ORGANIZATIONAL STRATEGIC LEARNING CAPABILITY: EXPLORING THE DIMENSIONS
Abstract

How to build and enhance the strategic learning capability of an organization becomes crucial to both research and practice. This study was designed to conceptualize strategic learning capability by translating and interpreting the related literature to develop empirical dimensions that could be tested and used in a survey instrument. The resulting survey instrument included fifty-nine items that were developed through a review of the literature, a brainstorming session of HRD practitioners, and communications with experts in the field and committee members. Based on responses on a five-point performance scale, strategic learning capability items were identified and prioritized, and seven dimensions were discovered: (1) External Focus, (2) Strategic Dialogue, (3) Strategic Engagement, (4) Customer-Centric Strategy, (5) Disciplined Imagination, (6) Experiential Learning, and (7) Reflective Responsiveness.

Keywords: Strategic learning capability, Strategy, Strategic Planning, Strategic implementation, Strategy process, Strategic Human Resource Development (HRD), Strategic Human Resources (HR), Sensemaking, Decision making, Organizational learning
Organizations must be extremely agile in the rapidly shifting global context of 21st century business (Tseng & Lin, 2011). Organizations that can learn strategically as an ongoing process will be more adaptable to the external environment (Pietersen, 2010). To do this, organizations must approach strategy making from a learning approach and develop strategic learning capability—*the capacity of an organization to retool rapidly to create and execute new strategy through learning at the individual and system levels in response to changes and uncertainties in complex environments*. While the literature related to strategic learning has grown during the past decade, knowledge around strategic learning capability needs elaboration so that scholars and leaders can more deeply understand what it really is, how it works, and how best to facilitate it.

Scholars have discovered learning facilitated by dialectical inquiry in the decision-making process (Woods, 2012) and scenario planning in the strategy process (Chermack, 2011; van der Heijden, 1996). However, organizations need more guidance and support to develop and embed strategic learning capability within their companies (Grundy, 1994).

On the other hand, while strategic learning has been elucidated over the past decade in terms of its processes (Hax & Majluf, 1988), domains (Sloan, 2006; Vince, 2004), and actions, it still needs elaboration in conceptualizing strategic learning capability within the realm of organizational sensemaking and decision making. In addition, the need for a quantitative measurement of strategic learning capability should be addressed in order to explore its empirical dimensions.

Few methods exist to measure strategic learning capability. A case study method of exploring strategic learning (Wyer, Donohoe, & Matthews, 2009) enlightens important
aspects of strategic learning in depth, which broadens the understanding of conditions to facilitate strategic learning via dialogue and illustrates learning sources, such as discovery and experimentation. Although this action research-based case study unfolds a deep understanding of strategic learning, it is limited to small business enterprises and is not generalizable. On the other hand, van der Merwe, Chermack, Kulikowich, and Yang (2007) have developed a measurement of the quality of strategic conversation and engagement during the process of strategy making, which allows diagnosing the level of an individual’s conversation quality and communication. Siren (2012) developed an instrument of strategic learning capability grounded in knowledge management, information transfer processes, and strategic sensemaking constructed from a strategic knowledge perspective. Although the instrument is integrative of strategic learning, the study focused on strategic knowledge rather than strategic capacity itself.

Regardless of the several attempts to measure strategic learning capability, an integrative and innovative approach to find meaningful dimensions of strategic learning capability will be desirable. A rigorous measure based on concrete concepts around strategic learning capability is needed to deepen our understanding and further theory building in this area. Thus, this study attempts to address the gaps in the literature by understanding and extending strategic learning theory with an exploratory approach. Following Benson and Clark’s (1982) instrument development and validation guide, this study tries to translate the important concepts of strategic learning capability into items.

The purpose of this study is to explore the empirical dimensions of strategic learning capability (SLC) and the guiding research question is “based on strategic
planners’ ratings, can the empirical dimensions of strategic learning capability be
developed?”

**Strategic Learning Capability**

Anderson, Covin, and Slevin (2009) distinguish strategic learning capability from
other manifestations of learning in that strategic learning creates new knowledge and
change as an organizational capacity. Strategic learning capability perceives learning
from a capability perspective, which allows the capacity to determine whether or not
organizations can continually execute strategic learning. Other scholars (Kuwada, 1998;
Pietersen, 2010) have used the term strategic learning capability, but strategic learning
capability is a key to “the question of how firms develop and adapt strategically over time”
(Anderson et al., 2009). Anderson et al. identify two specific aspects of strategic learning
capability: “new strategically relevant knowledge” and “the likely enactment of strategic
change as their consequences” (p. 220). Recently, emerging literature (Gibbert, 2004;
Szulanski & Amin, 2001) has emphasized applying disciplined imagination to strategy
making. Disciplined imagination allows diverse options, encourages creative thinking
that is grounded in reality, and ensures that these options are rigorously evaluated and
systematically developed and implemented (Weick, 1989).

