Chapter 84
Best Practices for Culturally Sensitive Data Visualizations

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ABSTRACT

Organizations are undergoing significant changes in their business environment. Competing on a global scale means that organizations must better understand cultural issues of their customers, employees, and key stakeholders. As business analytics grows in importance, managers are sharing data visualizations to a variety of different cultures and beliefs. When creating culturally sensitive data visualizations, a set of best practices is required to assist managers to make timely and accurate decisions with the least possible cultural bias. This article aims to develop these best practices by analyzing cultural traits, communication habits, and other differences between the western and eastern global regions.

INTRODUCTION

There are significant challenges within the business environment as a result of globalization. Instead of only competing within their own geographic area, organizations are now competing in a global marketplace. According to some, "globalization today has become a matter of survival" (Firoz & Ramin, 2004). Part of that survival is business analytics. A foundation of good analytics is data visualization, which is essential to increase an organizations competitive advantage. Managers are now sharing data visualizations with a variety of key stakeholders, sometimes in countries with different perceptions. This paper is about trying to understand the impact of those perceptions and developing a set of best practices for culturally sensitive data visualizations. In short, the authors attempt to answer the question: How do today's managers create high quality visualizations that ensure cross-cultural competency?

The genesis of globalization in the United States and elsewhere can be traced back to the 1960s when the first rush occurred to enter foreign markets (Scher, Reuss, Frank, & Dorman, 2000). In order to set the stage, the authors have adopted Thomas Friedman's definition of globalization:

The inexorable integration of markets, transportation systems, and communication systems to a degree never witnessed before – in a way that is enabling corporations, countries, and individuals to reach around the world farther, faster, deeper, and cheaper than ever before (Friedman, 2002).

He rise of interactions in the global market place has influenced us to do this research because the authors believe that for an enterprise to be competitive today, they must understand the culture-specific differences regarding phenomena and relations (Mintu, Calantone, & Gassenheimer, 1994) with those they are dealing with.

The target audience for the proposed best practices is middle level managers in multinational organizations. Specifically, the best practices are adapted for managers in service industries in the eastern and western regions – these are defined below. Culture significantly influences organizations competing across geographic boundaries with different values. Because of the variable influence of local norms and cultural differences the authors decided to create best practices for the western and eastern regions of the world.

Cultural sensitivity can have severe impact on an organization's ability to compete internationally. Too often organizations try implementing an existing product into a foreign market with disastrous results; the same can happen with data visualizations that are not sensitive to the local norms of the reader. No one is exempt from making blunders in this space, not even multi-billion dollar organizations. An example of an advertising blunder is when Kentucky Fried Chicken introduced their new slogan "Finger lickin' good" in China. That slogan translated to "eat your fingers off." The slogan had a negative impact on their business in China, both to their reputation and from a financial standpoint. Other multinational organizations such as Coca-Cola, Toyota, and Goodyear have made similar blunders (Hunt & Hodkin, 2012). While these examples are focused more on marketing, they accurately portray the potential consequences of overlooking the importance culture has in a global economy and to visualizations.

The Internet and Globalization Challenges

Over the past 25 years society has seen the change from a world where global communication was expensive and not always easy to do. The Internet has changed this dramatically and today even average citizens can interact in real-time with people around the world; extend that to multinational organizations that are able to instantly communicate globally. A major advantage of recent technology is that the time to communicate around the world with co-workers, decision-makers and others has decreased significantly (Chary, 2007). This new found freedom to communicate across the world has allowed businesses to expand internationally. Along with the relatively newly expanded and easy to tap marketplace, organizations face challenges like never previously seen in history.

Study Purpose

This study is based on an extensive literature review to determine the considerations for best practices for culturally sensitive data visualizations. The researchers aim to address the following question: How does

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