

Nice Work If You Can Get It: A Resource-Based View of Value-Based Pricing in Professional Services

Randy Napier*

University of Texas at Arlington, Texas, USA

Rajat Mishra

Stephen F. Austin State University, Texas, USA

Leading professional service firms strive to implement value-based pricing models. But the service operations management literature has not addressed value-based pricing with specific reference to professional service firms. This paper takes a first step to fill that gap by raising two research questions. First, what capabilities must professional service firms develop in order to apply value-based pricing? And second, what market or business conditions must exist to support value-based pricing for professional services? We present a conceptual framework that extends the Silvestro et al. (1992) service process model to sub-classify professional services; that framework includes propositions regarding factors that affect the ability of a firm to implement value-based pricing. We also analyze capabilities underlying value-based pricing for professional services in terms of the resource-based view of the firm. We discuss the relevance and limitations of this conceptual study to research and practice, and identify potential future extensions of this research.

* Corresponding Author. E-mail address: napier@uta.edu

I. INTRODUCTION

This research was inspired by a sub-plot in the Goldratt, Schragenheim and Ptak (2000) novel *Necessary But Not Sufficient*, and by anecdotal reports in the business press and practitioner journals that leading software publishers and professional service firms are working to position themselves to implement value-based pricing models.

The economic objective in applying value-based pricing models is to enable the professional service firm to capture the largest possible proportion of the value created through the application of the firm's expertise. One of the fictional protagonists in *Necessary But Not Sufficient*, and evidently many managers in professional service firms, face challenges in

justifying value-based pricing in the minds of their clients in order to move away from fixed-price or time & materials pricing arrangements.

The view we obtained from the business press and practitioner publications on the state of value-based pricing is that firms regard value-based pricing as desirable but elusive—in other words, “nice work if you can get it.” With that as our point of departure, we set out to understand and identify firm capabilities that must be developed, and market conditions that must exist, to support the implementation of value-based pricing in the professional services arena. Our intent was to extend service operations management literature on pricing in professional services, and to provide practitioners with a road map for realizing the

potential economic benefits of value-based pricing.

This gives rise to two central research questions:

- (a) What capabilities must professional service firms develop in order to apply value-based pricing?
- (b) What market or business conditions must exist to support value-based pricing for professional services?

A survey of peer-reviewed literature indicates that research on processes for pricing management and analysis, in theory and practice, is generally scarce. Furthermore, we have found no published research in the service operations management literature that addresses value-based pricing with specific reference to professional service firms.

At this point it is useful to define *professional services* for purposes of this study. Maister (1993) identifies two process facets that define professional service work: a high degree of customization, and significant direct interaction with clients. Silvestro, Fitzgerald, Johnston, and Voss (1992) define professional service firms as “organizations with relatively few transactions, highly customized, process-oriented, with relatively long contact time, with most value added in the front office, where considerable judgment is applied in meeting customer needs.” We consider firms based on work that requires high levels of education and occupational licensing (such as law, medicine, architecture, engineering, and accounting), as well as firms based on value-creation through other forms of knowledge-intensive work, as professional service firms. We would (non-exhaustively) recognize firms engaged in management consulting, enterprise software development and implementation, and executive recruiting work as professional service firms.

Building on existing literature, we identify a hierarchy of three pricing models that

fit most professional service firms. Then we present a conceptual framework that (a) extends the Silvestro et al. (1992) service process model to sub-classify professional services, and (b) includes propositions regarding factors that affect the ability of a firm to implement value-based pricing. We also analyze capabilities underlying value-based pricing for professional service firms in terms of the resource-based view of the firm. We discuss the relevance and limitations of this conceptual study to research and practice, and identify potential future extensions of this research.

We refer to our conceptual framework as the *professional service positioning matrix*. This framework models factors and conditions that define and limit the feasibility of value-based pricing in professional service firms. We offer the framework as a useful mechanism for addressing the two central research questions, and several elements of the framework can be identified as potential sources of competitive advantage under the resource-based view of the firm (Wernerfelt 1984; Barney 1991). Our conceptual framework contributes to service operations management literature by presenting pricing management capability as a resource under the resource-based view—with specific application to professional services. This addresses significant gaps that exist in service operations management literature regarding pricing in general, and value-based pricing in particular, in professional service firms.

The remainder of this paper is organized as follows. Section two presents a review of relevant literature. Section three develops the theoretical model and propositions regarding firm characteristics and market conditions that support value-based pricing. Section four discusses the concept development and methodology, contribution, future extensions and limitations, and practical implications of this research. Section 5 offers concluding remarks.

II. LITERATURE REVIEW

The literature review that follows begins with a working definition of professional services and an overview of the treatment of value-based pricing in practitioner and peer-reviewed journals. Next, the positioning of service operations is considered with special emphasis on Maister's (1993) professional services framework. The treatment of professional services and pricing from strategic and marketing perspectives is examined, professional service capabilities and market factors are reviewed, and gaps in peer-reviewed literature are identified with regard to professional services and value-based pricing.

2.1. Professional Services and the Quest for Value-based Pricing

Our working definition of professional services is drawn from peer-reviewed literature, and from popular understanding of this sector of the economy. Maister (1993) distinguishes professional services from other categories of service operations based on the degree of customization (high) and the level of direct interaction with clients (significant). A differently-worded but consistent definition provided by Silvestro, Fitzgerald, Johnston, and Voss (1992) emphasizes relatively low transaction volume, high customization, process orientation, high client contact, and significant reliance on judgment to meet client needs. The boundaries of professional service work are commonly understood but seldom scrutinized by most business practitioners; in the words of Potter Stewart (United States Supreme Court 1964) professional service work can be "hard to define but easy to recognize." In this study, we regard firms performing work requiring extensive education and occupational licensing (including law, medicine, architecture, engineering, and accounting) as professional service firms. Our non-exhaustive working definition also recognizes firms that

create value through other knowledge-centric work (including management consulting, enterprise software development and implementation, real estate appraisal, and executive recruiting) as professional service firms.

Value-based pricing is mentioned frequently in practitioner literature and peer-reviewed journals as a *wish-list* objective of professional services firms. Firms seek to justify value-based pricing in the minds of their clients; this is consistent with the strategic objective of capturing the largest possible share of the value created through their expertise (Brandenburger and Stuart 1996). Value-based pricing can provide professional service firms with a higher share of this value than other pricing models.

