

Revolutionizing the WFO Industry with a Superior User Experience

The Art of User Experience Design



The past 5 years have seen far more attention given to the interaction between humans and computers than has ever been the case. Millions of fascinated consumers now salivate over an upcoming release of Apple iOS and watch with anticipation to see what will be in the next version of Windows. What used to be referred to as the software “User Interface” or “UI” has been displaced by the more encompassing term “User Experience” or “UX”, which embraces all aspects of the experience of a user, including his or her subjective perceptions. Not surprisingly, the high demand for good UX design has given rise to a whole new industry, career path, academic majors and methodologies poised to generate well designed user experiences.

Unfortunately, UX design is, at present, more of an art than a science. Even UX experts don’t have a good understanding of how people process and respond to information, so there are no formulas or models that predict how people will react to one UX vs. another. Those firms that do specialize in UX design require a broad portfolio of special talents available including expertise in psychology, anthropology, architecture, sociology, computer science, graphic design, industrial design and cognitive science. For the most part, good UX design relies on some generally accepted rules of thumb or guiding principles for initial designs that rapidly become exercises in iteratively prototyping, testing and redesigning for the target user base until the users agree that the design is something they like.

This often lengthy process makes developing a really good user experience extremely difficult, even for the experts. Jony Ive, SVP of Design at Apple and architect of the Apple iOS user experience says, “Making the solution seem so completely inevitable and obvious, so uncontrived and natural - it’s so hard!” It’s expensive as well. Apple’s R&D budget is about \$1.1 billion annually, yet it took them over six years, from the release of the first iPhone to the release of iOS7, to decide that their icons should be flat and simple rather than textured and three dimensional as shown in the figure below. That’s an expensive lesson, and most software companies do

not have the patience or deep enough pockets to make these discoveries themselves.



iOS 6 Safari icon



iOS 7 Safari icon

Microsoft just recently made the same decision about flat, simple icons with the release of Windows 8, despite the fact that they have been evolving their Windows operating systems for decades, spending about \$9.6 billion in R&D annually. That seems like slow and expensive progress, but since the human mind is so complex, we really don’t have a sound understanding of how people process information. There is only what has been learned by trial and error at the cost of billions of dollars to arrive at some rules of thumb that seem to generally work. Whatever the state of the art, the bar is largely set and promulgated by Apple, Microsoft and Google, since their great user experiences are literally in the palms of our hands every day. The challenge is for other application software to catch up.

Trends in UX Design

After years of wrestling with the challenge of finding the best UX, Microsoft and Apple have developed some UX design principles that may at first seem a bit amorphous, but as we'll discuss later, these principles can manifest themselves in very real design decisions. See the figures below for a summary.

Microsoft UX Design Principles

- **Pride in craftsmanship** – devote time and energy to small things that many will see often
- **Fast and fluid** – product should feel immersive, responsive and compelling
- **Authentically digital** – create exciting possibilities in the digital world and remove unnecessary decorations and ornamentation
- **Do more with less** – focus on only what's needed
- **Win as one** – shared iconography, typography and metaphors

Apple iOS 7 UX Design Principles

- **Defer to content** – the user's content is at the heart despite an attractive UI; bezels, gradients and shadows should not overpower the content
- **Provide clarity** – Use plenty of negative space, let color amplify the UI, ensure legibility by using the system fonts, embrace borderless buttons
- **Use depth to communicate** – Use layers to convey hierarchy and position to help users understand the relationships among screen objects

These design principles from Microsoft and Apple are some of the best thinking when it comes to software user experience design, and their principles, although stated in different words, are not very different. But, as we noted above, UX design is an art, not a science, so these design principles will likely continue to evolve. As these software giants and others come to better understand the way human beings process information and as new technologies become readily available (such as gesture recognition, speech recognition, wearable sensors and projected displays), these principles will undoubtedly change and become more refined with the passage of time.

