



and managerial implications and suggestions for further research are then outlined.

## 2. Literature review

### 2.1. Resource based theory

Resource based theory seeks to explain the sources and conditions that create a sustained competitive advantage. It originates from strategic management (Barney, 1986a, 1991; Petterraf, 1993) and is now a dominant framework in international business (Peng, 2001), human resource management (Colbert, 2004; Saá-Pérez & García-Falcón, 2002; Wright, Dunford, & Snell, 2001), logistics (Lai, 2004), information technology (Bharadwaj, 2000; Mathwick, Malhotra, & Rigdon, 2001; Melville, Kraemer, & Gurbaxani, 2004; Wade & Hulland, 2004) and marketing (Day, 2014; Kozlenkova et al., 2014; Maklan & Knox, 2009).

RBT considers resources to be a source of organizational competitive advantage, a relationship that is empirically confirmed (Hitt, Biermant, Shimizu, & Kochhar, 2001; Huselid, Jackson, & Schuler, 1997; Robins & Wiersema, 1995; Wernerfelt, 1995). Although an organization can be considered as a collection of physical, human and organizational resources (Barney, 1991), RBT suggests that only strategic resources lead to competitive advantage. For a resource to be strategic it must be valuable, rare, non-imitable and non-substitutable (Barney, 1991). A resource is valuable when it can improve organizational effectiveness and efficiency. Rarity means that only a few current and potential competitors have access to that resource. A resource is non-imitable when competitors cannot obtain, imitate, purchase or duplicate that resource. This often occurs when competitors cannot identify the factors that lead to success due to unique historical conditions, path dependencies (resources need to pass through time dependent stages to create the advantage), causal ambiguity (difficulty in identifying how an advantage was created) or social complexity (based on interactions of multiple resources) (Barney, 1991). Non-substitutability means that there are no strategically equivalent resources (i.e., substitutes). If any of these conditions are missing, a resource is not strategic and cannot provide a sustainable competitive advantage.

The other important aspect of RBT theory is capabilities, which are particularly relevant in facilitating the use of resources in the market place (Day, 1994; Hooley, Broderick, & Möller, 1998). Capabilities are a “complex bundle of skills and accumulated knowledge that enable firms to coordinate activities and make use of their assets” (Day, 1994, pp. 38). Developing competencies requires an extended learning curve in understanding the market and developing managerial skills (Hooley, Greenley, Fahy, & Cadogan, 2001). Organizational change, such as altering an organizational culture, may also be necessary for the development of competencies and the alignment of an organization with market requirements (Hooley et al., 1999).

Day (1994) classifies marketing capabilities into three groups based on their internal or external organizational focus. Inside-out capabilities are related to core organizational processes that create economic value (e.g., financial management, cost control, integrated logistics, human resource management, manufacturing/transformation processes and technology development). These internal resources and capabilities are “activated by market requirements, competitive challenges, and external opportunities” (Day, 1994, pp. 41). Their value emerges only when used to exploit external opportunities. Outside-in capabilities help an organization understand their customers' evolving requirements and respond to them (e.g., market sensing, customer linking, channel bonding and technology monitoring). Their purpose is “to connect the processes that define the other organizational capabilities to the external environment and enable the business to compete by anticipating market requirements ahead of competitors and creating durable relationships with customers, channel members and suppliers” (Day, 1994, pp. 41). Spanning capabilities integrate inside-out and outside-in capabilities with a focus on satisfying customer needs (e.g., customer order fulfillment, pricing, purchasing,

customer service delivery, new product/service development and strategy development). They require an understanding of market requirements and internal competencies. The combined effects of the three groups of capabilities create causal ambiguity and complexity, so they are not imitable and can provide sustained competitive advantage.

