

Customer Experience Management in the new era of mobility

*The business case for understanding and optimizing
your mobile customer experience today*



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Executive summary

By the end of 2010, it was clear that the mobile channel had arrived. Consumers had started using mobile websites and mobile apps to interact and transact with e-businesses in a variety of industries, and were doing so at an unprecedented rate. They were using mobile capabilities as a criterion for choosing with whom they wanted to do business. But at the same time, mobile users have consistently encountered system, technical, and usability issues that caused them to struggle and prevented them from meeting their goals. According to a 2011 Harris Interactive® survey of 2,469 US adults, commissioned by Tealeaf, (now IBM), 84 percent of online adults reported that they experienced problems when conducting transactions on mobile devices.¹

Many e-businesses have looked at the rapid user adoption of the mobile channel, along with the compelling business value it offers, and decided that they have to roll-out mobile functionality as quickly as possible – sometimes at the expense

of following established business processes. But the data tells a different story – that a “Just Do It” approach to the mobile channel could actually do irreparable brand damage. Why?

- **Users have very little patience for poor mobile customer experiences.** In the Harris Interactive survey, 80 percent of adults who conducted a mobile transaction in the past year said that they expect the experience to be better than or equal to in-store, and 85 percent expect the experience to be better than or equal to the experience offered on the desktop web.
- **The effects of poor mobile experiences extend across all channels.** 63 percent of users surveyed would be less likely to buy from the same company via other purchase channels (online, in-store) if they encountered a mobile transaction problem.
- **The effects of poor mobile experiences extend to a record number of potential customers.** In fact, 78 percent of users who encounter problems completing mobile transactions share those experiences with others.

Leading e-businesses have taken this message to heart, and they have come to the same conclusion as they did regarding the desktop web: that they need to take a systematic, disciplined approach to understanding how customers interact with a business and removing the obstacles that cause them to struggle. In short, they need mobile Customer Experience Management (CEM).

IBM® Tealeaf® CX Mobile, an extension of IBM® Tealeaf® CX, brings the power of IBM Tealeaf solutions to the mobile channel – so that e-businesses can get the visibility, insight and answers they need to make better decisions about the mobile customer experience. Tealeaf CX Mobile offers proactive awareness into the traditional sources of customer struggle,

such as undetected technical issues, usability problems, or unanticipated user behavior. It also addresses factors that are unique to the mobile channel, including:

- Size constraints inherent to the mobile form factor.
- New technologies and interaction models available in native and hybrid mobile apps.
- Extended development and distribution cycles for native apps such as iOS and Android delivered to customers through vendor “app stores”.
- Immature business models that make it difficult for e-businesses to evaluate the success of their initiatives.

Tealeaf CX Mobile makes it possible for e-businesses to discover what is working in the mobile channel, what is not and why. As a result, you can:

- Gain visibility by capturing user information across mobile websites including both network and client-side interactions.
- Accelerate time-to-market for delivering winning mobile services.
- Make better investment decisions across your mobile channels, including the mobile web, mobile apps, tablet apps, hybrid apps and HTML5-enabled sites.
- Raise conversion/acquisition rates and revenues by detecting obstacles and issues that cause users to struggle.

These capabilities can bring significant benefits in the form of higher revenues, lower costs and higher customer satisfaction.

Mobile is the next customer experience frontier

2012 is truly an inflection point for mobile devices. In fact, the number of US smartphone subscribers surpassed the 100-million mark in January for the first time.² Just two years ago, the majority of mobile apps were for consumer entertainment, and mobile shopping was a blip on the radar. However, in February 2011, a Harris Interactive survey showed that 18 percent of online adults in the US had used a mobile shopping application in the last three months.³

The mobile customer experience is critical to business success

Few would argue that mobility introduces new opportunities to provide unique value to customers – distinct from the value an organization provides on the fixed Internet. Simply having a mobile channel is no longer the competitive differentiator it once was. It is rapidly becoming a channel where consumers expect to transact with their preferred companies across a number of industries.