The State of the UX for Workforce Optimization

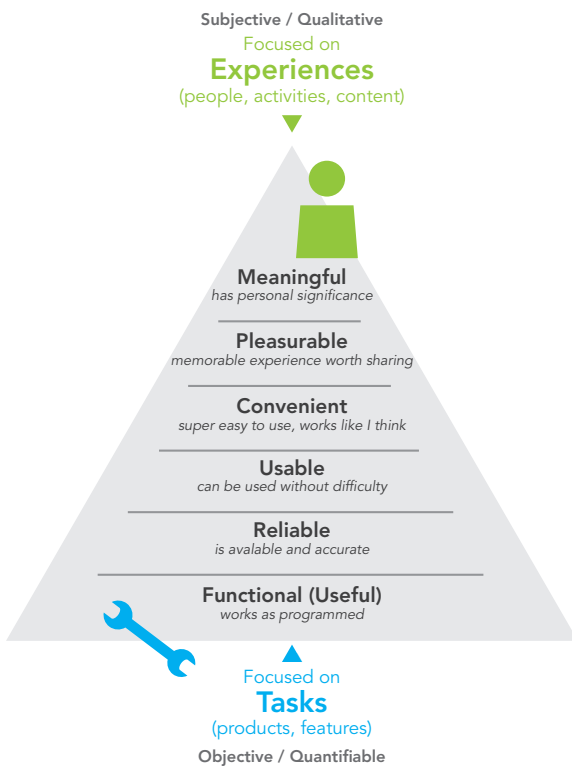
It's ironic that workforce optimization systems, which are designed to get the most out of the workforce, are themselves a barrier to productivity because they are so hard to use. DMG Consulting says, "dealing with a hard-to-learn, complex and time-consuming user interface remains the number-one reason why companies stop using their WFM solution". If some enterprises are actually giving up on their WFM systems because of a poor UX, there are no doubt 100 times as many enterprises that are frustrated by them to one degree or another, and that frustration leads to a host of negative effects summarized in the table below.

Negative Effects of a Poor WFO User Experience

- **Underutilization of powerful but complex WFO features**
- **Poor productivity**
- **Lengthy and expensive training**
- **Poor agent performance**
- **High operating cost**
- **Low employee morale**
- **Lower quality scores**
- **Reduced customer satisfaction**
- **Slow service**
- **Generally diminished results in all of the areas that WFO systems are designed to improve**

And why are the WFO software interfaces so poor? Workforce optimization and workforce management in particular are very complicated, and the focus of vendors has been on the key forecasting, scheduling, tracking, call recording and analytics features that have been yielding higher customer ROI for years. Also, many vendors have built their WFO portfolios through the acquisition of separate workforce management, quality management and performance management software companies. They simply never made the large investment to go back and thoroughly integrate these capabilities at a functional or UX level. In addition, the code-base of the larger providers predates recent major advancements in UX design. Finally, it is hard, time consuming and expensive work, or as Jony Ive says, "Different and new is relatively easy. Doing something that's genuinely better is very hard."

One commonly accepted way to think about the level of sophistication of the user experience is the UX Hierarchy of Needs shown below:



WFO software has for years been focused on call center tasks that are clearly and objectively measurable such as level of adherence, first call resolution rate and average handle time. WFO software exists today primarily at the bottom of the pyramid. It certainly exists in the Functional and Reliable layers. It works as programmed and is available and (generally) accurate. As evidenced by the quote from DMG consulting above, it's more than likely that WFO software only barely touches the Usable layer, because it often cannot be used without difficulty. Managing a contact center well is tremendously complex, and that complexity has to appear in the WFO software if the complexities are to be managed well. It's certainly no small feat to create a software solution that can manage a contact center, and Apple would likely agree that taking the next step toward creating a great experience for contact center users is in many ways even more difficult.

That's what Aspect Software has done in its recent release of Workforce Optimization 8.0. Aspect Software has turned the pyramid on its head by creating a UX that is truly exceptional, one that is both pleasurable and meaningful, one that is a memorable experience worth sharing and that has personal significance for our many agent users as validated by real user feedback.

Aspect's Decision to be the First to Adopt a Truly Superior UX

With over 2,000 customers and 1.4 million contact center seats, Aspect Software is one of the world's largest and most experienced providers of contact center software. As the global leader in customer engagement solutions, our unified interaction management, workforce optimization and back-office solutions seamlessly orchestrate people, processes and touch points for today's top brands in financial services, aviation, healthcare, telecommunication, retail and manufacturing.