Hooley and his colleagues provide some useful applications of RBT to marketing strategy (Hooley et al., 2005; Hooley et al., 1999; Hooley et al., 1998). Capabilities and resources are classifiable according to whether they provide outside-in and inside-out competitive advantages at an operational level. Hooley et al. (1998, pp. 102) see outside-in capabilities as a firm's ability to understand its customers and make links with them (i.e., market sensing skills). Examples include benchmarking performance, positioning offering, providing superior value (Priem & Butler, 2001; Zubac et al., 2010) and better service to consumers (Hooley et al., 1998). ‘Inside-out’ capabilities, on the other hand, are a firm's internal capabilities. This includes the redeployment of employees to provide better and more productive customer service. Examples include the use of service blueprinting, the continuous improvement of manufacturing and distribution and relationship marketing.

Research finds support for the relationship between the use of the type of capabilities and performance. Hooley, Greenley, Cadogan, and Fahy (2005) find that market performance is influenced, in part, by ‘outside-in’ capabilities (customer linking capacity), although they do not consider ‘outside-in’ capabilities. For service organizations, both types of capabilities need consideration concurrently, as the impact of a firm's operations is much greater for services than in goods-based organizations. A useful way that this can be examined is through a mixed-method case study approach that addresses how the two types of capabilities are formed and how they influence performance.

Firm performance, it is argued, is improved if RBT is successfully applied. Hooley et al. (1999), report that with European firms that deploy an RBT focus, there is better competitive performance, a finding mirrored by information technology researchers such as Bharadwaj (2000). Management researchers such as Hitt et al. (2001) find that human capital strategies have a much greater impact on professional service-firms if an RBT approach is used. Customer performance outcomes such as satisfaction, benefit from the application of RBT, and these outcomes predict greater firm performance (Wang & Lo, 2003). In marketing, the RBT approach is beneficial in improving sales (Menguc & Barker, 2005), logistics (Ellinger, Ketchen, Hult, Elmadağ, & Richey, 2008), export performance (Tan & Sousa, 2015), innovation (Kozlenkova et al., 2014), brand and customer assets (Pergelova, Rialp, & Prior, 2011) and financial performance (Kozlenkova et al., 2014; Wernerfelt, 2014; Yu, Ramanathan, & Nath, 2014). Interestingly, Wernerfelt (2014), argues that for RBT to be effective, resources and/or capabilities that demonstrate performance must not only be identified, but that the focus should be on those that a firm possesses which are superior to (or is something that is better done) than the competition. This approach is very much the focus of this paper.

Organizations must have a suitable corporate culture if resources and capabilities are to be correctly deployed (Barney, 1986b). This leads Hooley et al. (1999) to suggest that resources and capabilities are hierarchical, starting with marketing culture at the top, then passing through marketing strategy to marketing operations, in which the deployment of outside-in and inside-out capabilities or processes occur. This sentiment can also be seen in Day's (1994) suggestion that market-driven organizations need to have a clear focus on the external environment (more specifically, customers' needs and competitors' intentions). In other words, firms need to be market oriented if they are to deploy capabilities and resources successfully.

### 2.2. RBT and its contribution to services management

While there is emerging interest in the application of the RBT framework in marketing, its application in service management is still in its





complaint) (Telecommunications Industry Ombudsman, 2014). This provides a challenging environment for *AusBargain*.

### 3.2. Benchmarking by *AusBargain*

The data for the benchmarking study comes from a longitudinal 11-month study of an online survey of 971 cell phone customers from a national consumer panel. In terms of switching providers over the 11-month period, 147 respondents, or 15% of the sample, had switched providers. 43% did not switch but had considered switching, and 42% were not interested in switching. The sample matched the representativeness of the Australian population by state, gender and age group. This survey contains all the measures of benchmarking including value and satisfaction (quality of service) attitudes and the market performance indicator (MPI).