An example of mobility’s evolving role can be found in the retail industry, where leading companies are already piloting projects that leverage mobile apps to differentiate the in-store experience – from shopping lists to location-specific product information to in-store coupons. According to RSR Research, 12 percent of retailers in a recent survey now let users scan barcodes with their smartphones to check prices or availability, and another 25 percent have already budgeted for this functionality.⁴ In fact, Nielsen also predicts that by 2015, smartphones will be the primary enabler of consumer shopping engagements.⁵

The “mobility effect” is just as important in the financial services arena. In a December 2010 study of 1,800 consumers conducted by Mercatus LLC and sponsored by Visa, Inc., mobile capabilities had more impact on a consumer’s decision to select a bank than availability of online banking, access to ATMs, or nearby branches.⁶

Consumers have unprecedented expectations about the mobile experience

Harris Interactive surveys on behalf of Tealeaf (now IBM) over the past five years have consistently shown that customers have very little patience for poor online experiences – and the most recent data shows that the bar has been set even higher in the mobile channel. In the 2011 Harris Interactive mobile transactions survey, 80 percent of adults who conducted a mobile transaction in the past year said that they expect the experience to be better than or equal to in-store, and 85 percent expect the experience to be better than or equal to the experienced offered on the desktop web.⁷

Great expectations

- 47 percent of users expect the mobile experience to be better than the experience in-store.
- 80 percent of users expect the experience to be better than or equal to in-store.
- 85 percent percent expect the experience to be better than or equal to online using a laptop or desktop computer.

Percentages taken from the Harris Interactive Survey of Mobile Transactions, February 2011⁸

The impact of the mobile customer experience crosses channels and goes social

Given that the mobile channel is still quite new, consumer expectations might be unreasonably high. But, in fact, the survey found that when expectations are not met, mobile users are very likely to take their business elsewhere:

- 63 percent of users surveyed would be less likely to buy from the same company via other purchase channels (online, in-store) if they encountered a mobile transaction problem.⁹

Furthermore, today’s mobile users do not keep their experiences to themselves. According to the Harris Interactive survey, nearly four in five adults (78 percent) who encounter problems completing mobile transactions share those experiences with others.¹⁰ With their features for posting and sharing reviews, app stores encourage this type of behavior. This has huge implications for brand equity – and for the trade-off that e-business professionals must make between speed and optimization in the mobile channel. This time, mistakes have an even greater impact on the business and brand than they did fifteen years ago in the early days of transactional websites.

How do users share poor experiences in the mobile channel?

- 40 percent of users share via a social media channel (Facebook, Twitter, blogs, or others).
- 60 percent share via in-person conversations with friends and families.

Percentages taken from the Harris Interactive Survey of Mobile Transactions, February 2011¹¹

The mobile gold rush is fraught with risks

So what are e-businesses doing to deliver a struggle-free experience in their mobile channels, including mobile apps and mobile websites? Regardless of whether they are first launching a mobile channel or expanding their mobile reach with new apps, they are too frequently not doing enough to understand and manage the customer experience.

In light of rapid user adoption and compelling business value, many e-businesses are feeling the pressure to roll-out mobile functionality as quickly as possible. Reminiscent of the 1990s Internet boom, the focus is largely on “just getting it done” – often at the expense of doing things the right way. Many e-businesses had this attitude during the dot com era and subsequently paid the price for their haste when they had to completely rebuild their sites, costing them countless millions of dollars. With the higher adoption velocity and more

sophisticated, social users of the mobile era, a poor mobile user experience carries the risk of far greater brand damage than was ever before possible.

Mobile customer struggle manifests itself in many ways

The facts are clear. According to the Harris Interactive survey, 84 percent of users now report that they experienced problems when conducting online transactions on mobile devices.¹² These respondents cite a range of symptoms of customer struggle, as depicted in Figure 1.

Each of these problems goes well beyond common challenges like carrier connectivity issues and page load speeds. Although they can be easy to ignore when a business is focused on getting functionality live as quickly as possible, they represent critical barriers to customer conversion and satisfaction.

