The road to customer intimacy

Leveraging investments in customer insight to maximize returns
Introduction

Consumer electronics manufacturers are experiencing the painful reality of highly disruptive trends in the marketplace. There's pressure from shrinking margins, rapidly changing customer expectations and competition from non-traditional players. Companies need to deliver more innovative products and services, more quickly than ever. Traditional approaches to product and service development are no longer sufficient; it is clear that these companies have to find a smarter way to approach the marketplace.

There's a largely untapped resource available that can help electronics companies do exactly that: information. We are awash in data as never before. Billions of people, connected by nearly a trillion devices, are talking—but are you listening? If not, you should.

A recent study\(^1\) showed that 94 percent of global electronics industry CEOs identify customer intimacy as the number one priority over the next five years. Innovation for its own sake is not enough. The real key to success is to get past the idea of simply manufacturing devices and consider how products enhance peoples’ lives. Manufacturers should seek to get close to customers and create the experiences that they want—or even new ones that they never conceived of.

Greater customer intimacy means a fundamental shift in the traditional manufacturer-consumer relationship. It becomes one of partnership—a mutually beneficial feedback loop in which your business leverages customer insight to innovate, and your customers become active participants instead of passive consumers. Both parties gain by increasing intimacy.

The company wins by being better able to create compelling, differentiating customer experiences, and consumers win by getting even more than they were asking for.

Customers participate in this partnership in a myriad of ways, both directly and indirectly. With appropriate guidelines in place to protect privacy, behaviors as well as usage patterns and preferences can be monitored and real-time feedback gathered through direct interaction via social media, customer service contacts, short message service (SMS), and mobile e-mail. The company can, in turn, become a greater presence in the lives of customers, providing better service, more appealing products and personalized content.

Social media outlets are becoming a popular (and free) way to form relationships with customers and gather information. Sony USA, for example, has over half a million Facebook fans\(^2\)—not inconsiderable, given that Facebook was originally intended for personal interaction, not corporate marketing. The Sony page encourages involvement through a public “Make Believe” gallery, which lets users upload photos and share them with the world. In the process Sony gains access to useful data—names, emails, phone numbers and dates of birth.

Leveraging the flood of data being created by devices and people is one of the best ways to develop customer intimacy. The data being carried through the Internet is approaching 500 billion gigabytes. That's the equivalent of a stack of books stretching from the Earth, not to the Moon, but to Pluto—ten times\(^1\)! The raw data being produced by the trillion connected devices dwarfs even this mountain of information.
The insight resulting from analysis of data can be used to redefine product development and the customer experience. But how do you get there? Is the investment required to achieve the vision of customer intimacy worthwhile? And perhaps most importantly, what are the potential returns? To answer these questions, electronics companies need to both define a clear roadmap and quantify the benefits they can produce.

Investing in an array of capabilities that create deeper insight and foster smarter product and service innovation can pay off in a significant way. Companies that do a better job of capturing and analyzing data, and using it to revamp development and enhance customer experiences, stand to gain a very real competitive and economic advantage.

What's the overall potential?

Financial modeling[^1] of an illustrative US$20 billion home entertainment device manufacturer shows that, over four years and with phased implementation of a full range of capabilities, investment in smarter product and service innovation could potentially yield:

- **Total investment:** US$78 million
- **Total benefits:** US$353 million
- **Four-year ROI:** 352%
- **Payback:** 16 months
- **Net present value savings:** US$246 million in four years

How can you translate customer intimacy into value?

The idea of creating experiences that matter, rather than simply manufacturing devices, lies at the heart of competitiveness in today's consumer electronics marketplace. It's actually not a new concept. Decades ago companies like Kodak and Polaroid understood that they were really in the business of creating memories, not just selling cameras and film. However, they were unable to truly deliver on that promise of an experience. Once past the marketing, it was still all—and only—about the product.

