Value Driver Glossary and Discussion

(Note: References <u>not</u> included. Contact Paul Wendee at 949-246-1694 or <u>pwendee@yahoo.com</u> if you would like to see the references.)

Balanced scorecard. The balanced scorecard (Kaplan & Norton, 1992, 1996, 2004, 2007, 2008; Ratnatunga & Montali, 2008) is a value creation tool or value driver. According to Huang, Chu, and Wang (2007), "The balanced scorecard helps managers understand the interrelationships and causal effects among the various aspects. This understanding further enables managers to remove the functional barriers and ultimately improves their capabilities in decision making and problem solving" (p. 1113). The balanced scorecard has become a popular management tool. In addition to R. S. Kaplan and Norton, numerous authors have written on the practical uses and implementation of the balanced scorecard (e.g., Decoene & Bruggeman, 2006; Pettus, 2006).

Brand equity. It can be argued that brand equity is an important value driver and should be included in an earlier section rather than in the current section on miscellaneous value drivers. Brand equity is included in the current section because only two specific references to brand equity were found in the literature review. Costa and Evangelista (2008) stated that a "company's brand is an intangible activity of recognized value, which must be carefully managed. Excellent brands are characterized by the ability to involve their own consumers in a lasting relationship, based on trust and rich of symbolic and emotional value" (p. 69). More (2008) noted the importance of branding along with other benefits that can be offered by rights holders in observing that there is a "widespread perception that sponsorship is simply placing a logo on an athlete's clothing

or on the outside of a stadium. Rights holders need to look beyond branding to determine all the other benefits that they can offer to sponsors" (p. 68).

Business alliances. Vergauwen, Roberts, and Vandemaele (2009) discussed the importance of business alliances. Vergauwen et al. asserted, "Partnerships and alliances have become an important strategic choice in today's business environment However, the high popularity of alliances is connected to an equally high failure rate" (p. 239). Vergauwen et al. found that the relationship between behavioral attributes and alliance performance is important as follows: "The managerial implications resulting from these findings are that, if managers want to fully exploit the potential of business partnerships, they will have to consider intangible performance in terms of human, customer, and structural capital" (p. 251).

Business architecture. Business architecture can be an important value driver. According to Jones (2004), "Value creation takes place at three stages: input, conversion, and output. Each stage is affected by the environment in which the organization operates. Inputs include human resources, information and knowledge, raw materials, and money and capital" (p. 2). Jones (2004) further explains that "the way an organization chooses and obtains from its environment the inputs it needs to produce goods and services determines how much value the organization creates at the input stage" (p. 3). As to conversion and outputs, Jones (2004) explains, "The way the organization uses human resources and technology to transform inputs into outputs determines how much value is created at the conversion stage" (p. 4). In summary, Jones (2004) states, "The amount of value the organization of the quality of its skills, including its ability to learn from and respond to the environment" (p. 4). What Jones (2004) described is, in essence, the result of business architecture.

Versteeg and Bouwman (2006) provided another view of business architecture as follows:

We use the concept of 'Business Architecture' to structure the responsibility over business activities prior to any further effort to structure individual aspects (processes, data, functions, organization, etc.). The business architecture arranges the responsibilities around the most important business activities (for instance production, distribution, marketing, et cetera) and/or economic activities (for instance manufacturing, assembly, transport, wholesale, et cetera) into domains. (Versteeg & Bouwman, p. 92)

Business performance management. Several authors have discussed business performance management (BPM) as a value driver (e.g., Buytendijk, 2007; Frolick & Ariyachandra, 2006; Olsen et al., 2007; Paladino, 2007; Thompson, 2006). Frolick and Ariyachandra (2006) explain that business performance management is a consolidation of concepts such as data warehousing, business intelligence, and total quality management. Frolick and Ariyachandra (2006) stated, "This single integrated concept is focused on enhancing corporate performance. BPM provides an opportunity to align operations to organizational strategy and evaluates its progress over time to goal attainment" (p. 47).

Buytendijk (2007) took a somewhat different approach to business performance measurement and observed that "measurement drives behavior. Unfortunately, most performance measurement initiatives overlook this fact. Implementations are performed top-down with strategy as the starting-point" (p. 20). Buytendijk (2007) took the view that, "There needs to be a better understanding of the cultural context of the metrics (What is driving the behaviors?) and a better understanding of what metrics are to define (How do we drive the right behaviors through measurement?)" (p. 20).

