

# Creating Consumer Value through Physical and Digital Product Bundles: One Firm's Approach

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## ABSTRACT

In recent years, firms have bundled digital products and physical products to create value and gain a competitive edge in the marketplace. In this commentary, we discuss one such approach to value creation. We present the case of Ganz, who developed and marketed the Webkinz brand of plush toy collectibles. These Webkinz toys create unique value through bundling a physical collectible toy with digital services accessed through the Internet. In this article, we analyze the elements of the Ganz business model that contribute to creating consumer value. We conclude with implications for managers and suggestions for future research.

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## INTRODUCTION

Picture a business model that integrates the Beanie Baby craze of the 1990s with the power of Facebook's online social network. Not only would kids want the collectible toy, but an entire online software backend awaits young users, offering games, educational activities, and social opportunities. As a desirable collectible enabling a product-specific "marketspace" experience (Kim & Mauborgne, 1999), Webkinz represents this unique bundle of offline and online value. The plush toy is paired with a yearlong subscription to games and interactive play in a strictly regulated community inhabited by children. Ganz, the manufacturer of Webkinz, has developed a unique business model that bundles online and offline products to generate stakeholder value.

To understand this business model, we must examine the interests of three divergent constituencies. *Children* are the primary consumers collecting Webkinz offline and playing online. The *firm*, Ganz, has significant financial interest in the success of the business model. Finally, *parents* must be considered, as the source of finances and as decision maker on children's Internet use.

## THE BUSINESS MODEL

In recent years, firms have faced the challenge of managing physical and digital distribution channels (Ofek, Katona, & Sarvary, Forthcoming). For example, Barnes and Noble integrated their physical stores and e-commerce channels. One result is that customers who purchase books online can return their purchases at their local Barnes and Noble store. In other cases, Wal-Mart and Best Buy have enabled customers to purchase goods online and pick them up at their local retail outlet. Just as firms are operating physical and digital distribution channels, they are also attempting to create and promote both digital and physical versions of their products (Koukova, Kannan, & Ratchford, 2008). Consider music industry attempts to maximize profits by selling full albums on physical media (CDs) while offering digital downloads of individual songs (Zhu & MacQuarrie, 2003). Firms are also bundling digital and physical versions of information products, such as newspapers, books, and movies (Koukova, et al., 2008). Recent DVD products for movies like Avatar and Iron Man 2 have included the film in multiple formats: Blu-ray, DVD and digital download all bundled together.

In addition to offering physical and digital versions of the same product, businesses are capitalizing on information technology to supplement physical products with digital support. Whirlpool offers electronic manuals and literature as well as product support and customer service through their website ([www.whirlpool.com/custserv/index.jsp](http://www.whirlpool.com/custserv/index.jsp)). Beyond simple product support, firms are also bundling physical products with digital products to maximize value. Recently, 7-Eleven partnered with Zynga to bundle 7-Eleven's store products with digital downloads for use in Zynga's popular Facebook games Farmville and Mafia Wars (Morrissey, 2010). Customers, who bought 7-Eleven goods like Slurpee's or hot dogs, received a code enabling access to a digital product in Zynga's games like a unique cow in Farmville or a special vehicle in Mafia Wars. This cross promotion benefited 7-Eleven by drawing attention, and adding value, to their products. Zynga was able to promote their games to new users while renewing interest among existing users.

Ganz was among the first firms to employ complementary physical and digital strategies to attract younger consumers. Webkinz, a Ganz product, are collectible plush toys marketed to children. The offline component of the business model is similar to Ty Beanie Babies, a collectible toy popular in the 1990s. New models of Webkinz are regularly introduced and older versions retired. Ganz limits supplies of new models to increase consumer demand, leveraging scarcity to drive up perceived value. Parents recount stories about calling a dozen stores looking for the plush toys, or shipping Webkinz to relatives several states away where one cannot find the product in stock. Difficulty acquiring a Webkinz confers a sense of accomplishment to victorious adults, as well as to children who add to their collections. The "collectible" nature of the product encourages repeat purchases and drives a willingness to pay for hard-to-get models.

