



## Working Papers – 2008

### March 2008 **The Feedback Frontiers**

Many of our behaviors and expectations are shaped by the kinds and contents of the feedback we receive, whether individually or in groups. The protocols of social feedback frequently arise from culture, and when feedback systems are changed, they change culture. We are living in a time when all manner of feedback is undergoing profound change, and this will have implications for ourselves and our collective institutions. Now, with risks and needs rapidly changing, the feedback has to be prospective rather than retrospective. Employee feedback used to be a core competence of management; now that feedback can be done with a host of software. Romance and friendship used to rely on personal conversations and body language; now they rely on text messages and legal contracts. Military models relied on arms and personnel; now they must factor in the human condition, the internet, network vulnerabilities and rogue actions. Educational models used to rely on how people compared to their peers and interacted with their teachers; now students have no need to personally interact with their peers or their teachers. People will become more accustomed to being told about themselves, about their interests, about their whereabouts, about their needs and about their choices from sources other than other people. And that means that they will turn increasingly to new media to enable them to escape difficult interpersonal feedback. The products and services that alleviate the need for people to deliver uncomfortable feedback will see enormous growth in the coming years.

### March 2008 **Souls Revealed: The Promise of Reality Mining**

The collection of real-time behavioral data (known as reality mining) refers to the collection of technology-based data, collected primarily from mobile phones. Electronic devices are increasingly being used to control, regulate and predict our behavior, as they simultaneously gather information on us. The speedy, and widespread, adoption of mobile phone technology has given companies the ability to collect a much larger, and more unbiased, assortment of real-time data. These devices are also revealing things about your personality, your daily habits, your social network, and where you go and who you meet. These patterns in data can then be translated into maps of social relationships and dynamics. As human interaction becomes increasingly virtual, rather than physical, our ability to analyze speech, interpret movements, and anticipate consumer behavior will compound exponentially.

### March 2008 **Prime Metrics**

As the world enters the next stages of technological revolution, the era of BANGFUEL (**B**its, **A**toms, **N**eurons, **G**enes, **F**requencies and **U**ltra/infraspectral **E**nergy and **L**ight) is coming fast upon us. What we are beginning to unravel about the universe is rapidly propelling us to the frontiers of the unknown, and all of our bodies of understanding will be profoundly changed. What we did, what we made, what we believed and what we valued are all undergoing fundamental transformation. And we are only beginning to realize that we need to learn *how to measure different things differently* if we are to thrive as people and as institutions. What we measure, still, is what we can see, what we can touch, and what we can replicate. These were perhaps inadequate, but appropriate for an Industrial Era. We now understand that these are only derivatives of what reality may be now and in the future. Our metrics are based on stuff and input, whereas the future is about intangibles and output. Our current metrics are second and third order. We will need to quickly begin to design new dashboards to get to first order understanding – to the primary metrics – if we are to succeed and prosper in the coming years.

### June 2008 **Digital Tribalism**

Sociologists describe two kinds of social ties: *strong* ties to family members and those with shared values, beliefs and identities; and *weak* ties to acquaintances and other people with shallow connections. The Internet and, in particular, mobile devices are enabling the strong ties to be reinforced, often at the expense of the weak ties. At a time when technology is being lauded for encouraging diversity and facilitating cross-cultural communication, there is, consequently, a strong and growing countertrend: *digital tribalism*.

### September 2008 **Employment**

There are many developments pointing to the merging of the roles of consumers and employees in ways that change the relationship of both to any organization. It was once the mandate of any enterprise to utilize the input of its employees in order to enhance the output for its customers. Today, however, it is imperative to employ the input of customers to enhance the organization's output in order to retain talented and capable employees. We might call this state of affairs *employment*, a term that evokes the emerging complementary role of consumers and employees. In every facet of life, from medicine to tourism to education to home entertainment, the public is increasingly doing the work that employees and professionals used to do with regard to designing and configuring product offerings.

### September 2008 **Accumulous Cloud**

The majority of our computing lives now reside inside what is commonly referred to as “the cloud” – a centralized network made up of hundreds of thousands of servers, each storing staggering amounts of data. The cloud is simply a metaphor for the Internet – and leveraging the Internet to access web-based software or services. Information is stored in a centralized off-site data center instead of on your personal computer. Over time, these individual pieces of information can coalesce into a highly sophisticated portrait of people’s lives. People will increasingly enter this space through a variety of cloud-friendly devices: PCs, smart phones, PDAs, RFIDs. These need only to connect to the cloud rather than store the intelligence themselves. The mobile phone in your pocket, the laptop in your briefcase, the navigation system in your car, the tags on your purchases – all of these are enveloped by, and connected to, the cloud. Interactions with the cloud will increase in both number and diversity, which will provide valuable information on how people and systems think and respond.

### December 2008 **Healthcare and the Precautionary Principle**

As the great healthcare advances of the 20<sup>th</sup> Century continue and accelerate in the 21<sup>st</sup> Century, there is growing concern about negative consequences. Across a wide spectrum of treatments and medications, unanticipated harmful results are raising questions about whether we are proceeding with sufficient care. The Precautionary Principle, which grew out of efforts to anticipate environmental impacts of business and government actions, may increasingly be called upon in healthcare. That requires not only a serious effort to determine all outcomes but also an assumption of responsibility for all those outcomes.

### December 2008 **The New, New World Financial Order**

The current financial crisis will eventually be resolved; they always are. But in its wake, it seems likely to leave fundamental changes. The changes will profoundly alter both the appearance and the underlying structure of national and global financial systems. Governments will become more interventionist. Regulations will become more prevalent and stringent. Whether that will be a major inhibitor of capitalism and entrepreneurialism will be debated for some time to come. Capitalism will see more restraints, and there will be efforts to impose more transparency and accountability. Because this crisis is so deep and seems likely to last for a good while, the remedies proposed and enacted will in all likelihood be more than merely surface corrections.

December 2008 **Small is Big: Micro Innovation**

As the current financial stresses occupy center stage, there is rising concern that the many things that need fixing or change may be ignored. Some pessimists believe that innovative initiatives will dry up in the face of funding shortfalls. This may actually be true for a number of large-dollar ventures and big projects, but the exciting news is that so many innovative initiatives are small and potentially extremely effective. Over the next few years, most organizations will be feeling the need to cut costs and hunker down. Now, perhaps more than ever, we need to see innovation that leads the way out of the current crises – and that innovation need not be huge or costly. New avenues for value extraction need to be explored. Markets are eager for new solutions that are workable, more secure and less costly. Ingenuity is most necessary in times of great challenge, and what we must focus on is how to extract and apply that ingenuity so that many phoenixes can rise from the enormous piles of ashes on the horizon.