Business strategy. The review of the literature revealed a number of differing discussions and perspectives on business strategy as it pertains to value drivers. One line of discussion includes strategic reasoning about business models. Samavi et al. (2009) believe that businesses have to be able to recognize and respond strategically to disruptive change and answer questions about their business model such as: what are the threats and opportunities in emerging technologies and innovations? How should they target customer groups? Who are their real competitors? How will competitive battles take shape? (p. 171). Other researchers (e.g., Calandro, 2009; D'Andrea, Lopez-Aleman, & Stengel, 2006; Frolick & Ariyachandra, 2006; Grundy & Brown, 2005; Jackson, 2007; Miller & Galeaz, 2007; Sweet, 2001; "The Benefits of Managing for Value," 2004) have examined business strategy as a value driver in more general terms.

Cash flow return on investment (CFROI). A competing metric to EVA is cash flow return on investment (CFROI). The Boston Consulting Group and HOLT Value Associates promote CFROI (Scarlett, 2001). Madden (1999) described the CFROI method of valuation in detail. According to Scarlett, "CFROI: Compares inflation-adjusted cash flows to inflation-adjusted gross investments to find cash flow return on investment" (p. 4).

Competitive advantage. Competitive advantage is a value driver that business researchers mention often in the literature (e.g., Calandro & Lane, 2007; Enders, König, Hungenberg, & Engelbertz, 2009; Matthyssens & Vandenbempt, 1998; Mauboussin &

Johnson, 1997; Pan & Chen, 2004; Porter, 1983, 1996, 1998a, 1998b; Samavi, Yu, & Topaloglou, 2009; Stuckey, 2008). Porter (1980) is one of the best known proponents of the competitive advantage approach. The approach pertains to the various ways that enterprise leaders can gain a competitive advantage for their organization.

Porter (1985) stated,

Competitive advantage cannot be understood by looking at a firm as a whole. It stems from the many discrete activities a firm performs in designing, producing, marketing, delivering, and supporting its product. Each of these activities can contribute to a firm's relative cost position and create a basis for differentiation. (p. 33)

Corporate communications and relationships. Corporate communications and relationships are regarded by many as key value drivers. Phillips (2006b) maintained, "Relations with social groups, including shareholders, customers, employees and vendors among other stakeholders are pivotal to generating wealth and optimizing long-term shareholder value" (p. 34). Other authors (e.g., Argenti, 2006; Kordha & Elmazi, 2009; Phillips, 2006a; Zweig, 2009) have explored the importance of corporate communications and have reached similar conclusions.

Corporate real estate ownership. Brounen, Colliander, and Eichholtz (2005) conducted a study to assess the effects of corporate real estate ownership on the stock performance of firms. The firms studied were active in the international retail sector. According to Brounen et al., "In general, corporate real estate ownership for retail companies is associated with a strong relative performance, which contrasts markedly with the negative performance effects found for other industrial sectors" (p. 287).

Customer relation management and value creation. Creating customer value is a value driver. Maas and Graf (2008) stated, "Delivery of customer value (CV) is considered the fundamental basis of marketing activities and an effective source of competitive advantage in promoting profit growth and ensuring long-term success" (p. 107).

Many authors have shown the importance of customer value analysis and creation (e.g., Blanchard & Bowles, 1993; Child et al., 1995; Foehn, 2004; Heimers, Kupp, & Reitz, 2006; Johnson, 2003; Kennedy, 2004; Kothari & Lackner, 2006; Lapierre, 2000; Marriott & Brown, 1997; Morgan, 2008; Pan & Chen, 2004; Rusoff, 2007; Sanborn, 2004; Tallau, 2009; Todd, 2009; Verma & Plaschka, 2003). Desarbo, Jedidi, and Sinha (2001) created a statistical approach for performing customer value analysis. Lawer and Knox (2006, 2007) discussed a concept known as customer advocacy. According to Lawer and Knox (2006), "By assisting consumers to find and execute their optimum solution in a given market, it will be easier for an organisation to earn their long-term trust, purchases and loyalty" (p. 121).

E-business. E-business is a critical value driver. In discussing the results of their study, Rapp, Rapp, and Schillewaert (2008) stated, "The results also clearly suggest that value creation is associated with service firms' implementation of e-business technologies" (p. 36). Rapp et al. (2008) also stated that their "findings provide empirical evidence that e-business implementation is indeed associated with the four pillars of value creation (i.e. novelty, lock-in, complementaries, and efficiency)" (p. 36). A basic concept of e-business is to have the customer participate in part of the service delivery through electronic means. J.-S. C. Lin, Jang, and Chen (2007) stated, "Rising operation

costs encourage service firms to consider service delivery options that allow customers to perform part of the service themselves electronically" (p. 224).