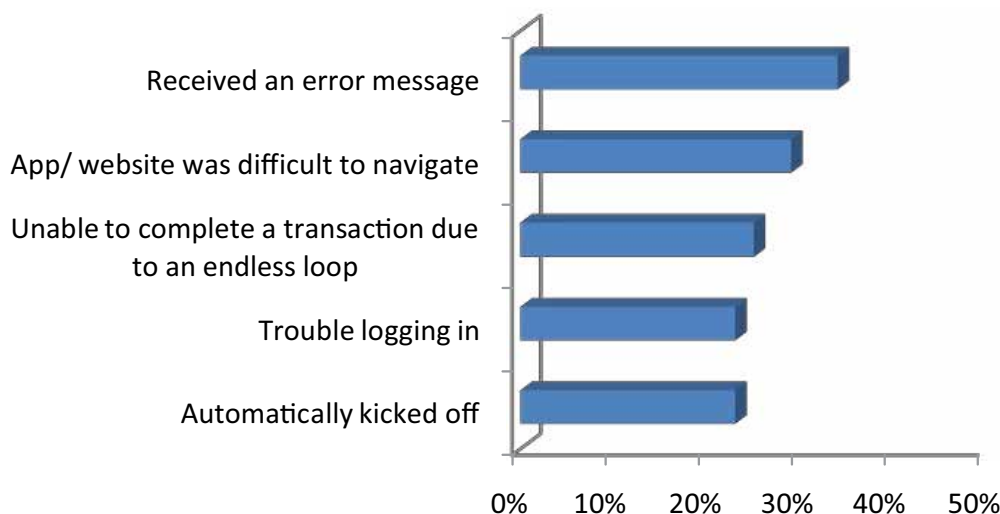


Figure 1: Problems encountered in the mobile channel

Today's mobile channel introduces both old and new sources of customer struggle

The mobile channel presents both well-known and new sources of online customer struggle. Customers still face many of the same problems that they face when using a PC – from undetected technical issues, usability problems, or just from trying to complete processes in ways that developers did not anticipate. Also, today's mobile landscape has a far greater diversity of device classes, operating systems, platforms, environments and browsers. Similar to the early days of the Internet, it is hard to plan and develop for every combination and contingency.

The mobile form factor demands a simple experience

Furthermore, the mobile form factor itself creates a new set of potential customer experience obstacles. On the mobile web, these obstacles manifest themselves as the trade-offs that exist between functionality and usability. Even in the more feature-rich mobile apps, a simple and clean user experience is critical to success.

E-businesses typically manage these trade-offs by offering a subset of the capabilities offered on the desktop web.

Unfortunately, there are few established best practices to help e-businesses determine which capabilities to offer and how to effectively design for usability. For example, “the fold” is in a different place on different smartphones. And does the fold even matter when a user can easily swipe a finger across the screen to reach the bottom of a page? If a mobile site or app compresses workflows into fewer steps, are you leaving out a critical piece of information or forcing a user to move forward in a sequence of steps that does not make sense?

Mobile apps bring in new interaction models

Feature-rich mobile apps may also utilize a variety of innovative, value-added technologies such as “check-ins,” Near Field Communications (NFC), geo-location, image

processing from a phone's camera, integration with social sites such as Facebook or Twitter and location-based advertising. While these features help to engage and deepen customer relationships, they can also cause users to struggle. For example, a feature that requests a user to share personal information early in a process flow may cause that user to abandon his or her transaction or hesitate before proceeding.

The mobile app development lifecycle slows problem identification and resolution

The fact that mobile apps are downloaded – and do not stay within the organization's span of control – makes finding and fixing problems much more complicated. Any change to the app – whether that change is intended to fix a known issue or to detect and diagnose one – must be re-submitted to the various vendors' app stores for approval; and customers must take the step of upgrading their devices.