In 2012, a new management team embarked on a journey to prepare the Aspect product lines for success in a new era of omni-channel customer communication, social media and software migrating to the cloud. With the contact center increasingly becoming the focal point for all channels of customer communications, they had a vision for a much better experience for agents, supervisors and other users of their workforce optimization tools. After extensive discussions with industry analysts and some of the best UX design firms in the world, they made the strategic and financial commitment to completely re-architect and tightly integrate the three primary components of the Aspect Workforce Optimization suite, i.e., Aspect Workforce Management, Aspect Quality Management and Aspect Performance Management.

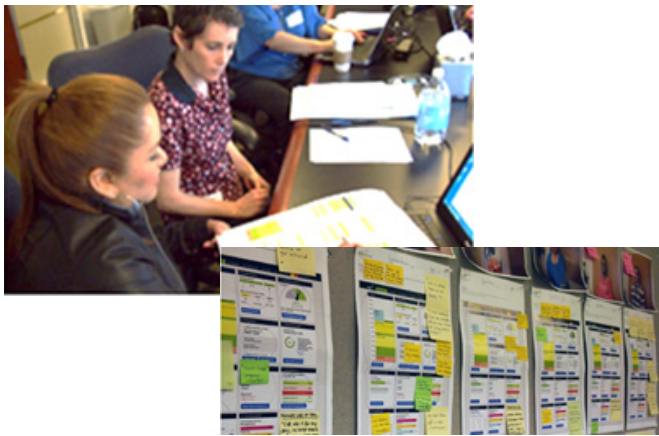
As part of this redesign, Aspect would radically improve the existing user interface, giving it a look and feel and usability that was a quantum leap ahead of any of the other offerings in the WFO industry. Aspect Software has delivered on that commitment, and the release of Aspect Workforce Management 8.0 has certainly changed the face of managing the contact center labor force forever.

Aspect's UX Design Process

Although Aspect's subject matter experts are steeped in contact center and WFO principles, we wanted to ensure that we also had access to the best UX design expertise available, and so we sought the consulting assistance of a premier design firm that has helped large software companies very successfully revise their UX design and enhance their brands. We chose a well-known firm that had been instrumental in creating new designs for industry giants including Microsoft, Apple, IBM, GE and Siemens.

In late 2012, Aspect and our UX design firm began the ambitious project to really walk in the shoes of our users and understand their needs and frustrations and then to iteratively test alternative designs to find the characteristics of the best

possible software UX for each type of user. Working closely with our UX design firm was certainly essential in converging on a design that had broad appeal to our users. They knew from the start the current thinking on best UX design practices and understood how to orchestrate collaborative and effective sessions in which new ideas could be surfaced and prototypes could be tested, improved and retested. The user test groups included dozens of experience agents, supervisors and other contact center personnel. Individual sessions were conducted using open-ended questions, paper worksheets for choosing mockups of user interface options, as well as HTML simulations used as stimuli for questions about task completion and overall feedback on appearance and usability.



Some real-world WFO frustrations quickly came to the surface including the following:

- Difficult vacation request process
- Complexity of shift trading
- Technology issues such as performance
- Searching for calls and scorecards
- Understanding the schedule

By the same token, numerous opportunities to dramatically improve the agent UX became evident including:

- Make the WFO software serve agents as well as it serves businesses
- Take the burden off the agents and put it on the system
 - Implement basic usability best practices
 - Hide information and functionality that is only useful to supervisors or analysts
 - Ultimately this will get the agents back on the phone faster with less stress

- Surface only the information that agents need
 - In human language
 - Don't make them search for it
 - Be smart and contextual
- Support collaborative workflows
 - Enhance interactions between supervisors and agents
 - Enable communication between agents
 - Close feedback loops
- Make data meaningful and actionable
 - Avoid "Death by metrics"
 - Suggest clear next steps
 - Integrate features into cohesive flows
- Encourage transparency
 - Explain why requests fail
 - Let the agent know where they are in all processes
 - Provide channels for more personalized communications

These revelations led Aspect to the design of working prototypes that were successively tested and improved until we converged on a user interface design that addressed the concerns of the agents and other users. In fact they really liked it!