Economic value added. The concepts of value added (EVA) (Stern, Stewart, & Chu, 2001; Stewart, 1991) and cash flow return on investment (CFROI) (Madden, 1999) are measurement systems designed to assess a manager's level of performance and the overall performance of a firm. Having such systems in place within an enterprise is an important value driver. According to Stewart,

The one performance measure to account properly for all of the ways in which corporate value may be added or lost is economic value added (EVA). EVA is a residual income measure that subtracts the cost of capital from the operating profits generated in the business. (Stewart, 1991, p. 118)

Many authors have written about EVA from many different perspectives. Some works are entire books or parts of books on EVA (e.g., Fabozzi & Grant, 2000; Grant, 1997; Stern & Hutchinson, 2004; Stewart, 1991; Young & O'Byrne, 2001). Some authors focused their articles on different approaches to EVA (e.g., Adsera & Vinolis, 2003a, 2003b; Krauter, Basso, & Kimura, 2004). One author, Jung (2008, p. 700), took the concept of economic value added into two different tiers of a business organization – operations and top management. By doing so, operations and management can be evaluated from two different business dimensions – ROS and asset turnover.

Executive decision making. A plethora of literature exists in the leadership studies field on the benefits and pitfalls of executive decision making. There is also a plethora of literature on how decision making can add or subtract value from a firm. Finkelstein, Whitehead, and Campbell (2008) addressed the subject of executive decision

making in their book titled, *Think Again: Why Good Leaders Make Bad Decisions and How to Keep it From Happening to You.*

Financial and non-financial drivers. Some authors (e.g., Bartov, Mohanram, & Seethamraju, 2002; Berger, 2002; Darrough & Ye, 2007; Demers & Lev, 2001; Graham, Cannice, & Sayre, 2002; Kelly, 2007; Krauter, 2007; Laitinen, 2004; Lev, 2001; Thompson, 2005; Zambon & Bello, 2005) demonstrated the existence of nonfinancial drivers that can create value in business enterprises. Nonfinancial drivers include goodwill, patents, copyrights, and other forms of intellectual property.

O. Tcheremnich (as cited in Kazlauskienė & Christauskas, 2008) defined financial drivers as drivers that are "given in monetary expression" and nonfinancial drivers as drivers "not having financial expression" (p. 25). O. Tcheremnich suggested dividing drivers into the categories of (a) internal (i.e., pertaining to a particular enterprise) and external (i.e., pertaining to the external environment) and (b) quantitative (i.e., measured in figures) and qualitative (i.e., not measured in figures). The measurement of financial drivers often includes the use of ratio analysis (e.g., Altman, 1967, 1968a, 1968b, 1993; Altman & Spivack, 1983; Burns, Sale, & Stephan, 2008).

Financial strategy. Mallette (2006) regards financial strategy, which is the set of policies that determines such things as capitalization, the sourcing of funds, and distributions to shareholders, as a significant value driver. Mallette (2006) stated that financial strategy "has a significant impact on a company's ability to invest for value creation, provides important signals to the investment community, and can capture for shareholders the value created in the company" (p. 11). Anonymous (2000) discussed the importance of reducing capital costs, another financial strategy, to create value.

Firm credibility. Zhang and Rezaee (2009) noted, "Prior research suggests that corporate credibility is associated with firm financial performance in developed countries" (p. 221). Zhang and Rezaee conducted a study to examine the relationship between corporate credibility and firm performance in emerging markets. The authors observed, "Results confirm that firms with high credibility exhibit better financial and market performance at least in the following 3 years" (p. 221). Dowling (2006) presented a paper on how corporate reputations can enhance the intrinsic value of a firm.