**Strategic Learning**

The concept of strategic learning was coined by Henry Mintzberg (1987a), a
strategy guru, and further developed by other scholars (Pietersen, 2002; 2010, Starbuck,
occurs as strategy emerges over time, until it gets formalized. Pietersen (2002) introduces
strategic learning situated in the strategy development process of reinventing strategy,
which allows continuous renewal of strategic knowledge in constant change. Starbuck et al. (2008) describe challenges of strategic learning in different firms such as difficulties of unlearning what has already been learned, those of learning from failure, and no occurrence of learning at all. Strategic learning has been portrayed differently by various scholars as a social learning process (Burgelman, 1988; Eden & Ackermann, 2001), as strategic thinking (Casey & Goldman, 2010; Liedka, 1998), and as a strategic behavior design process (Kuwada, 1998). Through strategic learning, organizations can build the capacity to prepare proactively for future uncertainties (de Geus, 1988). Strategic learning incorporates a dyadic process of learning (Mintzberg, 1987a) and unlearning (Argyris & Schon, 1996; Hedberg, 1981; Tsang & Zahra, 2008) repeatedly during the strategy process. Strategic learning can be further investigated within the dimensions of sensemaking and decision making.

**Sensemaking.** Sensemaking refers to those processes of interpretation and meaning production (Brown, 2000) which involve turning circumstances into a situation that is explicitly comprehensible in words and will be turned into action (Weick, Sutcliffe, & Obstfeld, 2005). The sensemaking phenomenon can be described as individuals sharing meanings they have jointly negotiated. Accordingly, individuals and groups collectively reflect on and interpret phenomena and come up with an intersubjective description (Brown, 2000).

Strategic sensemaking is a process of the scanning of, interpretation of, and taking action on organizational information (Pandza & Thorpe, 2009; Weick, 1995). These processes are connected through a feedback loop, and scanning and interpretation are the examination of experiences learned through action. The experiences are specific and
concrete, whereas what is learned from the experience is abstract and encyclopedic; sensemaking engages concrete experiences as well as abstract knowledge (Weick et al., 2005).

Weick et al. (2005) emphasizes the interplay of interpretation and action in that each plays its critical role. Action is the central focus, whereas interpretation is the core phenomena. He believes that sensemaking can be an orderly process of action and interpretation as “people organize to make sense of equivocal inputs and enact this sense back into the world to make that world more orderly” (p. 410). Action to scanning is a one-way relationship, because scanning involves interpretation before action. Scanning, interpretation, and action are interconnected, but the question lies in what comes first—sensemaking or action (Pandza & Thorpe, 2009).

The important role of sensemaking seems to hold up as an individual and organizational conduit for learning (Kuwada, 1998). Sensemaking allows not only information gathering among individuals but also integrating knowledge and de-embedding the knowledge across the multiple-levels of the organization, which involves creative authoring by both individuals and groups who construct meaning from knowledge (Brown, 2000). The definition of sensemaking is generally congruent among scholars, and thus, in this study, the definition of organizational sensemaking is an interplay of scanning, interpreting, and acting on organizational information (Neill et al., 2007).

**Decision Making.** Organizational decision making includes ambiguity, which is pervasive in organizations, ongoing processes, and repeated decisions (Shapira, 1997). Decision making implies making implicit choices into explicit ones. Researchers
continuously investigate the actual process of decision making (Cyert & March, 1963; Papadakis, Lioukas, & Chambers, 1998) and the concepts required to understand decision making (Nutt, 1993). Organizational decision making is “the execution of a choice made in terms of objectives from among a set of alternatives on the basis of available information” (Cyert & March, 1963, p. 19). Nutt (1993) describes the decision process as “a stream of action-taking steps that begins with claims by stakeholders drawn from signals that seem important and ends when a decision has been adopted” (p. 227). Drucker (1967) refers to decision making as “a systematic process with clearly defined elements and in a distinct sequence of steps” (p. 19), which is clearly illustrated into a five-step decision process—(1) establish a context for success, (2) frame the issue properly, (3) generate alternatives, (4) evaluate the alternatives, and (5) choose the alternative that appears best (Harvard, 2006). This process is similar to the three phases of the strategy process—strategy generation, strategy formulation, and strategy execution (Deiser, 2009).

Papadakis, Lioukas, and Chambers (1998) provided an integrative framework to understand strategic decision making, which includes a broader context interacting with other factors, such as the nature of strategic decision making and decision process characteristics. Rationality is one of the important characteristics of the decision process. Scholars (Hart, 1992; Slevin & Covin, 1997) have discussed rationality and bounded-rationality in strategic decision making to a varying degree. If the decision-making process follows a systematic process in pursuing goals, it represents strategic decision-making rationality. Bounded rationality describes the constrained situations that decision makers face due to “limited computational capabilities in coping with the complexity of
change” (Pandza & Thorpe, 2009, p. 121). Under the condition of bounded rationality, decision makers generate emergent strategies but also engage in “sensible problem-solving strategies to help compensate for their limitations” (Eisenhardt, 1989, p. 573). Systematic and orderly strategic decision processes, which are referred to as procedural rationality, are less favored in high-uncertainty environments (Slevin & Covin, 1997).

