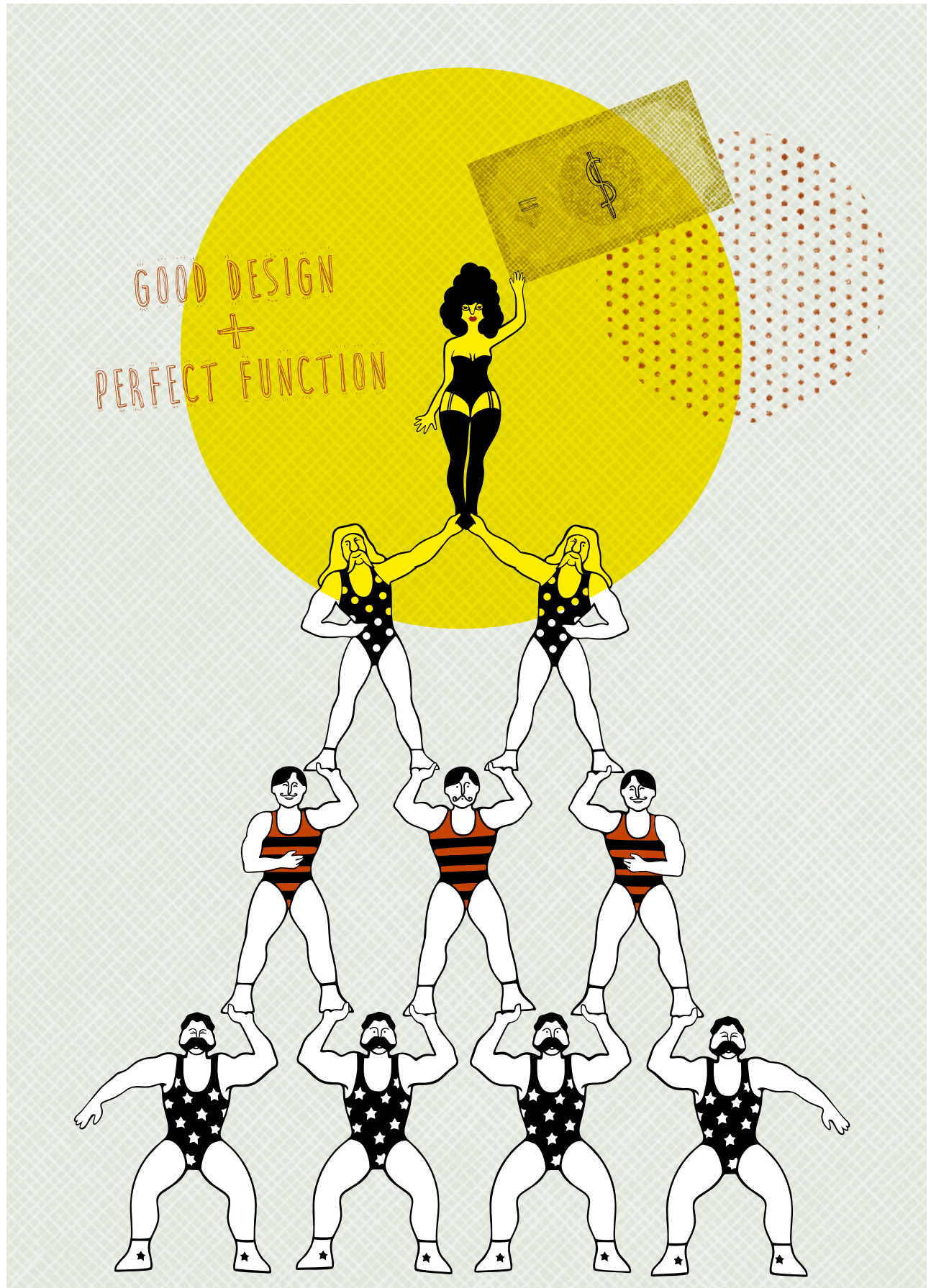




Design for Affect: A Core Competency for the 21st Century

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*Design, Emotions,
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It is not an accident that the most valuable firm on the planet is known for its core competency in DESIGN. Steve Jobs, the founder of Apple Inc., instinctively understood the power design has to emotionally connect with consumers and their wallets. Most would agree that his design-driven vision continues to generate unprecedented levels of cash flow years after his departure – making it not just the most valued but also the most loved company of this generation. Apple consumers are emotionally invested in their products, leading to superior profit margins and intense loyalty for Apple.

