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### Highlight:

- The mobile channel is the most personal touch point of your brand, so understanding how to differentiate your offering involves first understanding what your audience wants.
  - Find the right balance of functionality and simplicity. User expectations are high yet the most successful mobile apps happen to be the ones that do only a few things, but do them extremely well.
  - Relevance, context and innovation are key and a good design approach is as fundamental to a great user experience as it ever was.
  - Organisations with a true multi-channel approach and business alignment create a more rewarding and engaging brand relationship.
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# Creating a Compelling Mobile User Experience

## Introduction

The total number of smartphones that were sold in 2011 is forecast at nearly 500 million, with that number due to double to one billion by 2015 according to the IDC.<sup>1</sup> With over a million apps available to download across the different app stores<sup>2</sup>, plus an ever-growing number of mobile optimised websites already out there, consumers have a massive choice and little patience for products that don't deliver. In a market where quality and performance always come before brand loyalty, the competitor's app is only a tap away. So how can a business make its mobile offering stand out from the crowd and more importantly, beat the competition?

What does it take to become successful and why do consumers seem to embrace certain offerings when most fall by the roadside? The one fundamental differentiator that has become key is user experience – how people feel and think about the effectiveness of your offering. Knowing how to create a great user experience involves understanding many factors, from human behaviour and interaction design to an appreciation of the technical constraints that mobile brings.

Building on IBM's approach for modern website design practice, this paper looks beyond the mechanics of conventional web design to identify the differentiating factors for a good mobile offering. Specifically, this paper concentrates on mobile experience through smartphones and tablets, including bespoke apps and mobile browsing.

Through the combination of a user experience design approach and a solid understanding of new mobile interaction models, IBM Interactive enables businesses to create a unique mobile offering that acts as a powerful differentiator against competitors.



## Mobile user experience design

### Creating the right feeling

User experience is what a person feels about the relevance and effectiveness of the digital solutions they interact with. From a customer's initial awareness of the solution to its end, user experience is about the meaningful aspects of how people see, hear, and touch it. This means the focus is on how the customer enjoys and perceives value when interacting with a system. It's about making solutions easy to use, valuable and effective for people.

Organisations need to design their solutions as holistic end user experiences of their brands taking into consideration the application of marketing, branding, usability and aesthetics. The mobile channel is probably the most personal touch point available to your brand.

### Differences between mobile design and traditional web design

Although designing for mobile devices shares many of the same disciplines required for traditional web design, there are distinct differences that can make or break a successful mobile offering. Perhaps the biggest of these is that mobile design needs to be just that... uniquely mobile. This means a focus on what mobile can do well, its portability and the circumstances in which the users interact, taking into account their needs instead of simply serving up technical solutions.

Mobile experiences shouldn't be a carbon copy of a web offering. They need to deliver new ways for users to interact with information and be sympathetic to the context in which it will be used. This contextual understanding is easier said than done as it is complex and involves understanding human relationships, people, places and the things around them.

Both mobile and web designers work in a rapidly evolving field that shares similar development tools and processes, creating a user experience that must exist within the constraints of the technology. When using a computer to access the Internet users are typically in a more predictable setting, for example sitting at a desk, and have a larger viewing screen and more traditional input methods. Mobile devices tend to be the opposite, where you're faced with a small screen, limited input methods and in a highly variable context and environment.

When we use our mobile phones we are more prone to interruptions than when we are sitting at a desktop. A good design approach needs to account for the partial attention of the user and the interruptions they are likely to face. It needs to reduce the cognitive load and allow things to be as straightforward as possible. The user interface can take up the entire screen, so where designers can annotate expectations in the web world, options in mobile have to be very apparent. A mobile experience should guide people through information quickly and promote interaction and exploration.

## User experience themes for mobile

IBM Interactive has identified eight key user experience themes for guidance when designing and developing mobile channel user interfaces. These are defined and representative of a careful blend of renowned usability heuristics, IBM mobile user experience design methods and the concepts of emotional design.


Embedded in the themes are the tenets of the users' emotional journey:

- the first impression – the instinctive reaction to the design; its aesthetics, touch and general feel
- the usage of the functional solution; the ease of understanding, conducting and completing the application corresponding to its intended purpose
- the enduring impact; the users continuing feelings and perceptions of the solution.

The themes are an IBM Interactive point of view used to explore and address, in detail, both the emotional and technical dimensions related to modern, smart and successful mobile customer experiences. They also comprise the framework for the IBM Interactive mobile assessment method.