Franchise value. Leibowitz (2004) stated, "A firm's growth derives from new projects having returns that provide a positive franchise spread above the COC [cost of capital]" (p. 5). In his works on sales-driven franchise value, Leibowitz (1997, 2000) detailed how price, not cost, is the ultimate driver of a superior margin. Leibowitz (1997) summarized the approach as follows:

In a global environment, any one company's cost advantage from geographical locale, cheaper labor, or more-efficient production sites can always be replicated, in time, by a sufficiently strong competitor with access to today's free-flowing financial markets. Thus, the ultimate key to a superior margin will be price, not cost. High-value firms will be those that can develop and/or sustain a sales-driven franchise with premium pricing across a range of product markets. The incremental pricing margin beyond that available to a "new commodity competitor"- one who would be content to earn only the cost of capital - is the "franchise margin." (p. 43)

Human resources and human capital. An important category of value drivers comprises human resources and human capital management. Pfau and Cohen (2003)

showed the importance of human capital to an organization and proposed a value driver model. Pfau and Cohen (2003) observed that, "Despite strong evidence that human capital significantly affects shareholder returns, many organizations are not maximizing employees' contributions to the bottom line" (p. 177). The value driver model that Pfau and Cohen (2003) proposed provides a "framework for identifying the potential contributions each position can make to the organization. By doing so, the model helps managers and employees better align their work with the business objectives of the organization—a critical need for every company" (p. 177).

Namasivayam and Denizci (2006) considered human capital from an intellectual capital perspective. Gebauer (2003) created a system of human resources accounting. Various other authors have examined human resources and human capital from a number of other perspectives (e.g., Hiles, 2009; Lorber, 2009a, 2009b; MacDonald & Colombo, 2001; Welpe, Lutz, & Barthel, 2007; White, 2009; Young et al., 2005).

Information technology (IT). Many researchers view information technology as an important value driver. One aspect of information technology is a concept known as virtual worlds (VW). Cagnina and Poian (2009) discussed the implications of VW, stating, "VWs appear to create new opportunities for integrating the business of the firm with information technology . . . VWs are platforms that make it possible to identify nonmonetary sources of value" (p. 68).

Wagner and Weitzel (2007) conducted a study "to identify core IT value drivers in firms and to model them as an IT production function to help disclose and measure the IT value creation process and to guide managers in seeking adequate ways of employing the IT resource" (p. 380). McIvor, O'Reilly, and Ponsonby (2003) conducted a study to examine "the impact of Internet technologies on value creation in the airline industry" (p. 31). According to McIvor et al., "Four notable value drivers in the aviation context are identified, namely, efficiency, complementarities, lock-in and novelty" (p. 31).

Intangibles. The study of intangibles has gained extensive interest since in the last few years (see Lieberman & Anderson, 2008). According to Lev (2001), "An intangible asset is a claim to future benefits that does not have a physical or financial (a stock or a bond) embodiment" (p. 5). Lev (2001) notes that intangible assets can be "a patent, a brand, and a unique organizational structure (for example, an Internet-based supply chain) that generate cost savings are intangible assets" (p. 5).

Because of the extensive interest in the study of intangibles, numerous authors have discussed intangibles from many different perspectives (e.g., Fris & Gonnet, 2006; Lin & Tang, 2009; Moeller, 2009). Some authors have combined the analysis of value drivers with other approaches (e.g., Jhunjhunwala, 2009; Linzalone, 2008). One area pertaining to the study of intangible assets is the area of knowledge assets; many researchers have studied and written about knowledge assets (Andreou, Green, & Stankosky, 2007; Green, 2006a, 2006b, 2006c, 2007a, 2007b, 2008; Marr, Schiuma, & Neely, 2004a). Green and Ryan (2005) evaluated the integration of intangible assets and business strategy.

Several scholars have studied and written about measuring and benchmarking intangible assets (e.g., Canibano, Garcia-Ayuso, & Sanchez, 2000; Hussein & Seow, 2002; Kalafut & Low, 2001; Lieberman, 2003; Marr, 2007; Millman, 2002; Tsai & Hua, 2009). Several researchers have attempted to categorize intangible assets into a framework (e.g., Diefenbach, 2006). Some researchers have studied intangible assets as they pertain to companies outside the U.S. (e.g., Chareonsuk & Chansa-ngavej, 2008; Moeller, 2009; Watters, Jackson, & Russell, 2006).

Other investigators have studied the valuation of initial public offerings (IPOs) that are full of intangible assets (e.g., Guo, Lev, & Zhou, 2005). Pike, Roos, and Marr (2005) reviewed the role of intangible assets in value creation in research and development (R&D) organizations, further representing the diversity of studies in the field of intangible assets. Intangible assets have been the source of a great deal of controversy (e.g., Basu & Waymire, 2008; Ittner, 2008; Lev, 2008; Wyatt, 2008).

