Business focused applications of human-computer interaction

Technology, Computer

Computers have come a long way from helping people perform simple calculations. They have gone from filling up entire rooms, to occupying desktops, and, now, residing in our pockets in the form of smartness. We are clearly in an age when computers are becoming more and more ubiquitous. As their size and portability change, so must the methods of input and what we desire as outputs because we have to take environmental contexts into consideration. These changes have lasting ramifications for the way we run our organizations and they continue to develop rapidly.

The average layman understands the technological boom in general terms but it is important, in one's professional development as an information systems professional, to consider more definitively the latest developments in conceptualization, design, and execution of the latest applications. Here we will take a closer look at programs featuring: collocation, content analytics, and collaborative lifestyle management as some of the most cutting edge developments in the software industry today.

One would be hard-pressed to find an individual in a modernized society who has not utilized passive high accuracy collocation at one mint in time or another. Generally speaking, this usually occurs in the form of a navigation app executed on a smartened or navigation devices. But innovators continue to push the standards as far as how collocation through smartness can enrich users' experiences and performances in a meaningful way. For example, take Vim's development of the Access My NYC app.

This app was developed in order to help people with disabilities experience New York without having to expend the extra time and energy normally

required to determine what modes of transportation are available as well as what nearby events and locations are handicap-accessible (Access, 2011). The military has also been using passive high accuracy collocation to help leaders in convoys track the rest of their convoy, note significant events occurring in their proximity, and track other friendly forces traveling by convoy in the area.

Users can also communicate directly with their tactical command as well as communicate with any other users seen on the map via a system similar to instant messaging. This tool stands to help reduce friendly fire, maintain accountability, open p forms of alternate communication in case of radio failure, and improve situational awareness. An organization could utilize passive high accuracy gee-location in a number of ways to meet their objectives.

One may even take it a step further and apply data collected from passive gee-location activity on a daily basis and insert it into a content analytic program in order to Juxtapose information side-by-side and make logistics more efficient. For example, a logistic trucking company could have a passive gee-location device in all of their trucks, then gather information regarding peed, traffic, weather, altitude, and probable stop times utilizing content analytics to identify problems and extrapolate solutions. Content analytics software uses natural language queries, trends analysis, contextual discovery and predictive analytics to uncover patterns and trends across a company's unstructured content. " (Rouse, 2011) That being said, content analytics is a great tool for taking all of the unstructured and unrecognized

information flowing in and out of a business and presenting it to a business owner through different lenses. This is an extremely valuable product to offer but seems to be difficult to develop considering every business owner and business are different.

Vim's Content Analytics program helps users aggregate and analyze unstructured data such as: " company documents, e-mail, database records. " (MOM). They present that their visual style of displaying the whole of this wide gamut of data will help companies analyze a high volume of feedback, gain the initiative on product deficiencies while looking at service requests, and be proactive in managing their public image by analyzing " automated news, survey, and brand analysis. MOM). Another software firm, Titivation, seems to take a different approach of contents analysis for businesses. Where IBM highlights the user's ability to toggle back and forth between views, Titivation's program touts analysis on a schedule. This analysis would be based on " business-logic" with rules set before hand by the user/business owner (In-Engine 2011). Also, they promote their program's ability to analyze purchasing activity and item popularity.

So Vim's product may be weighed more heavily towards assisting with quality control where Titivation's focus is on predicting customer preferences. Where content analytics is helping management deliver a more pleasant experience to their customers, collaborative lifestyle management is helping to organize, direct, and supervise team collaboration on group projects in order to maximize productivity and process control.

Carolyn Pompano, Vim's Rational Program Director, referred to 5 imperatives of lifestyle management in discussing Jazz, Vim's Collaborative Lifestyle Management Program. (Collaborative 2013): * having a solution that helps you with real time planning * lifestyle traceability * in-context collaboration * development intelligence continuous improvement She went on to explain that " projects that have strong measurement practices have much higher rates of success... 50% of companies are not measuring quality of productivity. The key concept behind this tool is to do away with the hassle of team members e-mailing each other 1st, 2nd, and 3rd versions of certain sections of work and subsequently getting lost in going back and forth. Collaborative lifestyle management is a solution that allows team members to collaborate together directly on the project-at-hand while having their progress tracked by their management in eel time and without excess micromanagement. Google Drive is similar to Jazz in concept. It provides a cloud drive in which to save documents, either shared or unshared.

When a document is shared, it means the original user has invited others to collaborate on it in real time through their own free Google Drive account. The web based application has the basic formats for text documents, spreadsheets, presentations, forms, and drawings as well as the ability to upload files from other programs, translating them into Google's programming framework. Google also has a elaborative calendar that can be used in conjunction with Google Drive in order to set important dates for your project teams.

I did not see any features dedicated to development intelligence, or constantly monitoring the quality of the work processes taking place which may be a major weakness although Google Drive appears to be an application geared more towards the average consumer rather than highly-trained professionals developing a product requiring a lot of technical know-how. In closing, IBM and several other firms are all fiercely competing for market share in developing footwear designed to give its users in organizational settings the ability to use their computers for gathering data for their business that would otherwise be extremely difficult to monitor.