

Inversions of service-dominant logic

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Abstract

Value creation, both its nature and scope, can be better and more accurately understood by inverting six characteristics of goods-dominant logic, or what is also known as “old enterprise logic” or “neoclassical economics,” into a service-dominant-informed perspective. These six inversions include (1) entrepreneurship and the view that value creation is an unfolding, emergent process seen as superordinate to management, (2) effectual processes understood as primary in relation to predictive processes and better for informing actors about the interactive, resource-integrating, collaborate nature of value creation, (3) marketing being fundamental to value creation and taking primacy over manufacturing, (4) innovation as more fundamental to, and descriptive of, value creation than invention, (5) a focus on effectiveness as captured by value in use and value in context for beneficial actors taking precedence over efficiency, which is inherently a firm-centric lens, and finally (6) the the predominant reliance on heuristics rather than rational, calculative decision making.

Keywords

Effectual processes, entrepreneurship, human actors, service-dominant logic, value creation, value in use

Introduction

The hallmark of, and jumping-off point for, what has become known as service-dominant (S-D) logic ([Vargo and Lusch, 2004, 2008](#)) is the reconceptualization, and hence the repositioning, of “service.” There are two parts to this reconceptualization and repositioning. The first is its untethering from the concept of a “good.” That is, in S-D logic, rather than *defining service*

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Table 1. Axioms of S-D logic.

Premise/axiom		Explanation/justification
FP1/axiom 1	Service is the fundamental basis of exchange	The application of operant resources (knowledge and skills), “service,” is the basis for all exchange. Service is exchanged for service
FP6/axiom 2	The customer is always a cocreator of value	Implies value creation is interactional
FP9/axiom 3	All economic and social actors are resource integrators	Implies the context of value creation is networks of networks (resource integrators)
FP10/axiom 4	Value is always uniquely and phenomenological determined by the beneficiary	Value is idiosyncratic, experiential, contextual, and meaning laden

through reference to goods—either in terms of a unit of output, *other than a good*, or as a special type of (intangible) *good*—as has been traditional in economic (including marketing) thought, it defines service in its own right, as the *process of one actor using its resources for the benefit of another* (Vargo and Lusch, 2008).

This untethering permitted the (re)examination of the *relationship between goods and service*, instead of the *differences between goods and services*, which had been the traditional concern (e.g., Zeithaml et al., 1985). From this perspective, service emerged as a transcending concept, the second part of the reconceptualization and repositioning. That is, to paraphrase Gummesson (1995), both goods and services render service. Because services (plural), units of service output that provide service (singular, a process), becomes redundant, the term is dropped in S-D logic. Thus, rather than economic (and social) exchange being viewed as centered on the good, with service(s) playing a subordinate or supporting role, it becomes seen as centered on service, with goods playing the facilitating role—that is, as service delivery mechanisms. Service is, therefore, always what is exchanged, either directly or indirectly (e.g. through a good). In short, the role of goods and service(s) is inverted.

This reconceptualization and inversion allows, if not compels, the reexamination of a host of other concepts. The core reconceptualizations are, for the most part, captured in 10 foundational premises (FPs) (Vargo and Lusch, 2008), which contain, or at least imply two other inversions—(1) the primacy of operant resources, those that can act on other resources to create value, over operand resources, those that require operant resources to make them beneficial and (2) the “service economy” as a general, rather than a special case of economic activity. Recently (see Lusch and Vargo, 2014), we have condensed these 10 FPs into 4 (FP 1, 6, 9, and 10) *axioms*, from which the other FPs could be derived (see Table 1).

To these axioms, we have appended three additional, core reconceptualizations. The first is that *all actors* (individuals, households, firms, nations, etc.) are fundamentally doing the same core activities: engaging in *resource integration* to create new resources and using *service-for-service* exchange to access additional resources; thus, they are all, simultaneously, “producers” and “consumers” to use the traditional language. The second, is that the dynamic, interdependent, networked nature of value creation (i.e. cocreation) among these (generic) actors implies that the *service ecosystem*—relatively self-contained, self-adjusting systems of resource-integrating actors connected by shared institutional logics and mutual value creation through service exchange—rather than individual (e.g. the firm) or dyadic actors (e.g. firm–customer)

is the appropriate unit of analysis for understanding value creation. Finally, this in turn implies that the *institutions*—norms, rules, symbols, and so on—created by the actors to facilitate this value cocreation in service ecosystems is the (often-overlooked) glue that holds ecosystems together and makes joint value creation possible.