The mobile channel also creates struggle for e-businesses

Finally, the relative immaturity of the mobile channel has caused e-businesses themselves to struggle when evaluating the success of their initiatives. For example, while it has become easier to identify which mobile devices and browsers customers use to access a mobile site, there are still few explanations as to why customer conversion rates are lower in the mobile channel. For example, one of our customers in the utilities industry sees conversion rates for mobile bill pay that are one-half of its conversion rates for that same process on the desktop web. Another one of our customers, a popular travel portal, reports that mobile conversion is typically about two-thirds of its desktop web conversion rates.

Different customer interaction patterns and device limitations such as smaller screens may account for some of this difference; however, unpredictable site issues and hidden obstacles also play a significant role.

Mobile Customer Experience Management: the foundation for business improvement

When taking into account the rapid growth of mobile usage, new sources of customer struggle, and significant business implications of a poor mobile experience, there is a clear business case for focusing not only on launching but also on optimizing the mobile channel now. Customer experience is just as mission-critical in the mobile channel; and it is even more critical given the cross-channel implications of getting it wrong. But where should an e-business start?

Leading e-businesses are proactively applying the lessons learned from the desktop web – in the form of mobile CEM. CEM is about taking a systematic, disciplined approach to understanding how customers interact with a business and removing the obstacles that cause them to struggle. Mobile CEM extends these disciplines to the mobile channel across the mobile web, native apps and hybrid apps, including companies deploying HTML5.

IBM Tealeaf CEM solutions have helped hundreds of organizations take a more systematic approach to improving online customer experience. Many of the tools and best practices we have developed for the desktop web can be applied equally well to mobile optimization – whether you are launching a new mobile channel or determining how to improve an existing one. Without defined processes or a complete dataset of mobile user experience, e-businesses are forced to fall back on opinion and hunches when making critical decisions about their mobile investments.

Mobile CEM requires both metrics and deeper behavior analysis

As with other customer interaction channels, it is critical that e-businesses establish and monitor a set of Key Performance Indicators (KPIs) that measure the health of the business. However, metrics alone are not sufficient for mobile CEM. Time and again, our customers have found that the customer experience problems that are hardest to understand involve factors that the e-business is not tracking. That is, they are not anticipated. And if these factors are not identified up-front and tagged on the mobile website or in the mobile app, they are difficult to analyze, or even discover, using traditional analytics tools.

Because the mobile channel is new, it is inevitable that customers will use mobile websites and apps in unexpected ways. Furthermore, the unique development and distribution cycle of mobile apps (via app stores) introduces significant delays to any after-the-fact efforts to track or tag new components of user behavior. Therefore, it is critical to have a way to understand key drivers of customer struggle and to perform behavior analysis on an ad hoc basis, without pre-defined tags or beacons.

Successful mobile channels are integrated with other channels

More than other channels, mobile CEM needs to operate in the context of a broader, cross-channel approach to optimizing the customer experience. Why? Because the very nature of mobile devices means that users cross channels more frequently. It is easy for a user to abandon a transaction due to a site error and call customer service directly when he or she already has a smartphone in-hand. Or, a user may already be in the brick-and-mortar store but decide to search for a mobile coupon to get a better deal. According to a recent survey, nine in ten mobile-equipped shoppers have used a device while in-store.¹³ Even within the mobile channel itself, users may interact in multiple ways.

How IBM Tealeaf solutions provide visibility, insight, and answers for the mobile channel

IBM is a recognized leader in online CEM. IBM Tealeaf solutions have enabled hundreds of e-businesses to see their customers' actual online experiences, analyze their motivations, gain insight into why abandonment and other site actions occur, and quantify the revenue impact of website issues. Tealeaf CX Mobile brings the power of IBM Tealeaf solutions to the mobile channel – so that e-businesses can get the visibility, insight and answers they need in order to make better decisions about the mobile customer experience.