Importantly, the survey shows that of those who had switched providers previously, there were significant savings in costs of an average of \$26.52 a month, which when extrapolated to the industry represented around 623 million dollars annually to Australian consumers. There is also a higher level of satisfaction with the new provider than with the previous provider. This points to the importance of changing providers (which was modeled in the service blueprint) as a key means of consumer finding value (mean of value perception = 22.60 for those who switched compared to a mean of 17.63,  $t = 18.65$ ,  $p < 0.01$ ), and achieving higher levels of satisfaction with the quality of the service (mean of satisfaction with current provider service = 12.07, when customers switch provider, compared to a mean of satisfaction with current provider for those customers who did not switch = 9.80,  $t = 16.95$ ,  $p < 0.01$ ). Note that Appendix 1 lists the composition of the measures of satisfaction and value.

Because of the longitudinal nature of the survey and its use in other countries, *AusBargain*, used the MPI (European Commission, 2010) to compare Australian competitive conditions with those in the European Economic Union (EEU). The MPI is a composite perceptual and behavioral index constructed so that a higher score implies a better performing market. There are four aspects (questions) of the MPI that are easy for consumers to understand which form an equally weighted index (European Commission, 2014, pp. 7). These measures are:

1. Consumer perceptions of trust, with a higher score implying greater trust in the market.
2. The ease of comparing the goods and services on offer, with a higher score implying that consumers find it easier to compare competing offers.
3. The problems experienced and the degree to which they lead to complaints. This score is based on the occurrence of problems, how well they are resolved by the providers, and if respondents complained to third parties, family or friends or a complaints body. A score of 10 implies that a person does not experience a problem, a score of 5 implies that a problem is reported but the respondent does not complain, a score of 3 implies that the consumer complains to friends or family, a score of 2 implies that the consumer complains to the provider and a score of 0 implies that the consumer complains to a third party complaint body.

4. Consumer satisfaction or the degree to which consumers' expectations are met, with a higher score implying the market better meets consumers' expectations.

*AusBargain* uses the MPI to compare not only its performance with those of other Australian telecommunications providers, but also to provide a benchmark of market conditions in Australia with that of a number of countries in the EEU. *AusBargain* uses a longitudinal national survey to collect the required MPI data in Australia. As can be seen in Table 2, market conditions in Australia are worse than in the European Union, which may explain the high number of consumer complaints to industry and government bodies.

These results suggest that the Australian cell phone industry is not well regarded by consumers who, compared to their counterparts in Europe, see it as a market in which it is difficult to compare offers and which has less trustworthy providers that do not live up to expectations. Consequently, *AusBargain* uses service blueprinting to understand its service delivery and what customers value better.

### 3.3. Measurement of the quality of service and value perceptions

The measurement of quality and service quality perceptions is constructed using composite scores, based on PLS loadings from a previous study that examined mobile phone switching patterns (D'Alessandro, Johnson, Gray, & Carter, 2015). Their six-item reflective satisfaction with a current provider measure, which is based on research by Aydin and Özer (2005), follows Cronin and Taylor's (1994) and Jain and Gupta's (2004) suggestions. The three-item value measure of value is from Ruiz et al.'s (2010) study. As they suggest that this construct is formative, and is modeled in this way. Appendix 1 shows the details of the constructs. Given recent controversy in structural equation modeling research (see Davcik, 2014), we use PLS and also examine the discriminant validity of the measures of the constructs using Fornell and Larcker's (1981) approach. The PLS analysis provides construct alpha scores, communality and construct reliability measures (for details see D'Alessandro et al., 2015, pp. 308).

### 3.4. Service blueprinting by *AusBargain*

*AusBargain's* service blueprinting follows five steps. First, there is an identification of an important service process. The focus is on the process required to change cell phone providers, as this is associated with greater value and satisfaction for the consumer. Second, a flow chart of the service process from a customer's view is developed. Third, front and back stage activities of the service process are included in the flowchart. As part of this step, there is first a delineation of the lines of exterior interaction with the customer, after which the whole firm's service delivery process is detailed. This identifies the interior support activities that influence customers and front-office workers. The fifth and final step is to add the tangible evidence customers see or receives in the service delivery process.