In contrast to many collectible toy manufacturers, Ganz went beyond a "brick" focus on the product developing a virtual community of owners to add value to the total offering (Armstrong & Ill, 1996). Purchasers receive an access code, which enables them to "adopt" a virtual version of their Webkinz in a safe online environment. The player then interacts within a virtual world where one can earn virtual currency, in the form of Kinzcash, by "working" jobs such as painting fences or "hunting" for gems. Virtual currency can be used to furnish the Webkinz's virtual

abode or buy food. Players often save to purchase luxuries such as a backyard or swimming pool. While these “jobs” are entertaining, they also constitute educational experiences, teaching children the value of money and how to care for a pet, albeit virtual. A child’s image of credit cards dispensing unlimited amounts of money is replaced by an understanding of how purchases negatively impact one’s financial resources. Moreover, the online experience requires players to read, fostering literacy development. While one may play simple games without reading, deeper interaction within the virtual world rests on carefully scripted text. With parental permission, children may also use pre-existing scripts to make new Webkinz friends and chat.

The success of Ganz has inspired several imitators. Major toy industry players have launched similar products, including an online world for Mattel’s Barbie and virtual interactivity for Hasbro’s Littlest Pet Shop (Hindo, 2007). Other competitors include Russ Berrie’s Shining Star’s line of plush toys ([www.shiningstars.com](http://www.shiningstars.com)) and MGA Entertainments Bratz dolls ([www.be-bratz.com](http://www.be-bratz.com)). These lines similarly combine a physical, toy product with a digital, value added online environment. However, Ganz is remarkable for their role as a pioneer in the realm of physical and digital product bundling. The ability to effectively bundle physical and digital value has been a major factor in Webkinz’s success. Successful differentiation has resulted in a competitive advantage.

## **Bundling Value to Satisfy Target Customers**

Product bundling has been long established as a method to create value and market products to consumers (Gaeth, Levin, Chakraborty, & Aron, 1991; Hanson & Martin, 1990). A multi-product bundle refers to any package of multiple goods sold to a consumer for one price. This includes bundles of identical products, such as a 12-pack of soda, to bundles of different products. There are many examples of product bundles, ranging from the combo meals available at any fast food restaurant to the digital phone, Internet and television bundles offered by many telecommunications companies. Whether bundling traditional (Gaeth, et al., 1991) or digital (Grover & Ramanlal, 1999) products, the effect is that the consumer’s ability to accurately value the bundle is mitigated. When consumers cannot accurately value a product bundle, firms are able to charge a surplus — driving profits.

In recent years, innovative firms have bundled physical and digital products. While businesses can profit from bundling physical and digital value (Adams & Yellen, 1990; Bakos & Brynjolfsson, 1999), success rests upon an understanding of the target market. For Ganz’s line of Webkinz toys, their target market is children. For children, having a tangible product coupled with an online experience creates a multi-faceted experience that generates value in both real and virtual worlds. This unique interaction of physical and digital differentiates Webkinz from predecessors such as Beanie Babies, enabling Ganz to charge a premium. The interaction of physical and digital value goes beyond the traditional summative value. Instead of simply *physical + digital value*, the interaction of value consists of *physical + digital + (physical x digital) value*. Effective bundling of physical and digital products creates surplus value.

**Physical value** focuses on the physical, offline value of the product. Webkinz are positioned as collectible toys, potentially existing and competing exclusively in traditional marketplaces. While the physical value may not be the only selling point, offerings with poor or low value will be perceived primarily as software products. Accordingly, where the physical value of a product is

so low, physical aspects might be completely ignored compared with bundled digital content. In such cases, consumers will consider the product to be only as valuable as the software, with the physical product only incurring cost to the business model.

When seeking to leverage business models that bundle physical products and virtual environments, firms must develop products possessing value independent of the online experience. For physical products of low value, it becomes easier for consumers to compare prices with purely digital products. Here, the confounding effect of bundling is mitigated (Grover & Ramanlal, 2004). If the value of the physical product erodes to zero, consumers may easily compare the total package with similar software products or online communities. Ganz creates physical value by manufacturing and marketing products using long established methods within collectibles markets. The firm focuses on developing physical products familiar to children, their core customer base that have long been successful independent of the digital component, e.g., Beanie Babies.