An extension of Tealeaf CX, Tealeaf CX Mobile provides coverage across mobile web-enabled devices – as well as for native (iOS and Android), hybrid and tablet apps, including support for HTML5. It leverages Tealeaf CX's passive network data capture to record the interactions of each user, regardless of whether that user's device supports JavaScript. This includes insights into customer interactions with the mobile app or website (e.g., form field inputs), as well as into obstacles that cause customers to struggle, including usability and system issues. For JavaScript-enabled smartphones, IBM Tealeaf solutions provide extended visibility by capturing client-side user actions such as scroll, swipe pinch and zoom gestures and device orientation.

Tealeaf CX Mobile makes it possible for e-businesses to discover what is working in the mobile channel, what is not, and why. As a result, you can:

- Gain visibility by capturing user information across mobile website including both network and client-side interactions.
- Accelerate time-to-market for delivering winning mobile services.
- Make better investment decisions across your mobile channels, including the mobile web, mobile apps, tablet apps, hybrid apps and HTML5-enabled sites.
- Raise conversion/acquisition rates and revenues by detecting obstacles and issues that cause users to struggle.

Successful mobile channels are integrated with other channels

Tealeaf CX Mobile allows you to detect obstacles or issues that lead to customer struggle without relying on your users to report problems. In fact, it gives you enhanced insight across user, app, site, and back-end behaviors.

Tealeaf CX Mobile provides a robust set of metrics that you can use to better understand your customers, their usage patterns, their devices, their conversion rates and more. Furthermore, it uses algorithmic discovery to automatically surface high impact issues – providing an “early warning system” for mobile customer struggle. The Top Movers & Drivers dashboard saves time by surfacing the areas where the most mobile users are struggling at a given moment. This enables you to respond to potential issues as they occur in real-time and do more with fewer resources. Complement this automated awareness with qualitative insights available via a replay of mobile web sessions, and you can identify not only technical issues but also the usability problems that lead to struggle and abandoned transactions.

The Top Movers & Drivers dashboard is designed to help companies quickly identify key drivers of activities and compare them across time to assess trends.

Because Tealeaf CX Mobile does not rely on pre-defined tagging, you can discover and diagnose problems without having to re-launch your websites or re-distribute your apps.

Case study: a leading travel provider

A leading travel provider has long focused on CEM in its web channel. It has a robust set of site optimization processes, with IBM Tealeaf solutions at the core providing real-time customer experience insights. When the travel provider began to offer transactional services on the mobile web, it immediately recognized the value of extending the visibility IBM Tealeaf solutions provide for the desktop web to the mobile channel as well. In addition to the visibility that it gets into the complete mobile user experience, the travel provider uses data about mobile user behavior to prioritize its development activities. For example, although the Android operating system has rapidly gained ground in overall smartphone market share, Data gleaned from IBM Tealeaf solutions proved to the travel company that the majority of transactions on its site came from users with iPads and iPhones.