Intellectual capital. Some authors argued that intellectual capital and intangibles are one and the same. In his book on intangibles, Lev (2001) used the terms (a) intangibles, (b) knowledge assets and (c) intellectual capital interchangeably. Lev observed, "All three are widely used–intangibles in the accounting literature, knowledge assets by economists, and intellectual capital in the management and legal literature–but they refer essentially to the same thing: a nonphysical claim to future benefits" (p. 5). Lev noted, "When the claim is legally secured (protected), such as in the case of patents, trademarks, or copyrights, the asset is generally referred to as intellectual property" (p. 5).

Many authors have focused on the notion of intellectual capital as a separate concept from intangible assets (e.g., Bukh, Nielsen, Gormsen, & Mouritsen, 2005; Cheng, Lin, Hsiao, & Lin, 2008; Mouritsen, Bukh, & Marr, 2004; Pyszka, Zollakau, & Wolff, 2002). Some authors have focused their attention on using intangibles and intellectual capital to improve company performance (e.g., Andreou & Bontis, 2007; Choong, 2008; Kim & Kumar, 2009; Nazari & Herremans, 2007; Schiuma & Lerro, 2008; Vergauwen, Bollen, & Oirbans, 2007). Others have focused on the value creation aspects of intellectual capital (e.g., Ashton, 2005; Boedker, Guthrie, & Cuganesan, 2005; Bose & Oh, 2004; Housel & Nelson, 2005; Liang & Lin, 2008).

Some scholars have focused on the valuation of the intellectual capital asset (e.g., Bose & Thomas, 2007). One author (Schneider, 2007) examined the possibility of transferring the intellectual capital approach from the corporate level to the national level. Another group of researchers (Young, McManus, & Canale, 2005) examined the measurement of human capital in the hospitality industry. Measuring and benchmarking intangible assets is another common topic that Marr (2004, 2008) has covered extensively. Marr et al. (2004a, 2004b) explored the importance of mapping intellectual value drivers and pointed out flaws in the balanced scorecard approach.

Knowledge sharing. According to Sveiby (2007), "In 1992 James B. Quinn identified the sharing of knowledge as a crucial value-driver in organisations because of its unique characteristic compared to other assets of a firm: it grows most – and usually exponentially – when shared" (p. 1636). Serenko, Bontis, and Hardie (2007) concurred with such a notion by stating, "The importance of knowledge sharing in organizations is without question and clearly evident in the academic and practitioner literature" (p. 611). This view would be shared by Senge (2004, 2006). Senge (2004) stated, "…there is a kind of collective thinking and acting that goes on when any organization is really at its best" (p. 22).

Licensing deals. K. Arnold et al. (2002) conducted a study to assess the value of licensing technologies. The authors examined the value of the negotiator in licensing

deals. Licensing deals, in general, and the role of the negotiator, in particular, were found to have positive value.

Luck (randomness) as a value driver. Some might argue that luck (i.e., randomness) is a value driver. Mlodinow (2008) and Taleb (2001) offered some insights into the phenomenon of luck as a value driver. In his book, *Fooled By Randomness: The Hidden Role of Chance in the Markets and in Life*, Taleb wrote,

This book is about luck disguised and perceived as non-luck (that is, skills) and, more generally, randomness disguised and perceived as non-randomness (that is, determination). It manifests itself in the shape of the *lucky fool*, defined as a person who benefited from a disproportionate share of luck but attributes his success to some other, generally very precise, reason. (p. 1) Mlodinow (2008) observed the following:

When we look at extraordinary accomplishments in sports – or elsewhere – we should keep in mind that extraordinary events can happen without extraordinary causes. Random events often look like nonrandom events, and in interpreting human affairs we must take care not to confuse the two. Though it has taken many centuries, scientists have learned to look beyond apparent order and recognize the hidden randomness in both nature and everyday life. (p. 20) Mlodinow (2008) noted,

Deciding just how much of an outcome is due to skill and how much to luck is not a no-brainer. Random events often come like the raisins in a box of cereal – in groups, streaks, and clusters. And although Fortune is fair in potentialities, she is not fair in outcomes. (p. 13) The role of luck will be incorporated into the theory of value drivers in the current study because, as Mlodinow observed, "People systematically fail to see the role of chance in the success of ventures and in the success of people" (p. 199).