The other pricing models typically applied in professional service settings can be classified as either fixed-price or time and materials models. Under the fixed-price or commodity model, the professional service firm would commit to provide a defined set of services, or a precisely-scoped deliverable, in exchange for a fixed price that is agreed in advance (Farr 2001). Under the time and materials or hourly billing model (Cannon and Morgan 1990), the professional services firm would bill the client for time and materials committed to a project—typically where uncertainties regarding the scope and/or difficulty of the work preclude a fixed-price commitment.

As noted in the introduction, value-based pricing is explored as an objective for firms engaged to implement enterprise resource planning (ERP) systems in Goldratt et al. (2000). Wardell, Wynter, and Helander (2008) cite an industrial research report indicating that major software companies such as SAP seek to apply value-based pricing. According to McDonald (2013), management consulting firm McKinsey & Company has consciously applied value-based pricing to many client engagements over the years. Practitioner

articles that discuss value-based pricing are offered by Baker (2009) with regard to accounting firms, and by Stedman (2000) with regard to large software companies.

2.2. Service Positioning

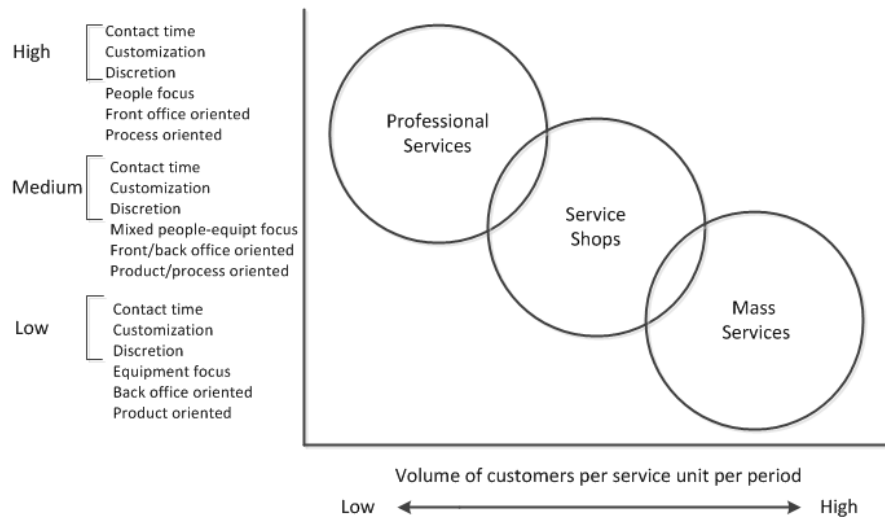
Research in the field of service operations management offers numerous classification schemes for services. Many of these classifications aim to adapt the manufacturing product-process matrix developed by Hayes and Wheelwright (1979) to services. An early framework for classifying services was provided by Schmenner (1986); this scheme classified services according to the level of customer interaction and customization. Schmenner recognized professional services as a distinct segment of the field, but did not offer further sub-classifications of professional services.

Wemmerlov (1990) offers a service taxonomy based on the degree of customer contact and the level of fluidity, as opposed to rigidity, involved in the provision of services.

Wemmerlov cites examples of services that fit into different cells in the taxonomy, but does not specifically distinguish professional services from other service settings.

Another service classification scheme was developed by Collier and Meyer (1998, 2000). The Collier and Meyer service positioning matrix classifies services based on whether performance of the services is directed by the customer, controlled jointly by the customer and the service provider, or directed primarily by the service provider.

A service process model that is useful for understanding the relative positioning of different service types is offered by Silvestro et al. (1992) and further developed by Silvestro (1999). This service process model classifies services according to the level of customer contact and the number of customers processed per time period. The Silvestro et al. (1992) model identifies three groupings of services with common characteristics along those two dimensions: professional services, the service shop, and mass services. The Silvestro et al. service process model is shown in Figure 1.



Sources: Silvestro, Fitzgerald, Johnston, and Voss 1992; Silvestro 1999.

FIGURE 1. SILVESTRO ET AL. SERVICE PROCESS MODEL

Other service classification schemes are offered by Tinilla and Vepsalainen (1995) and Kellogg and Nie (1995). These researchers draw on and extend the work of Schmenner (1986), Silvestro et al. (1992), Wemmerlov (1990) and others—but their analyses do not specifically distinguish professional services from other service settings, nor do they offer any sub-classification of professional services.

None of the research discussed above on service positioning offers sub-classification of professional services. Foundation research that does further categorize professional services is discussed below.

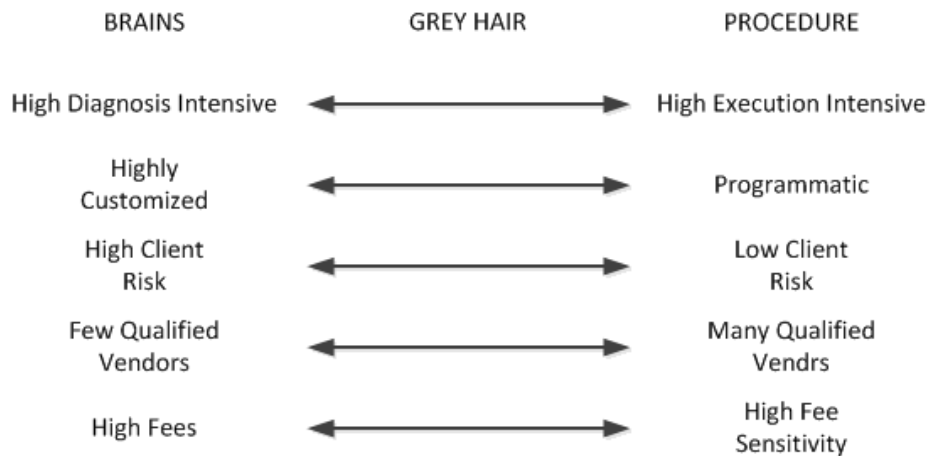
2.3. Maister’s Professional Services Framework

One of the most widely understood classifications of professional service projects and practices is provided by Maister (1982) and further developed in Maister (1993). Maister offers a three-level classification of professional service projects, which are labeled *brains*, *grey hair*, and *procedure*. Brains projects demand the highest levels of knowledge, creativity and innovation. Grey hair projects demand experience and proven judgment with a particular type of problem or

industry setting. Procedure projects demand a structured approach to a common type of problem or undertaking, and often involve managing and leveraging the effort of junior-level professionals. Maister (1993) also discusses the tendency of firms, or practice areas within firms, to recruit and develop professionals that fit the primary project type that defines the firm’s engagements.

Maister’s (1993) representation of these three levels of professional services work, and a number of characteristics associated with this classification scheme, are shown in Figure 2.

