

E3 - C2013/2-4

(E-health services Everywhere and for Everybody)



CELTIC-NEXT Proposer Day @



26th September 2018 - Madrid (Spain)

Óscar Chabrera (ViLynx)



A smaller version of the vilynx logo, consisting of a red stylized 'V' icon.

+3K Million

Video Previews served

+60K

Articles processed /day

+10K

Videos processed /day

Up to 490%

Uplift in CTR*

3X

Increase in page views*

*measured through A/B test run by our customers

E3 General Facts & Main Focus



Schedule

CELTIC Label: 27th November 2013

Start date: 5th December 2014

End date: /30th June 2018 (M42)

Main Focus

Design & implement an **E2E platform** able to **allow everybody access to e-health services everywhere**

Exploits and extends the results from the HIPERMED CELTICplus project

15 healthcare scenarios (professional-to-professional, professional-to-patient and patient-to-patient/relative) **validated by doctors testing the platform results**

International Cooperation is a MUST



Cross Domain SME driven Project

❖ 8 SME's





SENIORSome



❖ 1 Industry

VESTEL



❖ 3 Research,
Universities

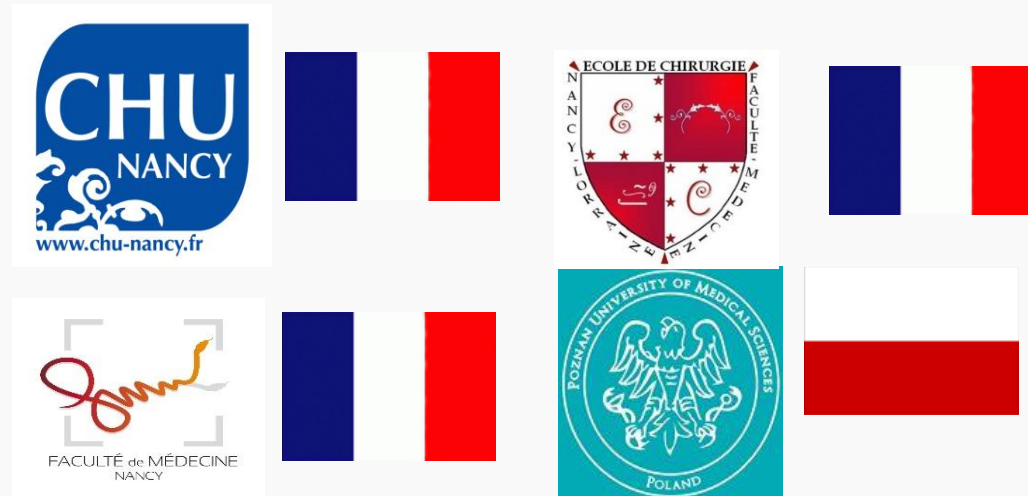


External project Cooperation

❖ 6 SME's



❖ 4 Hospitals & Medical Institutions



Solved Problems

- ◆ Funding Problems:
 - ◆ Partners NOT funded:
 - ◆ Sweden Withdrawal
 - ◆ Poland Self-Funded
 - ◆ Finland partly Self-Funded
 - ◆ 6 months Project Extension:
 - ◆ Partners finishing 6 months earlier
 - ◆ Partners not being able to cover 6 months extension costs
- ◆ Regulatory Changes
 - ◆ GDPR Adaptation

Main Innovations

- ❖ HEVC Proposal of medical test sequences for the MPEG video test set at the 119th MPEG meeting at Torino (Italy) + JCT-VC and JVET meetings
- ❖ WebRTC enabled HD video hardware encoder allowing to have adaptative bit rate solutions allowing the EVERYWHERE objective
- ❖ A new data hiding algorithm for smart videos (patent registration & start-up creation to exploit in process)
- ❖ Intensive use of AI /ML solutions:
 - ❖ Speech to Text AI automatic based solution
 - ❖ ML technology across all platforms (iOS, Android, TV, STB, Web) allowing EVERYWHERE objective
 - ❖ Image, Voice and Pattern Recognition
 - ❖ Robust NLP Processing of Human Response for “fuzzy logic quantification” of an “emergency medical assessment”
- ❖ Validation by subjective tests with doctors of the superiority of HEVC compared to H264 encoding standard for medical video compression

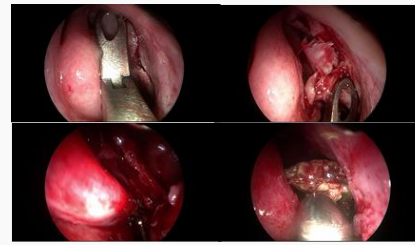
Main Achievements



E3 PROJECT
e-health solutions



- ❖ HEVC Proposal of medical test sequences for the MPEG video test set at the 119th MPEG meeting at Torino (Italy) + JCT-VC and JVET meetings
- ❖ “Bronze eVIA Innova Award in the Spanish Technological eHealth Platform eVIA”
- ❖ Cross Domain project with 3 Medical Congress:
 - ◆ **Nancy (France) on 29th Sept to 1st Oct 2015 First 3D Telesurgery transmission of both ENT & Heart Surgery, & Espoo (France) on the 14th June First & Nancy Final Review**
 - ◆ First 3D Tele surgery transmission of both ENT & Heart Surgery, 29th September 2015
 - ◆ First Simultaneous 2D & 3D Robotic & Endoscopic Surgeries in Nancy-Finland, Espoo-Finland & Poznan-Poland. E3 in EUREKA Week Helsinki, 2016
 - ◆ 2D endoscopic surgery and 2D robotic simulation in Nancy, 27th of June 2018
- ❖ First course on brain anatomy coupled to an awake live surgery (May 26, 2017) in Nancy France
- ❖ Follow up CELTICplus project FRONT-VL to study Pattern Recognition
- ❖ GDPR Compliance D4.10
- ❖ Compromised **€2.6M ARR in 3yr (6.5M in the next 3 yrs). ROI 1.3X.**
 - ◆ **MEDVC established as transmission platform for European Surgery Associations and deployed in 10 Clinics for ENT and 5 for UROLOGY**



- ❖ ViLynx English Speech to Text Technology adapted to Media and Deployed. Extended to Spanish. Moving to Portuguese.



