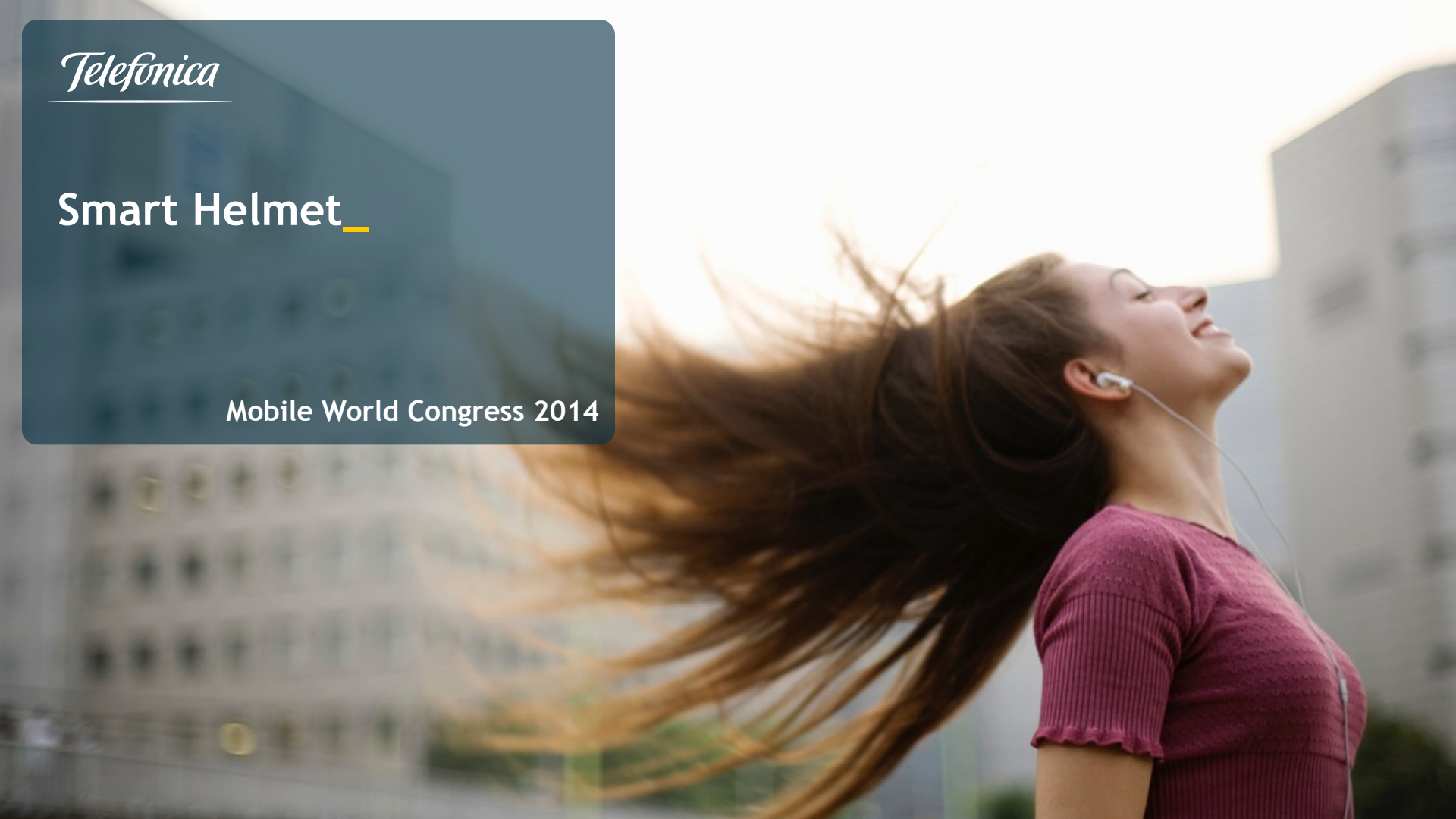# Telefónica

Smart Helmet

Mobile World Congress 2014

Objectives

Telefonica is developing new technologies with the aim of creating a new motorcyclist communication experience.

Smart Helmet consists of some smart wearables connected to the Telefonica network through the smartphone, which is the central element for providing all functionality.

User interfaces are adapted to motorcyclists' needs by means of a pair of smart gloves and the use of voice recognition technologies.

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Users Benefits

Providing a new motorcyclist experience thanks to customized natural interfaces.

Telefonica covers every important motorcyclist need from the moment they are at home preparing their travel up to the end of the journey:

▸ Communicating to each other along the route.

▸ Getting to their destination and receiving relevant 3D audio information along the route.

▸ Enjoying my friends' successful travelling experiences.

▸ Feeling safe in case of accident.

▸ Another amusing and entertaining services: music, taking and sharing photo/video, social networks...

Use cases

Navigation:

▸ Road Route creation, sharing and following.

▸ Conventional navigation system included.

Communication:

▸ 3D audioconference group call.

▸ Direct call to your contacts.

▸ Greeting between motorcyclists.

Landmarks:

▸ POIs on the road created by other motorcyclists or third parties (authorities, companies).

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Use cases

Safety:

- Impact detection by the sensors integrated in the helmet.
- Automatically reporting to an emergency centre.
- Accident notification to contacts and friends in social networks.

Photo and video:

- Taking pictures / recording videos and uploading to the cloud.

Music:

- Listening to Internet radio stations.

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Technologies

Around you menu:

▸ User interfaces:

▸ Voice recognition.

▸ Gesture detection by the gloves.

Helmet improvements:

▸ Impact sensorization.

▸ Loudspeakers for high quality 3D audio.

Bluetooth:

▸ Used for communication: Smart gloves and smart helmet.

▸ Audio profile adaptation for using microphone and the headphone stereo channel simultaneously.

*BE MORE_*
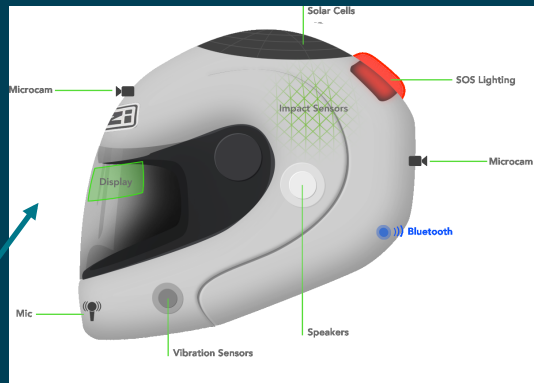*DISCOVER, DISRUPT, DELIVER*

Telefonica

Technologies

movistar

3D Audio Processing
3D Audioconference and
audio landmarks
Voice Recognition
Video/Photo
Safety
Navigation
Streaming (Music)

Bluetooth (((

GPS

4G

SMART HELMET

Telefónica

Solar Cells
Microcam
SOS Lighting
Impact Sensors
Microcam
Display
Bluetooth
Mic
Speakers
Vibration Sensors

Bluetooth (((

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Architecture

- ▸ Mobile Android App
- ▸ Smart Helmet
- ▸ Intelligent Gloves
- ▸ Services in the Cloud:
- ▸ 3D Audio Processing
- ▸ Voice Recognition
- ▸ Navigation
- ▸ Safety
- ▸ Radio
- ▸ Social Network
- ▸ 3G, GPS, Bluetooth Links.

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