Another sub-classification of professional services is offered by Maister and Lovelock (1982). These authors examine professional service work in terms of the level of client contact involved. They apply the term *front-room* to services involving a high degree of client contact, and use the term *back-room* for services involving less client contact. The potential for professional service firms to capture more value by seeking to standardize service processes and migrate more activity into the back-room realm is discussed, but the effect of this migration on pricing practices and mechanisms is not addressed (Maister and Lovelock 1982).



Source: David H. Maister, *Managing the Professional Services Firm*, 1993.

FIGURE 2. MAISTER’S SPECTRUM OF PRACTICE

2.4. Strategic Perspectives on Pricing and the Resource-based View

Pricing as a research topic is often associated with the field of marketing, but pricing capabilities have been recognized as relevant for operations management research. Pricing capabilities have also been recognized as firm resources that can serve as a source of competitive advantage under the resource-based view of the firm.

Frazier et al. (2010) offer a historical study of research topics and methods in operations management, and find that pricing is a relevant topic for operations management research. That study identifies papers published in the year 2007 that consider pricing in six leading journals devoted to operations management. None of the papers identified in that study examines pricing issues with direct reference to professional services.

The resource-based view of the firm (RBV) is a conceptual framework, developed in the strategic management literature, that is useful for understanding attributes and capabilities that can provide sustained competitive advantage (Wernerfelt 1984; Barney 1991). The term *resource* takes on a special meaning in the RBV literature, with the term applied to any characteristic that provides an advantage that is not diminished solely by the passage of time (Barney 1991). Under the RBV, capabilities that are *rare*, *valuable*, *difficult to imitate*, and *non-substitutable* are resources that can yield sustained competitive advantage (Priem and Butler 2001).

Published research in the field of strategic management has specifically recognized pricing as a resource under the RBV. Dutta, Zbaracki, and Bergen (2003) found that pricing capabilities can be a source of competitive advantage, and noted that firms must invest to develop and maintain the necessary pricing management skills and processes. Brandenburger and Stuart (1996) identified negotiating skill as a specific

capability that is needed to support pricing as a source of competitive advantage. Simon, Butscher, and Sebastian (2003) state that pricing processes can be superior to cost cutting as a path to higher profitability. A framework for understanding pricing strategies in industrial firms was developed by Liozu and Hinterhuber (2012), with specific emphasis on processes and practices used by industry leaders to implement value-based pricing.

Many papers dealing with pricing in operations management journals focus on revenue management models that optimize pricing under certain conditions. Revenue management models can be effective in markets where customers and prices can be segmented, fixed costs are high relative to variable costs, services can be scheduled precisely, and capacity is perishable (Krajewski, Ritzman and Malhotra 2010).

Papers on pricing aspects and applications other than revenue management are published less frequently in operations management journals. But papers that address pricing in terms of knowledge and processes to support management decisions can be understood in terms of the RBV. With that in mind, significant papers from leading operations management journals that have considered pricing issues separately from revenue management models are identified below.

Many papers that deal with pricing from an operations management perspective consider specific situations in traditional manufacturing and/or supply chain settings. Kingsman and de Souza (1997) examine pricing processes in “versatile” (engineer-to-order) manufacturing firms, and develop a set of expert pricing rules. Tomlin (2003) investigates the profit allocation and supplier capacity effects of alternative contract pricing scenarios in a two-echelon supply chain. The work of Cachon and Lariviere (2001, 2005) deals with the potential for revenue-sharing contracts that reduce a service provider’s cost

of reusable products or equipment to increase overall demand for the service provider. Cattani, Gilland, Heese, and Swaminathan (2006) examine the attractiveness of an equal-price policy for a manufacturer opening a direct channel that competes with a traditional retailer or distributor channel.

Research that addresses pricing in the context of software and information products has also appeared in operations management journals. Bala and Carr (2009) consider software upgrade pricing, and find that conventional upgrade pricing strategies may be suboptimal for mid-range extensions of software functionality. Li, Feng, Chen, and Kou (2013) examine bundling price strategies for information products, and conduct numeric experiments to identify potential profit optimization effects.

Some recent studies in the operations management literature have examined pricing issues in service settings—although these studies are more relevant to transportation and delivery operations than to professional services. Confessore, Corini, and Stecca (2008) present a simulation to validate a gain-sharing pricing model for delivery services. Support for the proposition that the pricing of natural gas pipeline capacity is consistent with value-based pricing principles is presented by Secomandi (2010). Cachon and Feldman (2011) compare subscription pricing to per-use fees when service usage is congested, and find that subscription pricing is preferable to the service provider in many situations. Affeche, Baron, and Kerner (2013) examine the effect of time-based service pricing on different classes of customers.

One study that addresses value-based pricing in a professional services setting is provided by Farr (2001). That paper, which is focused specifically on civil engineering services, identifies a number of factors that make it difficult to apply value-based pricing in the civil engineering arena.

With research on strategic pricing perspectives and the resource-based view considered, it is evident that support exists for viewing pricing capabilities as a source of competitive advantage. But it is also evident that published research specifically addressing pricing in the context of professional services is scarce.

2.5. Marketing Perspectives

Peer-reviewed research on pricing and positioning is more common in the marketing literature, but still rare with regard to professional services. Marketing research that supports and contributes to the professional service positioning framework presented in this paper is identified below.

The marketing literature offers a number of positioning and pricing frameworks that, while useful for identifying relevant factors, are not focused specifically on professional services. Lovelock (1983) examines previously-developed service classifications, and offers five classification schemes that identify strategic dimensions that are (a) distinct from industry definitions, and (b) are relevant for marketing management. A service positioning matrix based on differing levels of process complexity and divergence is presented by Shostack (1987). Cannon and Morgan (1990) present a framework of pricing strategies that are relevant to services. The Cannon and Morgan framework includes pricing strategies consistent with the three recognized in the professional service positioning matrix. Cannon and Morgan refer to these as going-rate pricing, cost-plus pricing, and perceived-value pricing.

Marketing literature offers some insight on value-based pricing in industrial companies. Liozu, Hinterhuber, Boland, and Parelli (2012) present empirical research on industrial firms that considers three alternative pricing models:

competition-based, cost-based, and value-based pricing. These authors find that value-based pricing is rare in practice, and not widely understood by managers and professionals. In a separate study, Liozu, Hinterhuber, Parelli, and Boland (2012) investigate industrial firms that successfully apply value-based pricing, and identify firm characteristics and capabilities that are common in such firms. These characteristics and capabilities would be *resources* under the resource-based view of the firm (Barney 1991).

