



## Enabling Connected Commerce

Banks Can Compete More Effectively by Supporting Shopping Preferences of Connected Consumers

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#### Introduction

The retail banking payments industry is ripe for disruption. Some analysts say the industry has not produced a game-changing innovation since the introduction of “plastic.” In the online/virtual space, the industry has proven particularly vulnerable to value propositions offered by players such as PayPal, Bill Me Later, and Amazon Payments. Banks are at risk of losing customer interaction in this emerging payment value chain.

As consumers and physical merchants become increasingly accessible via high-speed networks, mobile devices and edge networking open opportunities for new players to bypass the existing payments value chain. In this new reality, electronic payments have the potential to disrupt the payments industry in the way that MP3 disrupted the music industry. Soon, banks will need to introduce new propositions around point of sale (POS), as well as pre- and post-commerce, to retain a leadership position in the industry and monetize banks’ existing scale.

Cisco Internet Business Solutions Group (IBSG) conducted a survey of more than 1,500 consumers to gain a better understanding of how behaviors and perceptions are changing relative to commerce (shopping and payments), and to explore the types of value propositions that will resonate with these connected consumers.

#### Trends and Challenges

Clearly, the retail payments industry is a segment with tremendous opportunity. U.S. annual payments volume is nearing \$1.5 trillion and is expected to grow at 10 to 13 percent per year.<sup>1</sup> Current industry estimates indicate that payments represent 35 to 45 percent of banking revenue and 30 to 40 percent of operating profits, indirectly touching at least 60 percent of banking revenue.<sup>2</sup>

The existing payments system, however, is based upon long-standing paper-clearing processes—a fact that participants in the value chain find difficult to ignore. Merchant acquirers and independent sales organizations (ISOs) are finding it increasingly difficult to manage the high operational cost with diminishing margins in traditional credit and debit processing. Meanwhile, merchants themselves are demanding lower transaction costs and expanded services. Players like RevolutionCard are responding by charging fees equal to approximately one-fourth of the current average interchange. For banks, average interchange fees are falling and practices are under fire from government regulators.

1. Presentation to UBS Global Financial Services Conference, Visa, May 28, 2008.

2. Cisco IBSG analysis performed by reviewing financial reports and FDIC data for the top 20 U.S. banks, 2008.

Newer entrants are gaining traction as consumers seek alternatives and more commerce moves online and to mobile devices (through payments companies such as PayPal and Obopay). In countries like Japan, mobile carriers and other nonbanking companies have been instrumental in bringing cardless payment products to market without much involvement from financial institutions. Japanese mobile service provider NTT has attracted 24 million subscribers to e-wallet phones (45 percent of the total market).<sup>3</sup>

Consumers have great interest in cardless and paperless payment transactions. By 2010 in the United States, payments via emerging methods (such as RFID,<sup>4</sup> SMS,<sup>5</sup> and biometric<sup>6</sup>) are expected to grow to \$400 billion.<sup>7</sup> Twenty-three percent of IBSG's survey respondents expressed interest in using mobile devices to make contactless payments in physical stores, and that number is only expected to grow. Indeed, 58 percent of frequent users of contactless cards indicate a strong interest in swiping a mobile device with embedded chip at checkout.

Consumer demands are changing. They expect greater choice and have higher expectations of service. Convenience and security are the minimal stakes of the game, and therefore are difficult elements around which to build sustainable differentiation. As their preferences shift toward community, transparency, and flexibility, consumers are looking for better, more proactive solutions around life events and need states. This creates opportunities for banks to build differentiating strategies by becoming more relevant to life circumstances.

The consumer segments most interested in "Connected Life" solutions, however, are already moving toward alternate payment mechanisms. Consumers believe nonbanks can provide at par (if not better) payment solutions. In our survey, the difference between those who "trust" or "trust very much" banks for payment solutions versus alternate payment providers (like PayPal) is negligible (67 percent for banks to 64 percent for alternatives). Baby boomers (ages 45 to 64) actually show a level of trust in alternate payment providers that exceeds their trust in banks (see Figure 1).

Merchants, advertising agencies, consumer packaged goods (CPG) companies, banks, and new financial services entrants are all trying to capture consumer attention and be relevant at the moment of purchase. Our research shows that "Connected Consumers" will value and respond to targeted offers surrounding point of purchase. They are already making choices based on the messages they receive outside traditional sources such as newspapers and ads.

