Orchestration Services Increase Revenues for Retailers

Cisco IBSG Research Reveals New 'Learner' Segment Is Receptive to Services that Bridge Knowledge Gap, Provide Greater Value from Purchases

By Jon Stine and Jeff Loucks

Today's Retail Challenges

It is more difficult than ever for retailers to stand out from their competition. The reason is simple: Internet-based transparency, next-day supply chains, rapid product replication, and low barriers to market entry are rapidly increasing commoditization across the retail industry. As a result, margins fall, private-label products proliferate, brand loyalty withers, and, inevitably, industry sectors go through a process of brand consolidation.

Department stores and supermarkets are just two segments that have been impacted by this process. Dozens of once-proud department store marques are now gone, having been consolidated into brands such as Macy's, Dillard's, and Belk. The grocery market has also consolidated. Market leader Kroger is the sum of more than 20 independent brands, with private-label merchandise accounting for 20 percent of the company's revenues.[1]

The impact of commoditization is now being felt in the global consumer electronics (CE) retail segment. All the symptoms are there: an abundance of similarly featured products, a steady decline in the average selling price (ASP) per unit across multiple product categories, growth in private-label placement, and multi-faceted competition where shoppers can buy the same product from Walmart, Target, Amazon.com, the "hyper-market" divisions of Kroger, and literally thousands of other merchants with e-commerce sites.

Given this challenging environment, the Cisco® Internet Business Solutions Group (IBSG) conducted research to help retailers develop and implement strategies to combat segment maturation.[2] Specifically, the group studied:

- The CE market from the perspectives of device ownership and digital content consumption
- The impact of consumer confidence and knowledge on purchasing behavior
- Whether the application of value-added "orchestration" services could increase revenues by encouraging specific customer segments to spend more

Overall, Cisco IBSG found:

- A significant portion of shoppers for electronics products in the United States lacks confidence in its ability to choose, operate, and connect today's devices. Even among early adopters, a significant number of people would like to do more, but require the confidence and knowledge to do so.
- Confidence and knowledge gaps in device and digital content adoption have significant economic implications for CE and other retailers.
- Retailers can increase revenues by implementing one or more of the five orchestration services described later in this paper.

Understanding Today's Market: Cisco IBSG's 'Dual-Lens' Approach

The CE industry traditionally segments customers according to their purchase history and buying habits, including how many devices they own and how quickly they upgrade to the newest versions. Given this perspective, companies that sell consumer technology typically pursue early adopters above all other consumer segments.

Early adopters tend to be young, affluent males who are enthusiastic about technology. This group typically represents only a small minority (10 percent to 15 percent) of the available market. In addition, they are far more knowledgeable about industry terminology and product capabilities than average consumers, and account for an outsized portion of retailers' total revenues and margins.

Retailers' focus on early adopters is fiscally appropriate. However, as electronic devices and content services evolve at an ever-accelerating pace, the rest of the available market is increasingly being left behind. The unintended consequence of this approach is that retailers are alienating shoppers who are intimidated and frustrated by the complexity of electronic products. As a result, the majority of consumers, who own fewer devices and need less technical but more practical guidance, are being underserved.

These limitations aside, device-oriented segmentation made sense when consumers sought products with the latest and greatest features. Today, however, as products become increasingly commoditized, consumers are deriving value from the content, services, and applications they access from online sources rather than from the capabilities of the devices themselves.

For the most part, today's electronic products are "empty vessels" for running the movies, location-based services, social networks, and games that consumers want to use. Apple, for example, has avoided rampant commoditization by making it easy for consumers to access, purchase, and enjoy digital content (iTunes) and applications (App Store). It is increasingly clear that content matters more than the device itself.

This shift from devices to content changes how retailers should view consumers. By segmenting customers based on how they *use* devices rather than on the types and quantity of devices they *purchase,* retailers can uncover new groups of customers whose needs are currently unmet.