**Digital Value** represents the additional contribution generated by the software back-end. Digital value takes a variety of forms from an online game to product-specific support forums. Namely, a company that manufactures tools might provide tips and tricks online for consumers. If a digital product is used to differentiate competing physical products, consumers' ability to compare alternative physical offerings decreases. To be effective, digital value must be carefully focused on target consumers. Children find the online version of Webkinz fun and entertaining. They can play games and chat with other Webkinz owners. The online environment is composed of an "exclusive" club, which adds to the mystique of the overall product. The value of the bundle is best served by creating a significant and unique virtual experience. Low degrees of digital value (such as a digital instruction manual) or poorly targeted online value (such as games too advanced for younger users) do little to add value to a physical product.

**The interaction** of physical and digital creates "super normal" consumer value. While one may separate physical and digital value, such interaction enables businesses to charge a premium. The Webkinz product could be reduced to a physical product (the stuffed toy) and/or the digital product (the online game). Once simplified to a single offering, each side of the product is easily compared to competing products. A basic stuffed toy is comparable to all the other stuffed toys available in retail outlets. Likewise, the digital side could be compared to other software products that offer a similar experience.

An interaction is created by a unique relationship between each part of the bundle. The intertwining of the physical and digital products confounds the ability to compare competitors, producing surplus value. To children, the relationship between their stuffed toy and online avatar (Hemp, 2006) is rooted in their imagination. The digital experience provides a fantastical world that their Webkin "inhabits." The digital environment lets players act out fantasies specific to their favorite toy, like snowboarding with their polar bear. This digital world derives value from its connection to the plush toy. On the flip side, the "plush" gives the player the physical version of their online avatar. When the computer goes off, their Webkin is there beside them in bed at night. The online world enables the child to engage in exciting adventures with their toy, whereas the push toy lets them carry on their adventures away from the computer.

An interaction exists when one part of a bundle enhances the value of another. Simply offering a bundle of physical and digital value does not automatically result in interactive value. Many bundles of physical and digital products exhibit little to no interaction. Offering simple digital support, like manuals or literature, does not create interactive value with a physical product. Giving a customer access to digital product support in addition to print manuals does little to enhance product enjoyment. Similarly, when a bundling of physical and digital products only offers multiple forms of the same product, there is again little interactive value created. If one purchases the DVD edition of Avatar that includes the Blu-ray, DVD, and digital download, watching the digital download of the movie on a portable device does not increase enjoyment over watching the movie on DVD. Bundling multiple versions of the product may make the product harder for consumers to accurately value (Grover & Ramanlal, 2004; Zhu & MacQuarrie, 2003), but does not automatically cause interactive effects.

In the case of 7-Eleven and Zynga's cross-promotion (Morrissey, 2010), no interactivity exists to enhance the value of the food and digital download bundle. Buying a 7-Eleven hot dog does not enhance the enjoyment of playing Farmville or Mafia Wars. On the other hand, having access to a unique digital product in an online game does not improve the taste of a Slurpee. Although bundling a digital product created additional value for 7-Eleven in a summative manner, no unique relationship exists between the 7-Eleven food products and the digital game products to create interactive value. The creation of interactive value results from some unique connection between the physical product and the digital product. In the next section, we explore the unique connections that create interactive value for Ganz.

## **Business Model Drivers**

Webkinz drives business by effectively bundling a mixture of physical and digital levers. To create value, Ganz exploits levers commonly employed by collectibles manufacturers.