Today's rewards points programs are not driving payment preference behavior the way they once did. Only 16 percent of respondents cited loyalty points as the main benefit of using credit cards in-store (for online, this figure was just 6 percent); more respondents

3. "Complex Landscapes: Mobile Payments in Japan, South Korea and the United States," Federal Reserve Bank of Kansas City, September 2007.

4. Radio frequency identification.

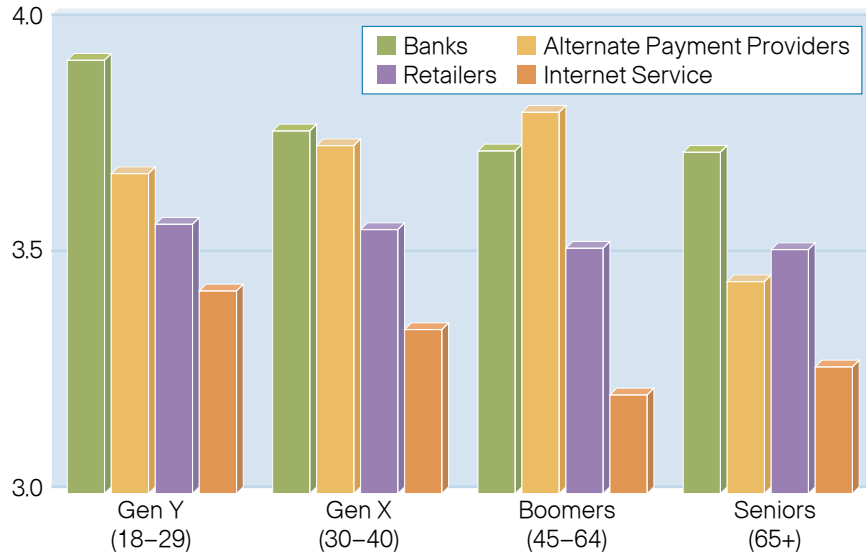
5. Short message service.

6. Such as thumbprint readers or retinal scan.

7. "Mobile Payments," PELORUS Group, 4Q 2007.

mentioned benefits such as speed and the ability to defer payments. This partially explains why there is such strong movement toward debit cards and alternate payment providers.

**Figure 1.** Consumer Trust in Payment Providers for Online Purchases (Mean, 1-5 Scale)



(Scale = 1 to 5: 1 is “Distrust Very Much”; 5 is “Trust Very Much”)

Source: Cisco IBSG, 2008

Consumers expect highly customized offers and the ability to react immediately to those offers via the device of their choice (mobile, set-top, desktop). Consumers can be found and reached in more ways than ever, including location-based services, set-top boxes, smartphones, dual-mode devices, digital media, and widgets. Mobile Internet penetration is expected to increase to more than 40 percent in 2010.<sup>8</sup> Increasingly, consumers will demand “stateful” interactions as they move from device-to-device.

## The Opportunity

Since the introduction of the Internet, online commerce has experienced three waves of evolution. In the *first wave*, retailers replicated or augmented offline business models with online storefronts. Although security concerns were high, traditional payment mechanisms dominated during this wave. In the *second wave*, new business models that exploited the unique attributes of the Internet begin to emerge. Amazon, eBay, Google, and others introduced us to long-tail effects, click-stream analysis, on-