Today, this focus on the customer experience has grown to the point where it practically overshadows the products themselves. They have become the doorway to a transformed lifestyle, one that's based on personalized content, rich interactions and new ways to make life more convenient and more enjoyable. It's about what the device allows people to experience, not what the device itself does.

That context is essential when considering new ways to innovate and generate revenue. To drive smarter product and service innovation, consumer electronics companies must know as much as possible about how products and services are used and how customers integrate them into their lives. A 360-degree view of the customer on how they use a particular device as well as insight into their entire lifestyle is needed. For example, what other devices do they use? What are they saying about your products? How do they use technology to interact with friends, family and colleagues? Looking beyond the offerings of a single company can paint a more complete picture of who customers truly are.
This is not a one-way street. Products and users no longer exist in isolation. Building new links to customers and leveraging highly interconnected technology allows companies to shape the interaction with their products and services, and in the process better understand what customers want. Or, with insight into how a game-changing new offering might impact the marketplace, the company can even get ahead of customers and redefine how they view the world in ways they never would have imagined.

Consider the evolution of television. For most of its history, viewers have had to, in effect, “make an appointment” with their TV. From broadcast, to time-shifting with a VCR, to DVRs, it's always been about actively seeking out and retrieving content, and watching it in a particular room on a particular device. Now, a vast selection of media is becoming available any time, anywhere, on any device. Programs of interest are being offered up to consumers on their terms—not according to a fixed roster or schedule, or through a single channel. This was inconceivable not that long ago.

This kind of experience transformation is all around us, in many forms. The rise of inexpensive song downloads, driven by new network-centric business models and affordable mp3 players, put every song we ever heard in our pocket and fundamentally changed how we think about entertainment. It even altered the face of the music industry itself, with more and more individuals self-publishing their work.

Two aspects of these developments bear special attention. One is that they changed lives in ways that consumers did not anticipate. Who would have thought that the television would become one media device among many, rather than the centerpiece of our entertainment lives? And few could have predicted that young, savvy consumers would so fully embrace the mobile lifestyle that some are choosing to cut the cord entirely and use their smart phones and laptops exclusively. Yet, companies with a deep understanding of current attitudes and future needs have been able to get ahead of the innovation curve and make an intuitive and visionary leap that redefines the consumer experience.

The second important aspect of innovations like these is that they represent entirely new business models and new revenue streams focused on what customers do, rather than the device they buy. Under this kind of business model, the device is a conduit: from the point of view of the customer, its primary value lies in its ability to access “must have” experiences. This can be seen in any advertisement for a connected device; no longer the star, the device is playing a supporting role.

For manufacturers, the result is new opportunities arising from collaboration with industry partners. New entrants in the smart phone arena, for example, are finally gaining traction, not because the device itself is technically superior, but because the number of applications available for these platforms has reached the tipping point. The ecosystem partners—application developers and telecommunications service providers in this case—gain from sales of content, subscriptions and bandwidth, while the manufacturer gains by making the device more appealing. For the manufacturer, it is still about the device—but services hold great potential to drive hardware sales. For this reason, it is in the manufacturer’s interest to facilitate these partnerships.

Today’s consumer electronics companies need to become businesses that create, orchestrate and manage customer experiences. To do that requires investment in a robust information, analysis and delivery platform. The means to tap into everything from demographics and usage history to point-of-event feedback is essential to creating insight. Smarter product and service development requires realization of that insight to drive innovation. And finally, transforming the customer experience requires a partnership strategy with manufacturers and service providers to create, personalize and deliver new services in real time—to stay in touch and put closer customer relationships to work.
The information and projections contained in this paper are based on research conducted by the IBM Center for Applied Insights, in which consumer electronics industry leaders around the world were engaged.

Case studies of nine out of the top 15 consumer electronics manufacturers were conducted to validate potential benefits, and 12 key company executives were personally interviewed. Each interview was designed to elicit clear, unbiased views of key imperatives facing the industry.

