain threshold that must be balanced among all relevant constituents to realize value creation and capture? For example, investors may favor value-creating activities that add to short-term profits, employees may favor value-creating activities that lead to long-term company stability, and environmentalists may prefer only those value-creating activities that preserve the environment. Can value creation activities survive in the long term if only one target is satisfied, or do value creators have to meet some minimum level of use value for all parties to maximize their exchange value?

Another direction for research rests on examining value creation at a meso level of analysis. While our discussion has focused on the individual, organizational, and societal levels of analysis, it is important to recognize that there are intermediate or meso levels of analysis that exist as well. For example, many organizations rely on teams as a mechanism for value creation. Whether developing new tasks, products, processes, or services, teams are unique, being dependent on the individuals that compose the team for effectiveness, yet they may be viewed as a higher-order entity as well. And with a focus on teams, factors such as team composition, members' willingness to share knowledge, and social networks gain prominence (also see Coff, 1999, for a focus on value capture in teams). Relatedly, an industry level of analysis also presents unique attributes that are greater than any one organization in the industry but narrower than society at large. Researchers need to determine whether what is valuable, the process of value creation, and the process of value capture are similar for these meso levels. We may find that there are unique features of these levels of analysis that substantially impact value creation and/or value capture.

Moving to a third area, recognizing that value creation and value capture are two distinct processes, research is needed that examines the relationship between these two concepts. In particular, we encourage research that examines a party's willingness to engage in value creation activities. At a basic level, a simple but important question is "Are value creation efforts dependent on a certain anticipated level of value capture?" As we noted above, value capture is never guaranteed—the source that creates a value increment from a given task, product, service, or activity may not necessarily succeed in capturing a majority of it in the long run. Yet because it is unlikely that most sources or creators (individuals, companies, and society) are

completely altruistic, we anticipate a hope or desire to capture all, or at least a considerable portion, of the value they create. But how much anticipated value capture is required to engage in value creation in the first place? Recall our earlier discussion of the machinist in the machine tool company:

> The owner asked the older machinist if he would help train another machinist so that production could be increased. The machinist refused, stating, "If I help you train other employees, you won't need me." He then asked for and received another raise.

This situation illustrates a potential tension. The machinist certainly could help create value for the company by training other employees. By doing so, production could increase and the company as well as other employees could benefit. Yet the machinist would be jeopardizing his potential value capture by reducing a critical isolating mechanism—unique knowledge. In short, the ability to create value does not necessarily mean that parties will do so. Would this machinist have acted differently had he had some other isolating mechanism in place to guarantee a continued return on his unique knowledge—or a way to ensure continued value capture (e.g., a long-term contract)? Would he have acted differently if he recognized that a new replacement technology was on the horizon? We can imagine situations in which parties at other levels of analysis have the potential for value creation but may not engage in doing so without some anticipated level of capture for those efforts. Thus, research is needed to examine the relationship between anticipated value capture and willingness to engage in activities that create value, and especially the role of extrinsic motivation in value creation.

A related issue pertains to the role of learning in the value creation–value capture relationship. A key question is whether actors learn from past value creation efforts in terms of the amount of value they capture and use this knowledge for decisions regarding future value creation activities. Recognizing that virtually all value creation activities face prospects of slippage, it is conceivable that the value creation process evolves for creators of value based on their learning from past experiences in trying to create and capture value. In this regard, past experience capturing the benefits stemming from creativity and/or innovation may influence how actors structure their value-creating efforts in the future. One logical focus is to examine how actors at different levels of analysis attempt to build isolating mechanisms into the actual process of value creation over time so as to ensure a greater level of capture.

It is interesting that some authors have suggested that it is only necessary to examine value capture. For example, Schumpeter (1942) and certain scholars in entrepreneurship are not interested in the creator of ideas and/or the inventor of products but, rather, are interested only in those who seize opportunities through action or capture the value from such ideas and products. In contrast, March (1991) has suggested that there is a need for scholars to understand the relationship between the exploration of new ideas, which connects well with value creation, to the exploitation of ideas, which connects with value capture. He suggests a balance is necessary. We believe that it is necessary to understand the antecedents and consequences of both value creation and value capture. As management and organization scholars, this is necessary if we are to assist individuals, organizations, and societies in raising the quality of life and enhancing economic development and well-being.

In conclusion, the subject of value creation is made complex by its subjective nature, multiple levels of analysis, and the theoretical discipline scholars use to study it. This introduction has no doubt raised more questions than it has answered. Nonetheless, we are hopeful that this introduction and the articles that follow fuel more debate and research on the subject of value creation. A greater understanding of value creation may help individuals, organizations, and society advance and prosper in a competitive world.

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