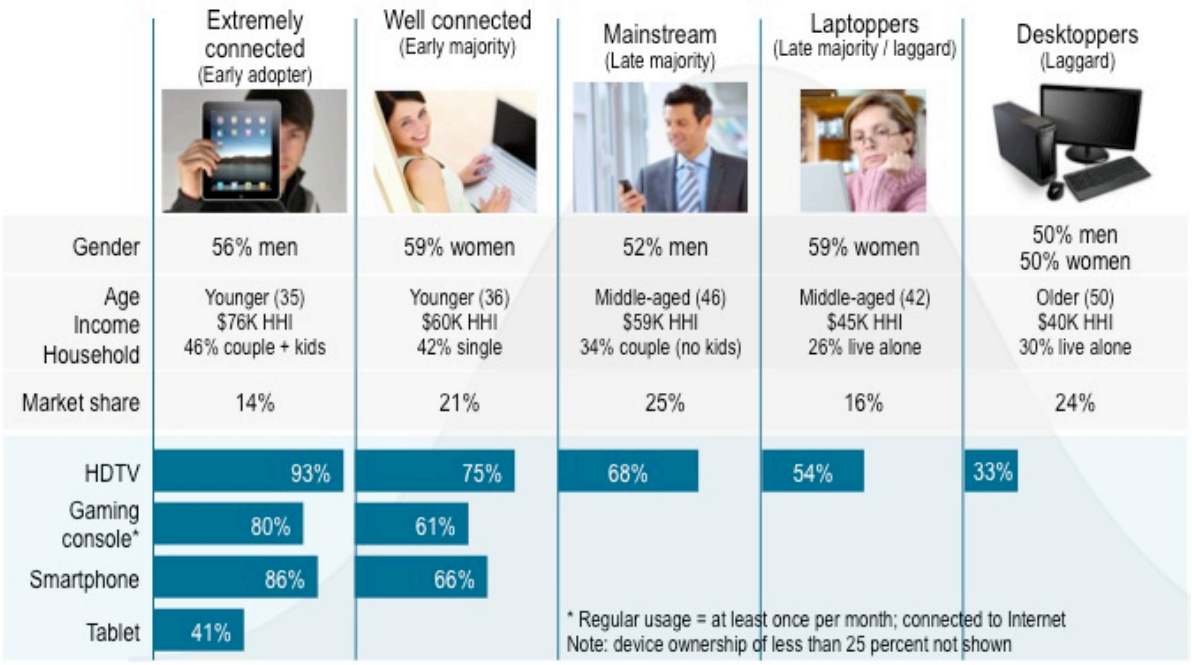
Cisco IBSG Research Segments

Using a technique called "cluster analysis" that finds commonalities based on how people answer questions, Cisco IBSG segmented respondents into two categories:

- **Device segment:** Considers the devices people own or use at least once per month. Devices range from everyday desktops and laptops to more advanced Internet TV, e-book, and online mobile gaming devices.
- **Usage segment:** Includes content and services that respondents use, or to which they subscribe, at least once per month. Offerings range from the nearly ubiquitous pay TV and social networks to less common online storage and streaming video services and content.

Cisco IBSG's cluster analysis produced five distinct groups across both segments. Geoffrey Moore's technology-adoption curve was then applied to classify each group, ranging from early adopters (technologically savvy) to "laggards" (technologically challenged). Figure 1 shows the demographic makeup and device ownership of the five groups.

Figure 1. Cluster Analysis Produced Five Distinct Groups Across Device and Usage Segments.