Therefore, the overall narrative of S-D logic, at least in its present state, becomes one of (generic) actors cocreating value through the integration of resources and exchange of service, coordinated through actor-engendered institutions in nested and overlapping service ecosystems. This is of course quite different from the rather linear, value production, delivery-and-consumption model of traditional economics, business, and marketing. It is also more complex though, we believe, much less complicated. Furthermore, in addition to being based on an inversion of the role of goods and service, a service-ecosystem-based S-D logic perspective motivates a series of other inversions of the relative role of concepts used in the understanding of value creation through economic exchange. As we completed our recent book, we concluded the last chapter with some of our current thoughts about additional inversions (Lusch and Vargo, 2014: 205–9). We recap these inversions here and also extend the list of inversions that we feel are needed. Hopefully others will add to this discussion and we expect that this list will grow.

Additional enlightening inversions

Entrepreneurship over management

Management is a relatively young academic discipline and orientation for business, emerging less than 200 years ago and proliferating especially after World War II. The even younger academic discipline of marketing largely emanates from and thus parallels this development, especially in its primary, management orientation, which emerged around the middle of the last century (Jones et al., 2009).

Like goods-dominant (G-D) logic, with which it is related, much of management thought, including marketing thought, has its roots in the industrial revolution, which motivated the scientific understanding and normative control of increasingly large, bureaucratic organizations, built on a foundation of neoclassical economics. Management thought's hallmark is *efficiency*, primarily in manufacturing but also in innovation and distribution. More broadly, it morphed into a general orientation for economic activity, with an emphasis on control of, and efficiency within, existing organizations and markets. The overall orientation is reflected in most business schools today, with the prominence, in all of its disciplines of the management, of large firms in large, pre-existing markets and innovation, when addressed, is seen mostly in terms of incremental improvement of output and its creation.

By the 1970s, journalists and scholars began to refer to a postindustrial society (Bell, 1976), but this view was still primarily built on a managerial, economic framework (Drucker, 1985). In both the public and private sectors, the 5-year strategic plan continued to be the central approach, supported by annual, quarterly, and monthly plans. The pervasive and expanding influence of this “old enterprise logic” (Zuboff and Maxmin, 2002) managerial model was evident in development and growth of business subdisciplines and related courses, such as marketing management, services management, human resource management, customer management, financial management, supply chain management, and information systems management. In brief, what some call the postindustrial economy is still a model of bureaucratic, central (within the organization) planning, and top-down management command and control, in which both workers,

customers, and even markets were viewed as “operand” resources (Vargo and Lusch, 2004), those that can be acted upon to produce desired effects. Entrepreneurial approaches to business, when present in most business schools at all, were still seen as special cases, often associated with small, family-owned businesses—“mom-and-pop shops”—and, less often as “startups,” though usually in existing markets. In short, they were seen as exceptions to the more normal, mainstream firms and the related economic activity.

In the mid-1980s, Drucker (1985) began to identify a movement toward what he coined *entrepreneurial management*. Projecting this movement into the future, he envisioned a movement in which the economy and organizations were not seen in terms of machines to be fine-tuned and operated through levers and switches for optimal performance, but rather in terms of biological processes, “genetically” organized through information. In fact, Drucker identified his role as a business academic as that of a “social ecologist.”

Likewise, S-D logic’s institutionally governed, context and cocreated value, ecosystem’s framework implies a dynamic model, in which entrepreneurial activity can be seen as the rule, rather than the exception. S-D logic defines service ecosystems, as stated, as “relatively self-contained, self-adjusting systems of resource-integrating actors that are connected by shared institutional logics and mutual value creation through service exchange” (Lusch and Vargo, 2014). This implies dynamic systems in which actors both influence and are restricted by the structural context (Giddens, 1984) that develops from their collective value- (viability, well-being) creating processes, through innovative resource integration and service provision. This, in turn, implies that value creation is an unfolding process, for which there is no end state to optimize or toward which to move. Rather, it is an emergent process within an ever-changing context, including ever-changing resources; it is, by necessity, an entrepreneurial process.

