

There are many aspects of the user experience that can be considered and ways of taking them into account when designing interactive products. Of central importance are the usability, the functionality, the aesthetics, the content, the look and feel, and the sensual and emotional appeal. In addition, Carroll (2004) stresses other wide-reaching aspects, including fun, health, social capital (the social resources that develop and are maintained through social networks, shared values, goals, and norms), and cultural identity, e.g. age, ethnicity, race, disability, family status, occupation, education. At a more subjective level, McCarthy and Wright (2004) discuss the importance of people's expectations and the way they make sense of their experiences when using technology.

How realistic is it for interaction designers to take all of these factors (and potentially many others) into account and, moreover, be able to translate and combine them to produce quality user experiences? Put frankly, there is no magic formula to help them. As of yet, there isn't a unifying theory or framework that can be readily applied by interaction designers. However, there are numerous conceptual frameworks, tried and tested design methods, guidelines, and many relevant research findings – these are described throughout the book. Here, we begin by outlining the process and goals of interaction design.

More generally, McCarthy and Wright's (2004) *Technology as Experience* framework accounts for the user experience largely in terms of how it is felt by the user. They recognize that defining experience is incredibly difficult because it is so nebulous and ever-present to us, just as swimming in water is to a fish. Nevertheless, they have tried to capture the essence of human experience by describing it in both holistic and metaphorical terms. These comprise a balance of sensual, cerebral, and emotional threads. Their framework draws heavily from the philosophical writings of Dewey and Pragmatism, which focus on the sense-making aspects of human experience. As Dewey (1934) points out: "Emotion is the moving and cementing force. It selects what is congruous and dyes what is selected with its color, thereby giving qualitative unity to materials externally disparate and dissimilar. It thus provides unity in and through the varied parts of experience."

McCarthy and Wright propose four core threads that make up our holistic experiences: sensual, emotional, compositional, and spatio-temporal:

- *The sensual thread.* This is concerned with our sensory engagement with a situation and is similar to the visceral level of Norman's model. It can be equated with the level of absorption people have with various technological devices and applications, most notable being computer games, smartphones, and chat rooms, where users can be highly absorbed in their interactions at a sensory level. These can involve thrill, fear, pain, and comfort.
- *The emotional thread.* Common examples of emotions that spring to mind are sorrow, anger, joy, and happiness. In addition, the framework points out how emotions are intertwined with the situation in which they arise – e.g. a person becomes angry with a computer because it does not work properly. Emotions also involve making judgments of value. For example, when purchasing a new cell phone, people may be drawn to the ones that are most cool-looking but be in an emotional turmoil because they are the most expensive. They can't really afford them but they really would like one of them.
- *The compositional thread.* This is concerned with the narrative part of an experience, as it unfolds, and the way a person makes sense of it. For example, when shopping online, the options laid out to people can lead them in a coherent way to making a