The team supplemented this primary research with data from more than 100 academic and industry studies and sources, combining all the input with their own experiences and perspectives.

The model for smarter product and service innovation that emerged from this research, along with the hypothetical value projections, is designed to help companies gauge their potential returns from their own, similar investments. The model can be scaled for different industry segments and corporate maturity profiles to produce individually tailored results directly applicable to your business.
The sources of tangible results

A critical business consideration is the source of return on investment. Innovation by itself does not produce financial gain, nor does redefining customer relationships. The kind of capabilities being discussed here represent a mosaic of investments, each one of which must produce results if it is to make economic sense. To build the business case, quantification of those results is necessary.

Research has shown that for the consumer electronics industry, there are several key sources of return on investment. These span a wide range, covering increased revenue, reduced cost and greater efficiencies.

Profit from increased revenue can be realized through new opportunities for cross- and upselling, as well as through higher demand for devices and service offerings. In today’s marketplace this is a synergistic relationship. For example, the sales of both e-readers and content are boosted when an appealing device is coupled with a robust online shopping service that offers a wide selection of e-books. The key is to “get it right” by correctly analyzing and interpreting customer needs and desires; many such devices have failed because the combination of product and service – the overall experience – was not sufficiently compelling.

Warranty and service cost reductions are found by building better products that are more user-friendly and gaining a better understanding of service needs. Consumers have become accustomed to – and expect – devices and services so simple and intuitive to use that instruction manuals are not needed. Likewise, they expect prompt, expert, and seamless support that does not complicate their lives. Here again, insight, dialogue and feedback lie at the root of product and service innovation that enables these savings. There are also opportunities to reduce spending through technical means; leveraging new delivery methods such as the cloud, for example, can reduce the cost of service delivery.

Efficiencies in research and development, as well as marketing, are also sources of considerable financial return. Product lifecycles are now dramatically compressed, thanks in part to a deeper understanding of the marketplace through customer insights, and an effective sharing and integration of information across the product development product chain. Closer contact with customers and the ability to deliver personalized services and highly targeted promotions also can dramatically increase the focus and effectiveness of marketing.

As shown in Figure 1, the greatest contributor to the financial benefit is the increase in incremental revenue. It is important to understand that there is no single investment that can be made to drive that level of profit: it takes a comprehensive approach that produces a broad range of capabilities.
Steps on the journey—and their financial benefit

We’ve described some of the ways in which product and service innovation can make a qualitative transformation in your business. We’ve also outlined the possible sources of the financial gains that justify investment in these new capabilities. But how do you connect the two? What investments do you need to make to help drive incremental revenue?

A comprehensive capabilities roadmap, shown in Figure 2, shows the way forward. Each step builds on the one before to improve both cumulative cash flow and innovation capability.

Your journey towards smarter product and service innovation may already be under way. Most companies have invested in some key capabilities, such as customer information management and/or product lifecycle management, with the aim of enhancing the customer experience. However, it is important to recognize the holistic and interdependent nature of the overall effort. Investing in individual capabilities can produce good returns, but an end-to-end approach offers synergy that can yield the maximum benefit. Companies that have made narrowly focused investments may be highly mature in specific areas, while still leaving a considerable amount of financial benefit unrealized.

For example, the value of customer data can be greatly enhanced through investments in analytics that drive deeper insight. Likewise, tying that insight to product lifecycle management can shorten time-to-market and produce superior offerings that are more in tune with customer needs and desires.

These capabilities are additive not only in the financial sense, but also in their contribution to the company’s overall readiness to deliver the ultimate experience. The farther along the path the company is, the greater its ability to leverage information. Capturing data alone is exploratory in nature; it gives the organization an understanding of what’s happening, but has limited influence on the outcomes. Once the company is able to optimize the insights to further enhance the experience, it can lead the marketplace rather than react to it.