Source: Cisco IBSG, 2012

Segmentation by Device

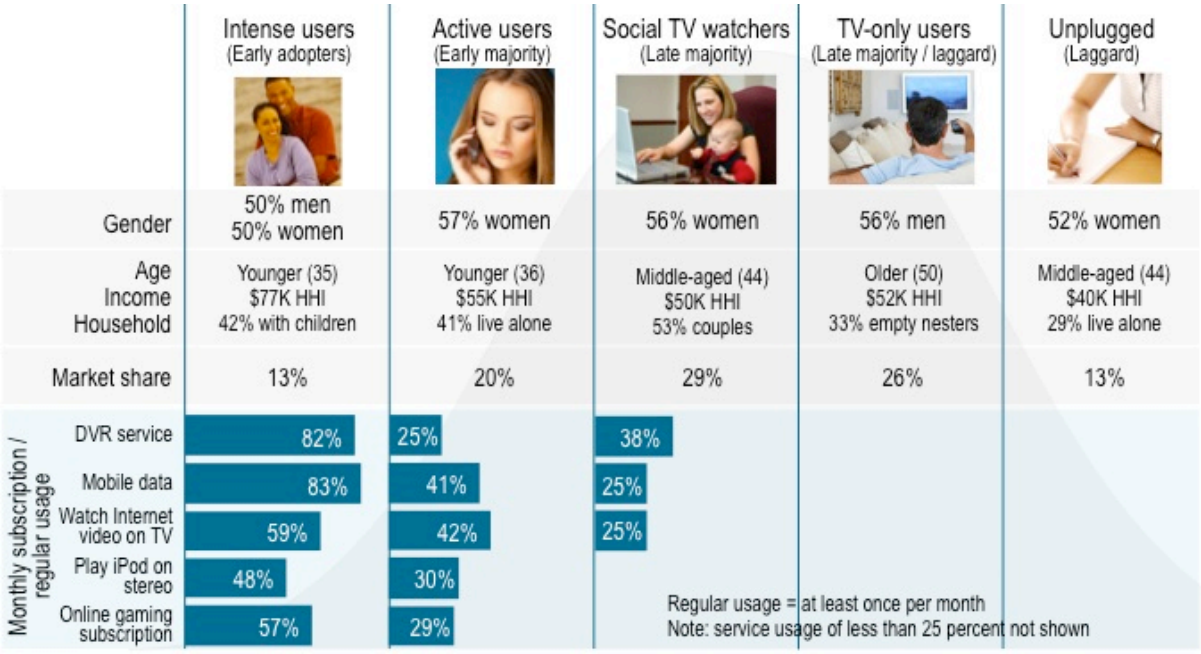
One noteworthy finding is that the early-majority group, which includes consumers who use technology in their daily lives but are not self-described "enthusiasts," is largely made up of females. The data shows that these consumers are strong adopters of both smartphones and gaming consoles. Despite this group's attractiveness (even from a device ownership standpoint), companies that sell consumer technology devices may be ill-equipped to maximize sales. This is because their messaging and, where applicable, store-based presentation and demonstration content, is skewed toward early adopters (young males).

As we move toward the less technically savvy groups who own fewer and less innovative devices, respondents tend to be older and have lower household incomes. Using a device-centric lens, retailers would likely conclude that "laptoppers" and "desktoppers" (named for the main devices each group owns) are not worth targeting, even though these two groups represent a large swathe of the market and have a need for more (and refreshed) devices.

Segmentation by Usage

Cisco IBSG then looked at the same 1,100 respondents from a usage perspective. When viewed this way, a subtle but important difference arises—the early-adopter group is made up of 50 percent men and 50 percent women (see Figure 2).

Figure 2. Segmentation by Usage Highlights Subtle but Important Differences Among Groups.



Source: Cisco IBSG, 2012

As alluded to, early adopters—both extremely connected users in the device segment and intense users from the usage segment—have a voracious appetite for the full range of content and services, including pay TV, digital video recording (DVR), online movie streaming and gaming, and e-book downloads. Importantly, these users also enjoy using devices that are optimized for viewing specific types of online content. For example, nearly 60 percent of early adopters view TV shows that are streamed or downloaded from the Internet on a TV rather than on a tablet or smartphone.