The company also uses qualitative research (seven focus groups from different consumer segments) and a national survey research of 843 *AusBargain* and 971 other cell phone users to find out how important these aspects are to customers' perceptions of value and quality.

**Table 2**

Benchmarking cell phone services in Australia with that of the EEU by *AusBargain*.

Components of the MPI	Australian industry	<i>AusBargain</i>	European Union
Difficulty of comparability of offers (0 = hard to compare)/10	5.60	5.37	6.90
Level of TRUST (0 = no trust)/10	4.07	4.10	6.10
Live up to what you wanted (0 = did not meet expectations)/10	5.22	5.79	7.20
Problems and complaints (10 = no problems/complaints)/10	7.22	7.58	8.60
The market performance indicator (MPI) average of the above/10	5.82	6.01	7.22



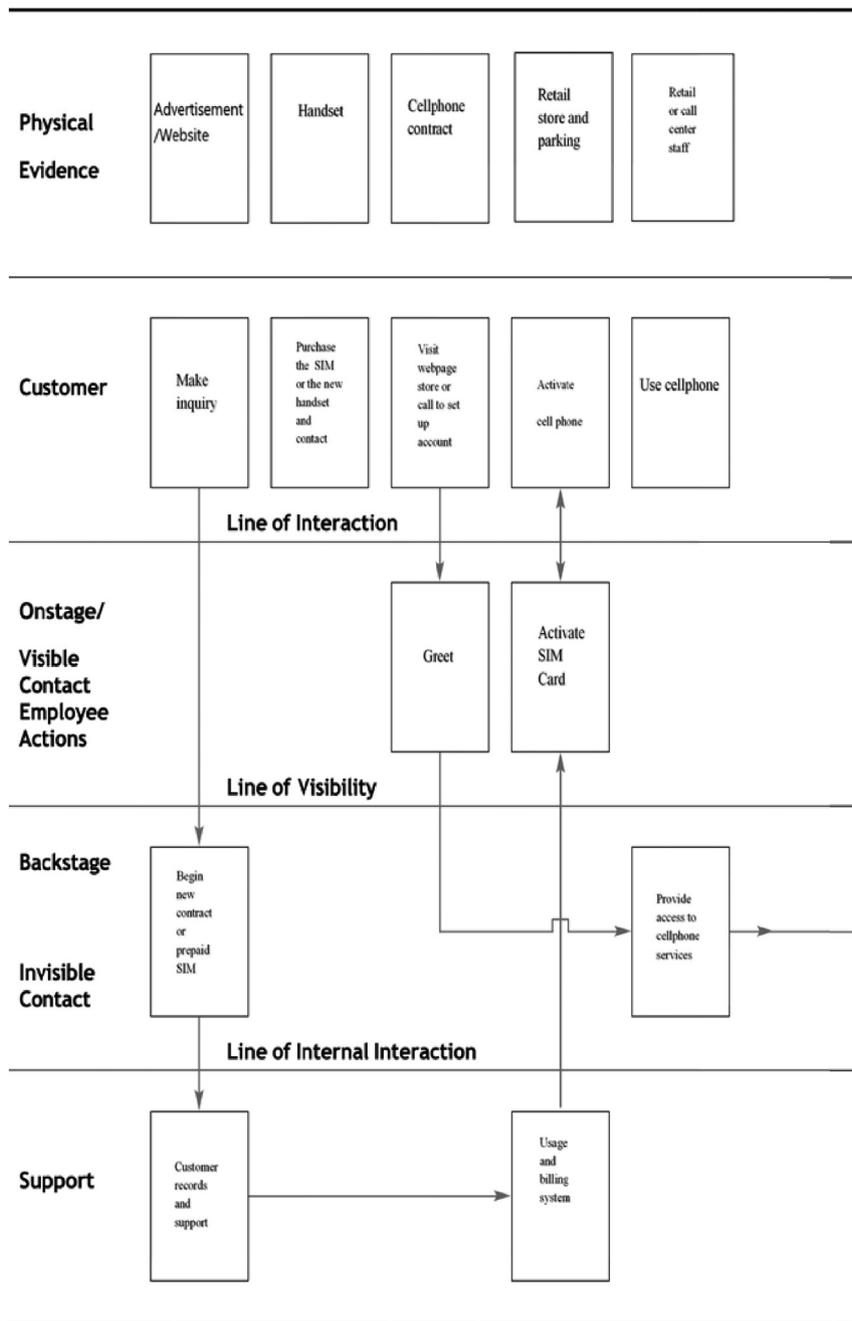


Fig. 1. A blueprint for changing cell phone providers. Source: Adapted from Bitner et al. (2008, pp. 76).

identifying resources and capabilities that lead to the co-creation of value and to better managing these moments of truth (Spohrer & Maglio, 2008; Yazdanparast, Manuj, & Swartz, 2010). It seems that while competitive conditions and outcomes of benchmarking are important, so too are internal service delivery processes. Research into the application of RBT frameworks would gain much from an

interdisciplinary approach, as such service engineering, logistics, strategic human resources management and operations science, as such approaches are likely to provide answers and directions for future practice.

No research is without its limitations and this study is no different. We only examine one company in a single industry context. Future research should replicate the suggested methods (service blueprinting and benchmarking) in other industries and in a number of companies to demonstrate their usefulness for identifying critical resources for creating customer value. However, this paper makes an important contribution by