Drivers of Physical Value	Drivers of Digital Value	Interactive Value Examples
<b>Scarcity:</b> Lack of supply drives product demand and value	<b>Time limit:</b> Drives the necessity for multiple purchases	<b>Versioning x Time limit:</b> The presence of a time limit on membership provides strong justification for buying new versions.
		<b>Network Externalities x Time limit:</b> The increase of network externalities drives the value of making more purchases to renew the time limited membership.
<b>Versioning and New Products:</b> Create a 'limited time only' effect along multiple product lines	<b>Online community:</b> The exclusive world separates Webkinz from competitors	<b>Scarcity x community:</b> The scarce nature of the product makes it harder to become part of the exclusive online world, and creates more pride in becoming part of the group. The presence of a community seeking the same product reinforces the difficulty of finding and acquiring the products.
		<b>Versioning x community:</b> Acquisitions of new or specific versions confer special benefits in the online world. The presence of an online community provides an audience to admire a collector's newer versions.
<b>Accessories x community:</b> Digital items come bundled with physical accessories, enhancing value. Seeing other children in the online community playing with digital accessories provides added incentive for purchasing accessories.		
<b>Network externalities x community:</b> As more children play online, online play becomes more interesting and parents are more willing to trust.		
<b>Accessories:</b> Drive customer interest and enhance the online experience	<b>Interactivity:</b> The interface drives emotional investment and inspires brand loyalty	<b>Versioning x Interactivity:</b> As children collect multiple Webkinz they are able to develop a unique relationship with each toy based on how they play with the avatar in the online game. Purchasing new toys enables them to engage in new adventures with a new character.
<b>Network Externalities:</b> Increase the value of products and positively influence consumers		<b>Accessories x Interactivity:</b> Buying a regular Webkinz accessory provides a code enabling access to digital accessories in the online world. Accessories become worth more since there is a digitally interactive component included.
		<b>Social contagion x interactivity:</b> The loyalty inspired by the investment drives children and parents to spread word of mouth.
<b>Social Contagion:</b> Word of mouth plays a key role in marketing for children and parents		

Table 1. Drivers of Value

## **Physical Drivers of Webkinz Value**

Through **versioning and new products**, Ganz regularly retires models and introduces new ones. Versioning plays on consumers' desires to get collectibles "while they last" and encourages purchasing readily available models. The manufacturer also differentiates products by age group. Littlekinz was introduced to target children younger than the typical established Webkinz consumer. Beyond expanding the target market, the additional version offers existing collectors another line of products to pursue.

**Scarcity** is another commonly leveraged tool fostering perceptions of value in markets for collectibles. Research suggests that consumers find goods more desirable and more valuable when their supply is limited by popular demand (Verhallen, 1982; Verhallen & Robben, 1994). By limiting availability and frequently issuing new versions of toys, Ganz has created a collectible instead of just another toy. Finding the hard to get versions creates a sense of accomplishment for both child and parent.

**Sanctioned and unsanctioned accessories** further serve to drive consumer interest in Webkinz. Ganz provides many licensed accessories, including charms and officially licensed clothing, both of which include online codes. Additional accessories, such as trading cards, add value by providing even more "secret codes" that offer access to special online features. Unsanctioned accessories, such as magazines, contribute to the buzz by fostering a sense of community and drawing more attention to the craze. Consider *The Complete Idiot's Guide to Webkinz*, which provides a comprehensive introduction to Wekinz, and Beckett Media, which publishes the Webkinz focused magazine *Plushie Pals*.

**Network externalities** arise when the value a consumer derives from a product is a function of the number of overall users purchasing and using a product (Katz & Shapiro, 1985). For Ganz, network externalities emerge as more individuals collect Webkinz, increasing their desirability and value. After all, it is easy to collect the things other people do not want. Such a collection might be of little value; however, as demand increases, so does the value. For children, acquiring Webkinz puts them in a unique group with other owners, and an elaborate collection confers status and prestige to the owner. The online game also yields benefits, as children are able to discuss their digital conquests and lavishly furnished online abodes. Network externalities also positively influence parents. As adults know more people who let their children play online, trust in the product rises. Finally, Ganz benefits from the associated word of mouth through increased sales.

**Social contagion** refers to the process by which people adopt new ideas, or products, because of interaction with those who have adopted the idea, or product (Young, 2009). In the case of Ganz, social contagion finds children telling their friends and family about their Webkinz collection and online adventures. Knowledge of the phenomenon has permeated schools and other social settings for children. Ganz requires purchasing a toy for one to "see and play" in this unique online world designed exclusively for children. The Webkinz world is designed for children, encouraging them to join the club. Similarly, social contagion has a similar effect on parents. Ganz arms adults with the current "water fountain" topic of discussion. Among other things, many adults commiserate about the difficulty experienced acquiring new toys, share triumphs when garnering rare versions, discuss how the online world benefits their child, and

relish peace and quiet while children are engrossed in the game. Anecdotal reports suggest logging onto Webkinz will keep a seven year old occupied for a solid thirty minutes.

