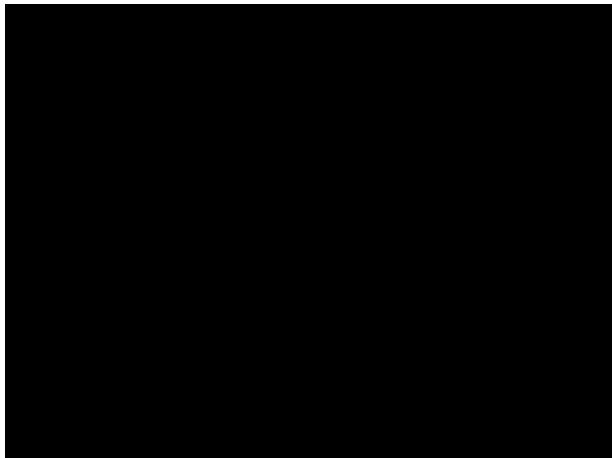




Outline

- Alterface Quick Overview
 - Vision
 - Approach
- Products and Applications
 - Example of natural interaction: the Station™
 - Other Products
- **Salto™ Technology**
 - Development Choices
 - Rationale



Overview

**Vision
Mission
Approach**

Vision

To facilitate man-machine interactions with multi-sensory devices

Market focus: interactive settings for

- Education and Entertainment (E&E) actors such as museums, leisure parks...
- Information and Advertising (I&A) actors such as chains, infopoints, resellers...

that

- Rely on **natural interaction**
- Are spectacular and accessible to the general public
- Allow one to fit contents and entertainment

Mission

Alterface develops the **software platform** which makes it possible to develop **interactive solutions** in physical spaces.

- **Robustness and reliability** for intensive, real-time usages and automation
- **Modular and flexible** in order to allow diverse uses with various types of sensors/captors.
- Allows for **natural interaction** and manages intelligent scenarios

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natural interaction

Concretely?

We develop **software** for solutions that are...

WITHOUT INTERFACE ("natural" use)

a

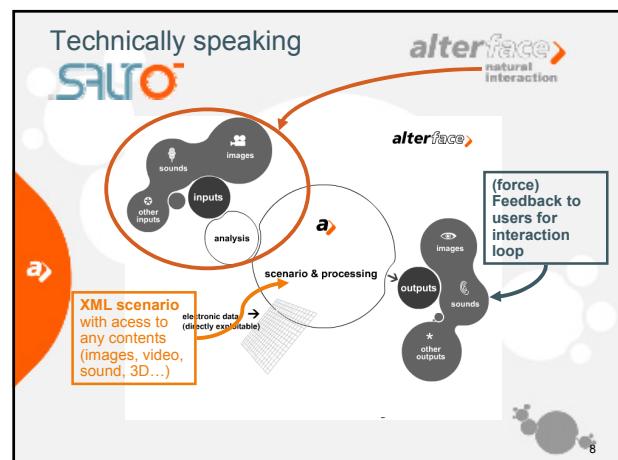
IMMERSIVE (user **WITHIN** the info)

(system reacts to user's actions) **INTERACTIVE**
(system even anticipates) **& PROACTIVE**

Fields of mixed-media, multimodal interface, pervasive computing...

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Market approach

- Engine directly ?

1. **Projects**
2. Offer simplification -> products (i.e. **solutions**)
3. **Products** -> contents by third parties
4. **Engine** as such

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Products and Applications

Natural interaction Example: Station™
Other products

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Interaction & Involvement

Webster dictionary

- **Interaction** (date: 1832)
 - mutual or **reciprocal** action or influence
- **Involvement** (date: 14th century)
 - 1 *archaic* : to enfold or envelop so as to encumber
 - 2 a : to engage as a participant <workers *involved* in building a house> b : to oblige to take part <right of Congress to *involve* the nation in war> c : to occupy (as oneself) absorbingly; especially : to commit (as oneself) **emotionally** <was *involved* with a married man>
- **Emotion** (date: 1579)
 - 2 a : the **affective aspect** of consciousness : feeling b : a state of feeling c : a psychic and physical reaction (as anger or fear) subjectively experienced as strong feeling and physiologically involving changes that prepare the body for immediate vigorous action

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Key challenges (personal view)

Interaction shall lead to involvement through emotion

- Paying attention to the *learning curve* for effective manipulation: technology should not inhibit
- Interaction should go **beyond** (mere) **reactivity*** -> need for surprises, **emotions** (**storytelling**)
- Only a strong (emotional) impact will provide users with a long-lasting **experience**

* Though 'responsiveness' (fast response time) is instrumental in modern systems

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Interaction for Education – one approach

1. Provide the user with a rich experience
2. by involving this user into a story, with narrative tension (goal, means...)
3. Have him/her take part in the (inter)action, with a real control
4. Surprise/challenge her/him
5. Include ... joy and fun ..., i.e. provoke emotions

Interaction – Involvement – Emotion
Story

This is notably key in « **learning by doing** », but also in pure 'education' and probably in 'training' and other more professionally-oriented activities

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Interaction for Edutainment – Station™ approach

1. Invisible technology (the user does not see the camera sensor) -> no barrier
2. Involve through user's own image
3. Provide control through 'natural' body behaviour/gesture
4. Provoke emotions through artefacts on the user's image
5. Make the interactive scenario a story

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Station™

Immersive, interactive station

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Edutainment examples

Edutainment = Education & **Entertain**ment

- "Knowledge is memorized more effectively when mediated actively than passively"
- Learning by doing
- Involvement / Emotion

Examples

- PASS (Science Park), Frameries, Belgium
 - Understand that for learning you need to dare and behave
- EuropEmotion at Mini-Europe, Bruparck, Brussel
 - Discover some key values of Europe through 7 games
- Futuroscope, Paradisio, Océade...

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PASS

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EuropEmotion

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aquaStation™

The aquaStation™ is a water-based interactive system. It features a large blue pool area where children can interact with a large screen displaying a virtual environment. The system includes a yellow metal frame structure and a control panel.

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Applications

Relying on the Salto™ engine,

- a portfolio of products/solutions is presented to the market:
 - Kiosk
Reaction, Pro-action, Interaction
 - Station
Immersion, Emotion, Interaction
 - Trace
Centralization, Personalization, Follow-up
 - Arena
Group Interaction, Show, Special Effects
 - Vision
Seeing the invisible, manipulation
 - Engine
On-demand Interactive Elements
- Physical setups are installed at customer sites.

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The “Kiosk”

The Kiosk is a reactive/interactive display station without interfaces (Keyboard, mouse, touch screen). It is piloted using body gesture analysis (general behavior, hands, fingers) and provides information adapted to circumstances.

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Video

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Kiosk

The Kiosk is a reactive/interactive display station without interfaces (Keyboard, mouse, touch screen). It is piloted using body gesture analysis (general behavior, hands, fingers) and provides information adapted to circumstances.

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The “Station”

The Station is a setup where players are immersed into contents (Magic mirror). They are "in situ" with or without props. No gloves, no glasses... Interactions between players and the virtual world. Content catalogue or ad hoc developments.

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Video

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The “Arena”

The Arena is an interactive attraction up to 80 players. It features on-stage players and interacting public, special effects on stage and for the public, and optional motion platforms.

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Video

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