

Reaching the Interactive Customer

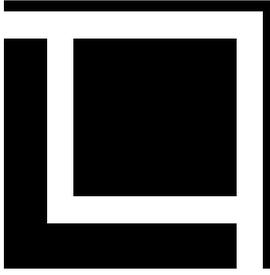
Integrated Services
for the Digital World

Mai-lan Tomsen & Ron Faith

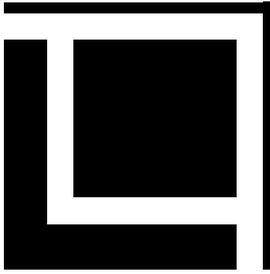
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MAI-LAN TOMSEN

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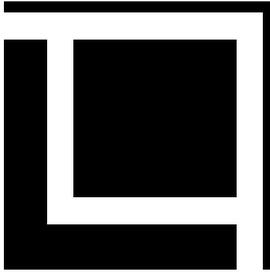
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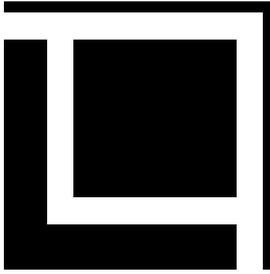
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To our spouses, Brandi and Mark, and our youngest interactive customers, Nicholas, Ian, Derek, and Hailey.



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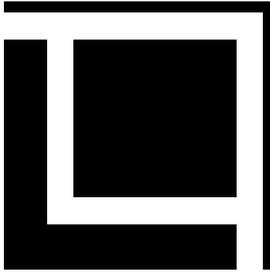
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Acknowledgements

This book is written at an exciting time in the evolution of consumer technologies. As the Internet phenomenon created often unrealistic expectations, Web-based applications also stand as one of the most constructively disruptive technologies in the history of the world. While we do not yet know the full impact of the Internet on society, it clearly continues the evolution of digital, networked technologies into our daily lives.

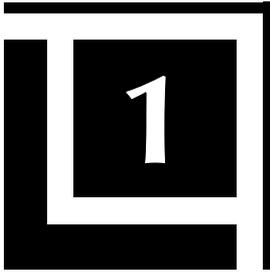
Having lived in the high-tech industry for all of our professional lives, we are indebted to a great number of people who have influenced our views while at both Apple and Microsoft. We would like to thank management at Microsoft and Qpass for their flexibility in enabling us to take on this project. Other people who influenced some of the thinking that went into this book include Mark McNeely, for his creative thoughts around consumer's continued adoption of technology; Bert Kolde, for leading by example in nimble and creative thinking; Carey Heckman, for his insights into technology, the law, and public policy; and Kendra VanderMeulen, for her extensive knowledge of the past, present, and future of the wireless industry. Finally, we would like to thank each other for being supportive during a hectic time in both of our lives (with new babies and late nights). We are excited that we are on this journey together, experiencing the evolution of integrated services from novelty to necessity in our daily lives.



About the Authors

Mai-lan Tomsen is the author of *Killer Content: Strategies for Web Content and Ecommerce* (Addison Wesley Longman, 2000), a popular guide for business and technical managers struggling to implement revenue-generating content on Web sites. Currently working at Microsoft, she recently led the ecommerce team at digeo, a leading digital services provider to cable network operators.

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Permeation of the Information Age

Digital devices, complex networks, and interactive applications and services permeate our daily routines. The adoption of digital, integrated services in peoples' lives stems from a causal chain involving customers of new technologies, device designers, and application product planners. Consumer expectations, set by the growing capabilities of interactive devices, fuel innovation from application and service product planners. Product planners then push the device designers to accommodate their increasingly sophisticated features (see Figure 1-1). The key to continual improvement without costly design mistakes lies in understanding how the consumers' expectations evolve with usage.

For example, cell phones with Internet access influence the consumers' expectations about repurposing the phone for other uses. However, browsing the Internet on a cell phone is a frustrating experience due to the limited screen display. Application and service designers step in to meet consumers' expectations of Internet access with alternatives to Web browsing. Internet-based applications deliver discrete amounts of information suited to the cell phone's screen display, such as personalized weather and stock quotes. Internet-based instant messaging and chat allow consumers the ability to use the phone's small screen for shorthand text messages. The adoption of these types of services and applications provides incentive for device designers to develop new features to accommodate the different usage.