But, can other manufacturers compete with Apple or develop a similar core competency in design to dominate their market? They can, provided they develop an understanding of how consumers value product attributes and associated emotional benefits differently in relation to each other. Furthermore, designers can design emotionally appealing attributes and benefits into products to deliver desirable financial performance. There is clearly an opportunity for all manufacturers to leverage the connection between design, emotions and profit margins. This would require an understanding of design principles that govern consumers' relative preferences and purchase decisions depending upon their wants and needs.

The role of design in purchase decisions /// Design can be seen as a planned organization of elements that are interconnected with a specific purpose. In product development, design serves to create a good mix of attributes and benefits and to evoke desirable emotions. For example, people making a horror movie design sets, makeup, costumes, sound effects, etc. to create a sense of suspense that evokes anxiety and fear in consumers.

Steven Spielberg created blockbuster movies such as JAWS and Jurassic Park by perfectly selecting and integrating the right mix of elements of filmmaking to deliver an ideal emotional experience. Similarly, Starbucks has successfully designed their outlets to create a unique and delightful coffee consumption experience. The assumption is that well-designed products create a better overall emotional experience compared to unbalanced alternatives. Hence, design strategy is critical to creating a desirable, delightful and emotionally fulfilling consumer experience leading to greater profit margins and customer loyalty.

Design attributes and consumers' emotional experience

/// Most consumer choice decisions involve making trade-offs among a variety of product attributes either because budgets are constrained or certain attributes are not available in a product that is otherwise desirable. But how do such trade-offs work? When buying a car, for instance, how does a consumer choose between a functional, utilitarian attribute such as an ABS braking system and an aesthetic, pleasure-related feature such as a panoramic sunroof? The answer depends upon the consumer's goals. According to our findings there is a consistent relationship between the types of product attributes, types of goals and types of emotions experienced by the consumer. While some features have the purpose of preventing undesirable feelings, others instead promote positive emotions. Functional attributes are designed into a product to fulfill consumers' prevention goals, and they evoke the positive prevention emotions of confidence and security. If they are missing or underperform, they cause anxiety or distress. Similarly, fun or aesthetic attributes are designed into a product to fulfill consumers' promotion goals and to evoke the positive promotion emotions such as excitement and delight – which are known as promotion emotions because the attributes promote or bring about these emotions. When they are not reflected

very well in the overall design, they cause disappointment and sadness. This relationship can be illustrated with functional automobile attributes such as seat belts, ABS, vehicle stability assist, and four-wheel drive. These features collectively increase the feelings of confidence and security and decrease the feelings of anxiety and distress for the driver, especially under bad weather conditions. However, if a car has only seat belts and no other safety features, then the driver will experience strong anxiety or even fear, especially under hazardous weather conditions with little or no feelings of security and confidence. On the promotion side, automobile attributes which promise fun and sensory pleasure, such as a panoramic sunroof, a 12-speaker premium audio system, or a leather interior collectively increase the feelings of excitement and cheerfulness. On the contrary, absence or reduction of such hedonic attributes would evoke feelings of sadness and disappointment. Therefore, emotions experienced by the consumer depend upon the attributes product designers choose to design into the product: Different emotions can be leveraged by design.

Consumer choices: enhance pleasure or reduce pain? ///

Consumers purchase products with the objective of reducing pain, increasing pleasure or both. Product aesthetics primarily contribute to enhancing consumer pleasure, and utilitarian attributes such as product functionality primarily contribute to reducing consumer pain. So the question is how consumers choose between the goals of reducing pain and enhancing pleasure. Do their choices follow certain principles that designers can follow to design useful and desirable products?