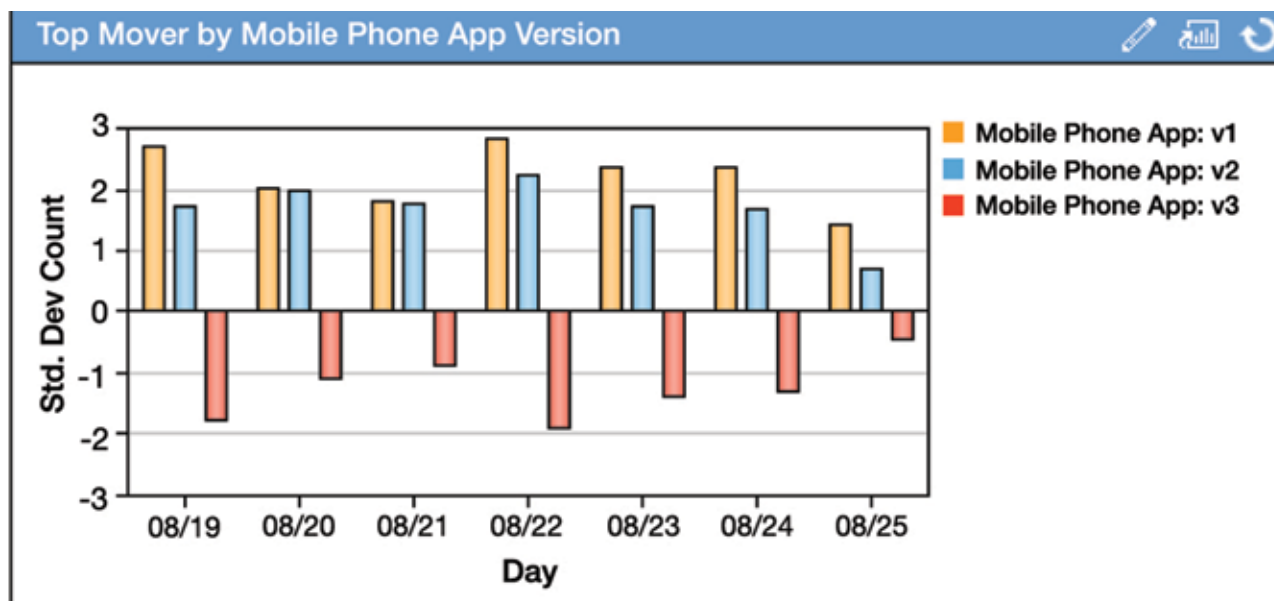


Figure 2: The Top Movers & Drivers dashboard helps companies quickly identify key drivers of activities and compare them across time to assess trends

Accelerate time-to-market for winning mobile services

E-businesses that can deliver winning mobile services faster than the competition will gain a critical edge with today's demanding customers. With Tealeaf CX Mobile, you can launch and iterate on new mobile features with less risk of failure. Because you do not have to rely on users themselves to provide feedback, it is easier to react to problems and adjust strategies to reflect actual usage. You can launch higher quality services and make improvements faster with insights from the real world.

Make better investment decisions across your mobile channel

As you launch and expand your mobile presence, you may face trade-offs between fixing issues that are causing customers to struggle, investing in new platforms to expand reach to new devices and users, or even removing functionality or platforms that are not delivering the expected results. With Tealeaf CX Mobile, your e-business has access to the reporting capabilities within IBM® Tealeaf® cxImpact. You can understand actual usage statistics and patterns across your mobile website or

mobile app, perform segmentation analysis by specific behaviors or attributes and quantify the lost revenue associated with each source of customer struggle. Armed with this data, you can confidently make decisions that make a positive impact on your mobile channel – and on your brand.

Case study: a leading US utility provider

A recognized leader in the utility industry wanted to provide mobile services as part of its initiative to raise the ease and efficiency for its online customers. For example, it enabled mobile customers to view and pay their bills, receive e-mails with account updates, and even report outages by text messages.

To help with its mobile initiative, the utility provider leveraged IBM Tealeaf solutions to develop a mobile optimized site that would be engaging and intuitive to navigate and that would let its customers perform key tasks quickly. Tealeaf CX Mobile allowed the utility provider to capture device attributes, which helped it prioritize development in line with the most frequently used mobile devices on its site. In addition, our dashboards helped the utility provider to quantify conversion rates/task effectiveness for key user activities and focus its efforts on optimizing the user experience. Finally, by analyzing user sessions, the utility provider identified its most-often-used mobile features and was able to better prioritize the features it would add or enhance in the future.

Deliver a smooth multi-channel customer experience

Tealeaf CX Mobile, deployed in conjunction with the Customer Service Optimization Suite, gives e-businesses a way to provide a smooth multi-channel experience not just across the desktop web, mobile web, mobile app (iOS and Android), tablets and hybrid apps but also across your customer service center. Used together, the solutions provide contact center agents with a view of exactly what customers experience on the mobile channel and what they have done in their previous mobile sessions, as well as in desktop web interactions.

Our customers have been able to provide differentiated customer service, accelerate problem resolution, improve first-call resolution, raise customer satisfaction and increase customer value by giving their contact center agents visibility into the full context of their customers' web experience.