This does not however imply that markets are chaotic, completely random, or totally unpredictable. Rather, in the S-D logic view, relatively stable “markets” are created by the actors in a service ecosystem through *institutionalization* (e.g. North, 2005), the widespread acceptance, of generalized value propositions (e.g. automobiles) as acceptable solutions to common needs (e.g. personal transportation). Once institutionalized, the activities associated with the markets also become institutionalized. Thus, perhaps ironically, through *performativity* (Kjellberg and Helgesson, 2006)—acting in accordance with institutionalized rules—can lead to something like the a priori, measurable, and predictable markets assumed in the managerial marketing taught in business schools. Thus, management of the large, bureaucratic firms organized for the purpose of the management of activities within existing markets has a place, but it is a *special, rather than a general case* (Lusch and Vargo, 2014). More generally, the business of business is the ongoing discovery of solutions to contextually changing, human problems and the occasional institutionalization of these solutions—that is, *market making* and shaping more than *management of and within markets*.

All of this suggests that the relative roles of management and entrepreneurial approaches might be misconstrued, both in business schools and in practice. That is, we tend to see (marketing) management as primary and entrepreneurial activities as a special case. The above, however, suggests that this logic needs to be inverted; entrepreneurial activities are fundamental to value creation in ecosystems of resource integration and service exchange; management within markets through traditional marketing management activities within the firm, is a special, limited case, applicable to the relatively few (temporarily) established markets, resulting from institutionalization.

Effectual over predictive processes

As explained, the practice and theory of management over the last two centuries was at best entrepreneurially neutral and, at worst, at least implicitly, somewhat anti-entrepreneurial. The dominant logic focused on the administrative hand of the manager writing and building detailed plans about highly institutionalized markets, supported with detailed financial predictions, which became the guiding framework for managerial action, resource allocation, marketing strategy, and control. It was largely based on a Newtonian view of markets, in which decision makers could maximize profits (economic value to shareholders) by setting the product (attributes), price, promotion, and place at some hypothetical ideal level. Business and the economy was a machine with levers to be pulled to produce results. Inherently, this model assumed that the market (and the underlying sellers and buyers) was a known and stable element and could be predicted and managed. The four Ps and other decision variables were causes or determinants of firm performance and astute and well-trained managers with proper research could both predict and maximize profits.

Once firms developed the mind-set and tools to predict and plan, this model provided a foundation for performativity. Briefly, because firms planned and made predictions based on a management model, the stage was set to control resources and managers (and other actors, such as workers and customers) in such a way that the predictions, in most situations, became at least apparently true. That is, the development of management model-consistent controls enabled a sort of false sense of predictive ability. As a result, a bureaucratic culture tended to be established and reinforced, with rewards provided for people that played the game “correctly,” often stifling creativity and innovation. This was best accomplished by continuing to devote managerial efforts and firm resources in well-established institutionalized products and markets that had become quasi-predictable.

On the other hand, S-D logic inverts the preceding logic and views effectual processes as superseding predictive processes. Effectual actors focus on knowing who they are, what they know, and whom they know (Sarasvathy, 2003; Sarasvathy et al., 2008) and integrate these and other resources obtained by collaborating and exchanging with other actors to cocreate value. These interactions result in the emergence of new structures, to include *new markets* and *new venues and platforms* for value creation (Alvarez and Barney, 2007). That is, plans and future directions *emerge* from this effectual process versus being predetermined by centrally organized bureaucrats attempting to financially engineer firm performance and maximizing economic rewards.