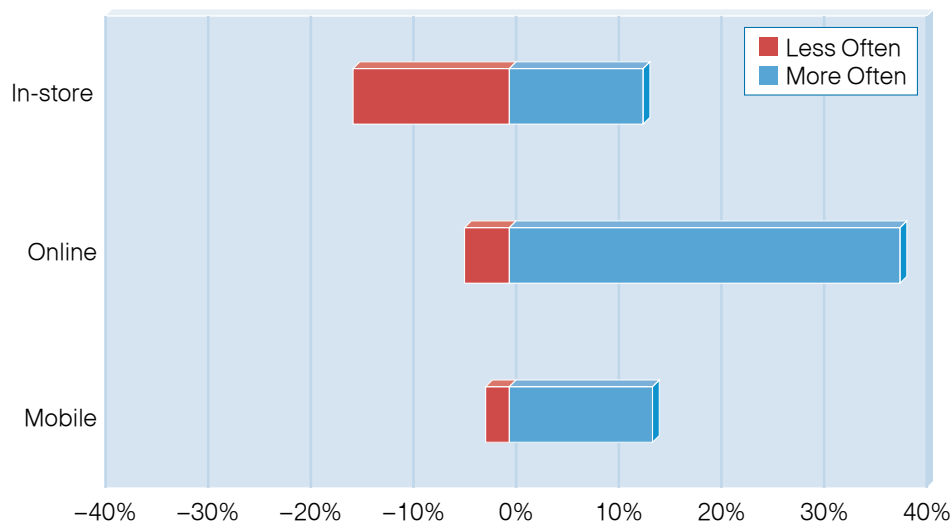
8. “U.S. Mobile Payments Market,” Frost and Sullivan, 2007.

demand support/advice, real-time recommendations, and hyper-targeted advertising. Consumers clearly value the types of propositions enabled by the second wave of Internet commerce.

Of those who shop in a physical store several times a week, 47 percent expect to shop online more frequently over the next two years, while only 16 percent expect to shop in physical stores more often (see Figure 2). Fifty-two percent of those earning personal income greater than US\$125,000 per year expect to shop online more often, while only 18 percent expect to shop in physical stores more frequently. Consumer shopping preferences are rapidly moving toward online commerce (see Figure 2).

**Figure 2.** Expected Change in Shopping Frequency over the Next Two Years

Source: Cisco IBSG, 2008



Alternate payment providers, such as PayPal, have grown dramatically during this wave. Thirty-five percent of all respondents cite “frequent” or “very frequent” use of alternate payment providers in online payments; the delta between those who expect to use given payment mechanisms for online shopping more often versus less often is highest for alternate payment mechanisms over the next two years (credit card is net 4 percent more, debit card is 7 percent, and alternate payments is 19 percent). (See Figure 3.)

While Internet merchant volume is growing, physical merchants still make up more than 90 percent of the volume. In the *third wave*, which is just beginning, we see physical-commerce organizations starting to explore business models and value propositions introduced in virtual commerce. We’ve come full circle; this is “connected commerce” in the physical world, enabled by connected consumers and their portable, networked devices, and by merchants with Internet-based point-of-sale (IP-POS) systems or

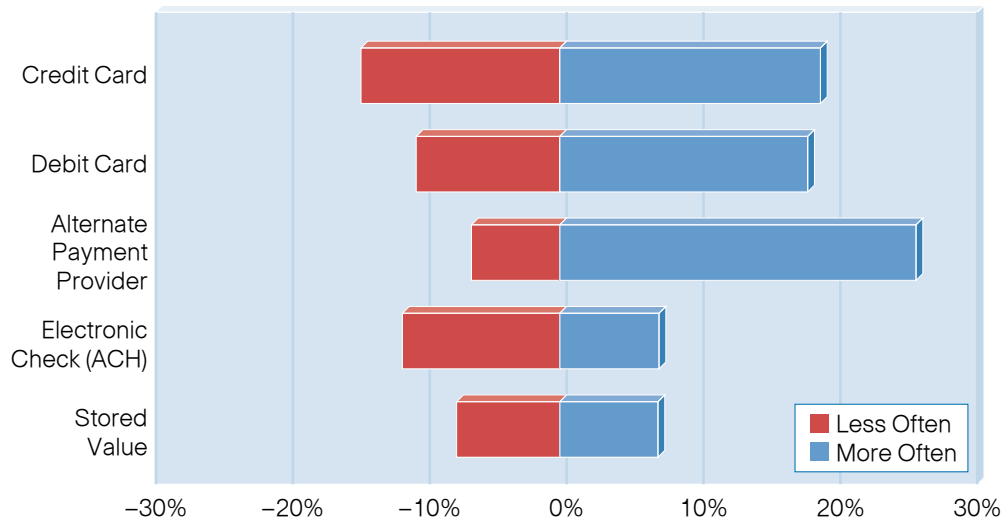
advanced routers that sit just behind the POS system.