As noted in Figure 1, an illustrative US$20 billion home entertainment device manufacturer might expect to see considerable annual financial benefits from investing in smarter product and service innovation. But where do the financial benefits come from? What kind of returns can be expected from investing in each successive step of the capabilities roadmap? These are key questions that must be answered in order to make intelligent investment decisions.
Capture data
This first step is to gather as much useful information as possible. This involves a broad range of capabilities, from direct device monitoring to mining social media and tracking customer interactions with service personnel. Every available source of data should be tapped. Better data can help reveal how customers relate to products, services and the company itself, along with new market opportunities.

It is important to standardize, synchronize and share information across the organization and at all touch points in a consistent way, in order to create a single version of the truth. This drives greater transparency and internal efficiency, reducing “churn” and manual intervention.

Amazon.com is a great example of why robust data collection is important. Its intelligent, intuitive recommendation engine, informed by extensive public user feedback, leverages buying and viewing histories to dramatically increase sales. The result, according to CNet News, has been an explosion of demand for e-books. By late October 2010, sales of the third-generation Kindle had surpassed 2009 holiday levels, and during the preceding 30 days, customers purchased more Kindle books than print books—hardcover and paperback combined.

What’s the quantifiable value of capturing data?

US$42 million
26% of the total US$160 million annual benefit.

Source of gain:
- Profit from incremental revenue 39%
- Product warranty cost reduction 7%
- Marketing cost reduction 54%

What’s the quantifiable value of optimizing insight?

US$49 million
31% of the total US$160 million annual benefit.

Source of gain:
- Profit from incremental revenue 68%
- Product warranty cost reduction 20%
- Marketing cost reduction 12%

Optimize insights
Analyzing your data to gain intelligence is the next step. This can help you spot hidden trends, predict outcomes and lend certainty to decision making. It is a critical capability, because it creates the basis for action – something that raw data alone cannot provide.

Analytics can help reveal the most intelligent and profitable course of action, based on answers hidden within your data. By developing a dynamic, real-time capability, you can try to achieve greater responsiveness to changing demands and conditions – for example, by participating in a social media discussion that naturally lends itself to promote products.

An important consideration when developing this capability is to integrate the resulting insight into your strategy and business processes. With clear governance, structure and automation, taking action on insights becomes much more effective and certain. There is little opportunity for a valuable insight to fall by the wayside.

An example of how the integration of insight into business processes can produce real gains is found in the experience of a leading telecommunications company. By monitoring social media, call records and other subscriber data in real time, then analyzing it, the company was able to predict churn and move proactively to increase customer retention. It engaged in targeted marketing that also boosted cross-selling of additional services. The result: a 10 percent ROI on the analytics solution.
What’s the quantifiable value of revamping development?

US$30 million
19% of the total US$160 million annual benefit.

Source of gain:
■ Profit from incremental revenue
■ Product warranty cost reduction
■ R&D cost reduction

What’s the quantifiable value of enhancing the customer experience?

US$39 million
24% of the total US$160 million annual benefit.

Source of gain:
■ Profit from incremental revenue
■ Product warranty and service cost reduction
(Reduction of 16% in product warranty and 39% in service)

Revamp development

Now that you have captured and optimized data to create insight, the next step is to make use of all you’ve learned to transform how products and services are created and managed. The ability to achieve fast time-to-market with intuitive and—more importantly—relevant offerings is a major factor in marketplace credibility.

Investments in revamping development focus on making the company more efficient by injecting automation and integration into product lifecycle management processes. Enhanced collaboration is also a key outcome of these investments, helping team members across different engineering disciplines become more effective by leveraging and sharing customer insight and data throughout the development chain.

The experience of global communications device manufacturer Peltor illustrates the value of better development. Not only was speed-to-market increased, but costs were dramatically reduced. By systematically refining its product lifecycle management and deploying more effective collaboration tools, the high-tech company was able to achieve dramatic results. It saw a 70 percent increase in product introductions over a given time period, with an 80 percent decrease in production errors, a 40 percent reduction in prototyping costs and a cut in new part development costs of one-third.