One paper that considers value-based pricing in the context of professional service firms is Wardell et al. 2008. These authors develop a quantitative incremental-value approach to the allocation of benefits under value-based pricing, but do not identify factors that support the viability of value-based pricing in professional service firms.

Other marketing research provides insights from other industries that are relevant to the study of value-based pricing in professional services. Shoemaker (2003) discusses the adverse impact of near-term profit maximization under revenue management on customer loyalty in service settings, and proposes considering the lifetime value of the customer relationship in pricing decisions. Stephenson, Cron, and Frazier (1979) conducted empirical research on the locus of pricing decisions in the medical device industry, and found that firms giving salespeople the highest degree of pricing authority generated the lowest sales and profit performance.

2.6. Professional Service Capabilities and Market Factors

A variety of peer-reviewed papers provide a theoretical foundation for elements of the professional services pricing matrix.

A positive relationship between service quality and the behavioral intentions of customers was found in a study of the

hospitality industry by Pandey and Joshi (2010). Those authors define customer behavioral intentions to include a customer's subjective probability of engaging in a certain behavior, such as remaining loyal to the service provider. It can be inferred from the findings of Pandey and Joshi (2010) that addressing an unusual or emerging problem at the request of a client would be perceived as an example of superior quality service or "going the extra mile" on behalf of the client. That would tend to enhance a client's loyalty and intention to rely on the service provider as a preferred vendor. In turn, that behavioral intention would tend to support the ability of the firm to implement value-based pricing practices—with regard to that client, and to other clients and prospects facing the same unusual or emerging problem.

An examination of the impact of compensation mechanisms explicitly tied to firm economic performance on employee productivity is presented by Presutti (2011). Although the underlying thrust of that paper is a call for reduced income inequality, the link between incentive compensation based on firm-wide performance and employee productivity posited there could conceivably motivate professional service firms to develop pricing analysis capabilities as a mechanism to help firms capture a larger share of the value created through their expertise.

A study that links client expectations to the total service experience and perceived quality of services is offered by Gunawardane (2011). That study, which was focused on health care operations, yields indications that the service provider's ability to retain the client is positively affected by the client's evaluation of service quality. This could serve to explain the ability of dominant professional service firms to leverage their reputation for superior capabilities and the prestige effect of working with them to capture more of the value created through their expertise—by justifying above-

market billing rates, or by applying value-based pricing models.

Market factors affecting the decision to rely on external resources such as outside service providers in lieu of internal resources are among the foundation concepts of organization theory and transaction cost economics. These have been addressed by, among others, Coase (1937, 1988), Grover and Malhotra (2003), and Williamson (2008). Factors that are relevant in the elements of the professional services pricing matrix include barriers to market entry and the switching costs associated with a decision to change professional service providers. This costs and process disruptions associated with a change of outside auditors is a widely understood example of such switching costs.

2.7. Literature Gap Analysis

The literature survey presented above indicates that pricing management capabilities can be a source of competitive advantage, but that research on pricing processes in general and value-based pricing is rare. It is also evident that research on pricing in services is scarce (see Machuca, Gonzalez-Zamora, and Aguilar-Escobar 2007), and that research on both positioning and pricing with emphasis on professional services is rare.

With the evident absence—and potential usefulness—of research on pricing in professional services identified, it is appropriate to develop the conceptual framework for professional service positioning with a view to the implementation of value-based pricing.

III. THEORETICAL MODEL AND PROPOSITIONS

This section discusses our concept development and methodology, recognizes antecedents of the model presented in this paper, develops the professional service

positioning matrix as a conceptual model, and identifies the propositions that comprise the model.

3.1. Concept Development and Methodology

As noted above, this research was undertaken to identify factors and conditions that tend to support or impede the ability of professional service firms to apply value-based pricing. The scope of this research is limited to the conceptualization of a framework for understanding those factors and conditions.

Our methodology involved examining the literature for existing service classification frameworks to identify those that (a) specifically address professional services, and (b) offer sub-classifications of professional services that are useful for understanding the dynamics of value-based pricing. We found research addressing pricing in professional services to be rare, and did not find an existing classification scheme that was useful for addressing value-based pricing.

We found the Silvestro et al. (1992) framework to be interesting, and agreed with the placement of professional services at the upper left of the customization/volume diagonal. We decided to cast our model as an extension of the Silvestro et al. service positioning matrix. Our approach was to add another level to the Silvestro et al. framework, and to classify professional service practices according to the hierarchy of pricing models in effect.

Next, we turned to peer-reviewed research, business periodicals, and the authors' professional experience to identify factors and conditions that influence the ability of professional service firms to implement value-based pricing. With a list of fifteen such factors and conditions identified, we identified commonalities and grouped these factors as related to firm capabilities, client characteristics, market conditions, and problems addressed. We then cast each of the

factors and conditions in terms of propositions to define the professional service positioning matrix.

3.2. Antecedents: The Service Process Model

This work can be regarded as an extension of the Silvestro et al. (1992) service process model. That framework classifies services in two dimensions: personal contact/customization and volume of customers processed by a single service unit per day. *Professional services* are positioned at the highest level of personal contact/customization and the lowest volume of customers per service unit/day.

Thus, as classified by Silvestro et al. (1992), professional services occupy an extreme end of the service spectrum. Given the significance and diversity of professional services, we regard further sub-classification as necessary if we seek to manage pricing for competitive advantage. Our conceptual framework extends the Silvestro et al. model by further subdividing the broader field of professional services, and by identifying factors that are relevant to pricing.

3.3. The Professional Service Positioning Matrix (PSPM)

Our conceptual framework, which we refer to as the professional service positioning matrix (PSPM) is presented and explained below. We first classify professional services by what we perceive to be the three most distinct pricing models for professional services: fixed price or turnkey pricing, time & materials pricing, and value-based pricing. We then identify a series of factors, each of which can be identified as having a range of possible values along a continuum for a particular firm. The positioning of a firm along the continuum

for each factor tends to support or impede the firm's ability to implement value-based pricing.

