ACTRONIKA PRESENTATION

# GIVE YOUR CUSTOMERS A UNIQUE SENSORY EXPERIENCE WITH HD HAPTICS

### WHAT IS HAPTICS?

- Haptics (from Greek Haptikos) is the science of touch. It can be divided into two main areas: kinesthetic haptics and vibrotactile haptics.
   Actronika is specialized in the second category of haptics.
- When we touch an object, vibrations are propagated in our body and allow us to understand the nature of the surface or object with which we interact. Vibrotactile haptics consists in reproducing these vibrations created during an interaction so that our somatosensory system interprets them and leads to a coherent tactile illusion.



### ACTRONIKA'S HISTORY

#### Laboratories of Pierre and Marie Curie University (Sorbonne University)

There, Vincent Hayward teaches haptics and will file about thirty patents on the subject.

#### HD Haptic Actuator

Vincent is at the origin of the realization of a haptic actuator, a vibrator technology that integrates into objects and allows to produce tactile high-definition sensations.

#### Creation of Actronika

n 2016, Vincent creates Actronika with Gilles Meyer and Rafal Pijewski to commercialize this research.

In 2019, Vincent has been invited to join the prestigious French Academy of Sciences.



Watch a video presentation of Actronika: https://www.youtube.com/watch?v=aTeg2PMdGus

### UPGRADE TO HD HAPTICS BY ACTRONIKA!

The particularity of Actronika is to offer **High-Definition (HD)** haptic solutions.

#### What is HD Haptics?

#### HD haptics is crisp, high-fidelity tactile feedback.

For example, it becomes possible to feel the texture of a fabric on your smartphone screen or create 3D buttons without bulky mechanical integration.

With the rise of e-commerce, today's store can no longer be a simple place where you go to make a purchase. It must absolutely offer something more: **the experience.** 

### OUR SOLUTION

Give your customers a unique sensory experience with high-definition haptics.



### CREATE A MEMORABLE IN-STORE EXPERIENCE

Allow the customer to shop independently and personalize their experience

- The customer answers a quick form to find out his product preferences. When he touches a product that suits the criteria he indicated in the form, the product starts to vibrate. It's a perfect match!
- Equip people with a haptic bracelet to teach them the right gestures in the store to apply make-up or cream. The bracelet indicates in a tactile way if the gesture is well done.



### DIFFERENTIATE YOURSELF BY INTEGRATING HAPTICS INTO YOUR PRODUCTS

#### Integrate haptics in clothes or shoes, allowing the customer:

To feel notifications
To get a massage and relax
Etc.

### HOW DOES OUR TECHNOLOGY WORK?

#### HD Haptic Library

Transferrable across a wide variety of applications, these pre-designed tactile effects enable you to choose the right sensation for your desired product experience without prior knowledge of haptic technology.

#### Embedded Technology

Unitouch embedded firmware is the seamless link between the haptic content and the vibrations produced by our specifically-designed haptic actuators.

The driver allows real-time interaction with virtual objects and sensor-based interfaces.

#### Actuator Control

The firmware has full control over Actronika's miniaturized actuators along with others on the market.

Unitouch can control up to 20 actuators.







## **OUR EXPERTISE**



COMPETITION



### UNIQUE SELLING POINTS

Simplicity : We simplify the integration of HD Haptics in our client devices.

1st full Platform: Actronika provides the first full Platform ready for integration.

**Modularity**: Our Unitouch Platform is highly modular, each components can be integrated separately, depending on the clients needs.

Unitouch Library: Our HD haptic effects provides state-of-the-art sensations, close to reality.

**Voice-coil actuators:** Actronika choice of technology is reliable and scalable, ready for large scale industrialisation and integration

Integration services: Actronika provides integration services, for clients without prior haptic knowledge.

Unitouch Firmware compatibility: Unitouch platform can run on microprocessors up to classic PC desktops.

### HOW DO WE WORK?



### TEAM









#### Gilles Meyer, CEO

- Serial entrepreneur in technology startups
- Harvard MBA,
   MSc Engineering

#### Rafal Pijewski, CTO

- O Design Engineer
- MSc in Mechanical Engineering

#### Vincent Hayward, CSO

- +30 years of experience in Haptics, dozens of patents
- Professor at
   Sorbonne
   University
- Member of the French Academy of Sciences

#### Strong team of 17 members

- Electro-mechanical engineers
- Embedded system engineers
- R&D team
- Commercials & marketing

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## THANK YOU FOR YOUR ATTENTION! ANY QUESTIONS?