Consumers exhibit specific frustrations related to the physical store shopping experience that can be addressed by connected commerce:

- “Checkout process takes too long”—cited by 50 percent of respondents
- “Items not in stock”—48 percent
- “Unable to find the items I want”—46 percent
- “Do not always have applicable coupons or offers with me”—22 percent
- “It’s hard or time-consuming to keep track of my receipts”—20 percent

**Figure 3.** Expected Change in Payment Mechanism Use for Online Purchases over the Next Two Years

Source: Cisco IBSG, 2008



Banks are in a unique position to provide “connected” propositions in the physical world. Given established relationships with both consumers and merchants, banks can provide the identity and data trail as consumers move from store to store.

The network is the linkage between these two worlds (physical and virtual). New technologies supported by intelligent networks and edge applications afford advanced functions and security at point of sale. The intelligent network brings new visibility to commerce events, and is an important development in the evolution of physical commerce because it allows for real-time monitoring and filtering, storage at the node, personalization, and multidevice bridging.

A few key, differentiating capabilities enable these new propositions:

- Mobility, location-based services, and RFID
- IP-POS terminals
- Virtual (e.g., web, mobile) and physical profile linkage
- Seamless channel connectivity
- Expertise virtualization (remote expert technologies)
- Rich media delivery

Banks need to evaluate their long-term competitive position in this changing landscape and move ahead of the threat and opportunities.

## Solutions

Banks have several options to remain competitive or extend their position:

- 1. Faster, cheaper, better:** Offer superior payment products with greater transparency, security, speed, and flexibility. In our survey, 50 percent of respondents indicate “checkout process takes too long” as one of their biggest inconveniences when paying for goods. Twenty percent cited security concerns at checkout. In our research, only cash scored low on security concerns. Two-thirds of current mobile banking users expressed interest in “swiping” a mobile chip in the device at point of sale. Nearly 60 percent of respondents who have set up “one-click” online showed strong interest in “one-click” checkout via a terminal in physical stores.
- 2. “Rich-loop” alternative:** Bankers are now familiar with the threat of a closed-loop payment model (PayPal-like) that allows users to make and receive payments without intermediation, bypassing payments networks and processors, and reducing fees for merchants and consumers. In our research, 87 percent of respondents who use mobile alternate payment providers (such as PayPal and Obopay) indicated strong interest in using mobile SMS or a similar method to initiate payments in physical stores. While the industry often discusses the opportunity for banks that have strong issuing and acquiring share to build a closed-loop system, another alternative is one where banks use traditional payment networks to process payments and supplement those with recommendations, offers, and payment options generated by combining POS, inventory, advertising, and client spend information. These banks could use such a value proposition to fend off the risk from players like RevolutionCard and PayPal.
- 3. Spend management:** Offer transaction “tagging” at POS, using the financial and nonfinancial information to help consumers make sense of their spending patterns, and providing guidance on “normal” ranges drawn from aggregate users fitting certain segmentation characteristics (similar to the “norming” data provided by TurboTax). Thirty percent of survey respondents cited either receipt management or spend tracking as one of their biggest concerns post-checkout. Fifty-four percent of Gen Y respondents (ages 18 to 29) would be interested in a service that automatically disaggregates purchases into item-level (SKU-level) detail and categorizes spending for budget purposes.



- 4. Loyalty program outsourcing:** Manage loyalty programs for and across acquired merchants to lower the cost of running these programs and improve ease of use and benefit accumulation for consumers. Consumers are overloaded with payment and loyalty cards. Based upon survey data, we estimate consumers carry an average of 6.4 cards with them at all times, and leave another 2.2 at home. More than 24 percent of survey respondents carry at least two store-based loyalty cards with them at all times, and at least 32 percent have multiple store-based loyalty cards that they may leave at home. Sixty-five percent of respondents that carry four or more loyalty cards stated they would be “likely or very likely” to use a service that consolidated their loyalty cards if offered by their payment provider.
- 5. Analytics, replacing or augmenting today’s couponing model:** Twenty-two percent of respondents cited not having applicable coupons with them as one of the biggest inconveniences at checkout. Sixty-eight percent of current mobile banking users would be interested in a service that delivers personalized offers to a mobile device while shopping at retailers. An overwhelming 76 percent of all respondents (and 81 percent of baby boomers and seniors aged 65+) indicated a high likelihood of making purchases based upon discounts that are automatically applied at checkout.
- 6. Merchant ecosystem:** Build a subscriber-referral model for merchants to bid for customer attention across other merchants. Seventy-two percent of current mobile banking users would be “likely” or “very likely” to use a service in which their payment provider alerts them to special offers from nearby merchants at checkout.
- 7. Payment broker:** Provide “LendingTree”-type intermediation, customized payment terms, or offer “matching” at consumer point of purchase. Seventy-three percent of contactless card users and 69 percent of current mobile banking users would like to receive competing offers from their primary payment provider if offered special terms at a merchant (for example, 90-day same as cash).