The area that most sets intense users apart from the other groups is the near-ubiquity of mobile data subscriptions. Intense users clearly want to access their content from wherever they are. Early-majority consumers, on the other hand, are not as concerned about their data usage, but nonetheless exhibit a high degree of technology know-how.

Perhaps the most interesting group for companies that sell technology devices and Internet-based content are the older, female-dominated "social TV watchers," who scored particularly

high on their use of social networks and interest in TV-based content. While subscriptions to mobile data plans and watching Internet-based content on a TV have reached a critical mass with this group, few consumer technology providers consider them a core customer segment.

The final two groups, "TV-only" and "unplugged," include the least-attractive consumers from a service and content usage point of view, since they have very low adoption rates for services beyond basic pay TV and social networking.

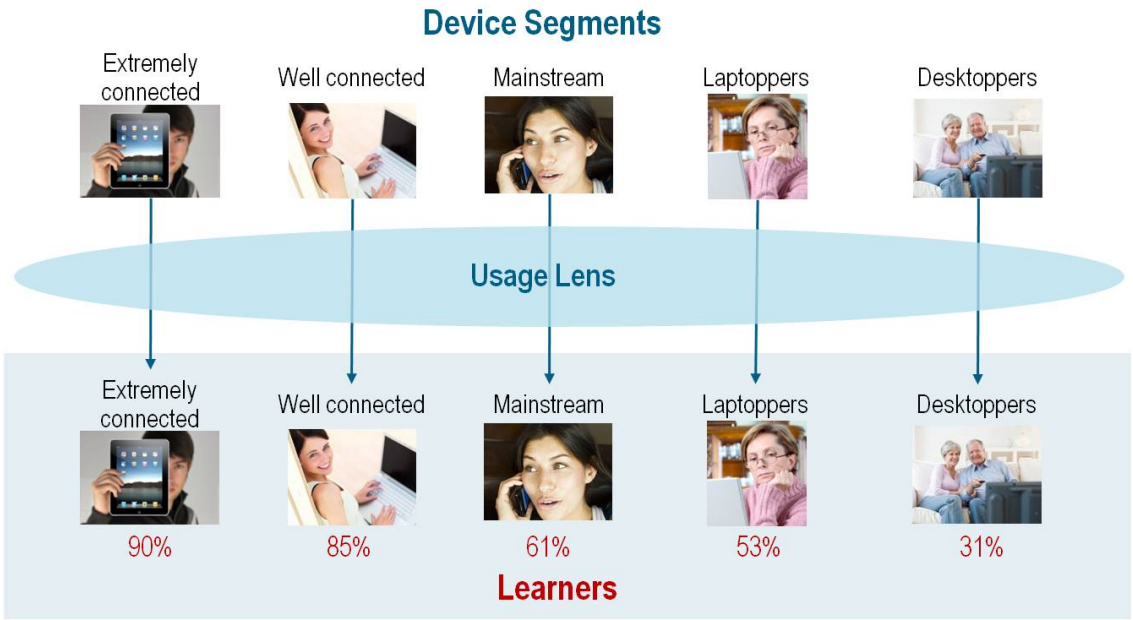
Important Learner Segment Emerges

Cisco IBSG has termed the three most attractive segments from a usage perspective—intense users, active users, and social TV watchers—"learners." This group is important because of their interest in and usage of technology services and digital content.

Interestingly, the most important insights from Cisco IBSG's research came when the device segments were viewed through the usage lens. Specifically, Cisco IBSG wanted to determine what percentage of consumers in each of the five device groups were also learners.

It turns out that a significant percentage of laptoppers and desktoppers are indeed learners (see Figure 3). In fact, these two groups represent 40 percent of a market that many retailers would consider unpromising from a device-only perspective. By looking at the device segments through the usage lens, it becomes clear that a majority of laptoppers and nearly one-third of desktoppers are very attractive consumers for companies that sell consumer technology devices and services.