### **Digital Drivers of Webkinz Value**

In a departure from traditional toy collecting, Webkinz relies on electronic levers to retain customers and drive digital value.

**Annual membership** is capped at one year of play for each Webkinz purchased, forcing players to purchase at least one Webkinz per year. This time limit serves as a mechanism driving repeat purchases. Furthermore, research finds that when there is a price paid to be a member, consumers become more loyal (Dick & Lord, 1998). By charging an annual membership “fee” in the form of a toy purchase, Webkinz drives consumer loyalty to their online world. Subsequently, parents may encourage their children to make use of the online world because there was a price paid to be a part of it.

Research suggests that firms who are able to organize and maintain an Internet-based virtual community may have a competitive advantage in the marketplace (Rothaermel & Sugiyama, 2001). For Ganz, their **online community** offers a “secret society,” which is ultimately a major factor driving the greater craze. The virtual world attached to the product brings the toy to life for children and provides Ganz with an open slate to “hook” youngsters through games. The online play differentiates their product from every other stuffed toy available.

For most toys, a child can choose between a physical toy to play with in the real world, or an electronic game enabling play in a digital world. With Webkinz, the physical toy crosses over into the digital world. As a result, their **interactivity** extends beyond that of most toys. Ganz has designed the online interface to build a relationship between child and toy. Once registered, children make an emotional investment in caring for their virtual pet. Children feed, play with, and take their pets to the doctor. For Ganz, children’s investment in this relationship serves as a driver of consumer loyalty to the broader brand.

### **Considering Other Concerned Stakeholders**

While the parent may make judgments with respect to value, adults are also burdened with other concerns. Allowing children to participate in an interactive, online environment, could incur considerable risk. Parents must trust that the community safeguards against undesirable behaviors, including contact from strangers and unfettered access to the dark corners of the Internet.

Extensive research finds that factors such as reputation (Jarvenpaa, Tractinsky, & Vitale, 2000) and third-party icons (Benassi, 1999) inculcate trust in a Web vendor. Moreover, the physical presence of a bundled product potentially enhances parents’ trusting intentions with respect to vendors. Research suggests that consumers are more likely to trust an Internet vendor when they are aware of a physical location for the vendor (Steinfeld, Adelaar, & Liu, 2005). Essentially, the “brick” side of the equation provides a “face” to the product. In this way, parents may be more likely to allow their children to play on a website developed by a known vendor engaged in relationships with well-known retail outlets such as Hallmark. Further, from social contagion (Young, 2009), parents may receive anecdotal support for trusting the firm as peers’ children use the product.



Because of Ganz's ties to trusted stores and peers, parents may transfer trust from these known entities to a well-established, yet unknown, toy manufacturer. Research finds that the quality of the user interface for e-commerce sites directly influences consumers' level of trust in that site (Roy, Dewit, & Aubert, 2001). Similarly, through the design of the online interface, a manufacturer may further enhance parent trust in an online community. Ganz encourages use of parental controls over their children's degree of social interaction with other players. Specifically, controls permit disabling of chat functions. When disabled, children's experience is akin to being in a bubble and walking around the online world with no way of sending or receiving messages to and from other members. By creating a high-quality interface with desirable parental controls, Ganz has sought to foster trust in product among parents of their target consumer.

## **IMPLICATIONS**

To maximize profit, the Ganz example serves to demonstrate how firms can optimize product value by creatively bundling digital and physical attributes. A digital back-end can differentiate an otherwise unremarkable physical product. Firms can utilize real world storefronts to enhance the likelihood that individuals relax and trust online components. Here, bundling digital value is potentially a highly profitable investment. While software development incurs significant startup costs, the ability to charge a premium decreases with competition. Consider that while a traditional product might cost \$5,000 to develop and then \$5 per unit to manufacture, a digital product might cost \$20,000 to develop but cost less than a \$1 to copy and distribute (Grover & Ramanlal, 2004). Once developed, digital products can be copied infinitely in the digital world or at marginal cost (the cost of a CD and box) in the real world. However, the effect of competition "competes" away profit margins. In a perfectly competitive world, digital products would be sold at marginal cost. The economics of digital products make them ideal for bundling with physical products. The effect of bundling reduces the ability of consumers to compare, thus weakening the effects of competition and preserving physical and digital value. In the Webkinz example, the online world may have come with a significant initial investment, but it contributes heavily toward profit margins and market craze. Furthermore, though Ganz must maintain servers to enable Internet play, the expense is minimal compared to realized benefits in the form of profits.