Effectual processes are superordinate to predictive processes because, in dynamic and open systems, which characterize service ecosystems, predictive processes are special cases, occurring in highly institutionalized markets and contingent on performativity. Predictive, causal, and deterministic approaches to managerial decision making and value creation, thus, can be counterproductive to innovation because they do not lend themselves to the recognition of and capitalizing on emerging opportunities. Firms operating under assumptions of predictability may find themselves being increasingly efficient but not necessarily doing the “right” things for system viability through value creation. Without a primary focus on effectual processes, long-term shareholder value can suffer because the value propositions offered do not have strategic advantage because they become too similar to others, in part, because managers’ mind-sets are centered on institutionalized solutions, rather than the dynamic, contextualized problems.

In an effectual, market creation approach to marketing and management, more generally, uncertainty and unpredictability are recognized and embraced for what they represent; opportunities

for market creation, market reshaping, and growth and recreation of approaches to value creation. This requires managers and other actors to be unshackled from the chains of heavily institutionalized solutions, which trap them through the quasi-predictability of performativity.

Arguably, effectual processes, rather than predictive processes, represent the natural, if not dominant, practice of human actors. Taking a few steps at a time, actors in service ecosystems create and design the future, including future markets. Learning by trying, and designing through imagining, rather than predicting, represent the foundational activities of human advancement.

Marketing over manufacturing

As discussed elsewhere (e.g. [Vargo and Morgan, 2005](#)), the focus on being “productive,” in the sense of thinking in terms of the primacy of the “product,” in economic exchange, occurred largely because of the work of Adam Smith, as well as the context of that work, toward the beginning of the Industrial Revolution. However, Smith’s central concern was not specifically economics, but rather the question of how to facilitate national wealth creation. Given that purpose and that context, Smith ([1776] 1904) reasoned that, even though “labor” (applied specialized knowledge and skills) was at the heart of economic activity, national wealth could best be advanced through a subset of that activity, the creation of surplus tangible goods, primarily because of their ability to be exported. He characterized this creation of tangible, exportable goods as “productive.”

Thus, it is not surprising that the economic models that followed centered on manufacturing. This preoccupation with manufacturing also fostered enormous practical benefits—the advancement of productivity—to the point that affordable supply was exceeding market development and access and thus the need for the systematic study of marketing. Given this development, it is also not surprising that marketing has traditionally been seen in a supporting role to that of manufacturing. Notably in 1937 when the American Marketing Association defined marketing as “business activities involved in the flow of goods and services from production to consumption”; it thus legitimized the supporting role of marketing in essentially taking units of output to the market to be sold ([Lusch, 2007](#)).

Given the tie between manufacturing and wealth, it is also not surprising that governments became convinced that the key to prosperity was manufacturing—the creation of products, again, with marketing seen as playing a supportive, if not detracting, role, in much the same way as “services” were seen as secondary to goods. This view impacted how we thought of services in terms of the production of intangible units of output. Even early marketing thought was subjected to this perspective, as seen in the early attempts to justify itself as adding time, place, and possession utility, through distribution, to the more essential form utility created by manufacturing ([Dixon, 1990](#); [Shaw, 1994](#)). Arguably, marketing, if not business in general, has been trying to dig its way out of this stepchild role and its implication for a good part of the last 100 years. This struggle can be seen in the initial efforts to justify the types of utility contributed by marketing (e.g. [Shaw, 1912](#); [Weld, 1916](#)) to the shift away from a “production” and product (e.g. [Levitt, 1960](#)) orientation and their foci on manufacturing processes and output to a market orientation. It can also be seen in Drucker’s proclamation that the firm has only two functions: marketing and innovation.

The S-D logic inverts this logic by seeing *marketing* as primary and manufacturing (and other production processes) in a support role. Marketing, in this sense is not limited to the activities of the marketing department, what is captured in traditional marketing management as segmenting a priori markets for the purpose of targeting one or more segments and positioning firm offerings

through manipulation of the marketing mix. Rather, it involves the *creating, increasing and recreating of markets* through developing innovative approaches to resource integration and service provision; it represents the *essential purpose of the firm*. In S-D logic, marketing and innovation are the same.

