



Mixed Reality...Coming Soon to a Planet near You

We are familiar with the term virtual reality, but what is mixed reality? Even a lot of people reporting on mixed reality seem to get it confused with virtual reality or heads up displays. Let's go through what each one is and examine their individual features and potential uses.

Virtual Reality: Virtual reality is an immersive technology similar to Oculus Rift, which was acquired last year by Facebook. Immersive technology puts the user in a world created entirely by the virtual reality headset in conjunction with an internal application. A few examples of virtual reality in use are: Games that place the user into the realm of the game as a participating character; virtual walkthroughs, wherein architects and engineers can stroll through a planned building to see it from an occupant's perspective; and simulators that place the user (such as a pilot) into an all-surrounding environment created entirely by the system. This last example is a good place to mention that mixed reality would undoubtedly be more effective in an instructional situation, because the pilot needs real controls and instruments to view and to manipulate in conjunction with a simulated flight environment.

Heads up Display: Heads up displays have been used by military pilots for decades. Even car manufacturers have implemented heads up displays (HUD) into automotive dashboard controls. Google Glass should also be characterized as a HUD. HUD projects images into the user's line of sight; typically, the information falls under status alerts, such as low fuel. Heads up displays are not interactive. The intent is to relay information in such a way that you don't have to take your eyes away from the task at hand. Another good utilization of HUD is in manufacturing and inspection processes. The displays provide crucial information to the workers, keeping them safe and distraction-free.

Mixed Reality: Because mixed reality hasn't been deployed yet commercially, there's confusion about what it is and what function it might serve. The two competing players are Magic Leap glasses and Microsoft's HoloLens. Their technologies allow users to view the real world as it exists around them and be able to project virtual images into that real environment. Practical uses of this might include adding design elements to an existing object and being able to see the effects of the design as well as to manipulate it within this combined environment. How does this differ from the virtual reality walkthrough? It becomes much more productive to draw only the element being changed than to have draw it and the environment it exists in, which would result in significant time- and effort-saving measures. In

addition, the real world allows a better representation of the final result. Mixed reality also enables increasingly dynamic games that can be incorporated into the real world. For office productivity, it allows a much more robust workspace in terms of organizing users information and interactions. A problem that has plagued the computer era is that the information we sift through has many dimensional aspects to it; representing that information in a one-dimensional list or two-dimensional chart doesn't capture the greater context. Qikspace, a company in Seattle, has developed a multidimensional organization structure that takes advantage of the mixed reality interfaces. This revolutionary product will start to hit the market in late 2015.

Mixed reality is the future of productivity enhancement tools. Virtual reality will simply become a cheap and effective method for gamers. Heads up displays will remain the most cost-effective way to provide limited one-dimensional information.

About Us

Qikspace (www.qikspace.com) specializes in social collaboration software with a personal relationship management (PRM) component. Qikspace was started as a research project in 2011 the emphasis was the analysis of contextual relevance in relation to human interactions. The result of this research became the platform that is being developed and enhanced today. Our unique philosophical and technical approach has allowed us to create a solution to the complex world of online human interactions and the consequent collaborations.

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