

Book Review

Aaron Marcus, Masaaki Kurosu, Xiaojuan Ma, and Ayako Hashizume

Cuteness Engineering: Designing Adorable Products and Services

—Reviewed by
LAURA ROKEY 

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Computers are now programmed to support emotion; we communicate with our computers as if the computer was another human, not a machine. As a result, user interfaces are being “cutesified” because people love and respond to cute things. This is the basic premise of *Cuteness Engineering*. Designers, developers, usability researchers, and graduate students will learn the history, key terms, problems, research findings, and international issues pertaining to cuteness engineering, and they will gain exposure to case studies from Japan and China. The book offers strategies and interviews with cuteness designers.

This book serves as an introduction to the developing field of cuteness design in the user experience. It is divided into five main chapters, excluding the introduction and conclusion chapters. The first two chapters explore cuteness in Japan and China, the next chapter provides a taxonomy of cuteness, and the final two chapters consist of interview transcripts with user-experience designers.

The authors include the theory of cuteness engineering, backed by real-world examples. They accomplish this through global/cross-cultural studies (chapters two and three) and interviews with user-experience designers (chapters five and

six). Technical communicators, software engineers, marketing professionals, and user-experience designers will find this book thought-provoking and practical.

Chapter one begins its exploration of cuteness engineering by first defining cuteness itself. It asks: “What makes something cute?” The authors offer a simplified definition of cuteness, claiming that something is cute if it is “appealing, charming, funny, desirable, endearing, memorable and non-threatening” (p. 92). Because cuteness is considered a universal language, it needs to appeal to as large an audience as possible. Therefore, all styles of cuteness are inoffensive, inclusive, simple, and predictable. Examples fitting these characteristics include babies and animals.

Based on their ethnographic research, the authors categorize cuteness by different styles that support different goals. This taxonomy is divided into categories such as “gender-specific,” “gender-neutral,” and “personality-based,” which each contain their respective subcategories (pp. 92–118). Air China is used as an example of a cute user-interface design because they use a cartoon panda as the star of its safety videos. The panda is an example of the gender-neutral, animal-cute taxonomy. Using this type of cuteness makes information that is typically seen as complex and tedious more palatable to people who are likely to be under stress or fatigued.

However, engineering cuteness does not always mean using a cute mascot, as in the case of Air China. Cuteness can also be expressed in small and subtle ways, such as using a colorful progress bar or using transition animations. For example,

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people are more likely to wait for a page to load if they see progress that the page is loading.

The next logical question the book addresses is “Why cuteness?” To answer this question on a broad scale, the authors use cross-cultural research to examine cuteness in different cultures. This research was used to create and validate their taxonomy of cuteness. However, this taxonomy is general and does not consider the culture-specific attributes of cuteness. To address this problem, the authors study the specific attributes of cuteness in Japan, China, and the US. They hypothesize that “cuteness should be different in different cultures” (p. 15). According to this theory, different styles of cuteness should be used in different cultures.

At the same time, the authors also claim that cuteness “serves as a universal language that bridges people from different demographic and cultural backgrounds” (p. 89). Since cuteness is considered a universal language, cuteness is a tool used to help close the gap between technologies, designs, and users. For example, cuteness can make mundane processes more interesting by increasing the product’s inherent appeal and memorability.

This contradiction limits the overall findings of this book. However, this limitation can be rectified by further clarifying the difference between the goals of cuteness itself (which are universal), and the goals of the individual styles of cuteness (which vary based on culture). Exploring this relationship between the purpose of cuteness and the styles of cute presents an opportunity for future research in cuteness engineering.

Based on their cross-cultural research in chapters two and three, cuteness in Japan is known as “kawaii” (p. 33). Kawaii is hard to describe, but the authors explain that it is more of a feeling about the object than the attributes of the object itself. An example of kawaii cuteness is Hello Kitty, who is both cute-looking and evokes feelings of cuteness. In contrast, cuteness in China is often represented as “baozou,” or rage cuteness (p. 73). Baozou cuteness is used primarily in memes which are spread through social media (p. 70).

In western culture, cuteness is defined as something that “draws people’s attention in an attractive and emotional way” (p. 5). However, it is important to note that English-speaking people often differentiate between “cute” and “pretty” (p. 34). “Cute” is usually attributed to more

child-like representations, while “pretty” is used for adults. It is unclear which corresponds more to the “kawaii” representation in Japan or the “baozou” representation in China. This is an opportunity for further research.

However, cuteness is not always appropriate. It is a tool that should be applied based on the needs of the customers. For example, entertainment-based products should be more cute, while professional products should be less cute (p. 148). Overusing cuteness, especially in a professional setting, is easily interpreted as condescending to its users.

To help the reader understand the practicalities of cuteness engineering, the book utilizes interviews with user-experience professionals. The first interview in chapter five was with Yuko Yamaguchi, the designer of Hello Kitty. Hello Kitty herself is an example of “kawaii” cuteness, and she has grown into that specific style of cuteness based on the preference of customers. As Hello Kitty became popular worldwide, so did the “kawaii” style of cuteness.

Yamaguchi acknowledges “kawaii” cuteness and describes strawberries in that way (p. 133). This example is interesting because it reaffirms the cultural difference between China and Japan when it comes to styles of cuteness; it is unlikely that strawberries would be considered cute in the “baozou” realm because baozou-style cuteness falls under the “negative-cute” category, while strawberries fall under the “sensory-cute” category in their proposed taxonomy (pp. 95–96).

The second interview in chapter six was with Wentao Wang, Senior User-Experience Designer, at Baidu, Beijing, China. Cuteness plays a vital part in the design of mascots at Baidu; however, it is not applied indiscriminately to Baidu’s products. According to Wang, cuteness should be

used according to the profiles and needs of the target audience . . . more cuteness in entertainment apps, less cuteness in business, financial, and professional apps. (p. 149)

His opinion reaffirms the authors’ warnings about overusing cuteness.

These interviews provide invaluable information about how cuteness design is used in the realworld. The interviews complement the theoretical taxonomy of cuteness by providing

concrete examples of the theories described in the first part of the book.

The primary research methods used were qualitative. It would be interesting to see the results of A/B testing on “more-cute” and “less-cute” user interfaces. The results would provide researchers with quantitative data that could show whether users prefer cute interfaces, which styles they prefer, and when cuteness design is appropriate.

Cuteness Engineering serves as an introduction to the new field of personality-based user experiences. The book could provide more examples from the

US, Europe, Latin America, and other countries; it could also discuss in greater detail the virtues and challenges importing cuteness engineering to different cultures. However, overall, the book provides a new theoretical model to understand the cultural and contextual meanings of personality design, specifically cuteness. This model has the potential to lead user-experience professionals and software developers toward the future of personality design in artificial intelligence.