### **What traditional, physical value drivers are of interest to the core customers?**

Managers must consider how to create a product that can be competitive based on traditional models of physical value. The physical product must be strong enough to be of interest to consumers. If the physical product is not interesting or valuable, then customers will find a way to acquire only the digital component or will forego the bundle entirely. For instance, it is highly unlikely that a consumer who does not like 7-Eleven food products would buy any, regardless of a bundle with digital accessories for Zynga's online games.

### **What electronic, digital value drivers would benefit the customers?**

Managers have to identify digital products that create the most value for their customers. Digital products like instruction manuals or customer support offer little value, whereas access to online games adds value. When there is a strong potential for network externalities, such as with virtual worlds populated by online communities, firms should place a premium on innovation.

Being the first mover may provide a significant advantage in populating the community within a virtual world, resulting in a competitive edge over the competition.

### **Does the digital product complement the physical product?**

Interactive value is generated when the physical product enhances the value of the digital product and vice versa. This results from a unique connection between the physical and digital product. Managers should ask themselves how a digital product could improve the enjoyment or value derived from the physical product in the bundle, and vice versa. Managers should also understand that the unique value created by an interaction only exists when one part of the bundle enhances the value of the other part. While bundling physical and digital products creates additional value and can be an effective promotion (Morrissey, 2010), managers should seek to find unique connections between the physical and digital world to create a lasting competitive advantage.

### **Have the concerns of key stakeholders been addressed?**

Particularly when creating products marketed towards children, firms should carefully consider the concerns of all stakeholders. Firms must consider the interests of parents, but may also need to address the concerns of regulatory bodies or even political pressures from outside groups. Firms may try to offset some of these concerns by creating products that are fun, but also offer educational (De Avila, 2009) or health benefits (Schmidt, 2007).

### **Future Research**

For academics, there are several interesting research opportunities. Management researchers may consider how firms manage the physical and digital channels of their business model. When bundling physical and digital products, is there close interaction between the physical product development and digital product development? Are digital processes outsourced to information technology vendors?

For information systems and e-commerce research, academics should consider how the presence of a physical product influences loyalty to, and participation in, electronic initiatives. Does the extent of investment in a physical product influence the depth or nature of involvement with an online community? Research suggests that sunk costs, in the form of membership fees, encourage consumers to be more loyal (Dick & Lord, 1998). Does this have the same effect with a consumers' connection to a digital environment? When consumers have invested heavily in a physical product, does their valuation of the associated digital product increase?

## **CONCLUSION**

To reap the most benefit from bundling activities, firms must consider available traditional and electronic business model drivers. Such levers are the appropriate starting point for firms wishing to effectively pursue physical and virtual bundling strategies. Firms must, however, ask themselves what combination of traditional and electronic levers will yield the greatest competitive advantage within their respective competitive environment. Once identified, firms can develop bundling strategies aimed at maximizing such competitive positions.