Closing the customer experience gap between the contact center and the mobile channel offers the same compelling payoff – and helps to prevent the expectation gaps that are driving down brand loyalty.

Additionally, the single, integrated view of interactions that IBM Tealeaf solutions create across both the mobile and desktop web channels makes it possible to engage in retargeting and remarketing activities that help recover the revenue lost when mobile users abandon their transactions. Our customers have been very successful running these types of order-recovery initiatives for their traditional web channels.

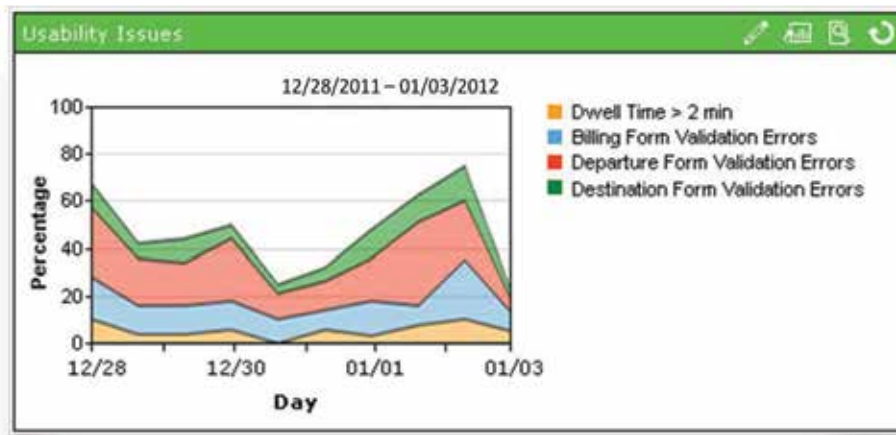


Figure 3: The Usability dashboard helps companies identify issues that may impact the usability of its mobile channel

The dashboards offered in IBM Tealeaf solutions help track KPIs on a regular basis to quickly identify if there is an issue that, for example, is affecting the conversion rate.

The disciplined approach to CEM pays off

Tealeaf CX Mobile extends the time-tested benefits of IBM Tealeaf solutions to mobile services, the fastest-growing interaction channel to date. A recent study by Forrester Consulting shows that, on average, our customers realize the following business benefits from CEM on the desktop web:

- **3.5 percent increase** in site conversion rates.
- **1 percent improvement** in customer retention rates.
- **.5 percent improvement** in average order value.
- **60 percent reduction** in IT and development costs associated with problem reproduction and resolution.
- **10 percent reduction** in IT and development costs associated with better prioritization of site projects and project avoidance.

With the rapid growth and high expectations placed on the mobile channel, e-businesses that take a disciplined approach now can achieve these types of results – and more.

Mobile CEM enables you to optimize this emerging channel now and turn a huge risk into a key strategic differentiator. Mobile CEM also gives e-businesses critical capabilities: the ability to accelerate the business benefits and competitive differentiation afforded by the mobile channel, to diagnose and fix problems faster, to deliver superior multi-channel customer service, and to capture lost revenue. These capabilities help form the cornerstones of a successful customer-centric business.