showing how the application of RBT in a service management context improves organizational performance and, most importantly, improves service quality and customer value. Future research should consider not only an internal analysis of service processes and best industry practices, but also how consumers' interactions with these processes create value for both parties (Payne et al., 2008). The

**Table 3**  
Mean quality of service and value perceptions of AusBargain compared to other Australian telecommunication providers.

Components of the MPI	AusBargain	Others
Satisfaction with current provider	26.8**	18.1
Value of service provided	4.7**	3.5

(Note: \*\* difference significant at  $p < .01$ ).

suggestions made here are a significant first step that demonstrate RBT's applicability in service management contexts, and provide an important future research agenda.

## Appendix 1

**Table A1**  
Measures of satisfaction and value.

Scale and items: weights (w) and loadings (L) of latent constructs where relevant	Measurement statistics		Mean (SD)
	Cronbach's alpha	Construct reliability	
Satisfaction with current provider (6 items, reflective measure AVE = .80).	.78	.92	
I am happy with this company's services (L = .95)			4.6 (1.6)
Overall, I am pleased when I purchase this company's services (L = .95)			4.5 (1.6)
Using this company's services is a satisfying experience (L = .92)			4.3 (1.6)
My choice to use this company was a wise one (L = .93)			4.6 (1.6)
Overall, I am dissatisfied with this company (L = -.70)			4.4 (1.8)
I think I did the right thing in deciding to use this company for my service needs (L = .90).			4.6 (1.5)
Customer value of cell services (3 items, formative measure)	N/A	N/A	
The value I receive from this company's services is worth the time, effort and money, I invested (w = .45)			3.3 (1.0)
The company provides good services for the price (w = .37).			3.3(1.0)
This company offers good value for the price I pay (w = .25).			3.3 (1.1)