## REFERENCES

- Adams, W. J., & Yellen, J. L. (1990). Commodity Bundling and the Burden of Monopoly. *Quarterly Journal of Economics*, 90(3), 475-498.
- Armstrong, A., & Hagel III, J. (1996). The Real Value of On-line Communities. *Harvard Business Review*, 74(3), 134-141.
- Bakos, J. Y., & Brynjolfsson, E. (1999). Bundling Information Goods: Pricing, Profits, and Efficiency. *Management Science*, 45(12), 1613-1630.
- Benassi, P. (1999). TRUSTe: An Online Privacy Seal Program. *Communications of the Association for Computing Machinery*, 42(2), 56-59.
- De Avila, J. (2009). Pursuing an Academic Edge at Home. Retrieved January 12, 2011, from <http://online.wsj.com/article/SB10001424052970204900904574304363629865056.html>
- Dick, A. S., & Lord, K. R. (1998). The Impact of Membership Fees on Consumer Attitude and Choice. *Psychology & Marketing*, 15(1), 41-58.
- Gaeth, G. J., Levin, I. P., Chakraborty, G., & Aron, M. L. (1991). Consumer Evaluation of Multi-Product Bundles: An Information Integration Analysis. *Marketing Letters*, 2(1), 47-57.
- Grover, V., & Ramanlal, P. (1999). Six Myths of Information and Markets: Information Technology Networks, Electronic Commerce, and the Battle for Consumer Surplus. *MIS Quarterly*, 23(4), 465-495.
- Grover, V., & Ramanlal, P. (2004). Digital Economics and the e-Business Dilemma. *Business Horizons*, 46(4), 71-80.
- Hanson, W., & Martin, R. K. (1990). Optimal Bundle Pricing. *Management Science*, 36(2), 155-174.
- Hemp, P. (2006). Avatar-Based Marketing. *Harvard Business Review*, 84(6), 48-57.
- Hindo, B. (2007). Toys with a Second Life. Retrieved January 15, 2011, from [http://www.businessweek.com/magazine/content/07\\_53/b4065091329372.htm](http://www.businessweek.com/magazine/content/07_53/b4065091329372.htm)
- Jarvenpaa, S. L., Tractinsky, N., & Vitale, M. (2000). Consumer Trust In an Internet Store. *Information Technology and Management*, 1(1-2), 45-71.
- Katz, M. L., & Shapiro, C. (1985). Network Externalities, Competition, and Compatibility. *American Economic Review*, 75(3), 424-440.
- Kim, W. C., & Mauborgne, R. (1999). Creating New Market Space. *Harvard Business Review*, 77(1), 83-93.

Koukova, N. T., Kannan, P. K., & Ratchford, B. T. (2008). Product form bundling: Implications for marketing digital products. *Journal of Retailing*, 84(2), 181-194.

Morrissey, B. (2010). Zynga, 7-Eleven Link Virtual, Real Goods. Retrieved January 15, 2011, from [http://www.adweek.com/aw/content\\_display/news/agency/e3i4a68f0689d02bf9eb1d308a5ea40a771](http://www.adweek.com/aw/content_display/news/agency/e3i4a68f0689d02bf9eb1d308a5ea40a771)

Ofek, E., Katona, Z., & Sarvary, M. (Forthcoming). "Bricks and Clicks": The Impact of Product Returns on the Strategies of Multichannel Retailers. *Marketing Science*.

Rothaermel, F. T., & Sugiyama, S. (2001). Virtual internet communities and commercial success: individual and community-level theory grounded in the atypical case of TimeZone.com. *Journal of Management*, 27(3), 297-312.

Roy, M. C., Dewit, O., & Aubert, B. A. (2001). The impact of interface usability on trust in Web retailers. *Internet Research*, 11(5), 388-398.

Schmidt, T. S. (2007). Is the Wii Really Good for Your Health? Retrieved January 12, 2011, from <http://www.time.com/time/business/article/0,8599,1584697,00.html#ixzz1DQafn25J>

Steinfeld, C., Adelaar, T., & Liu, F. (2005). Click and Mortar Strategies Viewed from the Web: A Content Analysis of Features Illustrating Integration Between Retailers' Online and Offline Presence. *Electronic Markets*, 15(3), 199 - 212.

Verhallen, T. M. M. (1982). Scarcity and consumer choice behavior. *Journal of Economic Psychology*, 2(4), 299-322.

Verhallen, T. M. M., & Robben, H. S. J. (1994). Scarcity and preference: An experiment on unavailability and product evaluation. *Journal of Economic Psychology*, 15(2), 315-331.

Young, H. P. (2009). Innovation Diffusion in Heterogeneous Populations: Contagion, Social Influence, and Social Learning. *American Economic Review*, 99(5), 1899-1924.

Zhu, K., & MacQuarrie, B. (2003). The economics of digital bundling: the impact of digitization and bundling on the music industry. *Communications of the Association for Computing Machinery*, 46(9), 264-270.