Figure 3. Device Segments Provide Additional Insights When Viewed Through Usage Lens.



Source: Cisco IBSG, 2012

To take advantage of these findings, Cisco IBSG believes that retailers should focus more attention on these consumers since a significant percentage of each group is using content and services on the devices they own, are motivated to find out more, and are not saturated with too many advanced devices.

Strong Correlation Between Consumer Confidence and Buying Behavior

Among segments, there are significant differences in consumer confidence about using advanced device features, even within the learner category. Among intense users (13 percent of the market), 85 percent expressed confidence in their ability to use the advanced features on their devices. The confidence scores declined proportionately in the next two learner segments, with 75 percent of active users (20 percent of the market) and 53 percent of social TV watchers (29 percent of the market) claiming confidence in using advanced device features.

The comparative lack of confidence in the active-user and social TV watcher segments appears to be impacting the sales of CE retailers. When intense users were asked about what they buy with their devices, only 7 percent reported that they seldom or never purchase accessories, and 19 percent indicated that they seldom or never buy "go-with" items.

The "seldom or never" numbers increased dramatically in segments with less confidence. Nearly a quarter of active users (23 percent) and close to a third of social TV watchers (31 percent) seldom or never buy accessories (items specifically designed to complement device usage, such as a protective case). In addition, more than 40 percent of both active users and social TV watchers seldom or never buy go-with items (items that extend device value and usage, such as wireless routers and printers).

The bottom line for retailers is that more than 20 percent of the industry's most active users seldom or never buy accessories, and 36 percent of the same group seldom or never buy go-with items.

The Connected World: Not Yet a Reality for All Consumers

In addition to surveying respondents about their device and content usage separately, the study also looked at which devices were used to consume various types of content. Interestingly, for the majority of users that fall outside the early-adopter group, life in the digital world is still largely an aspiration. For example:

- 59 percent of intense users regularly watch Internet-based videos (from sources such as Netflix, YouTube, or sports sites) on their TVs. This approach requires either direct use of an Internet-ready TV or transport of the content from another device, such as a PC, to the TV. Active users are also on the "Internet-to-television" bandwagon. In fact, more than two-thirds (42 percent) of respondents in this group watch Internet-based video on their big-screen TVs. However, within the largest segment of the learner category—social TV watchers—only 25 percent watch Internet videos on an optimized viewing device. About 70 percent view Internet videos on desktop or laptop PCs.

- Nearly half of intense users (49 percent) use smartphones to access online games. This compares to 19 percent of active users and only 10 percent of social TV watchers who do so.
- Nearly half of intense users (48 percent) use cloud-based services to store their digital content, such as movies. This compares to 22 percent of active users and less than one-in-ten (8 percent) of social TV watchers.
- Nearly half of intense users (48 percent) watch live, streaming video on their smartphones and tablets. This compares to only 21 percent of active users and 8 percent of social TV watchers who do so.
- Nearly two-thirds of intense users (61 percent) access digital music from more than one Internet-enabled device using a cloud-based service. This compares to only 39 percent of active users and slightly more than one-in-five (22 percent) of social TV watchers who do so.

Knowledge Gap Keeps People from Doing More

Recognizing that active users and social TV watchers are consuming Internet-based content on their HD TVs, computers, and smartphones, why aren't other users doing more with their devices? In addition to the generally understood answers of "interest level" and "household demographics," as well as the confidence gap that has already been discussed, Cisco IBSG's research uncovered another reason.