Management science. Some authors (e.g., Chang, Yen, Huang, & Hung, 2008; Samavi et al., 2009; Van Mieghem, 2004) discussed value drivers in the context of management science. According to Monahan (2000), management science is important because "management is decision making" (p. 1), and management science helps in decision making. Anderson, Sweeney, and Williams (1979) explained, "Management science is a broad discipline which includes all rational approaches to managerial decision making that are based upon an application of scientific methodology" (p. 1).

Operational drivers. Some authors have discussed value drivers in operational terms (e.g., Reidenbach & Goeke, 2006b; Tracy & Knight, 2008). As discussed by Kazlauskienė and Christauskas (2008), Rappaport divided drivers into three separate groups: (a) operational, (b) investment, and (c) financial. Scarlett (2001) added the fourth group of intangible drivers. R. S. Kaplan and Norton (1996) divided value drivers into the following categories: (a) financial, (b) purchasers, (c) internal, and (d) innovations. Ittner and Larcker (2001) divided value drivers into the following groups: (a) financial, (b) purchasers, (c) employees, (d) operational, (e) quality, (f) alliances, (g) supply, (h) environment, (i) innovations, and (j) society. Damodaran (2002) developed a value creation model that describes (a) idle money flow, (b) capital cost, and (c) expected growth period influences as giving rise to an enterprise's value creation (i.e., the value drivers that create value).

Product development and commercialization (PD&C). McKinsey & Company has been a major developer of models and tools used in business. In yet another example of their ability to create tools of lasting value, McKinsey consultants Emptage, Walsh, Georgiadis, and Summa (1995) developed a "diagnostic tool that enables management to link PD&C value drivers with shareholder value creation for any specific project or portfolio of projects" (p. 180). Emptage et al. stated, "By linking potential shareholder value and PD&C, our diagnostic provides senior management with sound fact-based analysis to fuel the conviction they will need to drive a powerful change program" (p. 181).

Real options theory. Some researchers and authors (e.g., Copeland et al., 2000; Damodaran, 2001; Jensen & Warren, 2001; Koller, Goedhart, & Wessels, 2005; Morin & Jarrell, 2001; Woolley & Cannizzo, 2005) have examined the use of real options theory in creating value for a firm. Real options theory can be a tool that gives value to an enterprise in and of itself as well as a tool used in valuing projects. As an example of using real options theory, Jensen and Warren (2001) observed, "The early insight that Options Theory could be applied to non-financial, or real options…coupled with the realization that the real value of investing in research is the equivalent to the purchase of a real option…" (p. 173) led them and others to use Options Theory to value research.

Risk in R&D projects. Patrick (2005) took a portfolio approach to risk in R&D projects and argued that the risk in any one R&D project should be considered in light of (a) what the project contributes in value to the corporation and (b) how its unique risk is diversified through other R&D projects that might be underway in the corporation. Investors know that some projects will succeed and others will fail. Investors are

concerned with the overall value of the corporation, not the value and risk inherent in any one project.

Risk management and enterprise risk management. Risk management and enterprise risk management are sometimes considered to be sources of value creation. Segal (2006) defined enterprise risk management (ERM) as "the process by which organizations assess, control, exploit, finance, and monitor risks from all sources for the purpose of increasing short-and long-term value for stakeholders" (p. 16). K. Williams (2001) noted, "Many companies still don't realize that how they approach risk management can create and sustain or destroy shareholder value" (p. 19).

Shareholder value method. One of the most often cited categorizations of value drivers (e.g., McCarthy, 2004; Mills, 1995; Mills & Print, 1995; Ratnatunga & Montali, 2008; Reimann, 1990; Schaltegger & Figge, 2000; Scribbins, 1994; Shukla, 2009) is based on the shareholder value method of business valuation. The founder of the method is Rappaport (1998). The shareholder value method is the first categorization to be discussed because it forms the basis for the theory of value drivers, along with the other discounted cash flow (DCF) models and methods proposed by Kazlauskienė and Christauskas (2008) and Damodaran (2002).

Because of its popularity and significance for enhancing the potential value of business enterprises, researchers have conducted extensive studies and discussions on the shareholder value approach (e.g., Walters, 1997). Other researchers have elaborated on components of the shareholder value model in their discussions (e.g., Kim, Lim, & Park, 2009). According to Rappaport (1998), "Business value depends on the seven financial value drivers that have been emphasized throughout this book: sales growth, operating profit margin, incremental fixed capital investment, incremental working capital investment, cash tax rate, cost of capital, and value growth duration" (p. 171).

