



Transforming the present and constructing a better future

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Abstract

Sapiens Circus was created by exploring the so-called Experience Economy⁽¹⁾ and the new Human-Centered-Technologies⁽²⁾. The purpose of the project is to generate memorable experiences through the use of games, stories and technology in an engaging and interactive environment.

In this way, materialized by a modular, flexible physical structure and a playful language. Sapiens Circus becomes a platform for technology, fun, and learning, based on both art and science that focuses on ourselves, with a basis in concrete studies about our very existence. By means of technological devices such as tables, carpets, cell phones and other elements.

More than a technology challenge, we link social systems (*Politics, Traditions And Aesthetics In The Modern Social Order*)⁽³⁾. Human Centered Technology broadens concepts and actions and recalls a transdisciplinarity. These concepts and actions, lead us to a transdisciplinarity that Manuel Castell among other social scientists have indicated includes processes of construction of a new cycle of realimentation of the flows and networks of current society⁽⁴⁾.

Keywords

Education, Experience Design, User centered design, Participative systems, Participatory design, Interactive Media.

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Introduction

The transformation of reality begins with people and it is for them that Sapiens Circus' methodology of action and technology is directed, because all technological development is "centered on human beings". The visitors' motivations are constantly encouraged by experiences presented in a rich conjuncture of content and carefully created themes.

The participants are much more than mere spectators, they assume the role of protagonists in a story and are challenged to complete an important global mission. In this dynamic, a narrative arises that contextualizes the communication of knowledge and attitudes in the form of a story.



The choice of the first content was crucial to demonstrate the complete potential of this new platform of experiences. Within this spirit, the first content presents the Biodiversity of the Amazon as one

of humanity's most valuable assets. It is a non-explored environment that needs protection and must be used rationally and carefully to assure the well-being of humanity.

CASE: BIODIVERSION

"BioDiversión: an Amazon Adventure", was developed by a multidisciplinary team of psychologists, educators, biologists, and other scientists from the National Institute of Amazon Studies (INPA), as well as screenwriters, designers, actors, directors, technology specialists and many others. The goal was to carefully create the various aspects of an interactive educational experience. The objectives included: (1) to stimulate debate about the importance of the Amazon's biodiversity among students 10-14 years of age in Manaus, Brazil; (2) to transmit basic concepts about biodiversity and encourage future classroom studies and (3) to study the use of technology as an educational tool.

Using the technological devices, students interact with films, games and actors. This dynamic surges through a narrative which indirectly provides students with information about the Amazon's biodiversity. The information is not simply presented to the students. They receive "clues" that help them search for information needed to complete a "mission." In this search, the students are stimulated to cooperate with each other to increase their knowledge and take decisions by means of a story or simulation in which the Amazon's biodiversity helps them to resolve a problem. In this way they deduce the importance of its preservation and sustainable use. Sapiens Circus therefore teaches basic concepts about biodiversity and sustainable development.

The results are impressive, in agreement recall on the Final Report of the Research⁽⁶⁾, 80 % of them participants characterize the Sapiens Circus as an experience that teaches what it consolidates the recital of the research. The use of technology as an educational tool associated to the new language used in Sapiens Circus was quite stimulating for all involved and truly led the students to an initial reflection about the environmental question. In addition to awakening a greater motivation to study the theme presented in their classrooms.



TECHNOLOGY

Considerable research and technology were needed to make Sapiens Circus a true platform for Experience. Great care was made so that all the elements (content, environment, interactivity, guests) would be in perfect harmony. Sapiens Circus is based on concepts that go beyond technology in its most traditional uses, focusing on and giving greater emphasis to human beings and their relationships with other people. For this reason,

Sapiens Circus adopted some distinct concepts to make interaction with visitors as natural as possible.

- Human-Centered Technologies are based on the principle that a technology should adapt to the needs of Human Beings. Technological solutions must resolve problems and assist people to achieve their objectives in a natural and efficient manner. The development of new forms of interaction with the Human Being represents one of the principal efforts and research focuses for Sapiens Circus
- Integration, Convergence and Automation are resources needed for Sapiens Circus to function in a single and integrated manner. Identification Systems, lighting, video projection, audio, appliances, communications systems, cameras, data bases and many other elements are linked and ready to respond to visitors needs.
- Pervasive Technologies. The Human Centered Technologies combined with the integration of all the devices and equipment, lead us to a new concept, technologies that permeate our lives. We come to use them in such a natural way that we don't realize we are using them. The resources are available to everyone, and there is no need to be concerned about their origins, or how to operate them. The naturalness and ease of access in the interaction, lets its resources permeate the needs and activities of the visitors.

CONCLUSION

Based on the integration of entertainment, education, aesthetics and immersion, and using elements of game theory, dramaturgy, cinematography, animation, plot, scenography, lighting and sound, structured on a base of interactive and friendly technologies and highly, Interactive content, SAPIENS allows users to explore "Complex Subjects" as simulated protagonists in adventures and challenges, in both virtual and physical environments that leave deeply memorable experiences guided by missions and cooperative interactive games.

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