

Interface Revolution : The Next Digital Revolution

*From our perspective, at ConceptSL, we believe that with Digital Revolution comes the **Interface Revolution**. Digital interfaces evolve quickly and are not only changing the way Humans interact with digital information, digital entities and digital beings; but they are also changing the way real-life objects are being designed to hold these digital entities.*



The success of natural interfaces, recently popularized by the **iPhone** and the **Wii** have demonstrated that people actually like to interact directly and more naturally with digital entities and have shown that a smart design and more natural

interfaces can actually exceed efficiency of the old-fashioned mouse & keyboard combo.

Other said natural interfaces are being developed as we speak, such as brain interfaces and the never-proven-efficient speech interfaces.



This device is not available to consumers. The consumer version will be announced at a later date.

All these interfaces have a common drawback: the digital entities are still contained "**behind the screen**". But things are getting better. Although **Holographic** projection is not ready yet, a new technology is slowly investing the market: **Augmented Reality (AR)**.



Augmented Reality is allowing digital entities to come to life (in the real world) by superimposing information to real-video stream. The user is watching through video cameras or VR devices and interacting thanks to motion sensors and motion detection or other natural interfaces.

Another big revolution is actually hidden inside virtual spaces themselves: **Avatars**. Although avatars are originally used to represent a human in digital spaces, we at **ConceptSL**, believe they can be of other (better?) use. We are seeing the rapid development of a new kind of real-life objects, so-called **Communicating and Smart Objects**. These objects are connected to Internet and are so able to interact with digital information (send emails, read e-books, etc.). Not exactly **R2-D2s** yet but they are getting smarter every day. These objects being a bit like small computers, they are poised by the same recurring problem: *how do we interact with them?*

We are suggesting a new use for Avatars: **becoming an interface between us and those objects**. "Interfacing avatars" (we coined the term "**Mediatars**"), could incarnate the smart objects describing orally or visually (through AR for instance) what features the object is offering. We would interact with the avatar directly in natural language or gestures.



More generally, we suggest that Mediatars could highly simplify the way Humans can interact with "Machines". Mediatars have the knowledge of the Digital or Physical entities they incarnate and the ability to communicate with Humans. When a company develops a new technology or object, they just need to configure the Mediatars ("injecting" it with the technology knowledge) to be able to manipulate them. No more need for huge Excel-like GUIs (Graphical User Interfaces) and features that nobody ever heard of.

Maybe the Mediatar will become like the little brother born with technology that helps his grandmother to configure her online mailbox.



What is certain is that technologies are becoming more and more complex as well as the volume of Information is increasing very fast. And huge efforts and big amounts of money are poured into R&D to create interfaces that will enable easy use of this technology and easy sorting of Information. And the increasing speed of technology development will just accelerate that phenomenon.

Simplifying this through thorough design of interfaces will become more and more complex if not impossible! We need to change the way we design objects to simplify their use and we need to rethink how interfaces are made by inventing new means of interaction in and out of the screen and go back to the basics of Ergonomics.

This is the Interface Revolution.

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