External factors that affect strategic decision making are heterogeneity, dynamism, hostility (Papadakis et al., 1998), and industry characteristics (Hitt & Tyler, 1991). In terms of internal factors, organizational culture, such as belief systems and paradigms (Deiser, 2009), planning formality (Papadakis et al., 1998), and identity challenges (Laroch, 1995), are the acknowledged idea of strategic decisions initiating changes. Strategic choices are made by decision-makers within organizations, but constrained by external environments (Hitt & Tyler, 1991).

In terms of the speed of decision making, a high level of comprehensiveness slows the strategic decision process, whereas limited participation and centralized power accelerate decision making (Eisenhardt, 1989). In Leidner and Elam’s study (1995), the decision making speeds for senior and middle managers were positively related to executive information systems. How fast organizations make decisions becomes important as organizations pursue agility.

Based on the information provided for decision-making, decisions are mostly made as a result of a decision maker’s cognition, “because individuals approach complex decisions with previously constructed heuristics or cognitive models that are reflected in personal characteristics” (Hitt & Tyler, 1991, p. 332). The interesting interplay lies in “the experience of cognition [that] is anchored in the role of experience in interpretation
of and response to changes in the environment” (Mitchell, Shepherd, & Sharfman, 2011, p. 686). Strategic choices are domain specific activities accompanying strategy and also incorporating implementation strategy (e.g., reward systems). However, decision-makers frequently disappear behind organizational processes and routines (Laroch, 1995), because decisions are not the product of individual strategists (Gavetti & Warglien, 2007). In this study, organizational decision making refers to “the execution of a choice made in terms of objectives from among a set of alternatives on the basis of available information” (Cyert & March, 1963, p. 19).

**Interplay of Sensemaking and Decision Making**

A first version of our strategic learning model was introduced in 2012 (Moon & Ruona) and attempted to describe learning and unlearning in the strategic planning and implementation processes. That first model is meaningful in that it captured the organizational capacity to learn and unlearn in two phases of the iterative strategy process. Since then, our first model has evolved by expanding the strategy process from two to three phases. In addition, our second version of the model (see Figure 2-3) “unpacks” the learning/unlearning processes by focusing on sensemaking and decision making during the three phases of the strategic process.

Decision making and sensemaking are tightly-coupled processes in that “decision-making is an effort to develop meaning as well as determine choice, which is embedded in sensemaking” (Neill et al., 2007, p. 734). As it is noted, it is inseparable in its activities and processes. According to Weick’s description, sensemaking is an ongoing process of scanning, interpreting, and acting. Scanning and interpreting are cognitive and trigger actions, while the action phase is mostly behavioral and overlaps with decision making.
The inter-relationship of scanning, interpretation, and action is present, as sensemaking traverses the three phases of decision-making. Sensemaking is divergent in its character—concrete and reflective; whereas, decision making is convergent—concrete and reflective. Although they seem to be co-mingled in many aspects, they are separable by searching and highlighting their own distinctiveness in the strategy process to simplify reality.

The capacity to learn and unlearn plays with every dynamic of sensemaking and decision making, because learning encompasses the aspects of adaptation, such as decision making (Kolb, 1984). Disciplined imagination (Weick, 2002) and experiential learning (Casey & Goldman, 2010; Kolb, 1984) theories have been incorporated to explain the dynamics of the sensemaking dimension. And, theories related to behavioral decision theory (Cyert & March, 1963), unlearning (Hedberg & Starbuck, 2001; Tsang & Zahra, 2008) and experiential learning (Kolb, 1984) have been utilized to further understand the decision-making dimension. Figure 1 describes the interplay between sensemaking and decision making.

*Figure 1. Strategic Learning Process*
Sample

After piloting with small samples for reliability, a heterogeneous sample of organizational leaders who perform strategic activities as part of their job was invited to participate in this study. The samples were across organizations in the U.S.A, Europe, and Korea in order to get the maximum variances among organizations. Snowball non-probability sampling was applied to this study. A total of 237 responses were used for the analysis after eliminating 40 responses from Korean Global companies that might have slightly different characteristics and six responses from non-management technical individuals (hourly employees) that were assumed to have a lack of knowledge in the strategic process. In order to run exploratory factor analysis (EFA), the sample size should meet the criteria. In this study, the sample size reached the absolute case number of 200 (Guilford, 1954) and a 3 to 1 ratio (i.e., subjects-to-variables ratio), and thus EFA was conducted, since the criteria were satisfied. For organizational demographics, types of industry, number of employees, and annual revenue were identified and for individual demographics, the primary responsibilities and the participants’ roles in their companies were identified.