Rappaport (1998) further noted, "The 'shareholder value approach' estimates the economic value of an investment by discounting forecasted cash flows by the cost of capital. These cash flows, in turn, serve as the foundation for shareholder returns from dividends and share-price appreciation" (p. 32). Other authors (e.g., Akalu, 2002; Losbichler et al., 2008; Mills & Print, 1995; Petty, 1993; Tallau, 2009) have used the shareholder value approach or other similar approaches in discussing value drivers. Akalu (2002), for example, stated, "The SV [shareholder value] approach is centered on a number of value drivers. The term value driver is coined for those economic variables that are critical to revenue and cost functions of a firm" (p. 2). Akalu (2002) also explained that, "Researchers vary as to the number of these value drivers; for instance, five (Ruhl and Cowen, 1990), six (Moskowitz, 1988), and seven (Rappaport, 1998; Mills and Print, 1995; Mills, *et al*, 1992). Turner (1998) has identified eight value drivers" (p. 2).

Mills and Print (1995) contrasted shareholder value analysis (SVA) and EVA analysis and noted that "both SVA and EVA are approaches that can be used to measure the potential financial benefit (or loss) to shareholders from pursuing strategic options like acquiring, divesting and/or restructuring" (p. 1).

Six sigma. Some authors (e.g., Axtman, 2006; Reidenbach & Goeke, 2006a, 2006b) have argued that Six Sigma is a value driver. Pyzdek and Keller (2009) stated,

Six Sigma is a rigorous, focused, and highly effective implementation of proven quality principles and techniques. Incorporating elements from the work

of many quality pioneers, Six Sigma aims for virtually error-free business performance. Sigma, σ , is a letter in the Greek alphabet used by statisticians to measure the variability in any process. A company's performance is measured by the sigma level of their business processes. Traditionally companies accepted three or four sigma performance levels as the norm, despite the fact that these processes created between 6,200 and 67,000 problems per million opportunities! (p. 3)

Pyzdek and Keller (2009) note that "the Six Sigma standard of 3.4 problems-permillion opportunities is a response to the increasing expectations of customers and the increased complexity of modern products and processes" (p. 3).

Social capital. Smedlund (2008) stated, "The term social capital is a concept introduced by social economists. The concept tries to connect inter-personal social relationships to the creation of economic value" (p. 65). Smedlund (2008) argued that knowledge has different value creation logics, with each different value creation logic needing a different kind of social infrastructure in order to be converted into value. Codified explicit knowledge assets (e.g., customer databases) can be turned into value by implementing them in production. Tacit knowledge assets (e.g., professional knowledge) can be turned into value by transferring them and sharing them with others within the organization. Potential knowledge assets (e.g., the reception of a new technology) can be converted into value by creating the right infrastructures to utilize this knowledge (p. 64).

Strategic business units. Some researchers believe thinking in terms of strategic business units is an important value driver. McKinsey & Company developed an analytical tool called the "market-activated corporate strategy (MACS) framework"

(Gluck, Kaufman, Walleck, McLeod, & Stuckey, 2000, p. 17). According to Gluck et al. (2000), "Like the old nine-box matrix, MACS includes a measure of each business unit's stand-alone value within the corporation, but it adds a measure of a business unit's fitness for sale to other companies" (p. 17).

One of the earlier models for strategy and strategic business units is the nine-box matrix developed at McKinsey. According to Coyne (2008),

The nine-box matrix offers a systematic approach for the decentralized corporation to determine where best to invest its cash. Rather than rely on each business unit's projections of its future prospects, the company can judge a unit by two factors that will determine whether it's going to do well in the future: the attractiveness of the relevant industry and the unit's competitive strength within that industry. (p. 1)

Strategic market position. Jackson (2007) stated, "Increase the overall Strategic Market Position (SMP) for your business unit or company and you will increase your ability to achieve higher profitability and growth, and unlock hidden value" (p. 1). Jackson further asserted that SMP is a "proven and highly effective tool for creating value. It is founded on the assumption that not all growth is good - in fact, that some growth actually destroys value. SMP helps companies identify the difference and respond accordingly" (p. 1).

Supply chain, purchasing, suppliers, and buyers. According to Scarlett (2001), "Supply chain management (SCM) . . . is a broad concept that seeks to unify the planning and control of materials, services, production and technologies along a whole supply chain from material source to end customer" (p. 123). Several authors identified in the literature review discussed SCM (e.g., Crichton & Gallery, 2004; Losbichler et al., 2008; Samavi et al., 2009; Scribbins, 1994; Yang, Kwon, Rho, & Ha, 2003). Supply chain management has both inter-company and intra-company aspects (Scarlett, 2001, p. 123).