These themes provide practical support for insightful exploration on the potential of any mobile user experience.

 **Always be relevant**  
Before embarking on any type of digital venture, it's worth considering why and how your digital product will be used. The most basic questions here are also the most important: are you going to offer your target users something they actually want? If so, is there real value in delivering it as a mobile solution as opposed to sticking to a traditional web offering? In other words, is your mobile proposition useful and relevant to your target audience?


Relevance is a key factor to the success of any customer experience - it's imperative that users can see a reason to adopt and engage with your offering. Only by having clear knowledge of your target audience and understanding what they're looking for will you be able to meet their expectations

and provide a compelling experience. Equally, your offering needs to be relevant to your business objectives. Once you've fully understood your users' "wants and needs", you should map these against your business objectives. Where these two elements connect is where you should concentrate your efforts.

The world of mobile offers unique opportunities to introduce new ways of doing things, from finding a local restaurant to making a payment and even arranging a taxi home. Companies that successfully match the user's goals to the device capabilities can offer relevant content that aligns with factors such as the user's location, identity, usage history, social network or time of access. This will create a more personalised and more relevant user experience that will appeal to customers and develop a connection with them.

Before a mobile device is able to capture and use data such as location, the user must first give their permission for it to do so. Typically, this will only be granted if they see value and understand why such data is required. To gain this trust, companies must be transparent and genuine about how they intend to use the data. It is imperative that you explain clearly and contextually the reasons why you require any personal information from users.

In the end, your mobile offering should contain the right content in the right way and at the right time in your user's journey.

 **Keep it simple**  
Smartphones tend to be used in a very task focused fashion, from simply sending a text or checking an email to booking a flight. This usage usually occurs on the move, in short bursts and at a fast pace – all factors to consider when designing a mobile experience.

More than on any other platform type, the goal should be to minimise any virtual friction points and empower users to perform the tasks they want quickly and easily, without making them jump through lots of hoops.

This starts with the user interface, which needs a more delicate approach than traditional web design. Considering constraints such as limited screen size, the user interface needs to be clean, free of clutter and easy to use. One key question to ask is whether the user will be able to navigate and use an application without instructions. This is known as discoverability - users do not want to have to think about what they're doing; they just want to be able to do it.

Intimately linked to discoverability is prioritisation of content. The more options you show a user, the more you make them think and the less they will actually do. A good mobile designer will prioritise what's important and remove any unnecessary elements that can get in the way of the task at hand. This will often mean trade-offs: the most important factor in deciding which trade offs to make is to remember to be relevant to users' needs as well as your business objectives.

It's also advisable to provide contextual, proactive guidance that helps users make good decisions. For example, use clearly labelled and logically positioned buttons that guide users through the different stages of their journey. Here you should design for the most common user journeys while using techniques of progressive disclosure to handle exceptions.

In summary, every aspect of the user interface design must be justified; anything that doesn't need to be part of your mobile offering shouldn't be. Even if you think a feature is essential, reconsider if it really is. It's no coincidence that the most successful mobile apps today are the ones that do just a few tasks extremely well. Simplicity, efficiency and elegance can set you apart from the competition.



## Build richer experiences

Keeping things relevant and simple doesn't mean that a mobile proposition should lack impact, features or that all important wow factor. In fact, creating a rich experience that delights and connects with users is potentially one of the most important differentiators in a very crowded and competitive market.

The level of richness a user experience has will naturally depend on the purpose of your offering, user expectations and your business objective. However, one thing is certain, there is often little or no point in providing static content as users now expect a desktop-like experience on their mobile devices. Dynamic, up to date content, smart transitions, use of video, images and audio can all help deliver this. However, these should not be relied upon on their own or over used to the point where performance could be compromised. It's actually when you combine these elements with the portability of mobile and native device features such as built in GPS, compass, camera and Near Field Communications that things get interesting. Mobile, more than any other platform, has heightened expectations of solutions that integrate with native applications.

User engagement can be made more compelling through the intelligent combination of what your app or mobile site can offer with applications and data already on the mobile device. For example, users expect to be able to add travel dates and details into their mobile device's calendar as part of the booking experience, or to directly link to Google maps for directions when looking up a business address. But an end goal here also has to be to make the experience as seamless as possible for the user.



## Think innovation

The mobile revolution not only offers consumers new ways of doing things, but also provides companies with opportunities to be innovative and creative. These are all vital elements in building a mobile brand and establishing differentiation from the competition. Breaking new ground by introducing functionality and features that take advantage of the opportunities mobile brings should be aspirations that are inherent in any forward thinking mobile strategy.

