### Chapter 39

# Transformational Content and Relationships:

Research, Analytical Tools, and Big Data in Shaping the News User Experience (UX)

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#### **ABSTRACT**

This chapter outlines the trend toward research within news organizations based upon big data and the increasing emphasis of growth-oriented companies on promoting a positive and passionate User Experience (UX). It discusses the implications of digital research techniques developed by successful technology and consumer merchandising organizations, and links the 24/7 nature of digital research methodologies to the development of more user-responsive and successful news organizations. A journalistic organization that wants to grow in the digital age must revamp its operations to take advantage of the continuous big data research cycle. This means creating a feedback loop from the organization to the information consumer and back, viewing journalism as content to be shaped to the UX through constant modification and change based on growing sets of user behavior and preference data.

#### INTRODUCTION

The evolution of new research in reaction to the explosive growth of big data has the potential to be every bit as intense and impactful as the changes and challenges of the digital era. This revolution is made possible by the increasingly sophisticated technology of consumer measurement, along with the ability of news producers to create, aggregate, and store an almost limitless amount of digital data on individual market behavior. This may assist news organizations in not only surviving, but thriving, in the digitally-driven 21<sup>st</sup> century. Ultimately, the winner in all of this is the news and information consumer. Consumers may increasingly find that contact with news channels shaped by big data immeasurably increases their likelihood of a satisfying User Experience (UX), while increasing affinity between news organizations and their audiences.

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There are three critical elements that will enable a news organization to employ big data to positively transform the UX. These same three elements are the natural result of a news organization adopting, as an integral part of operations, the research tools and analytics essential to big data and its corresponding methodologies. The three elements:

First, the use of the big data research approach will promote a consumer-oriented worldview rather than the traditional journalistic view of the world. This is largely due to a perceptual shift accompanying the use of digital research approaches. This shift may pull a news organization from its conventional journalistic view of the world, wherein the news product is traditional journalism and the news consumer needs to be informed by what the newsroom views as the necessary topics of the day, to an evolved view that sees the news product as content and the audience as users—rather than the objects of journalism—in need of a long-term relationship with the news organization.

Second, the UX can be dramatically transformed by the adoption and use of a new research and analytics paradigm, enabling an interactive approach over the one-way capabilities of older tools. This approach relies in large part on the constantly evolving digital analytics that are already part and parcel of successful digital-based information organizations, as pioneered in both the consumer merchandising and technology sectors.

And, third, effective use of big data research tools and analytics demand a commitment to a continuous research process, integrating user analysis into the everyday operations of news/content teams. This process empowers the audience, consumers of news and information products, and makes them part of a continuous product-improvement process. The focus of news organizations is shifting from "doing journalism" to producing an interactive connection between news providers and consumers through an intelligent UX.

#### **BACKGROUND: TRANSFORMING TRENDS**

Paired together, big data and UX have become—in the age of technology-powered data collection and analysis tools—drivers of insight and, consequently, market empowerment (Svilar & Chakraborty, 2013). This has happened to such an extent that 21<sup>st</sup> century organizations, and even slow-to-change news enterprises, cannot adequately market and operate without the use of these tools, which in turn have attracted an army of software suppliers (see, for example, Schiff, 2012). Along with this, research has been elevated to a central place within organizations' competitiveness. News organizations will increasingly rely on big data and its affiliated research tools to shape content, while research methodologies continually push them toward the use of metrics that assume a well-targeted UX as a primary goal.

It's trite but it's true – you are what you measure. The constantly expanding arsenal of digital research tools assumes an affecting and passionately positive UX as the pot of gold at the end of the rainbow for an organization. The tools were developed and continue to be developed with the single-minded notion that progress in a market demands positive users, and extraordinary progress demands extraordinarily positive users.

Some brief definitions important to understanding the research that will lead to a positive UX include the following:

**Big Data:** Big data is the variety, volume and value of data that results from the combination of the tracking and storing of the digital footprints left by consumer behaviors and habits. The acquisition and employment of digital analytics that correspond to the product-related behaviors related to an organiza-

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