Many users have the ability, but lack the knowledge to make their devices work to their full potential due to incompatible standards, numerous industry acronyms, and bewildering complexity. As an example of this knowledge gap, the research showed that roughly two-thirds of the learner segment listens to music from the Internet, such as online radio stations and streaming music services such as Pandora. However, the percentage of these users who listen to Internet music services on a home audio system is much lower. The study showed:

Intense users

- Listen to Internet music and audio at least once per month: 84 percent
- Listen to Internet music on a home audio system: 59 percent
- Gap = 23 percent

Active users

- Listen to Internet music and audio at least once per month: 73 percent
- Listen to Internet music on a home audio system: 32 percent
- Gap = 41 percent

Social TV watchers

- Listen to Internet music and audio at least once per month: 50 percent
- Listen to Internet music on a home audio system: 19 percent
- Gap = 31 percent

The reason for the difference or "gap" between users who listen to Internet music and audio at least monthly and those who listen to Internet music on their home audio systems is clear—they don't have the knowledge to make it work. The idea of a knowledge gap was also

supported when survey participants were asked about other types of device and content usage:

- 28 percent of early adopters want to stream live TV on their smartphones and/or tablets, but aren't doing so, or aren't doing so because they don't know how.
- 26 percent of early-majority users (largest user segment) want to view their digital photos on TVs and/or other Internet-based devices (such as tablets) at home, but aren't doing so, or aren't doing so because they don't know how.
- 30 percent of social TV watchers would like to download movies and/or TV shows through their gaming consoles, but aren't doing so, or aren't doing so because they don't know how.

The research shows that a significant number of customers want to do more, yet stop short of achieving the full potential of their electronic devices and content services. The impact of this behavior is clear—basket sizes become smaller and refresh cycles take longer, limiting potential sales for retailers.

Orchestration Services Bridge Knowledge Gap

Retail orchestration services add value to physical products by creating both virtual and physical customer experiences that combine aggregation, assembly, and education. When designed and deployed correctly, orchestration services bridge the knowledge gap by helping customers learn more about—and gain more value from—the products they purchase.

- **Aggregation.** Bring together all the elements required to create a solution for device usage. Examples include recipes, shopping lists, and prepackaged "bundles" of connectors and services.
- **Assembly.** Put together all the elements in a complete solution. Examples include in-home installation services and installation of existing contacts and content onto newly purchased mobile phones.
- **Education.** Learn what's available, what's possible, and how to put it all together.

One of the best examples of orchestration is the Genius Bar found in Apple's retail stores. Other examples include personal shopping and wardrobe services provided by leading retailers like Macy's, Nordstrom, and Neiman Marcus; wine and cooking classes offered by upper-end grocers; and virtual kitchen design services tested at select Home Depot locations. With few exceptions, including Best Buy's Geek Squad, few CE retailers offer orchestration services.

Cisco IBSG Tested Five Orchestration Concepts

To test whether consumer behavior would be swayed by orchestration, Cisco IBSG asked survey respondents to evaluate five potential services[3]:

1. **Learn how to use it.** In the store, shoppers can attend hands-on seminars and one-on-one sessions. Online, consumers can take advantage of how-to-use-it videos, live and recorded seminars, and chats with experts.
2. **Discovery Zone.** This offering allows customers to "play" (either in person or virtually) with devices, apps, and online services. The Discovery Zone is staffed by experts

who can help shoppers understand how devices and services work, make recommendations, and answer questions.

3. **Device compatibility tracking.** Customers simply enter the name, model, and year of the devices they own to see a list of compatible devices and how to connect them. Shoppers can also view whether their devices are compatible with new software and services. The compatibility tracking service is included with new purchases.
4. **Remote installation support.** Customers can speak with a product installation expert online via chat or a webcam. They can also use a video camera or mobile phone to take and upload pictures and videos for a product installation expert to review and provide feedback.
5. **Personalized downloads.** This capability helps shoppers select software, online services, and apps based on their unique needs and interests. Customers receive a list of personalized recommendations and can choose the products they want. Service and installation are free.

Orchestration Concept Findings

Cisco IBSG's pre-survey hypotheses held that the orchestration concepts would be of most interest to active users. This was because active users demonstrated less confidence than intense users, but had more device ownership and content usage than social TV watchers.