Sustainability and social responsibility. Several authors have shown how corporate social responsibility (CSR) has been gaining importance as a topic of study (e.g., Baron, Harjoto, & Jo, 2009; Blake, 2006; Keane, 2009; Parisi & Hockerts, 2008; Zambon & Bello, 2005; Zweig, 2009). Weber (2005) assessed the sustainability policies (i.e., policies pertaining to environmental impact) of European banks and financial service organizations. Weber found that firms with sustainability policies performed as well or better than their peer organizations with no such policies. Zambon and Bello stressed that social and environmental policies including sustainability and corporate governance are important value drivers.

Tax structuring in mergers and acquisitions (M&A) deals. The way in which mergers and acquisitions (M&A) deals are structured can be a source of value creation. Neuhaus and Brauchli (1999) noted that an acquisition or a merger "can only be successful if it is carefully planned. The planning has to include commercial, financial, legal and tax considerations. It is too often the case that the tax advisors are involved only at a very late stage" (p. 63). Neuhaus and Brauchli (1999) believe that "this should be changed because taxes can be deal breakers. If tax problems are being recognized at an early stage and then solved, the tax structuring may be a real value driver" (p. 63).

Value-based management. Closely related to the concept of shareholder value is the concept of value-based management (VBM) that several authors have discussed (e.g., Cant, 2006; Karr, 1993; McTaggart, Kontes, & Mankins, 1994; Miller & Mathisen, 2004;

Miller, Mathisen, & McAllister, 2004; Walters, 1997). Scarlett (2001) defined VBM as follows: "VBM is an approach to management whereby the company's overall aspirations, analytical techniques, and management processes are aligned to help the company maximize its value by focusing management decision-making on the key drivers of shareholder value" (p. 2). The concepts of (a) SVA, (b) EVA, (c) business process re-engineering, (d) the use of the balanced scorecard, (e) activity-based costing and activity-based management, (f) total quality management, (g) just-in-time production systems, (h) benchmarking, and (i) supply chain management are all parts of value-based management (Scarlett, 2001).

Value chain. Some authors (e.g., McPhee & Wheeler, 2006; Porter, 1985; Ruggles, 2006; Samavi et al., 2009) discussed value drivers in the context of the value chain. Porter described the value chain as follows: "The value chain disaggregates a firm into its strategically relevant activities in order to understand the behavior of costs and the existing and potential sources of differentiation. A firm gains competitive advantage by performing these strategically important activities..." (pp. 33-34). Value drivers specific to a sale. In addition to looking at the value drivers that influence a going concern which is remaining in control of its current owners, other factors can have a great impact on value when selling a business. Two examples are (a) access to capital and (b) liquidity of the market. Both factors have a direct impact on the pricing of a company offered for sale and the timing of putting the company on the market. As Slee (2004) noted, "The availability of capital to finance private transactions is a driving force behind private acquisition multiples" (p. 189).

Marks et al. (2005) indicated the availability of capital from a supply and demand perspective can affect private company valuations. Marks et al. suggested that a possible strategy in financing is to find ways to fund the enterprise on a short-term basis as a bridge to more permanent financing. Terms of the sale can have a significant impact on the price at which a business sells.

Desmond (as cited in Pratt et al., 1998) argued that, "There is substantial evidence that the terms of sale of a small business have a significant impact on the price" (p. 490). Most small businesses are sold on terms other than cash. In such cases, the seller usually accepts an installment sale arrangement over some period in addition to a down payment (Pratt et al., 1998). According to Pratt et al., "The cash equivalency value of a small business sale transaction may be substantially lower than the announced deal price" (p. 465).

Such a situation can happen when (a) the terms are for restricted stock in the acquirer or (b) when the terms on an installment sale are for an interest rate that is below the market rate of interest as is often the case (Pratt et al., 1998). Miles (1993) conducted a study using the IBA database and stated,

It can be argued that, for a number of reasons, a business sold for all cash should bring a higher price than if it were sold for terms . . . Empirical data seems to conflict with the conventional wisdom. One likely explanation is that, although there is a relationship between selling price and terms of payment for a business, the relationship is not a strong one, and is masked by other factors affecting selling price. (p. 8)