## Benefits

Banks can capture value from new propositions through increased merchant retention and acquisition, greater share of spend and resulting fees at POS, new revenue streams, lower transaction costs, and customer acquisition. Each model above shows very different economics, which become more compelling when employed in combination. Assuming a conservative impact of 2 percent net growth on existing payment revenue, the total estimated value for the average “top 20” U.S. bank could exceed \$112 million per year by 2015.<sup>9</sup>

9. Cisco IBSG analysis performed by reviewing financial reports and FDIC data for the top 20 U.S. banks, 2008.

## Real-world Examples

Physical retailers are already moving toward online payment mechanisms. For example, customers of Moosejaw, a Michigan-based outdoor-and-adventure chain, can now use PayPal to purchase goods in Moosejaw's seven physical store locations. Once an order is rung up, the cashier provides the customer with the amount of the sale and the email address of the store. If customers can access the Internet through their mobile phones, they can log in to their PayPal Mobile account and email the funds to the store; otherwise, they can initiate the payment through a text message, says Jeffrey Wolfe, Moosejaw's chief operating officer. The retailer has ordered signs that will be placed at checkout counters letting customers know they can pay with PayPal, and offering them double rewards points in the Moosejaw loyalty program if they use PayPal.

In South Korea, SK Telecom and McDonald's are partnering on an RFID ordering and payment system in Seoul. Customers download SK's Touch Order application, which includes integrated payment. McDonald's tables have an RFID reader and RF-tagged menu. Customers plug the reader into their mobile phones and point at the items they want to order, which are transmitted directly to the kitchen. An SMS message is sent when the order is ready to be picked up at the counter, and payment is automatically charged through the mobile phone.

Amazon's pioneering TextBuyIt / Amazon Payments service allows customers to enter a product name or ISBN into mobile devices while shopping at a physical merchant, and then check on Amazon's price and availability via SMS. If Amazon offers the product, the page with current price and description will appear on the mobile browser. Customers can then buy with a one-step SMS transaction. A similar service from Amazon Japan allows customers simply to scan a bar code with their phones.

Bank of America has released "My Offers Center," which provides online banking customers special offers from retailers such as Target.com and BestBuy.com through the Bank of America Mall. Offers are personalized and promise discounts of 5 to 20 percent. But what if the bank delivered offers to consumers wherever they're shopping, instead of through the Bank of America Mall portal? What if the offers were stored and automatically retrieved at checkout? How much would this increase the likelihood that consumers would pull that card from their wallet at point of sale?

## In the Final Analysis

Retail payments is ripe for innovation, and banks need to look for innovation opportunities in product, distribution, service, process, and business models. Cisco IBSG research demonstrates that there is a ready market of connected consumers that will value and respond to propositions delivering better-integrated payments and shopping. New technologies around intelligent networks, edge applications, and digital media distribution afford advanced functionality and security at point of sale.

Clearly, consumers are ready for these innovations in connected commerce, and eager to adopt more convenient methods of payment. The question remains: when will banks take up the challenge and deploy these technologies to gain competitive advantage and retain their leadership position in the payments industry?

Finally, evolving consumer expectations of conducting commerce are as relevant when consumers are shopping for financial services products as they are to retail shopping. While this article discusses the opportunity for banks to participate in the transformation of the retail industry, the same lessons apply within the banks' own retail locations.

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### More Information

The Cisco Internet Business Solutions Group (IBSG), the global strategic consulting arm of Cisco, helps CXOs and public sector leaders transform their organizations—first by designing innovative business processes, and then by integrating advanced technologies into visionary roadmaps that address key CXO concerns.

For further information about IBSG, visit <http://www.cisco.com/go/ibsg>

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