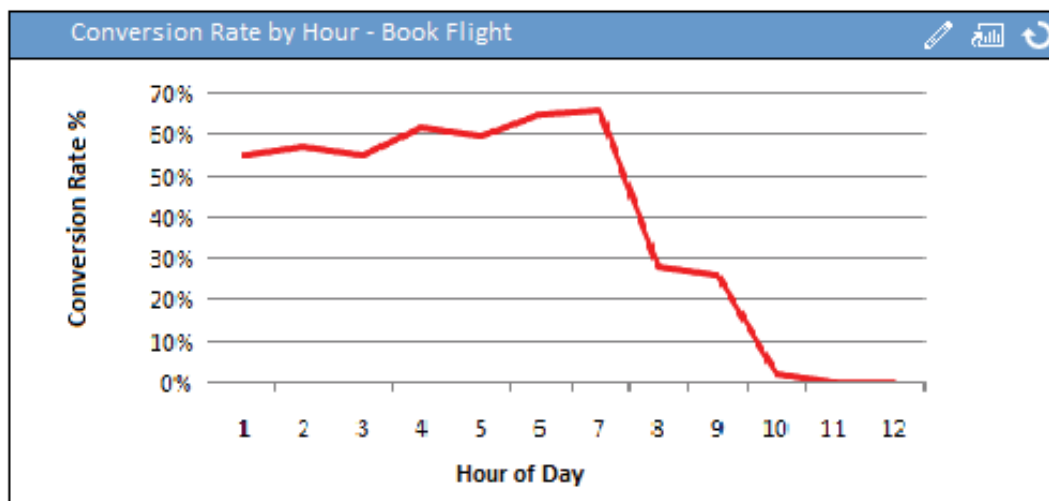


Figure 4: The dashboard helps track KPIs on a regular basis to quickly identify if there is an issue that, for example, is affecting the conversion rate.

Summary

No customer interaction channel to date has grown faster than mobile; and no channel yet has had such high customer expectations from the start. Even though mobility has just left infancy as a strategic touch point, it has already become a key factor in consumers' decisions of where to take their business – and when to take that business elsewhere. Because of the huge cross-brand impact of a poor mobile customer experience, e-businesses must set their sights on launching in the right way and delivering a struggle-free experience today for their mobile web, native, and hybrid applications.

The 2011 Harris Interactive mobile transactions survey demonstrated that mobile customer struggle is real.¹⁵ Because there are so many ways that customers can struggle with mobile websites and apps, e-businesses will need to take a disciplined approach to mobile CEM in order to diffuse this struggle and its associated risks. Tealeaf CX Mobile provides the visibility, insight, and answers that e-businesses need to make better decisions across their mobile channels. In addition, it can provide a compelling payoff in the form of higher revenues, lower costs, and higher customer satisfaction.

About IBM Enterprise Marketing Management

The IBM Enterprise Marketing Management (EMM) Suite is an end-to-end, integrated set of capabilities designed exclusively for the needs of marketing organizations. Integrating and streamlining all aspects of marketing, IBM's EMM Suite empowers organizations and individuals to turn their passion for marketing into valuable customer relationships and more profitable, efficient, timely, and measurable business outcomes.

Delivered on premises or in the Cloud, the IBM EMM Suite of software solutions gives marketers the tools and insight they need to create individual customer value at every touch. The IBM EMM Suite helps marketers to understand customer wants and needs and leverage that understanding to engage buyers in highly relevant, interactive dialogs across digital, social, and traditional marketing channels.

Designed to address the specific needs of particular marketing and merchandising users, the IBM EMM Suite is comprised of five individual solutions. Digital Marketing Optimization enables digital marketers to orchestrate relevant digital interactions to attract and retain new visitors and grow revenue throughout the customer's lifecycle. With Customer Experience Optimization eCommerce professionals can turn visitors into repeat customers and loyal advocates by improving the digital experience of every customer. With Cross-Channel Marketing Optimization customer relationship marketers can engage customers in a one-to-one dialogue across channels to grow revenue throughout the customer's lifecycle. Price, Promotion and Product Mix Optimization allows merchandisers and sales planners to make price, promotion and product mix decisions that maximize profit and inventory utilization. And with Marketing Performance Optimization, marketing leaders, planners and decision-makers can model and assess mix, and manage marketing operations to maximize ROI.

Over 2,500 organizations around the world use IBM EMM solutions to help manage the pressures of increasing marketing complexity while delivering improved revenue and measurable results. IBM's time-tested and comprehensive offerings are giving companies such as Dannon, E*TRADE, ING, Orvis, PETCO, Telefonica | Vivo, United Airlines and wehkamp.nl the power and flexibility required to provide their customers and prospects with what they expect today – a more consistent and relevant experience across all channels.



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