These innovations must tightly align with business objectives while at the same time addressing a real customer need or benefit and should never be technology for technology's sake. The goal is to enhance the user experience by making it more convenient and efficient for the user to get their task done. It must address the "What's in it for me?" factor.

Innovative apps often use native device features like location and direction services based on the GPS and compass technology, creating augmented reality applications that make use of video camera or motion detection for interaction.



IBM's Seer app at Wimbledon - augmenting the view with live scores and more

Knowing what competitors are doing helps to differentiate your offering from theirs, but also it's crucial to look outside of your industry. Look past your competition to draw inspiration and seed ideas that surprise and delight your audience. Comparing the best mobile experiences around while keeping on eye on what your customer needs helps you to stay ahead. Just be aware of the continually developing context of the modern, mobile, always on and socially connected lifestyle.



## Optimise content for mobile

Designing for mobile devices is always a trade-off between simplicity and functionality. On one hand there's a desire to create feature-rich applications that users find seductive and that make the most of the technology. On the other hand, one must consider constraints such as screen size, input method, bandwidth, connection speed and even power consumption, so as to ensure optimum performance and ease of use. Other factors that need to be considered are which devices or operating systems to support and what the development and maintenance costs will be.

Performance is a key factor; users want to access information fast. The design needs to consider and adapt to the constraints and make every pixel count. It's a case of thinking big by being small and making the most of the opportunity to connect with your audience in a dedicated way. Remember that mobile is about location, specifically where the mobile user is at any given moment.

A successful approach will be one that keeps the mobile context at the forefront, ensuring that at each stage of the development process, performance, usability and relevance are repeatedly measured and refined. This means taking an approach that balances recognised usability heuristics with the need for rich mobile functionality.



### The end-to-end experience

A well thought through mobile solution needs to fit in with your overall digital strategy, providing a continuous and seamless user experience. This means that the content and functionality that are delivered on each of your channels must be in line with what customers actually want to do at that point in time. Establishing such a multichannel fit can only happen if there is organisational alignment on a strategy that maps to customer needs.

Consider and design every aspect of the customer experience as fully integrated; from devices to all digital touch points, to real world contact with your brand. Users should be directed to the channel that's most appropriate to their needs and will expect consistency between their digital channels accessing the Web but accept their mobile experiences to be balanced for optimal performance.



### Be more social

Mobile devices are at the centre of how people communicate with their circle of friends and colleagues, whether by phone, text, email or increasingly, through accessing social networking sites. We have seen a dramatic rise in the number of people using social media while on the move. Mobile usage is now fuelling the popularity of social networks. Facebook alone claims that 350 million people access their accounts via mobile, performing a range of activities from posting comments and blogging to uploading images taken on their phones. This represents a shift where mobile users now spend more time on social networks than PC users do.

Businesses need to understand how to fit into this socially connected world and create opportunities that can drive revenue by building tighter bonds with customers. Add value to your digital propositions by having a seamless integration with the way your potential customers engage with one another and become part of the conversation by allowing them an open voice on your digital channel.



### Smart evolution

The catalyst for change can come from any direction - advances in technology, new industry trends, differing business requirements and last but not least, feedback from your users.

Having the ability to respond to such changes and make improvements to your mobile proposition is a critical factor in an age where consumer expectations are higher than ever. Listen to your users and be able to respond quickly to their feedback and their needs. Keep them happy and engaged by creating an agile deployment strategy, introducing new features as they become ready.

Most mobile users are accustomed to receiving the benefits of the latest technology and are increasingly willing to experiment with it. If bugs or security flaws are found, release fixes immediately to correct them, making sure to be clear about the new features you've implemented, the bugs that you've fixed, and whether or not you've fixed any security issues.

## Bringing it all together

The eight mobile user experience themes described must be applied in concert to truly deliver on a compelling user experience for the mobile channel. IBM Interactive has specifically tailored its user centric design approach to ensure that these themes are all front and centre in our thinking as we design and deliver mobile solutions for users.

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Our approach always starts with the needs of the user and works from there, but there are a number of other fundamental questions that impact an organisation when designing for mobile e.g. device choices, development platforms, native app versus Web debate. Our full mobile visioning and strategy approach brings the needs of the user, business and technology together to ensure the development of a strategy and solution that delivers for all.

For further information about how we can help you in a Mobile world, please contact:

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