Enhance the experience

Creating the ability to extend the usefulness and appeal of products through the introduction of new value-added services is a key differentiator in today’s marketplace. It is what elevates your company above the ranks of device manufacturers, allowing you to open up completely new revenue streams and enter markets closed to those who limit their offerings to device sales.

Today’s consumers respond to direct, continuous and high-touch connections to trusted brands. Offering real-time, pervasive service execution and robust service lifecycle, device and subscriber management is a critical driver of brand preference and customer loyalty.

Adding new services does more than boost device sales. It provides opportunities to interact, partner with, and gather information from customers and business partners. This closes the loop—creating a new way to gather data that drives insight, development and further enhancement of the customer experience.

Net TV from Philips Electronics demonstrates the value of such partnerships. Equipped with preconfigured connectivity out of the box, it provides access to one of the widest selections of entertainment and content in Europe the moment it is turned on? Thanks to its ability to take customers beyond a passive viewing experience, Philips can sell more televisions while also profiting from advertising, placement, sponsorship and revenue sharing.
Beyond the numbers: Large-scale business benefits

The benefits of investment in smarter product and service innovation are both quantitative and qualitative. The roadmap described above lays out the quantitative benefits, but there are broader business implications. Your company could benefit strategically and operationally, as well as build a stronger brand. Investment in the capabilities we’ve outlined here can even be of importance to society.

From a strategic standpoint, these benefits can go beyond increased responsiveness to customer needs and wants. You can capitalize on digital convergence by placing your products at the heart of this trend. Becoming a more effective organization—one that is seen as an innovator and leader, with a powerful presence in the marketplace—carries with it important brand benefits. Customers look to such companies to help make their lives more convenient and the right moves can generate intense customer loyalty. You can also gain increased leverage with business partners and suppliers by demonstrating market leadership.

Operationally, you can become much more efficient and effective by integrating information and insights with business processes, development and delivery. Information that is more readily available and consistent throughout your organization can help speed development, reduce costs and uncover new opportunities.

Perhaps most important of all is the potential to impact the world beyond your company in a positive way. We live in an exciting time—recent history has shown that electronics companies that lead rather than follow, by providing simpler, more intuitive products and transformative experiences, can literally change the way we live our lives.

Can we get you started?

Your journey to smarter product and service innovation will have its own distinct twists and turns. The same research that lies behind this paper can be applied to your company, showing you the possible quantifiable benefits of transformation and helping you chart a course that will get you there.

If you would like to continue the conversation about how and where you can start, we invite you to contact one of the authors.
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Capitalizing on Complexity: Insights from the Global Chief Executive Officer Study, IBM, May 2010

An ad hoc view of the Sony USA Facebook page at http://www.facebook.com/home.php#!/sony on March 17, 2011 showed 549,057 “likes.”

Internet data heads for 500bn gigabytes, guardian.co.uk, Monday 18 May 2009; http://www.guardian.co.uk/business/2009/may/18/digital-content-expansion

The model used for the financial results cited in this paper is highly dynamic and customizable, and makes a number of assumptions about the sample company including overall maturity and investments made. The modeling methodology is based on extensive primary and secondary research including interviews and data from more than 100 industry and academic sources. Individual results for other company profiles will vary and the model can be tailored to accurately reflect individual circumstances.

CNet News, October 25, 2010

Results based on modeling of a representative US$20 billion home entertainment device manufacturer.


Peltor: Launching 70% more products with CATIA V5 and ENOVIA SmarTeam, Dassault Systemes case study, http://a1.media.3ds.com/fileadmin/COMPANY/CUSTOMER-STORIES/PDF/Peltor_DDRbrochure_Eng.pdf

Philips, Sharp and Loewe aim to create common platform for connected TV’s, Royal Philips Electronics press release, September 2, 2010

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