It is important to understand that this removes the firm from a primary, central role in value creation to the role of a participant in the value creation process of and for others in the context of service ecosystems. Manufacturing, when involved, plays a supportive role, one that can often be outsourced to the market. As Levitt (1960) once noted:

we habitually celebrate Ford for all the wrong reasons . . . his real genius was marketing. Actually, he perfected the assembly line because he concluded that at \$500 he could sell millions of cars. Mass production was the result, not the cause of low prices. (p. 51)

Marketing, in the sense it is used here, is a transcending function. Unlike manufacturing, it cannot be outsourced. Again, we believe understanding this central, but noncentric, role by inverting the manufacturing–marketing relationship reveals new opportunities in innovation.

Innovation over invention

We have been taught that humanity progresses because of the great inventors throughout history. However, invention is not the pathway to prosperity. Inventions are isolated devices and processes that, unless they are connected to actors in service ecosystems, are neutral artifacts and unrealized, if not wasted resources. In fact, the great inventors we often refer to, such as Gutenberg, Newcomen, Edison, and Ford, were more than inventors of devices or process improvements; they were market visionaries and creators (actually cocreators) who *instigated and institutionalized solutions to human problems*, through resource integration. This typically required innovative participation in the development of ecosystems that supported their innovation. That is, it took the innovation of a host of actors as well as innovation in the coordination of these actors in the development of a supportive, contextual environment (i.e. ecosystem). In this sense, innovation is more of a design, visionary, and entrepreneurial activity than invention, which is more of an engineering activity. Thus, in S-D logic, just as marketing becomes superordinate to manufacturing, innovation becomes superordinate to invention. It is here, in social and economic processes associated with innovation, that most of the risk taking occurs, which also serves as the source of most of the potential reward (Lusch et al., 2013). That is, value is created more through innovation than through invention.

Effectiveness over efficiency

The Industrial Revolution involved many converging and integrating technologies, not only around manufacturing but also around transportation and communication. In all of these technologies, the unending pursuit was for efficiency—productivity, the doing of more and more with fewer and fewer resources, the elimination of “waste.” It was at the very core of industrialization and, coupled with the movement toward large bureaucratic organization, often became the central focus of some activity. The gain from efficiency was captured in value in exchange and institutionalized as cost leadership. Efficiency is inherently producer centric, though clearly it can have user benefit.

Effectiveness, on the other hand, is a user-centric concept and was typically only considered important if the organization or system was first efficient. Effectiveness as a user-centric concept

captured in “value in use” and “value in context” (e.g. [Vargo et al., 2008](#)). Thus, not surprisingly, S-D logic inverts the efficiency–effectiveness order, with the latter being primary. That is, without effectiveness, efficiency becomes a mute issue. Moreover, effectiveness can be considered an essential route to efficiency, at least in the long run. Once again, understanding this relationship is critical to innovation and value cocreation.

Heuristics over rationality

With some exception, neoclassical economic and marketing thought have generally been built on models of rational humans involved in extensive calculative decision making and judgment. There is little doubt that humans have calculative abilities but there is also considerable evidence that it is not nearly as extensive or universally employed as these underlying models suggest.

An alternative understanding of human decision making and action is based on heuristic tools. The seminal effort in economics and business is usually credited to [Simon \(1956\)](#) and his work on “bounded rationality” and *The Sciences of the Artificial* ([Simon, 1996](#)). Simon’s work is often interpreted as suggesting that heuristics are used as cognition-conserving tools that allow holding the more desirable, calculative, and optimizing skills in reserve. However, [Gigerenzer and Todd \(1999\)](#) argue and present evidence supporting the idea that heuristics can actually be more robust for problem solving than calculation, in part because they are more generalizable (cf. scientific models). Regardless of relative superiority, there is considerable evidence (e.g. see [Laroche et al., 2003](#)) that heuristics play an important role in decision making.

[Simon \(1956\)](#) ties heuristics to environmental structure. This is a subtle but significant point: Heuristics work because they fit (are adapted to) the environmental structure (see [Gigerenzer and Todd, 1999](#)). But recall from the reference to [Giddens’ \(1984\)](#) structuration theory above, as supported by [Simon’s \(1996\)](#) discussion of “artificial,” that the same actors both influence and are influenced by environmental structure. This artificial structure particularly includes the institutions, which can themselves be seen as heuristic tools, and institutional logics, which are an integral part of the service ecosystem of S-D logic. Arguably, the most in-depth discussion of this structure and the corresponding heuristics (though not necessarily using this term) can be found in consumer culture theory (CCT) (e.g. [Arnould and Thompson, 2005](#)), with which S-D logic is increasingly being connected. Of particular note are the signs, symbols, and meanings of human artifacts. [Venkatesh et al. \(2006: 251\)](#) see the “market as set of culturally constituted institutional arrangement” and go as far as to suggest that we should consider the “markets as a sign system.”