Instrumentation

The instrument of strategic learning capability was developed by adopting Benson and Clark’s (1982) survey instrument development process, and systematic steps were taken to obtain items as many as possible. The figure 2 presents the development steps of the initial item pools.
Before collecting data, the guiding definition of strategic learning capability was provided—*the capacity of an organization to retool rapidly to create and execute new strategy through learning at the individual and system levels in response to changes and uncertainties in complex environments*. Survey items were developed based on an extensive review of the literature, a brainstorming session with HRD practitioners, and informal conversations with research committee members. Initial items were generated based on the multidisciplinary literature (e.g., strategy, strategic planning, strategic implementation, strategic thinking, scenario planning, and organizational learning) illustrating the concept of strategic learning capability. In terms of the inclusion of items, any items in the literature offering a guiding definition of strategic learning capability were included (i.e., Anderson, Covin, & Slevin, 2009, Andrews & Smith, 1996, Argyris & Schon, 1996, Hamel & Prahalad, 1994, Gavetti & Warglien, 2007, Mintzberg, 1987a, Mintzberg, 1994b, Narver & Slater, 1990, Neil et al., 2007, van der Heijden, 1996, Schon, 1983, Pietersen, 2010, Weick, Sutcliffe, & Obstfeld, 2005). 65 items on strategic learning
capability were collected and generated to deepen understanding of strategic learning capability around important aspects of two domains—sensemaking and decision-making. Items were also categorized into three phases of the strategy process—strategy generation, formulation, and execution—for the purpose of the itemization, to clarify the meaning of the items and avoid any overlap.

Secondly, 22 human resource development (HRD) practitioners in a graduate-level human resource and organization development class at the University of Georgia participated in a brainstorming session. The researcher presented a definition for strategic learning capability and cases of organizations, both with strategic learning capability and without strategic learning capability. Participants in the session were asked to provide: (1) an example of processes and activities that help individuals in organizations learn to think strategically in order to create new strategy, (2) organizational activities and processes that enable organizations to adapt quickly and efficiently to changes in the external environment, and (3) kinds of learning involved in individuals and organizations while executing strategies. Brainstorming session with HRD practitioners generated 21 items.

Additional 14 items were generated by encounters with major professors and committee members in the process of clarifying the meanings, jargons, and particular terminology. As we got to engage in the instrument development for over a year, we became item writers to translate our insights into more items. Total of 100 items were generated, and the items were reduced to 59 by expert reviews.

A critique session, composed of the researcher, two methodologists, and six doctoral students, was held for two hours to test and confirm the face validity of the
instrument as the pre-pilot of the prototype survey. A pilot instrument was developed with the pre-pilot expert feedback. The content validity of the measure was tested again including questions, format, and scales during the pilot test. The pilot survey was distributed via the HROD (at UGA) alumni listserv, and 36 participants responded. The pilot test was used to ensure that observed variation exists in each survey item. After the pilot study was administered, the results analyzed, and the survey prepared into its final form.

**Findings**

The strategic learning capability measure was examined with the single goal of identifying a parsimonious measurement model and conceptually clear dimensions. In order to achieve this goal, I ran multiple solutions and ultimately applied conceptual meaningfulness to answer the following questions: (1) Does the factor have a simple solution? (2) Can I name the dimensions that correctly capture the meaning? (3) Are they discriminant factors? Exploratory factor analysis was conducted to find simple factor structure.

Before exploratory factor analysis (EFA), factorability was tested by the Kaiser-Meyer-Olkin measure and Bartlett’s test of sphericity. The KMO (.962) closer to 1 was large enough to support factor analysis. The Bartlett’s test of sphericity was statistically significant ($x^2 = 11723.10$, $df = 1711$, $p = .00$). Bartlett’s test yielded a large Chi-square with a low $p$ value, which allowed rejecting the null hypothesis regarding the assumption of sphericity. Since the sphericity was not violated, factor analysis was conducted.

In order to find a simple factor structure, exploratory factor analysis (EFA) was employed “to evaluate the dimensionality of a set of multiple indicators by uncovering
the smallest number of interpretable factors needed to explain the correlations among
them” (Brown, 2006, p. 20). Numerous EFAs were performed using IBM SPSS 19.
Principal component solutions were used because they account for the maximum amount
of variances and the total correlation matrix obtainable (Gorsuch, 1983). As a data
reduction technique, principal components were appropriate to reduce a larger set of
measures to a smaller, more manageable number of composite variables to be used in
subsequent analyses.

After factors have been extracted using the selected estimation method, some
important decisions were made to select the factors. Because EFA is an exploratory or
descriptive technique by nature, the decision about the appropriate number of factors was
guided by attentive considerations. The extracted factors were rotated to enhance
interpretability. After I ran both orthogonal and oblique rotations, I decided on orthogonal
rotation because it provided a simple uncorrelated factorial solution.