Using a research technique called the Kano Model,[4] Cisco IBSG found that intense users expressed the greatest interest in each concept. Results showed that one-third or more of these consumers expressed differentiating delight or excitement. Clearly, intense users want to learn more and do more with their devices.

In addition, four of the five concepts received a delighted or excited response from one-third or more of the entire learner segment. This finding is significant because it represents a "cry for help" from the most active consumers in the digital world.

Figure 4. Percentage of Respondents Expressing Differentiating Delight or Excitement in Each Concept.

	Intense users	Active users	Social TV watchers	Learners
Learn how to use it	36%	36%	32%	35%
Discovery Zone	36%	35%	30%	33%
Device compatibility tracking	38%	30%	30%	32%
Remote installation support	36%	24%	21%	25%
Personalized downloads	33%	23%	19%	23%

Source: Cisco IBSG, 2012

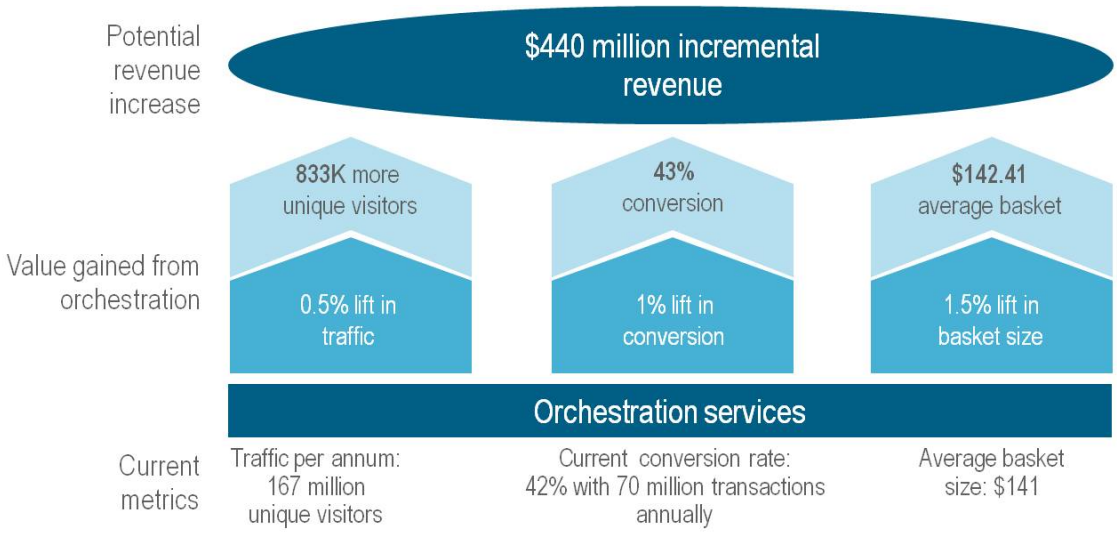
Cisco IBSG's study revealed the following findings for each concept:

- **Learn how to use it.** Received the highest overall rating of all five concepts. The following segments expressed delight or excitement in the service: 36 percent of intense users, 36 percent of active users, and 32 percent of social TV watchers.
- **Discovery Zone.** The following segments expressed delight or excitement in this service: 36 percent of intense users, 35 percent of active users, and 30 percent of social TV watchers.
- **Device compatibility tracking.** The following segments expressed delight or excitement in this service: 38 percent of intense users, 30 percent of active users, and 30 percent of social TV watchers.
- **Remote installation support.** Intense users showed a strong response (36 percent). However, the response dropped in the other two segments (24 percent for active users and 21 percent for social TV watchers).
- **Personalized downloads.** One-third of intense users (with 84 percent smartphone ownership) reported delight or excitement, compared to 23 percent of active users (with 49 percent smartphone ownership) and 19 percent of social TV watchers (with 28 percent smartphone ownership).