A New UX is Born

The design process was long and expensive but the results were really gratifying and exciting. We knew by the smiles on our users' faces that we had taken a major leap forward in WFO software and that the industry would never be the same. Based upon the detailed feedback from our test users on prototypes, Aspect has developed a very intuitive, icon and widget-based graphical user interface with the following primary features:

- Simple and pleasing dashboards, icons and widgets that use consistent color and metaphors across all primary WFO software functions – workforce management, quality management and performance management
- An attractive and forgiving UX that works on all major browsers without requiring plug-ins and functions equally well on desktops, laptops, tablets or smartphones
- Screens that dramatically simplify the complex tasks that agents identified as being problematic
- Displays that surface the information that is most relevant to the particular user whether agent, supervisor or other and hides other data without losing it

- Tight data and functional integration amongst workforce management, quality management and performance management enables advanced features to work in cohesive flows across applications
- The Aspect UX features a combined dashboard that presents the most important information across all applications within the WFO suite

Below is an example of a combined dashboard screen that illustrates how we followed many of the design principles that have been adopted by Microsoft.



- Pride in Craftsmanship
 - Significant thought was given to exactly what information should be available in each widget for each type of user (agent, supervisor or other) so that only the minimum necessary is shown
 - Every widget and icon was designed for maximum graphical appeal and rapid understanding
 - The WFO 8.0 UX was designed to adapt to any device or form factor whether PC, laptop, tablet or smartphone
- Fast and Fluid
 - The most meaningful data is immediately available to the user
 - Navigation between menus is fast and intuitive
 - Menu selections, not applicable to current user, are hidden
 - With a common look and feel in all WFO 8.0 components, users can rapidly jump from quality to performance to WFM without hesitation or additional training

- Authentically Digital
 - Flat, simple icons without imitations of the real world (e.g., Customer Services performance monitor does not attempt 3-D look of a real meter)
 - Clickable numeric results to drill down into detail
 - Typography that is representative of feature hierarchy
- Do More with Less
 - Elimination of type fonts with serifs
 - Although it does not appear on the screen, help is always available by rolling the mouse over different portions of the screen
 - Definitions of terms are available by clicking on the information icon next to the term
 - Only the most important information is shown, the rest is hidden but available
- Win as One
 - Consistent use of color for meaning (e.g., in the Schedule Editor, orange always means Training)
 - Blue boxes with arrows always mean links to other more detailed information
 - Banner headers for a specific purpose are always black bands with labels on the left
 - Where settings are available, they can always be accessed via the gear symbol in the upper right
 - Combined dashboards function similarly whether one, two, three or more components of the WFO were purchased

Our users agree that the new WFO 8.0 UX is very powerful yet easy to use. Preliminary tests are showing that for many day-to-day activities, agent productivity has improved over 50%. The full extent of the benefits of this new UX are still being studied, but all beta test customers give it very high marks. A major hotel chain with about 200 centralized agents is using the beta version of the Workforce Management component of WFO 8.0 and decided that they want to keep their beta test system rather than go back to the original. Agents are saying:

- “The new WFO UI is definitely faster”
- “Everything is great!”
- “It’s been flawless”
- “Love this”
- “This is so easy”

Brave New World

Over the next few years, we will undoubtedly see continued advancements in the techniques used to create a natural environment for interactions between humans and computers. We are also likely to see software providers of all sorts increasingly focused on the user experience given the new standard being set by some high profile companies whose software we use every day. For the WFO industry, Aspect is leading the charge into this brave new world. Given the economies of scale associated with hundreds or thousands of

agents, even small improvements in often-used software tools can mean big gains for the enterprise. WFO software with a really good UX offers to make significant improvements to key contact center objectives including productivity, employee morale and customer satisfaction, to name a few. As the extent of the benefits from a truly superior WFO UX become fully quantified, expect to see other vendors follow Aspect's lead in the redesign of their user experiences.

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About Aspect

Aspect is the only software company with a fully-integrated interaction and workforce optimization platform for enterprise contact centers globally that need to profitably (and seamlessly) orchestrate people, processes and touch points in an era when the contact center is the new center of the customer experience. For more information, visit www.aspect.com.