Ultimately, I decided on these factors based on the variance percentage explained
by the factors and the shared meaning of each factor. The cumulative percentage of
eigenvalues was 66.09% for the 7th factor, which was acceptable in social science.
Accordingly, 66.09% of the variance accounted for the latent variable of strategic
learning capability by the 7th factor. In order to find simple factor structure, we employed
the following steps. To identify the first factor, the horizontal movement from left to right
was repeated to find any significant loading for that variable on any factor, and we
underlined it if it had not been circled in the previous step. Items were evaluated for their
overall contribution to the factor.
After the simple factor solution was identified, factors in the solution were defined that were comprised of several indicators that strongly relate to the factor. We gave careful consideration to the items belonging to each factor. We brainstormed together and tried to come up with new names and definitions.

Based on the EFA result, seven numbers of factors and 49 items were identified by principal component analysis and varimax rotation (e.g., orthogonal rotation). The goal of principal component (PC) extraction was to reproduce the variance of the variables as efficiently as possible. It was not possible to optimize all of the psychometric properties of a newly developed instrument. Therefore, I decided on the seven-factor solution after excluding cross-loading and non-loading items.

The initial communality estimate was 1.0 for the principal component model. Based on the cohesiveness of the item groups, the seven factors in this solution were named (1) External Focus, (2) Strategic Dialogue, (3) Strategic Engagement, (4) Customer-Centric Strategy, (5) Disciplined Imagination, (6) Experiential Learning, and (7) Reflective Responsiveness. The following section illustrated factor loadings for each factor, and the cutoff value for the factors was at or above .450 for the factor loadings.

Table 1. Factor Solution After Varimax Rotation

<table>
<thead>
<tr>
<th>Item</th>
<th>Cromba Alpha</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1. External Focus</strong></td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td>24. Paying close attention to external conditions/trends</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>25. Tracking emerging trends specifically related to our products and services</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>14. Rapidly responding based on what our competitors are doing</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>23. Creating strategies based on external trends</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>27. Noticing “signals” in the external environment that we need to pay attention to</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>15. Making our decisions with full consideration of our competitors</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>29. Soliciting information on external trends from many levels across</td>
<td>.62</td>
<td></td>
</tr>
</tbody>
</table>
the organization

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>26.</td>
<td>Recognizing information that needs to be further explored</td>
</tr>
<tr>
<td>30.</td>
<td>Making sound interpretations of business trends in order to learn from them</td>
</tr>
<tr>
<td>28.</td>
<td>Helping our executive leadership team to learn about external changes that are or may affect us</td>
</tr>
<tr>
<td>16.</td>
<td>Developing strategies that allow us to quickly respond to market needs</td>
</tr>
</tbody>
</table>

**Factor II. Strategic Dialogue**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>54.</td>
<td>Sharing challenging ideas among employees</td>
</tr>
<tr>
<td>55.</td>
<td>Sharing information effectively <em>within</em> departments (or teams)</td>
</tr>
<tr>
<td>56.</td>
<td>Sharing information effectively <em>across</em> departments (or teams)</td>
</tr>
<tr>
<td>57.</td>
<td>Engaging in collective thinking processes</td>
</tr>
<tr>
<td>58.</td>
<td>Working together to create better business strategy</td>
</tr>
<tr>
<td>53.</td>
<td>Challenging previously held ideas in our organization</td>
</tr>
<tr>
<td>52.</td>
<td>Taking the time employees need to dialogue especially regarding risky issues</td>
</tr>
<tr>
<td>59.</td>
<td>Coming to an agreement when making decisions</td>
</tr>
</tbody>
</table>

**Factor III. Strategic Engagement**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>48.</td>
<td>Using action plans to ensure we achieve our organizational goals</td>
</tr>
<tr>
<td>51.</td>
<td>Investing what it takes to successfully implement our strategies (e.g., financials, HR, processes, systems)</td>
</tr>
<tr>
<td>49.</td>
<td>Translating strategic goals into measureable performance goals</td>
</tr>
<tr>
<td>46.</td>
<td>Clarifying our strategies explicitly enough to formally operationalize them</td>
</tr>
<tr>
<td>47.</td>
<td>Articulating strategies clear enough to be implemented by the workforce</td>
</tr>
<tr>
<td>50.</td>
<td>Knowing how much we have to invest in the future</td>
</tr>
<tr>
<td>10.</td>
<td>Knowing what it takes to successfully implement our strategies</td>
</tr>
<tr>
<td>45.</td>
<td>Examining failed strategies to inform our next strategic move</td>
</tr>
</tbody>
</table>

**Factor IV. Customer-Centric Strategy**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18.</td>
<td>Monitoring customers’ experiences with our products and services</td>
</tr>
<tr>
<td>21.</td>
<td>Continuously seeking better ways to improve our products and services</td>
</tr>
<tr>
<td>20.</td>
<td>Sensing shifts in what our customers’ value</td>
</tr>
<tr>
<td>19.</td>
<td>Using customer feedback to improve our strategy</td>
</tr>
<tr>
<td>17.</td>
<td>Creating business strategies that deliver value for our customers</td>
</tr>
<tr>
<td>22.</td>
<td>Improving how we produce our products and/or services</td>
</tr>
</tbody>
</table>