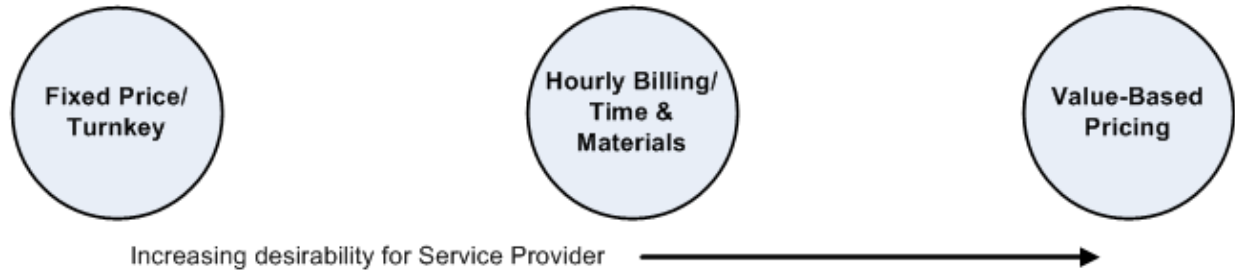
A schematic representation of the professional service positioning matrix is shown in Figure 3.

As indicated in Figure 3, the professional service positioning matrix is comprised of fifteen identified factors that may influence the positioning of a professional service firm in terms of its ability to implement value-based pricing. These factors are presented in groups, with each group related to a specific aspect of the firm or its operating environment. The factor groups are related to firm capabilities, client characteristics, market conditions, and the problems addressed. Each factor gives rise to a proposition, and the propositions related to the identified factors are developed and presented below.

3.4. Propositions Comprising the Professional Service Positioning matrix

3.4.1. Propositions Regarding Firm Capabilities

Firms that offer innovative problem solving abilities will tend to offer significant value to clients by either (a) applying existing tools, techniques, and technologies to new problem settings, or (b) developing new tools, techniques, and technologies to create a better solution to an existing and heretofore non-solvable problem. McKinsey & Company has consistently developed and marketed its adaptability and its proprietary analytical techniques to clients, and has reportedly been able to base its pricing for client engagements on the value of expected outcomes (McDonald 2013). This gives rise to the following proposition:



Firm Capabilities:

P1: Innovative problem solving	Standard methodology	Innovative approach
P2: First-mover capability	Imitator	First mover
P3: Transformation/prestige	Back room solution	Transformation /prestige
P4: Pricing analysis	Intuitive pricing	Pricing analysis/modeling
P5: Negotiating skills	Namby pamby/price taker	Ask & justify larger share

Client Characteristics:

P6: Abundant client resources	Cost-constrained	Flexibility/munificent
P7: Relationship focus	Transaction-focused	Relationship-focused
P8: Long-term win-win focus	Zero-sum game view	Win-win perspective

Market Conditions:

P9: Demand exceeds supply	Supply exceeds demand	Demand exceeds supply
P10: Barriers to market entry	Anyone can play	Barriers to market entry
P11: Premium/quick response	Stable/stagnant market	Premium for quick-turn
P12: High switching costs	Generalized methodology	High first-time cost

Problems Addressed:

P13: Unique problems	Commoditized problem	Unique situation
P14: Undefined/open ended	Routine/"check-listable"	Undefined/open ended
P15: Integrality required	Modular/local issues	Requires integration

FIGURE 3. THE PROFESSIONAL SERVICES PRICING MATRIX

P1: Innovative problem solving capabilities support value-based pricing.

Similarly, firms that are among the first to address a new and significant problem will tend to be able to address and solve problems that other firms are not (or not yet) able to deal with. Faced with limited alternatives, clients will tend to accept pricing that allocates an above-normal portion of the value created to the service provider. An example would be the emergence of firms like Protiviti that geared up

quickly to help large publicly-traded companies comply with the Sarbanes-Oxley legislation after 2002 (Solomon 2005). This gives rise to the following proposition:

P2: First mover capability supports value-based pricing.

Service firms capable of guiding clients through significant and necessary transformations, combined with high prestige associated with the service firm, will tend to be

able to command value-based pricing. Top-tier investment banks such as Goldman Sachs and CS First Boston frequently earn fees based on the size of the transaction for advising clients on the negotiation and financing of major acquisitions (see, *e.g.*, Steinmetz 1994). The link between the client expectations and the perception of high service quality in dealing with dominant service providers (Gunawardane 2011) could also affect the viability of value-based pricing. This gives rise to the following proposition:

P3: Transformative capability coupled with high firm prestige supports value-based pricing.

It can be inferred that pricing analysis and decision modeling capabilities will tend to make it more likely that a service firm can apply value-based pricing than its competitors that lack these capabilities—partly because the competitors will lack the tools needed to measure the potential value that is created. Peer reviewed literature on this point specifically focused on professional service firms is scarce, but it is reasonable to expect that the findings of Liozu, Hinterhuber, Parelli, and Boland (2012) and Dutta et al. (2003) that pricing capabilities can be a source of competitive advantage would hold true in the professional services arena. The impetus to develop pricing analysis capability in order to capture more of the value created by applying the firm's expertise could also come into play in that regard (Presutti 2011). This gives rise to the following proposition:

P4: Pricing analysis and decision modeling capabilities support value-based pricing.

The presence of strong negotiating skills, coupled with the willingness to claim the largest justifiable portion of the value created through its professional expertise, will tend to increase the likelihood that a professional service firm can apply value-based pricing. This is consistent with the findings of

Brandenburger and Stuart (1996). This gives rise to the following proposition:

P5: Strong negotiating skills support value-based pricing.

3.4.2. Propositions Regarding Client Characteristics

Client firms with abundant resources can be viewed as more likely to be willing and able to share a significant portion of the value created by applying the expertise of professional service providers. This characteristic of client firms is characterized as *munificence* by Dess, Ireland, and Hitt (1990). On the other hand, it may be difficult to persuade clients that are cash-constrained or otherwise resource-poor to agree to value-based pricing for services. This gives rise to the following proposition:

P6: Abundant client resources support value-based pricing.

Client firms that have an established and trust-based relationship with a professional services firm may be more inclined to agree to engagement terms that include value-based pricing. It has been reported that McKinsey & Company has leveraged longstanding client relationships to price certain engagements based on the strategic value of the expected outcome (McDonald 2013). By way of contrast, client firms taking a transactional view of a professional service engagement could be expected to rely more on fixed price arrangements, or on time and materials pricing with a not-to-exceed provision. This gives rise to the following proposition:

P7: Relationship-focused client engagements support value-based pricing.

Clients requiring service engagements involving an ongoing relationship, where both the client and the professional services firm expect to receive an ongoing stream of benefits,

may be more open to value-based pricing arrangements for continuing services. Speaking specifically of civil engineering work, Farr (2001) suggests that clients may be more receptive to value-based pricing in design-build-operate projects than in design-build projects. This gives rise to the following proposition:

P8: Client engagements offering long-term win-win outcomes support value-based pricing.

