The Next Revolution



What is the Intelligence Revolution?

By Russ McGuire - russ.mcguire@gmail.com

ast month, I briefly introduced the Intelligence Revolution and put it in the context of the broader Information Age - following ✓ behind and building upon the Digital Revolution, the Internet Revolution, and the Mobile/Social Revolution. This month, I'd like to more thoroughly explain what this new revolution is. Next month, we'll look at the new power and the new danger represented by this revolution.

A Brief Review from Last Month

The Digital Revolution is often referred to as the PC or Microprocessor Revolution, because the Microsoft-Intel-IBM personal computer ushered in this new era where computing power moved out of the data center, onto the desktop, and eventually into virtually every product with a power supply. However, the long term implications of this era of the information age stem from

the fact that these changes enabled virtually everything in the physical world to be digitized - to be accurately represented as ones and zeros that were easy to store, copy, and manipulate.

The Internet Revolution is most notable for making it easy for that digital information to flow across boundaries - between individuals, families, companies, and countries. Among other things, this meant that information could easily

be shared with others, and information from different domains could be combined to create new information.

The Mobile/Social Revolution enabled everything and everyone to be connected digitally all the time. We are growing increasingly comfortable sharing information about ourselves online in fairly public ways. Meanwhile objects around us are constantly collecting information and bringing it into the cloud - from weather stations to security cameras to car engines.

What is Big Data Analytics

Over the past few years, a new discipline has started to emerge called Big Data Analytics. You've probably heard of it and you may have some idea of what it is, but unless it's become part of your job description, I'm guessing it's still a pretty nebulous concept to you. Admittedly, the definitions in the industry are still swirling a bit, but I found Timo Elliot's blog post on "7_ Definitions of Big Data You Should Know About" very helpful. He starts with a 12-year old definition that describes Big Data as representing the combination of Volume, Velocity, and Variety of data. He then introduces the new technologies that have made it cost-effective to deal with high volume, high velocity data from a wide variety of sources, most notably Hadoop and NoSQL. He goes on to point out that we previously primarily dealt with data about transactions, but now we are also analyzing interactions (e.g. web page clicks) and observations (data collected automatically by connected devices). He describes making decisions based



Membership Contributions Group Involvements Child Check-in Web Integration



on transactional data as "managing out of the rear view mirror" but that interactions and observations can "signal" things that are likely to happen in the future. He closes his piece with a couple of analogies - "dark data" (data that we previously ignored because of technical limitations) and big data providing a "nervous system" for the planet.

Although that collection of definitions fails to provide a single crisp, clear, and comprehensive definition of big data analytics, hopefully it gives you a good sense for what is happening. Because we are on our computers and on our smartphones all the time, doing stuff and sharing stuff, each of us has become a data factory churning out massive amounts of information about ourselves and the world around us. Likewise because the objects around us are increasingly observing themselves and the world around them, collecting those observations, and then bringing those observations into the cloud, we are surrounded by data factories. Technology now enables all of that information to be stored, correlated, and analyzed to create new insights that can create value for someone.

Some of those "someones" scare us. The revelations by Ed Snowden about NSA surveillance programs was a wake up call that governments are putting tremendous computing power to work in ways we could never have previously imagined.

Some of those "someones" may bother us. Clearly, advertisers have much to gain

by being able to more accurately target who sees their ads and when they see them. Nissan's marketing dollars are best spent if they can put a compelling offer in front of someone who has a preference for Japanese automakers while they are in the process of considering their next car purchase. On one hand, we prefer to see ads that are relevant to us. On the other hand, it's pretty creepy when advertisers are using big data analytics, based on information we didn't realize was public, to put ads in front of our eyes.

But, to be honest, we probably welcome some of those "someones." My ESPN mobile app already knows that the Kansas City Royals are my favorite baseball team (because I told it so). And because of that, when I open the app, I see the Royals score and their latest news. However, I look forward to the day when that app will also know that I've set up my DVR to record the game and to not provide notifications each time the Royals or their opponents score!

With all that as context, here's my working definition for the Intelligence Revolution: "The Intelligence Revolution will help us better understand the world around us; will improve our

> decision making to enhance our health, safety, and peace of mind; and will enable companies to better serve us based on the correlation and analysis of data from the interrelation of people, things, and content."

> Of course, my definition paints this revolution in the most positive manner possible, and hints at the "power" of this revolution. I think it's obvious there are many "dangers" as



well. We'll talk about the power and the danger, as well as the barriers for this revolution, in next month's column.

Any geek worth his salt is already thinking we're all being assimilated into the Borg collective in this "revolution", which hopefully reminds us of what Jesus told his followers in the 8th chapter of John. "If you abide in My word, you are My disciples indeed. And you shall know the truth, and the truth shall make you free." (John 8:31b-32) As technologists, we can easily get caught up in these technology revolutions, but let us never lose sight of the One who is the Source of all knowledge and intelligence, and Who cares for us and watches over us. The "revolution" that really matters is the one that in happens in our heart, changing us from being dead in sin to being alive in Christ. God is in control and He is working all things to His glory and to the good of those who love Him.

It is my hope and prayer that these articles will encourage you in your daily walk with Christ. As 1 Peter 4:10 teaches us "As each has received a gift, use it to serve one another, as good stewards of God's varied grace."

Russ McGuire has spent the past 10 years as an executive for a Fortune 100 company. His current focus is on helping young Christian entrepreneurs to grow in grace and in excellence. He also provides advisory services for businesses large and small (sdgstrategy.com).





CHURCH SOFTWARE

with integrated solutions. Supporting church growth since 2002.

888.997.9947 | ELEXIO.COM