**Factor V. Disciplined Imagination**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>Brainstorming new business ventures</td>
</tr>
<tr>
<td>1.</td>
<td>Actively exploring new strategies as the business context changes</td>
</tr>
<tr>
<td>6.</td>
<td>Imagining alternative futures for our organization</td>
</tr>
<tr>
<td>5.</td>
<td>Seeking to generate new ways to reconfigure our existing products and services</td>
</tr>
<tr>
<td>8.</td>
<td>Transforming our business model when market conditions shift</td>
</tr>
<tr>
<td>2.</td>
<td>Continuously reviewing emerging trends to identify innovative</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>Knowing what it takes to successfully implement our strategies</td>
</tr>
<tr>
<td>45.</td>
<td>Examining failed strategies to inform our next strategic move</td>
</tr>
</tbody>
</table>

18
strategies
3. Encouraging the exploration of creative ideas  .56
7. Revising our business model to effectively meet the needs of the market  .52

Factor VI. Experiential Learning  .86
42. Learning by trial and error during strategy implementation  .68
43. Modifying business strategy based on what is working and what is not working  .57
37. Applying past experiences to help us address new challenges (e.g., new ventures, new markets, new products)  .47
40. Reframing current strategies when needed  .47

Factor VII. Reflective Responsiveness  .88
33. Providing time to think before we strategize in a particular area of our business  .76
32. Reflecting on unanticipated signals from the marketplace  .55
34. Accessing relevant information to inform our strategic conversations and decisions  .51
31. Actively reflecting on emerging challenges before they become unmanageable  .49

The purpose of EFA was “to maximize the magnitude of primary loadings and minimize the magnitude of cross-loadings” (Brown, 2006, p. 43). The criterion for including an item in a factor was .45 and above and loaded on just one factor. Some factors have loaded on more than just one factor, because the observed variances shared the concepts of other subscales. Some items consistently stood alone, though factor extraction was repeated several times. Six items did not load on any principal component. Cross-loading and non-loading items were deleted. The findings based on EFA were discussed to identify the important characteristics of the seven dimensions of strategic learning capability.

External Focus. Factor I included organizational planning activities in general that were relevant to the external environment. This dimension illustrated the type of strategic knowledge and different activities involved in the strategy process. The eleven items could be distributed in three phases of the strategy process—strategy generation
(#24, #25, #23, #27, #29, & #28), formulation (#30, #26, & #16), and implementation (#14 & #15), since the items illustrated a variety of activities related to the External Focus. These dimensions described what OD leaders actually did and how they responded with information about the external environment in order to generate, formulate, and execute a winning strategy.

Item #24, paying close attention to external conditions/trends, and Item #23, creating strategies based on external trends, were drawn from the work of Andrews and Smith (1996) and was called a macroenvironment. Item #14, rapidly responding based on what our competitors are doing, was drawn from the work of Narver and Slater (1990) and was called competitor orientation. The items seemed slightly different, but they converged on the notion of External Focus.

**Strategic Dialogue.** Factor II was related to different types of strategic planners’ conversations. Three items illustrated sharing challenging ideas (#54 & #53) and dialoguing about risky issues (#52) coined with the dimension posed by Sloan (2006) that described the importance of having risky dialogue in the strategy process. Two items concerning engaging in collective thinking processes (#57) and working together to create better strategies (#58) accorded with Sadler-Smith’s (2008) collective learning and shared meaning. The rest of the items (#55 & #56) also captured aspects of effective information sharing.

**Strategic Engagement.** Factor III illustrated the notion that is emphasized in strategic HRD literature—supporting every possible resource for the performance of key strategies (Swanson & Holton, 1999) and integrating systems, processes, and HRM (Garavan, 2007). Items reflected embracing the systems as well as operationalizing
strategies for the ultimate goal of successful strategy execution. Some items included activities in strategy implementation, which involved investing finances integrating HR and processes, and recouping systems (Items # 51, #50, #10, & #48). Other items described making strategies explicit for the purpose of strategy diffusion (Items # 46, #47, & #49). Item #45 seemed to go with retrospective learning, which was related to making decisions after reflecting on failed experiences.

**Customer-Centric Strategy.** Factor IV included the notion of strategy making oriented to customers. This dimension illustrated what needed to be focused on in terms of customers. The highest factor loading was Item #18 (.76), *monitoring customers’ experiences with our products and services*, and the lowest factor loading was Item #22 (.502), *improving how we produce our products and/or services*. The items emphasized seeking (#21), creating and delivering (#17), sensing (#20), monitoring (#18), and improving (#22 & #19) customer-oriented strategy.

**Disciplined Imagination.** Factor V included items related to searching for new creative ideas. Weick (1989) had emphasized strategic planning from a disciplined approach that provided selection criteria with varieties of possibilities. Eight items reflected Weick’s concept of *Disciplined Imagination* in that the ways of controlling and monitoring were applied to the exploration of possible strategies.