3.4.3. Propositions Regarding Market Conditions

Situations where the demand for qualified professional service providers with available capacity exceeds the immediately available supply will tend to promote receptiveness to value-based pricing. This is intuitively easy to accept as a function of supply and demand. This gives rise to the following proposition:

P9: Demand in excess of supply supports value-based pricing.

Similarly, it is intuitive that barriers to market entry will position well-qualified existing professional service firms to capture a larger portion of the value created by the application of their expertise. The American Medical Association, which is the principal professional organization for physicians in the United States, has at times been accused of supporting excessively high fee structures for medical services by lobbying to limit the number of accredited medical schools (see, *e.g.*, Yesalis, Holt, and Politzer 2013). The effect of barriers to market entry on pricing for products and services is well established in organization theory (Coase 1937, 1988) and in transaction cost economics (Grover and Malhotra 2003; Williamson 2008). This gives rise to the following proposition:

P10: Barriers to market entry support value-based pricing.

Given the right market conditions, the design and execution of professional service processes to provide higher levels of service would tend to make it possible for service providers to charge premium prices. Examples would include quick mobilization of top-tier investment banking firms to support or contest a proposed hostile takeover bid; see Steinmetz (1994). This gives rise to the following proposition:

P11: Premium service with quick response supports value-based pricing.

Situations where switching from one professional service firm to another would involve incurring abnormally high costs will tend to enable professional service providers to support higher price levels. Resistance to the high first-year costs, and spiking staff time required, in the first year with a new audit firm, is one of the underlying factors that explain the reluctance of publicly-traded companies to change auditors (see Solomon 2005). Switching costs are dealt with extensively in the organizational theory literature (*e.g.*, Coase 1937, 1988) and transaction cost economics (Grover and Malhotra 2003; Williamson 2008). This gives rise to the following proposition:

P12: High switching costs support value-based pricing.

3.4.4. Propositions Regarding Problems Addressed

Professional service firms invited to undertake engagements involving extremely unusual problems will tend to be able to command premium prices for the required services. The unusual nature of the problem may give rise to a supply vs. demand imbalance, or may cause clients to seek out firms with a reputation for innovative problem solving. As referenced previously, McKinsey & Company has long been positioned to win engagements involving unique strategic

situations, and has frequently applied value-based pricing in those engagements (McDonald 2013). Additionally, the relationship of perceived service quality to positive behavioral intentions on the part of clients toward service providers, as identified by Pandey and Joshi (2010), tends to make value-based pricing more viable for firms that take on unique problems at the request of clients. This gives rise to the following proposition:

P13: Unique problem situations support value-based pricing.

Similarly, and also consistent with the findings of Pandey and Joshi (2010), professional service firms engaged to address first-impression problems, or problems of a kind not previously encountered, and undefined or open-ended problems at the request of clients will tend to be able to command premium prices for the required services. This gives rise to the following proposition:

P14: Undefined or open-ended problems support value-based pricing.

Another problem dimension that would tend to influence the ability of a professional service firm to apply value-based pricing would be the tendency of the problem to require a solution involving *integrality*. Integrality, as the term is used by Fine, Golany, and Naseraldin (2005), would require a high level of coordination among different solution elements—and is distinguished from modularity, which would involve addressing individual solution elements in isolation. The broader range of competencies required to address a problem requiring integrality would tend to exclude some service providers from consideration; this would allow providers with the necessary breadth of expertise to command premium prices. This gives rise to the following proposition:

P15: Problems requiring integrality of solutions support value-based pricing.

IV. DISCUSSION

The sub-sections below consider the research presented here in terms of its contribution, future research directions and limitations, practical implications, and originality and value.

4.1. Contribution

The professional service positioning matrix is a conceptual framework that can be used by scholars and by practicing managers to understand the factors and conditions that tend to support or impede the ability of professional services firms to apply value-based pricing. As such, the framework is useful as the basis of a response to the two central research questions:

- (a) What capabilities must professional services firms develop in order to apply value-based pricing models?
- (b) What market or business conditions must exist to allow professional services firms to apply value-based pricing?

In considering the categories of factors and conditions that make up the framework, it is clear that a strong position in terms of any element in the Firm Characteristics category could be regarded as a potential source of competitive advantage under the resource-based view. It is also conceivable that professional service providers with a strong interest in maximizing their captured share of the value created through their efforts could design and implement processes to position the firm for the right mix of Client Characteristics, Market Conditions, and Problems Addressed to support value-based pricing.

Viewed in that light, the conceptual framework presented here contributes to the service operations management literature by framing capabilities related to pricing management as resources under the resource-

based view, specifically with regard to professional service firms. As noted above, this research addresses significant gaps in the operations management literature with regard to value-based pricing in professional service firms.

The professional service positioning matrix can be validated by considering the positioning of professional service firms in terms of the identified factors and the pricing models in use. For example, firms like H&R Block that specialize in tax return preparation for individuals offer fixed (turnkey) prices for returns without unusual complexity or special compliance issues. Most consulting firms specializing in enterprise resource planning software implementations apply time & materials pricing in an environment that is not standardized but features a common range of technical and people-centered issues. Firms that frequently succeed in applying value-based pricing include elite consulting firms like McKinsey & Company that trade on innovative problem solving, close client relationships, transformation/prestige effects, and unique or open-ended problem situations.

It is important to distinguish the price positioning effect of the professional service positioning matrix from Maister's (1993) professional services spectrum of practice. On the surface, it would seem that Maister's three categories would align closely with the three pricing models in the professional service positioning matrix: *procedure* firms would apply fixed pricing, *grey hair* firms would apply time & materials pricing, and *brains* firms would apply value-based pricing.

But in practice this alignment does not always hold—indicating that the more flexible multi-factor analysis provided by the professional service positioning matrix is useful. For example, the staff-leveraged (procedure) Big Four audit firms can often command value-based pricing for audit services due to prestige effects and market entry barriers. These factors preclude large publicly-

traded firms from choosing non-Big Four firms as auditors. And elite (brains) firms like McKinsey & Company have at times decided to enter markets such as information technology outsourcing that require fixed or time & materials pricing due to the presence of factors like standardized methods, the back-room nature of solutions, and routine (check-listable) problems.

4.2. Future Research Directions and Limitations

The professional service positioning matrix presented here can serve as the point of departure for future studies that will extend theory and support practice development with regard to value-based pricing in professional service firms. A natural extension of this research would include empirical investigation through case studies, field studies, action research projects, and survey research to frame the propositions offered here as testable hypotheses.