Orchestration Services Can Increase Revenues by Nearly 5 Percent

Cisco IBSG calculates that orchestration services can increase revenues for a $10 billion big-box CE retailer by $440 million.[5] The incremental increase in revenue is driven by three variables: (1) a 0.5 percent lift in traffic, (2) a 1 percent increase in customer conversions, and (3) 1.5 percent growth in basket size (see Figure 5).

Figure 5. Potential Revenue Increase from Orchestration Services Is $440 Million for a $10 Billion CE Retailer.



Source: Cisco IBSG, 2012

Achieving the Full Potential of Orchestration Services

Given these findings, how can retailers design and deliver orchestration services that win the attention, loyalty, and wallet share of the digitally active learner segment?

Cisco IBSG believes the first step is to better understand customers by analyzing device ownership *and* usage. Taking a dual-lens approach will provide unique insights for your specific situation.

The next step is to identify your own learner segment by:

- **Defining your objective.** Initial orchestration efforts should be aimed at business areas that have the greatest potential for increasing revenues and expanding market share. For instance, while survey results point to latent demand in numerous categories, CE retailers are currently experiencing strong results in connected mobility. Use orchestration services to leap ahead of the competition in the most profitable areas for your business.
- **Exploring the three elements of orchestration.** Once your objective has been defined, begin developing orchestration services by evaluating how products and services can be aggregated, assembled, and delivered for maximum educational impact.
- **Designing multichannel variants of your orchestration services.** There are numerous ways in which orchestration services (especially aggregation and education) can be virtualized and delivered through online and mobile channels. For instance, a five-minute in-store tutorial about how to use a mobile application will also have value.
- **Establishing corporate-wide "expertise management" as a strategic capability.** In an era of increasingly commoditized products, retailers that help customers understand how to use the items they purchase will enjoy a significant competitive advantage. The key is to identify where the expertise exists both within and outside your organization, and then deliver it to customers at the right time and at the right touchpoint across the shopping lifecycle.
- **Enlisting store associate support.** The value of orchestration services in the store should not be limited to permanent physical space. Sales associates in the aisles will drive greater results when they are equipped with the appropriate devices and orchestration solutions.

Business and Technology Enablers To Keep in Mind

As you determine how to develop and scale the orchestration services that will deliver the greatest return for your business, it is important to consider the following business and technology enablers.

Business Enablers

- Knowledge and content management, including content generation, refresh cycles, decision rights and responsibilities, and content security.
- Operational processes and procedures, including associate roles and responsibilities, labor and expertise management and optimization, and revenue recognition.

- Channel management, including data integration, cross-channel inventory fulfillment, and revenue recognition.

Technology Enablers

- Content management and delivery, including security, bandwidth capacity and optimization, and the architecture required to deliver reliable, high-bandwidth, low-latency experiences at peak traffic times.
- Store architecture, including bandwidth capacity, CPU optimization and virtualization, and total thin-store opportunities.
- Data integration that enables a single view of on-order and on-hand inventory, customer profiles, and flexible fulfillment.

If you would like more information about transforming your retail business with orchestration services, please contact:

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Endnotes

1. Source: BB&T Capital Markets, 2011.
2. Cisco IBSG designed a web-based survey that was answered by 1,100 respondents in the United States—a sample demographically representative in age, gender, and income of the general population.
3. The orchestration services findings are based on a research technique called the Kano Model. This approach allowed us to identify customers who are willing to change their behavior as a result of orchestration services.
4. In the 1980s, Noriaki Kano, an expert in understanding customer satisfaction, developed the Kano Model. His research approach provides a powerful tool for understanding how customers feel about products and services. The Kano Model is especially useful for uncovering potential demand and helps determine customer "surprise" and "delight."
5. While it is always risky to predict the impact of one variable in a retail revenue equation, Cisco IBSG believes that its estimate is conservative based on the research findings.

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