## References

- Aarikka-Stenroos, L., & Jaakkola, E. (2012). Value co-creation in knowledge intensive business services: A dyadic perspective on the joint problem solving process. *Industrial Marketing Management*, 41(1), 15–26.
- Aydin, S., & Özer, G. (2005). The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market. *European Journal of Marketing*, 39(7/8), 910–925.
- Australian Bureau of Statistics (2010). *Household expenditure, Australia – Detailed expenditure items, 2009–10*. (Canberra, Australia).
- Ammons, D. N., & Rivenbark, W. C. (2008). Factors influencing the use of performance data to improve municipal services: Evidence from the North Carolina benchmarking project. *Public Administration Review*, 68(2), 304–318.
- Barney, J. B. (1986a). Strategic factor markets: Expectations, luck, and business strategy. *Management Science*, 32(10), 1231–1241.
- Barney, J. B. (1986b). Organizational culture: Can it be a source of sustained competitive advantage? *Academy of Management Review*, 11(3), 656–665.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Barney, J. B. (2014). How marketing scholars might help address issues in resource-based theory. *Journal of the Academy of Marketing Science*, 42(1), 24–26.
- Bharadwaj, A. S. (2000). A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS Quarterly*, 24(1), 169–196.
- Bissett, T., & Buchan, J. G. (2006). Global experience of benchmarking facility maintenance and turnaround contracted services. *ACE International Transactions*, 6(3), 6.1–6.8.
- Bitner, M. J., Ostrom, A. L., & Morgan, F. N. (2008). Service blueprinting: A practical technique for service innovation. *California Management Review*, 50(3), 66–94.
- Bolton, R. N., & Drew, J. H. (1991). A multistage model of customers' assessments of service quality and value. *Journal of Consumer Research*, 17(4), 375–384.
- Braganza, A., Stebbings, H., & Ngosi, T. (2013). The case of customer recruitment processes: Dynamic evolution of customer relationship management resource networks. *Journal of Marketing Management*, 29(3–4), 439–466.
- Carman, J. M. (1990). Consumer perceptions of service quality: An assessment of the SERVQUAL dimensions. *Journal of Retailing*, 66(1), 33–55.
- Chatain, O. (2011). Value creation, competition, and performance in buyer–supplier relationships. *Strategic Management Journal*, 32(1), 76–102.
- Colbert, B. A. (2004). The complex resource-based view: Implications for theory and the practice in strategic human resource management. *Academy of Management Review*, 29(3), 341–358.
- Cronin, J. J., & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing*, 58(1), 125–131.