At a minimum, this heuristic and symbolic perspective reinforces the necessity of looking beyond the firm and the customer, in isolation or as a dyad, to understand value creation and to look to the service ecosystem as the appropriate level of analysis. This implies at least a triadic orientation ([Chandler and Vargo, 2011](#)).

None of this means that there is no rational, calculative thought; it just means that it is not only “bounded” ([Simon, 1996](#)) but also enhanced by human institutions that provide shortcuts to the very process of value creation, rather than just to value-related choice decisions. In short, rational thought might be best understood as a subcategory of heuristic thought, arguably a somewhat inefficient and often ineffective one.

Conclusion

The central thesis of this commentary is that marketing thought and practice have been restricted by their historical ties to G-D logic, in which value is seen to be something that firms plan,

manage, create, and deliver as opposed to value being dynamic, emerging, and cocreated with many actors. We have explicated some of the key inversions that we believe are necessary for a more robust understanding. Others we have dealt with more implicitly, such as the primacy of networks and systems over channels and chains. No doubt, additional important inversions of conceptual relationships can be identified.

It is not so much that G-D logic is wrong, as it is that it limits understanding by focusing on special cases of exchange and value creation, rather than the general case. Thus, none of this is intended to privilege particular concepts and value-creating activities; rather, it is intended to point out that both academics and practitioners will benefit from generally viewing business, marketing, and value creation from an entrepreneurial, effectuation, market-driving, innovation, effectiveness, and heuristic decision-making lens, with management (including traditional marketing management), prediction, manufacturing, invention, efficiency, and rational decision-making perspectives more useful in special cases, often characterized by deeply entrenched, institutionalized solutions—that is, in well-established markets.

It is therefore important to reemphasize that these concepts should not be seen as binary alternatives but rather nested and, more generally, goods logic is thus seen as nested in S-D logic, rather than replaced by it. It is in this zooming out to try to grasp the general sense that we see S-D logic as transcending. By inverting some of the strongest pillars of G-D logic, S-D logic can, arguably, advance the understanding of value creation and marketing.

References

- Arnould, E.J. and Thompson, C.J. (2005) 'Consumer Culture Theory (CCT): Twenty Years of Research', *Journal of Consumer Research* 31(4): 868–82.
- Alvarez, S.A. and Barney, J.B. (2007) 'Discovery and Creation: Alternative Theories of Entrepreneurial Action', *Organizações em Contexto* 3(6): 123–52.
- Chandler, J. and Vargo, S.L. (2011) 'Contextualization: Network Intersections, Value-in-Context, and the Co-Creation of Markets', *Marketing Theory* 11(1): 35–49.
- Bell, D. (1976). *The Coming of Post-Industrial Society: A Venture in Social Forecasting*. New York, NY: Basic Books.
- Dixon, D.F. (1990) 'Marketing as Production: The Development of a Concept', *Journal of the Academy of Marketing Science* 18: 337–43.
- Drucker, P.F. (1985) *Innovation and Entrepreneurship*. New York, NY: Harper & Row, Publishers, Inc.
- Gigerenzer, G. and Todd, P.M. (1999) *Simple Heuristics That Make Us Smart*. Oxford, UK: Oxford University Press.
- Giddens, A. (1984) *The Constitution of Society*. Berkeley, CA: University of California Press.
- Gummesson, E. (1995) 'Relationship Marketing: Its Role in the Service Economy', in W. J. Glynn and J. Barnes (eds) *Understanding Services Management*, pp. 244–68. West Sussex, UK: John Wiley and Sons.
- Jones, D.J.B., Shaw, E., and McLean, P.A. (2009) 'The Modern Schools of Marketing Thought', in P. MacLaran, M. Saren, B. Stern, and M. Tadajewski (eds) *The Sage Handbook of Marketing Theory*, pp. 42–58. London, UK: SAGE Publications Ltd.
- Kjellberg, H. and Helgesson, C.-F. (2006) 'Multiple Versions of Markets: Multiplicity and Performativity in Market Practice', *Industrial Marketing Management* 35(7): 839–55.
- Laroche, M., Kim, C., and Matsui, T. (2003) 'Which Decision Heuristics are Used in Consideration Set Formation', *Journal of Consumer Marketing* 20(3): 192–209.
- Levitt, T. (1960) 'Marketing Myopia', *Harvard Business Review* 38: 45–56.
- Lusch, R.F., Liu, Y., Chen, Y., and Zang, J. (2013) 'The Emergence of Innovation: A Social Cultural Perspective', Working Paper. Arizona, AZ: McGuire Center for Entrepreneurship, University of Arizona.