Based on the consistent pattern of choices and purchase behavior across multiple product categories, our research did indeed reveal situations when either the principle of functional or hedonic dominance explained consumer choices. The pattern and the experienced promotion and prevention emotions are described in figure 1.

In the case of functional dominance consumers attach greater importance to fulfilling their minimum utilitarian needs compared to their minimum hedonic needs. If consumers have to choose between two products and one product meets their minimum functional requirement but does not meet their minimum aesthetic expectations, while the other meets their minimum aesthetic expectations but does not meet their minimum functional requirement, they prefer the product that ensures a basic level of functionality. Consumers want the chosen product to meet a certain threshold of usefulness before they can begin to enjoy its aesthetics.

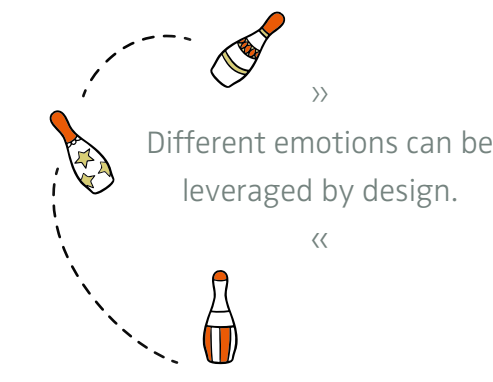
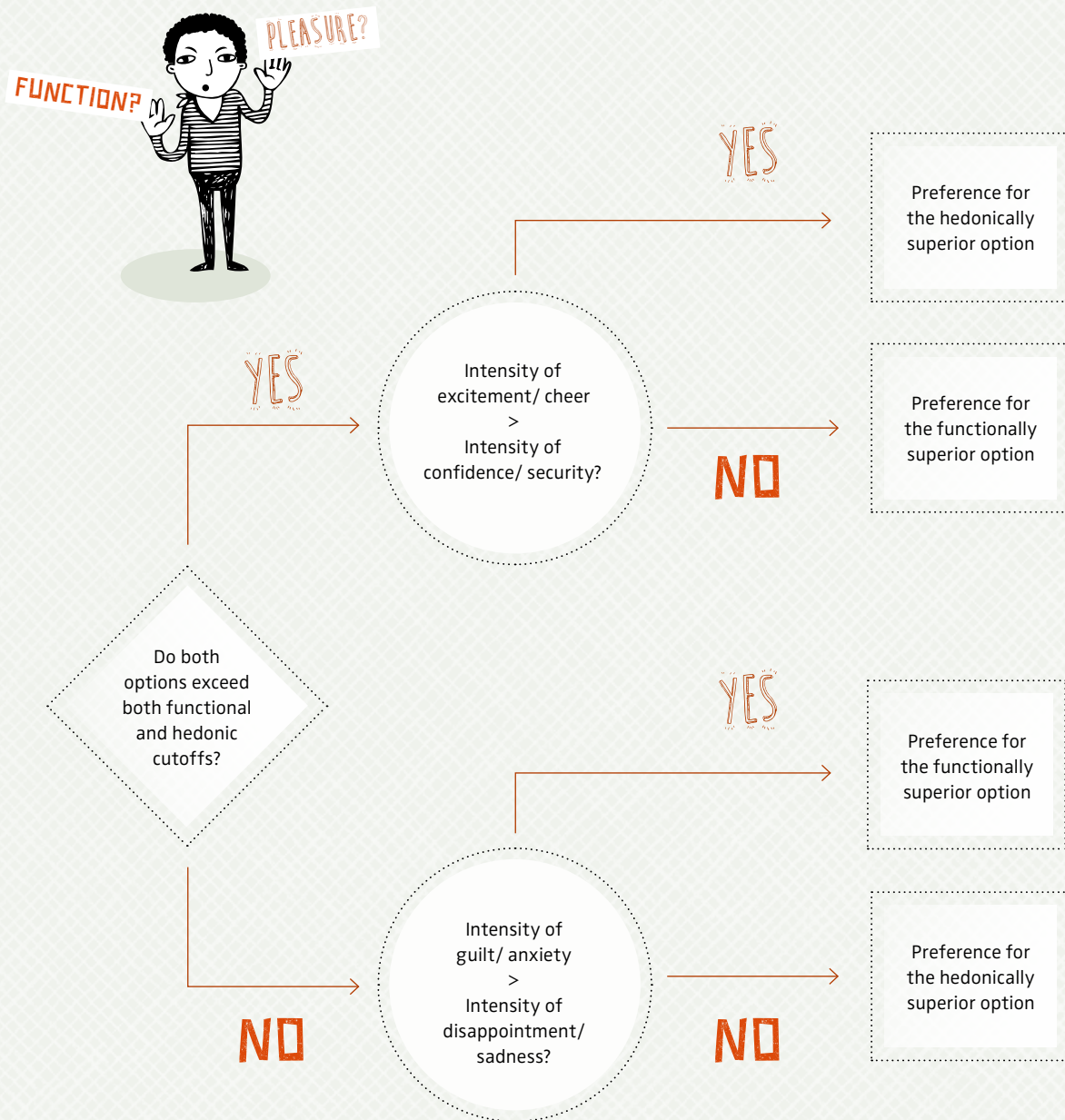
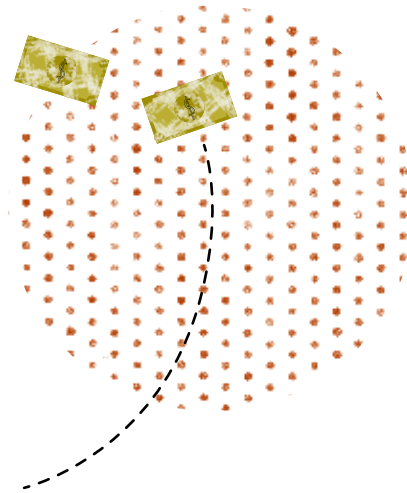