- D'Alessandro, S., Johnson, L., Gray, D. M., & Carter, L. (2015). The market performance indicator: A macro understanding of service provider switching. *Journal of Services Marketing*, 29(4), 302–313.
- Davcik, N. S. (2014). The use and misuse of structural equation modeling in management research: A review and critique. *Journal of Advances in Management Research*, 11(1), 47–81.
- Day, G. S. (1994). The capabilities of market-driven organizations. *Journal of Marketing*, 58(4), 37–52.
- Day, G. S. (2014). An outside-in approach to resource-based theories. *Journal of the Academy of Marketing Science*, 42(1), 27–28.
- Ellinger, A. E., Ketchen, D. J., Hult, G. T. M., Elmadağ, A. B., & Richey, R. G. (2008). Market orientation, employee development practices, and performance in logistics service provider firms. *Industrial Marketing Management*, 37(4), 353–366.
- Euromonitor International (2011). Mobile phone statistics from. <http://www.portal.euromonitor.com/Portal/Pages/Statistics/Statistics.aspx>
- European Commission (2010). *Consumer Markets Scoreboard, making markets work for consumers*. Luxembourg: Office for Official Publications of the European Union.
- European Commission (2014). *Consumer markets scoreboard: Making markets work for consumers*. Brussels, Belgium: Office for Official Publications of the European Union.
- Evanschitzky, H. (2007). Market orientation of service networks: Direct and indirect effects on sustained competitive advantage. *Journal of Strategic Marketing*, 15(4), 349–368.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Grönroos, C. (2011). Value co-creation in service logic: A critical analysis. *Marketing Theory*, 11(3), 279–301.
- Hartline, M. D., & Jones, K. C. (1996). Employee performance cues in a hotel service environment: Influence on perceived service quality, value, and word-of-mouth intentions. *Journal of Business Research*, 35(3), 207–215.
- Hinterhuber, A. (2013). Can competitive advantage be predicted?: Towards a predictive definition of competitive advantage in the resource-based view of the firm. *Management Decision*, 51(4), 795–812.
- Hitt, M. A., Biermant, L., Shimizu, K., & Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *The Academy of Management Journal*, 44(1), 13–28.
- Holbrook, M. B. (1999). *Consumer value: A framework for analysis and research*. Psychology Press.
- Hooley, G., Broderick, A., & Möller, K. (1998). Competitive positioning and the resource-based view of the firm. *Journal of Strategic Marketing*, 6(2), 97–116.
- Hooley, G., Fahy, J., Cox, T., Beracs, J., Fonfara, K., & Snoj, B. (1999). Marketing capabilities and firm performance: A hierarchical model. *Journal of Market-Focused Management*, 4(3), 259.
- Hooley, G., Greenley, G., Cadogan, J., & Fahy, J. (2005). The performance impact of marketing resources. *Journal of Business Research*, 58(1), 18–27.
- Hooley, G., Greenley, G., Fahy, J., & Cadogan, J. (2001). Market-focused resources, competitive positioning and firm performance. *Journal of Marketing Management*, 17(5–6), 503–520.
- Hunt, S. D. (2011). Developing successful theories in marketing: Insights from resource-advantage theory. *AMS Review*, 1(2), 72–84.
- Hunt, S. D. (1997). Resource-advantage theory: An evolutionary theory of competitive firm behavior? *Journal of Economic Issues*, 31(1), 59–77.
- Huselid, M. A., Jackson, S. E., & Schuler, R. S. (1997). Technical and strategic human resources management effectiveness as determinants of firm performance. *The Academy of Management Journal*, 40(1), 171–188.
- IBISWorld (2012). *Industry report J7122: Mobile telecommunications carriers in Australia, 1–148*.
- ISO (2015). International standards for organization. Retrieved April 10, 2015, from <http://www.iso.org/iso/home/standards/certification.htm>
- Jain, S. K., & Gupta, G. (2004). Measuring service quality: SERVQUAL vs. SERVPERF scales. *Vikalpa: The Journal for Decision Makers*, 29(2), 25–37.
- Johne, A., & Storey, C. (1998). New service development: A review of the literature and annotated bibliography. *European Journal of Marketing*, 32(3/4), 184–251.
- Kingman-Brundage, J. (1989). The ABCs of service system blueprinting. In M. J. Bitner, & L. A. Crosby (Eds.), *Designing a winning service strategy* (pp. 30–33). Chicago, IL: American Marketing Association.
- Kingman-Brundage, J. (1991). Technology, design and service quality. *International Journal of Service Industry Management*, 2(3), 47–49.
- Kingman-Brundage, J., & Christopher, W. F. (1993). Service mapping: Gaining a concrete perspective on service system design. In E. E. Scheuing (Ed.), *The service quality handbook* (pp. 148–163). New York: American Marketing Association.
- Kingman-Brundage, J., George, W. R., & Bowen, D. E. (1995). "Service logic": Achieving service system integration. *International Journal of Service Industry Management*, 6(4), 20–39.
- Kozlenkova, I. V., Samaha, S. A., & Palmatier, R. W. (2014). Resource-based theory in marketing. *Journal of the Academy of Marketing Science*, 42(1), 1–21.
- Lai, K. -H. (2004). Service capability and performance of logistics service providers. *Transportation Research Part E: Logistics and Transportation Review*, 40(5), 385–399.
- Li, T., & Calantone, R. J. (1998). The impact of market knowledge competence on new product advantage: Conceptualization and empirical examination. *Journal of Marketing*, 62(4), 13–29.
- Lillis, B., & Zwyczajewski, M. (2012). An exploratory study of strategic operations audit methods in services. *International Journal of Operations & Production Management*, 32(11), 1306–1336.
- Luo, J., Fan, M., & Zhang, H. (2012). Information technology and organizational capabilities: A longitudinal study of the apparel industry. *Decision Support Systems*, 53(1), 186–194.