- Lusch, R.F. (2007) 'Marketing's Evolving Identity: Defining Our Future', *Journal of Public Policy and Marketing* 26: 261–69.
- Lusch, R.F. and Vargo, S.L. (2014) *Service-Dominant Logic: Premises, Perspectives, Possibilities*. Cambridge, UK: Cambridge University Press.
- North, D.C. (2005) *Understanding The Process of Economic Change*. Princeton, NJ: Princeton University Press.
- Sarasvathy, S. (2003) 'Entrepreneurship as a Science of the Artificial', *Journal of Economic Psychology* 24(2): 203–20.
- Sarasvathy, S., Dew, N., Read, S., et al. (2008) 'Designing Organizations that Design Environments: Lessons from Entrepreneurial Expertise', *Organizational Studies* 23(3): 331–50.
- Shaw, A.W. (1912) 'Some Problems in Market Distribution', *Quarterly Journal of Economics* 26: 706–65.
- Shaw, E. (1994) 'The Utility of the Four Utilities Concept', in J. Sheth and R. Ferguson (eds) *Research in Marketing*, pp. 47–68. Greenwich, CT: JAI Press.
- Simon, H.A. (1956) 'Rational Choice and the Structure of the Environment', *Psychological Review* 63(2): 129–38.
- Simon, H.A. (1996) *The Sciences of the Artificial*. 3rd ed. Cambridge, MA: MIT Press.
- Smith, A. ([1776] 1904) *An Inquiry into the Nature and Causes of the Wealth of Nations*, Reprint (1904), London, UK: Printed for W. Strahan and T. Cadell.
- Vargo, S.L., Maglio, P.P., and Akaka, M.A. (2008) 'On Value and Value Co-Creation: A Service Systems and Service Logic Perspective', *European Management Journal* 26(3): 145–52 (lead article).
- Vargo, S.L. and Lusch, R.F. (2004) 'Evolving to a New Dominant Logic for Marketing', *Journal of Marketing* 68(1): 1–17.
- Vargo, S.L. and Lusch, R.F. (2008) 'Service-Dominant Logic: Continuing the Evolution', *Journal of the Academy of Marketing Science* 36: 1–10.
- Vargo, S.L. and Morgan, F.W. (2005) 'Services in Society and Academic Thought: An Historical Perspective', *Journal of Macromarketing* 25(1): 42–53.
- Weld, L.D.H. (1916) *The Marketing of Farm Products*. New York, NY: Macmillan.
- Venkatesh, A., Penaloza, L., and Firat, F. (2006) 'The Market as a Sign System', in R. F. Lusch and S. L. Vargo (eds) *Service-Dominant Logic: Dialog, Debate, and Directions*, pp. 251–65. Armonk, NY: M.E. Sharpe.
- Zeithaml, V.A., Parasuraman, A., and Berry, L.L. (1985) 'Problems and Strategies in Services Marketing', *Journal of Marketing* 49: 33–46.
- Zuboff, S. and Maxmin, J. (2002) *The Support Economy: Why Corporations Are Failing Individuals and the Next Episode of Capitalism*. New York, NY: Viking Press.

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