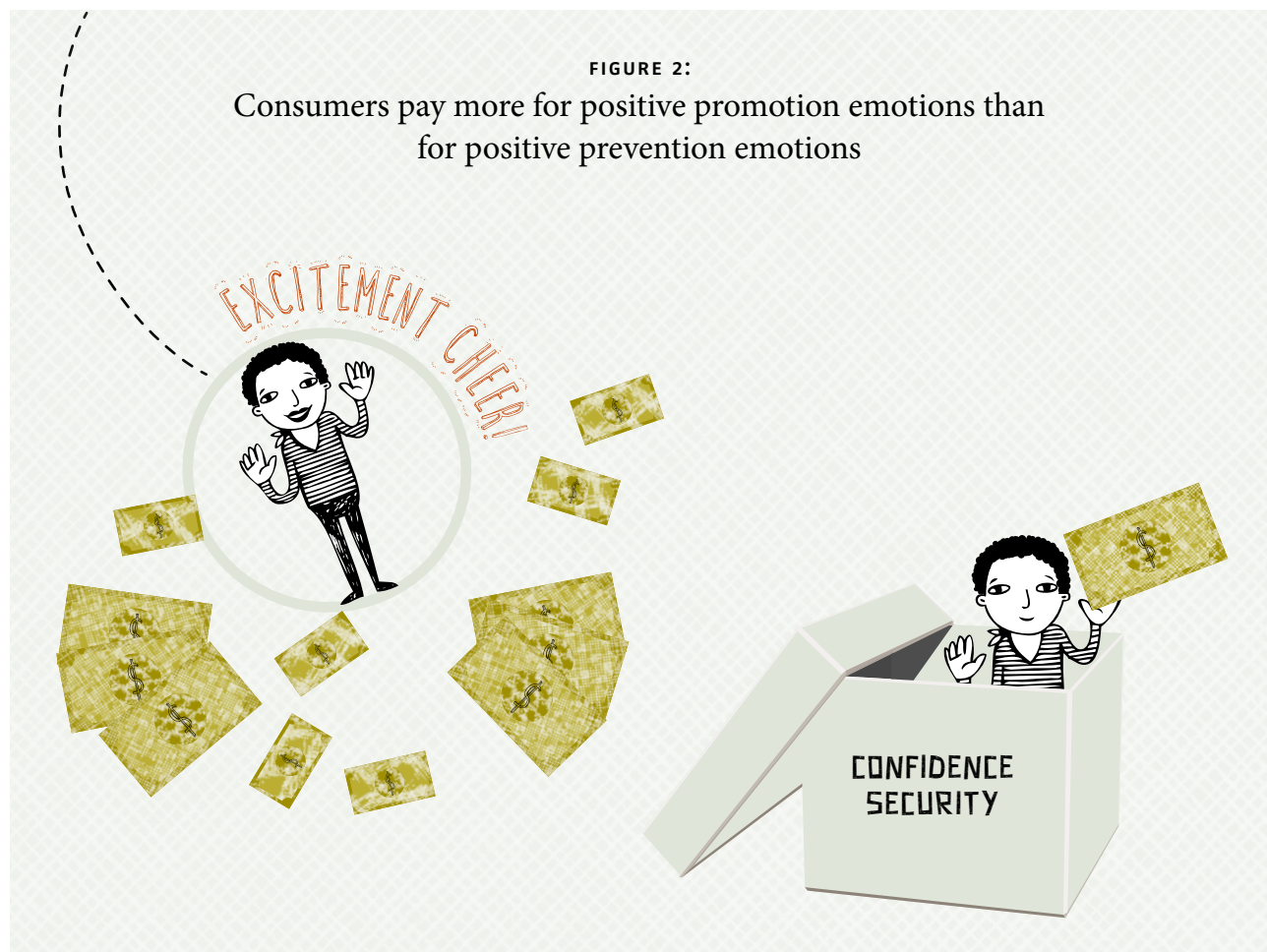
FIGURE 1:
Product design attributes, emotions and consumer choice