The literature survey conducted to support this study reveals other opportunities to extend research on pricing in the context of professional services. This could include further study of analytical methods and processes to develop pricing capabilities for competitive advantage, benchmarking of pricing capabilities from industrial companies that could be adapted to professional services, and the development of a pricing process maturity model.

The principal limitation of this research is that its scope is limited to concept development; empirical data has not been collected to validate the professional service positioning matrix. Given the dearth of peer-reviewed research on pricing in professional services, we would suggest that this is an appropriate scope for an exploratory study at this point, and that empirical validation of the model can be the focus of future studies.

Indeed, we look forward to conducting empirical research that will involve collecting data that can be used to test the propositions that comprise the professional services pricing matrix as hypotheses. Our intent is to use previously-validated survey items, and to develop and validate new scales as needed, to gather survey responses from practicing professionals in different fields for hypothesis testing. After appropriate evaluation of survey responses for reliability, we will use structural equation modeling and/or regression analysis to test hypotheses drawn from the professional services pricing matrix. In addition to testing these hypotheses with responses from practicing professionals in a range of fields, we would plan to collect sufficiently large samples from multiple professions so that we will be able to compare and contrast the empirical results across different professions. Further research could also address differences in survey results for firms with different size, different geographic profiles, and other significant distinguishing characteristics.

4.3. Practical Implications

The professional service positioning matrix can provide senior managers of professional service firms with a roadmap for developing a response to this question: how can we position our firm, and what capabilities must we develop, in order to implement a value-based pricing model for our services? We would like to think that the analysis presented here would have been useful to the managers of the fictitious software implementation firm in *Necessary But Not Sufficient* (Goldratt et al. 2000).

V. CONCLUSION

This research was inspired by references, in various sources, to the quest by professional service firms to apply value-based pricing models in order to capture a higher

proportion of the value created through the application of their expertise. Our background research revealed significant gaps in the literature regarding classification frameworks for professional services, and regarding pricing processes and practices in professional service firms.

Our objective has been to remove value-based pricing from the “nice work if you can get it” realm by presenting a professional service positioning matrix that identifies firm capabilities to be developed, and market conditions to be sought, to support value-based pricing. This framework includes a scheme for classifying professional service firms in terms of the three most prevalent pricing models, and is comprised of fifteen propositions related to factors and conditions that would tend to support the application of value-based pricing models by professional service firms.

The pricing capabilities recognized in the professional service positioning matrix can be understood in the context of the resource based view as sources of competitive advantage. This research can be extended to yield further understanding of value-based pricing in professional services, and can be used by practitioners as the starting point in efforts to implement value-based pricing models.

REFERENCES

- Afêche, P., Baron, O. and Kerner, Y., “Pricing Time-Sensitive Services Based on Realized Performance”, *Manufacturing and Service Operations Management*, 15(3), 2013, 492-506.
- Baker, R.J., “Pricing on Purpose: How to Implement Value Pricing in Your Firm”, *Journal of Accountancy*, 207(6), 2009, 62-67.
- Bala, R. and Carr, S., “Pricing Software Upgrades: The Role of Product Improvement and User Costs”, *Production*

- & *Operations Management*, 18(5), 2009, 560-580.
- Barney, J., "Firm Resources and Sustained Competitive Advantage", *Journal of Management*, 17(1), 1991, 99-120.
- Brandenburger, A.M. and Stuart, H.W., "Value-Based Business Strategy", *Journal of Economics & Management Strategy*, 5(1), 1996, 5-14.
- Cachon, G.P. and Feldman, P., "Pricing Services Subject to Congestion: Charge Per-Use Fees or Sell Subscriptions?", *Manufacturing and Service Operations Management*, 13(2), 2011, 244-260.
- Cachon, G.P. and Lariviere, M.A., "Turning the Supply Chain Into a Revenue Chain", *Harvard Business Review*, 79(3), 2001, 20-21.
- Cachon, G.P. and Lariviere, M.A., "Supply Chain Coordination with Revenue-Sharing Contracts: Strengths and Limitations", *Management Science*, 51(1), 2005, 30-44.
- Cannon, H.M. and Morgan, F.W., "A Strategic Pricing Framework", *Journal of Services Marketing*, 4(2), 1990, 19-30.
- Cattani, K., Gilland, W., Heese, H.S. and Swaminathan, J. "Boiling Frogs: Pricing Strategies for a Manufacturer Adding a Direct Channel That Competes With the Traditional Channel", *Production & Operations Management*, 15(1), 2006, 40-56.
- Coase, R. H., "The Nature of the Firm", *Economica*, 4, 1937, 386-405.
- Coase, R. H., "The Nature of the Firm: Influence", *Journal of Law, Economics & Organization*, 4(1), 1988, 33-47.
- Collier, D.A. and Meyer, S.M., "A Service Positioning Matrix", *International Journal of Operations & Production Management*, 18(11/12), 1998, 1223-1244.
- Collier, D.A. and Meyer, S.M., "An Empirical Comparison of Service Matrices", *International Journal of Operations & Production Management*, 20(6), 2000, 705-729.
- Confessore, G., Corini, D. and Stecca, G., "A Computational Method for Pricing of Delivery Service in a Logistics Network", *International Journal of Production Research*, 46(5), 2008, 1231-1242.
- Dess, G.G., Ireland, R.D. and Hitt, M.A., "Industry Effects and Strategic Management Research", *Journal of Management*, 16(1), 1990, 7-27.
- Dutta, S., Zbaracki, M.J. and Bergen, M., "Pricing Process as a Capability: a Resource-Based Perspective", *Strategic Management Journal*, 24(7), 2003, 615-630.
- Farr, J.V., "Commodities and Value-Based Pricing of Engineering Services", *Journal of Management in Engineering*, 17(4), 2001, 224-228.
- Fine, C.H., Golany, B. and Naseraldin, H., "Modeling Tradeoffs in Three-Dimensional Concurrent Engineering: a Goal Programming Approach", *Journal of Operations Management*, 23(3/4), 2005, 389-403.
- Frazier, G.V., Avery, S.L., Cagle, C.J., Masters, B.L. and Napier, R., "Operations Management Research 2007: Current State and Trends", Working paper, University of Texas at Arlington, Arlington, Texas, 2010.
- Goldratt, E.M., Schragenheim, E. and Ptak, C.A., *Necessary But Not Sufficient*, North River Press, Great Barrington, Massachusetts, 2000.
- Grover, V., and Malhotra, M. K., "Transaction Cost Framework in Operations and Supply Chain Management Research: Theory and Measurement", *Journal of Operations Management*, 21(4), 2003, 457-473.
- Gunawardane, G., "Total Experience as a Dimension of Quality in Services: A Study in the Health Care Industry", *California Journal of Operations Management*, 9(1), 2011, 91-103.
- Hayes, R.H. and Wheelwright, S.C., "Link Manufacturing Process and Product Life