Items #1- #6 captured an imaginative way to generate strategy, and then, items #7- #8 described applying rules to evaluate possible strategies to transform or revise current business models. The highest factor loading was Item #4 (.68), *brainstorming new business ventures*, and the lowest factor loading was Item #7, *revising our business model to effectively meet the needs of the market* (.52).
**Experiential Learning.** Factor VI included that items were related to strategies based on experiences. Each item carried the meaning of unlearning (Items #40 & #43), retrospective sensemaking (Item #37), and learning by trial and error (Item #42), but experiential learning incorporates retrieving knowledge from organizational memory (Item #37) and revising strategies (Item #40). Considerably, factor loadings of Factor VI were relatively lower than other factors; and thus, more items were needed for this particular factor to explain the variance of the construct.

Learning from experience involved learning from both successes and failures. Accordingly, Item #43, *modifying business strategies based on what is working and what is not working becomes significant*, illustrated what strategic planners took into account in both cases and how they reacted, which could change the quality of the strategy-making process. Item #37, *applying past experiences to help us address new challenges*, addressed the notion of retrospective sensemaking (Weick et al., 2005). Experience-based knowledge had been emphasized in organizational learning and strategy literature (Levinthal & March, 1993; Pietersen, 2010) in that organizations were depicted as knowledge repositories of past and lived experiences.

**Reflective Responsiveness.** Factor VII included items that were related to reflective practices (Schon, 1983) and being flexible to changes and sensitive to unstable markets (Green, Covin, & Slevin, 2006; Pal & Lim, 2005). The items emphasized being reflective and responsive in terms of strategizing. Reflection initiated deep strategic thinking for planners before taking actions, and thus, Item #34 illustrated how the retrieval of information from either long-term or short-term memory took place in the
strategy process. The rest of the items (#33, #32, & #31) represented strategic thinking before taking actions.

**Factor Identification**

Seven dimensions were identified, and 49 items out of the initial 59 items met the criterion of strategic learning capability. Four items cross-loaded, and six items did not load. Based on the factor loading values, we reviewed the empirically discovered dimensions and labeled and defined the dimensions to confirm the concept. Some dimensions were retrieved to enlighten scholarly works but redefined in accordance to items. The following table described the newly identified dimensions and their definitions.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Dimension</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor I</td>
<td>External focus</td>
<td>Ability to analyze and learn from trends in the macro-environment, industry, and/or competitors</td>
</tr>
<tr>
<td>Factor II</td>
<td>Strategic dialogue</td>
<td>Ability to collectively share and challenge (when necessary) the underlying assumptions and beliefs of what we know and how we think to craft better decisions and strategies</td>
</tr>
<tr>
<td>Factor III</td>
<td>Strategic engagement</td>
<td>Ability to translate and operationalize strategy to engage the organizational system and workforce towards successful implementation</td>
</tr>
<tr>
<td>Factor IV</td>
<td>Customer-centric strategy</td>
<td>Ability to understand and continuously monitor customers to create value–add strategies</td>
</tr>
<tr>
<td>Factor V</td>
<td>Disciplined imagination</td>
<td>Exploring new, emerging, and/or creative ideas and possibilities and applying structures and rules to imagine and evaluate alternatives for the organization’s future strategy</td>
</tr>
<tr>
<td>Factor VI</td>
<td>Experiential learning</td>
<td>Ability to use past and lived experiences to interpret new situations and address new challenges</td>
</tr>
<tr>
<td>Factor VII</td>
<td>Reflective responsiveness</td>
<td>Ability to actively reflect in response to unexpected signals before strategy making</td>
</tr>
</tbody>
</table>
Implications

The findings of this study extend the knowledge base of multi-disciplines, including strategy management, organizational learning, and strategic HRD. This section highlights two research implications: (1) Conceptualization of strategic learning capability and (2) Importance of the strategic learning capability framework to the field of HRD.

Conceptualization of Strategic Learning Capability. This study conceptualized and operationalized the important notion of strategic learning capability, which is relatively new in the field of strategy management and organizational learning literature. Scholars in several disciplines have given attention to this important concept of strategic learning capability and have worked on building a theoretical foundation. As a long-term adaptive capability, strategic learning capability fosters ongoing learning in the strategic planning and implementation process in that learning and development is reinvented and realigned with organizational strategy (Deiser, 2009).

The strategic learning model presented in Figure 1 highlights the ongoing processes of learning as well as unlearning in strategic planning and implementation. Unlearning, which has been an important concept in organizational learning, is letting go of past organizational patterns or behaviors. Some of the items developed in this study reflect the notion of unlearning, though the performance rating on items related to unlearning was low. This implies some challenges to organizational unlearning. Organizations can unlearn what is observable, but are much more challenged to unlearn
what is deeply embedded as organizational cognitive structures (Hedberg & Wolff, 2001). This study is an initial approach to discover the learning and unlearning aspects of strategic learning process and provide empirical evidence to discuss the undergirding theories to deepen the knowledge base of strategy and organizational learning literatures.