But what happens after the minimum functional needs are fulfilled? Is there a change in the relative value consumers assign to product functionality vis-à-vis product aesthetics? Yes. In this case, the principle of hedonic dominance applies. If consumers have to choose between two products and one product meets their minimum functional requirement

but exceeds their minimum aesthetic expectations, while the other meets their minimum aesthetic expectations but exceeds their minimum functional requirement, they go for the product with superior aesthetics. Consumers want to maximize pleasure by choosing a hedonically superior product after fulfilling a certain threshold of usefulness.



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“Design for affect” is a highly profitable core competency /// Consumers purchase products to fulfill their emotional wants and needs. They buy access to GPS based map services for driving directions to lower the anxiety of losing their way in an unfamiliar location. They visit Disney World or pursue scuba diving depending upon the level of excitement they seek. But how much are those different experiences worth to the customer? We also investigated willingness to pay and found that consumers are likely to pay more for goods and services that help them experience positive promotion emotions such as excitement and cheerfulness compared to positive prevention emotions such as confidence and security.

Apple has applied this principle very successfully, and their products have historically garnered 20 – 30 % higher profit margins than their competition by designing superior aesthetics into their products. However, other brands can use these insights as well. Designers can significantly improve consumer preference for the products they are designing by complying with the principles of functional and hedonic dominance. If they ensure that products meet minimum functional needs, these options will be considered for purchase. And if their design, on top of that, evokes promotion emotions of excitement and cheerfulness, they will motivate consumers to pay a significantly greater price for the experience. Firms who want to dominate their market and enhance their profit margins are well advised to develop a core competency in design. They should form a design group that understands the relationships between design principles, fun and aesthetics versus function, promotion and prevention emotions as well as consumers’ willingness to pay. A balanced design with an optimal combination of attributes and emotional experiences will reach a greater price on the market and ensure higher profits.

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