- Cycles”, *Harvard Business Review*, 57(1), 1979, 133-140.
- Kellogg, D.L. and Nie, W., “A Framework for Strategic Service Management”, *Journal of Operations Management*, 13(4), 1995, 323-337.
- Kingsman, B.G. and de Souza, A.A., “A Knowledge-Based Decision Support System for Cost Estimation and Pricing Decisions in Versatile Manufacturing Companies”, *International Journal of Production Economics*, 53(2), 1997, 119-139.
- Krajewski, L.J., Ritzman, L.P., and Malhotra, M.K., *Operations Management: Processes and Supply Chains, Ninth Edition*, Prentice Hall, Upper Saddle River, New Jersey, 2010.
- Li, M., Feng, H., Chen, F. and Kou, J., “Numerical Investigation on Mixed Bundling and Pricing of Information Products”, *International Journal of Production Economics*, 144(2), 2013, 560-571.
- Liozu, S.M. and Hinterhuber, A., “Industrial Product Pricing: A Value-Based Approach”, *Journal of Business Strategy*, 33(4), 2012, 28-39.
- Liozu, S.M., Hinterhuber, A., Boland, R. and Perelli, S., “The Conceptualization of Value-Based Pricing in Industrial Firms”, *Journal of Revenue & Pricing Management*, 11(1), 2012, 12-34.
- Liozu, S.M., Hinterhuber, A., Perelli, S. and Boland, R., “Mindful Pricing: Transforming Organizations Through Value-Based Pricing”, *Journal of Strategic Marketing*, 20(3), 2012, 197-209.
- Lovelock, C.H., “Classifying Services to Gain Strategic Marketing Insights”, *Journal of Marketing*, 47(3), 1983, 9-20.
- Machuca, J.A.D., González-Zamora, M.D.M. and Aguilar-Escobar, V.G., “Service Operations Management Research”, *Journal of Operations Management*, 25(3), 2007, 585-603.
- Maister, D.H., “Balancing the Professional Service Firm”, *Sloan Management Review*, 24(1), 1982, 15-29.
- Maister, D.H., *Managing the Professional Services Firm*, Simon & Schuster, New York, 1993.
- Maister, D.H. and Lovelock, C.H., “Managing Facilitator Services”, *Sloan Management Review* 23(4), 1982, 19-31.
- McDonald, D., *The Firm: The Story of McKinsey and Its Secret Influence on American Business*, Simon & Schuster, New York, 2013.
- Pandey, D. and Joshi, P. R., “Service Quality and Customer Behavioral Intentions: A Study in the Hotel Industry”, *California Journal of Operations Management*, 8(2), 2010, 72-81.
- Presutti Jr., W. D., “Organization-Wide Variable Pay: The Missing Link in Managing the Supply Chain”, *California Journal of Operations Management*, 9(2), 2011, 59-69.
- Priem, L. and Butler, J.E., “Is the Resource-Based ‘View’ a Useful Perspective for Strategic Management Research?”, *Academy of Management Review*, 26(1), 2001, 22-40.
- Schmenner, R.W., “How Can Service Businesses Survive and Prosper?”, *Sloan Management Review*, 27(3), 1986, 21-32.
- Secomandi, N., “On the Pricing of Natural Gas Pipeline Capacity”, *Manufacturing & Service Operations Management*, 12(3), 2010, 393-408.
- Shoemaker, S., “The Future of Pricing in Services”, *Journal of Revenue & Pricing Management*, 2(3), 2003, 271-279.
- Shostack, G.L., “Service Positioning Through Structural Change”, *Journal of Marketing*, 51(1), 1987, 34-43.
- Silvestro, R., “Positioning Services Along the Volume-Variety Diagonal”, *International Journal of Operations & Production Management*, 19(3/4), 1999, 399-420.

- Silvestro, R., Fitzgerald, L., Johnston, R. and Voss, C. "Towards a Classification of Service Processes", *International Journal of Service Industry Management*, 3(3), 1992, 62-75.
- Simon, H., Butscher, S.A. and Sebastian, K.-H., "Better Pricing Processes for Higher Profits", *Business Strategy Review*, 14(2), 2003, 63-67.
- Solomon, D., "At What Price? Critics Say the Cost of Complying With Sarbanes-Oxley is a Lot Higher Than It Should Be", *Wall Street Journal*, October 17, 2005.
- Stedman, C., "Value-Based Pricing", *Computerworld*, 34(11), 2000, 58-59.
- Steinmetz, G., "American Home's Cyanamid Conquest Spawned Fat Fees—Firms' Investment Bankers Received \$57.6 Million for Two-Week Struggle", *Wall Street Journal*, August 29, 1994.
- Stephenson, P.R., Cron, W.C. and Frazier, G.L., "Delegating Pricing Authority to the Sales Force: The Effects on Sales and Profit Performance", *Journal of Marketing*, 43(2), 1979, 21-28.
- Tinnilä, M. and Vepsäläinen, A.P.J., "A Model for Strategic Repositioning of Service Processes", *International Journal of Service Industry Management*, 6(4), 1995, 57-80.
- Tomlin, B., "Capacity Investments in Supply Chains: Sharing the Gain Rather Than Sharing the Pain", *Manufacturing and Service Operations Management*, 5(4), 2003, 317-333.
- United States Supreme Court, *Jacobellis v. Ohio*, 378 U.S., 1964, 184-204.
- Wardell, C.L. III, Wynter, L. and Helander, M., "Capacity and Value Based Pricing Model for Professional Services", *Journal of Revenue & Pricing Management*, 7(4), 2008, 326-340.
- Wemmerlov, U., "A Taxonomy for Service Processes and Its Implications for System Design", *International Journal of Service Industry Management*, 1(1), 1990, 20-40.
- Wernerfelt, B., "A Resource-Based View of the Firm", *Strategic Management Journal* 5(2), 1984, 171-180.
- Williamson, O. E., "Outsourcing: Transaction Cost Economics and Supply Chain Management", *Journal of Supply Chain Management: A Global Review of Purchasing & Supply* 44(2), 2008, 5-16.
- Yesalis, C.E., Holt, H.D. and Politzer, R.M., *Fundamentals of U.S. Health Care: Principles and Perspectives*, Delmar Cengage, New York, 2013.