Specifically, this study deepened the understanding of strategic learning capability by exploring its empirical dimensions. Based on the discussion of the findings, seven dimensions are displayed in three phases of the strategy process, and Figure 3 shows how these new dimensions might be conceptually situated in the strategy generation, formulation, and execution phases. These dimensions involve allowing leaders to generate a plan of action that is followed by strategic moves.

![Figure 3. Navigating New Dimensions of Strategic Learning Capability](image)
During the strategy generation phase, every plausible idea is opened up through *Disciplined Imagination*, and external environments are thoroughly scanned and interpreted. Strategy is brainstormed based on the customers’ experiences and their values of the organization’s products and services. Accordingly, strategy generation includes creating the space for companies to develop strategic alternatives based on the emerging knowledge. *Customer-Centric Strategy* entails searching for information related to customers and interpreting the data to generate an effective strategy.

During the strategy formulation phase, existing frameworks are challenged or broadened through *Strategic Dialogue*, which allows for shared meaning creation through dialogue that is even further activated among individuals, groups, and organizations. Sharing challenging ideas and taking the time for risky dialogue can help strategy formulation. In addition, *Reflective Responsiveness*—for example, “acting thinkingly” (Weick et al., 2005, p. 412)—is essential in terms of strategy synthesis. *Reflective Responsiveness* embraces thinking before strategizing, which allows space for the processing of strategic knowledge. Through *Strategic Dialogue* and *Reflective Responsiveness*, all ideas are assimilated to provide some sense of reliability that leads to decisions. The strategy formulation phase facilitates an organization engaging in the process of making strategic choices and decisions that reflect emergent strategy (Mintzberg, 1994b; 1987a).

During the strategy execution phase, systems, processes, and human resources are engaged to implement the strategic choices that are made. Strategy execution requires the action plans and actions that help to make the necessary changes in organizations to execute the strategy effectively. All the operational systems and processes should be in
place for successful strategy execution. Learning from experiences, trial and error, failed strategies, and organizational knowledge take place as an ongoing process but are more prominent at strategy execution.

**Importance of the Strategic Learning Capability Framework to the Field of HRD.** It is important to the HRD field to expand the paradigm of learning in terms of learning dimensions, learning embedded in practice, and the contributions of learning. Swanson and Holton (2001) emphasized the role of HRD to provide strategic planning education and learning and actively participate in the strategic planning process. Further, scholars in HRD urged that the field of HRD should respond in a proactive way to the current organizational external environment and prepare for the future (Ruona, Lynham, & Chermack, 2003). In short, HRD scholars agree that some key functions of HRD are creating strategic value for and delivering strategic value to an organization (Garavan et al., 1998; Swanson & Holton, 2001; Torraco & Swanson, 1995), and how we accomplish this is imperative.

Although the strategic management approach still exists and works, another approach is needed to better understand the nature of the strategy-making process. One possible approach on which to build an organizational capacity in the strategy process that will help organizations become successful (Ulrich et al., 2013). Building a capacity to create competitive strategy is imperative, and studies (e.g., Anderson et al., 2009; Siren, 2012) have attempted to connect learning with the strategy-making process. This study is an effort to identify dimensions of strategic learning capability by developing a conceptual model and an instrument. The dimensions of strategic learning capability can
be utilized for an underlying foundation to create value-add practices in terms of developing and implementing strategies.

**Recommendations**

As an initial explorative study, it paves the way for several future research agendas. Replications of this study with a large sample are recommended to gain confidence in the stability of this factor solution. After determining the appropriate number of common factors and unfolding measurable variables, confirmatory factor analysis is recommended. As implied in the findings, the sub-dimensions of strategic learning capability can be inter-correlated. After empirical and theoretical grounds are established, it will be important to develop tentative CFA models, which will allow further relationships among the subscales and with other outcome variables via structural equation modeling (SEM).

Practical tools to optimize strategic learning capability in organizations are still needed. It is important to locate ways in which we can facilitate strategic learning capability in the strategy process. Scenario planning is a tool for stimulating and facilitating individual and organizational learning when it is institutionalized (van der Heijden, 1996). Scenario planning can be used as a rigorous tool to facilitate learning through strategic conversation in order to enhance strategic learning capability.

Furthermore, Pietersen’s (2010) strategic learning model provides practical guidelines with four action steps—learn, focus, align, and execute—that help create a winning strategy. Sloan’s (2006) three-stage model—preparation, evaluation, and re-evaluation—is useful to facilitate strategic thinking at the individual level. Strategic conversation (Zula & Chermack, 2007), dialogue, and a disciplined imagination (Szulanski & Amin,
2001) can also foster strategic thinking. Another practice that is applicable in the business context is the Blue Ocean Strategy, which shifts the strategic focus through four actions—reduce, eliminate, raise, and create (Kim & Mauborgne, 2005). This practice allows companies to reduce underperforming factors and eliminate overdesigned products and services to beat their competitors. At the same time, it allows raising the bar above the industry’s standard and creating new demand and shifting the strategic pricing of the industry. Some innovative tools and practices to foster strategic learning capability are recommended for HRD practitioners.
References