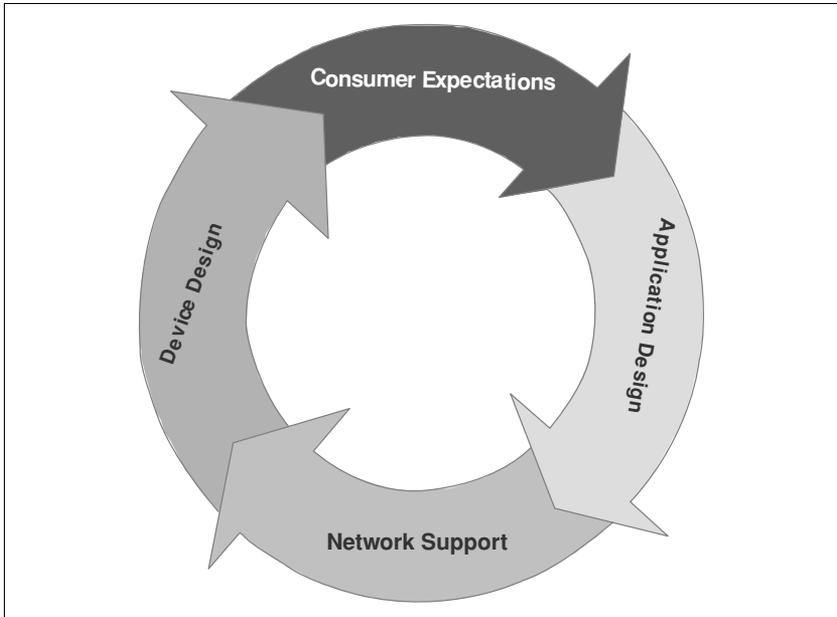


FIGURE 1-1. Evolutionary Cycle for Interactive Devices

The evolutionary cycle for interactive devices moves as fast as the device manufacturers and application providers release new variations of the product. As consumers become familiar with new interactive features, the consumer develops new expectations about the device itself and services and networks that support the service. The need to fulfill these shifting expectations results in an acceleration of the development cycle for device manufacturers and service providers. An accelerated speed of development can result in poor, costly design decisions. Balancing speed against market demands and accurate design requires an in-depth understanding of how interactive consumer expectations drive the evolution of technology. Starting with the consumer and the expectations of the consumer helps device designers and application and service planners to prioritize features and deliver successful products.

Understanding consumer expectations begins with understanding how consumers use (and don't use) technologies. Digital devices

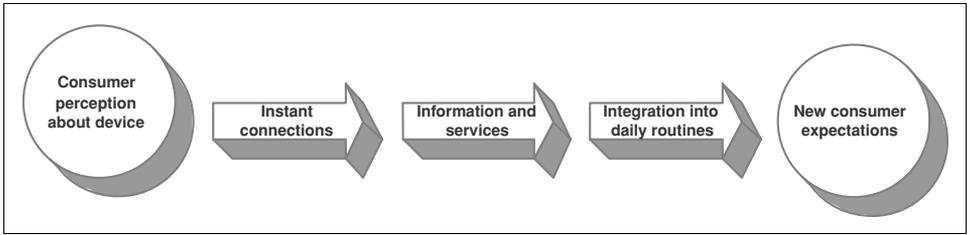


FIGURE 1-2. Changing Consumer Expectations Through Usage

and communication networks provide instant connections to other people, applications, and services. Consumers use these services to gain access to a world of limitless repositories of digitized information and media. The dual forces of instant connection and access to limitless information propel deeper adoption of integrated services in consumers' daily routines (see Figure 1-2).

Based on their dependency on the device, consumers who incorporate integrated services into daily routines expect greater capabilities from their devices. This book describes how device, application, and service providers can take advantage of and drive these new consumer expectations. By breaking down consumer expectations for different types of interactive experiences (like audio and visual), technology providers gain a better understanding of the customer for devices and services.

First, let's lay the foundation for understanding the interactive consumer by discussing the relationship between devices, services, and applications in an integrated service. This chapter describes the following:

- ▣ The definition of an “integrated service”
- ▣ How instant access and limitless information results in the adoption of new integrated services
- ▣ How digital networks and devices enable new forms of communication

Components of an Integrated Service

The options available to consumers today cannot easily be classified in traditional notions of a product or a service. Today, most interactive products have a service component and most integrated services have a product component. An integrated service combines products and services into a single package for the user.

Integrated services consist of the following three tiers:

- ▣ Devices
- ▣ Networks
- ▣ Applications and services

Each of the three tiers has different technologies and business models. Each tier provides value to the consumer in a way that would be difficult to achieve independently. For example, a cell phone without access to an Internet network has a very different consumer value proposition than a cell phone with Internet network access and a game application. The combination of the three tiers, as depicted in Figure 1-3, creates the most compelling package, which in turn raises consumer expectations for each tier in the integrated service.

Devices are the first and most tangible tier to the consumer. Devices take many forms and come with a wide range of capabilities. A device can be stationary in a given location (e.g., personal computers, cable television set-top boxes, and gaming consoles) or a device can also travel with the consumer [e.g., a cell phone or a personal digital assistant (PDA)].

Most interactive devices share the three following common characteristics:

1. The device has a user interface through which the consumer interacts with the device.
2. The device can connect to data communications networks.