- ❖ CALBOQUER is studying usage for the Deaf and Hard of Hearing as life expectancy is continuously growing and Elderly are demanding this service & CALBOQUER must give a universal service.



- ❖ VESTEL is studying using ViLynx Speech to Text technology

- ❖ ViLynx video summarizing and indexing solution



- ❖ SENIORSOME, IDI-EIKON & VESTEL are studying using ViLynx summarizing solution

- ❖ ViLynx ML Technology adapted to iOS, Android, Roku TV. Adapted to Media and deployed.



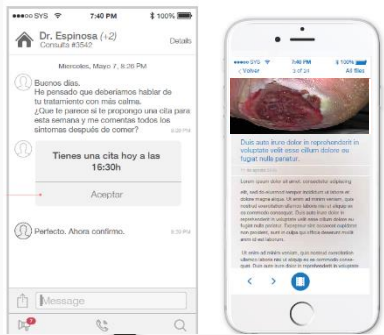
- ❖ VESTEL is studying using ViLynx technology on their STB and HDTV

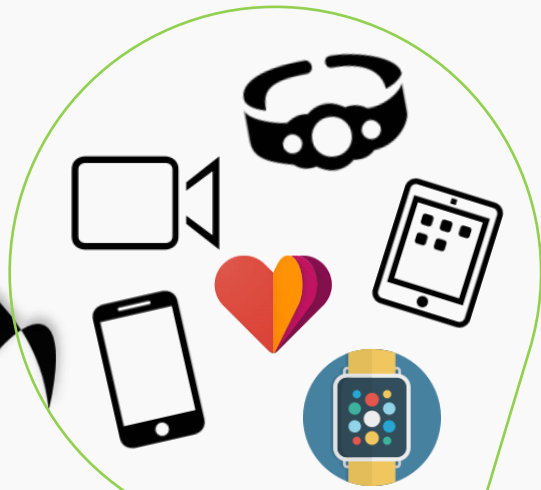


- ❖ Tebex (Calboquer external partner) is analyzing the possibility to start using the technology developed in the scenario 3 of WP3 HealthCare Professionals organizing daily work and registering daily operations via mobile device, to optimize their daily operations related to its absence from work inspection service.



- ❖ Calboquer is also analyzing the exploitation of the wounds and sores professional to professional solution as this provides a extended added value for elderly facilities and small care centers that can have a 24x7 remote specialist service.





vilynx.

- ❖ Medical **WebRTC** provision of low cost advanced healthcare services in an integrated and interoperable way to both professionals and in-home patients.
- ❖ Selling to Spanish and LATAM hospitals

Physiotherapist



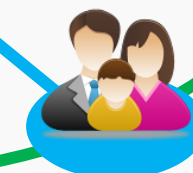
"At home"
COPD Patient



Social Worker
Psychologist



Other Providers
(PCP, Hospital, Specialties...)



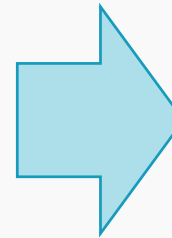
Caregivers &
Community



R&D

Market

Accelerator



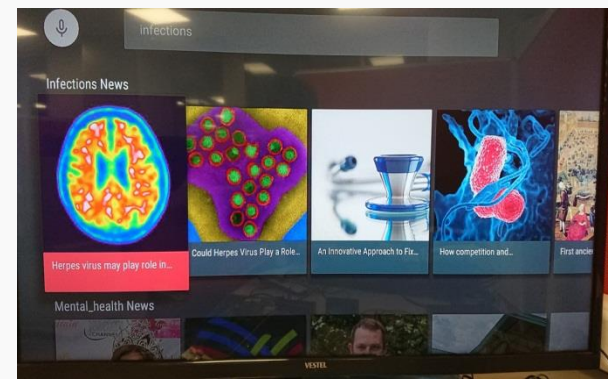
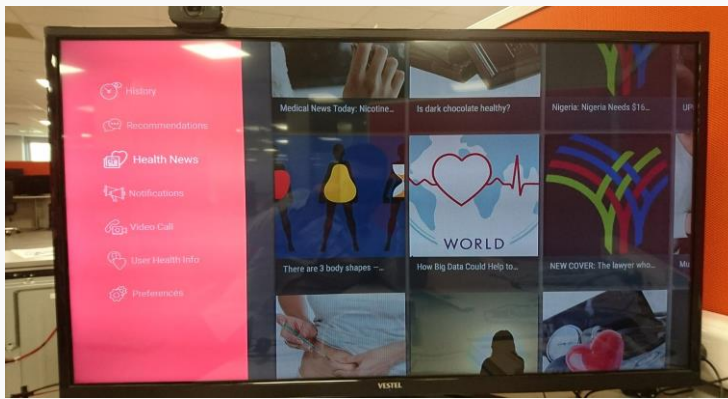
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VESTEL

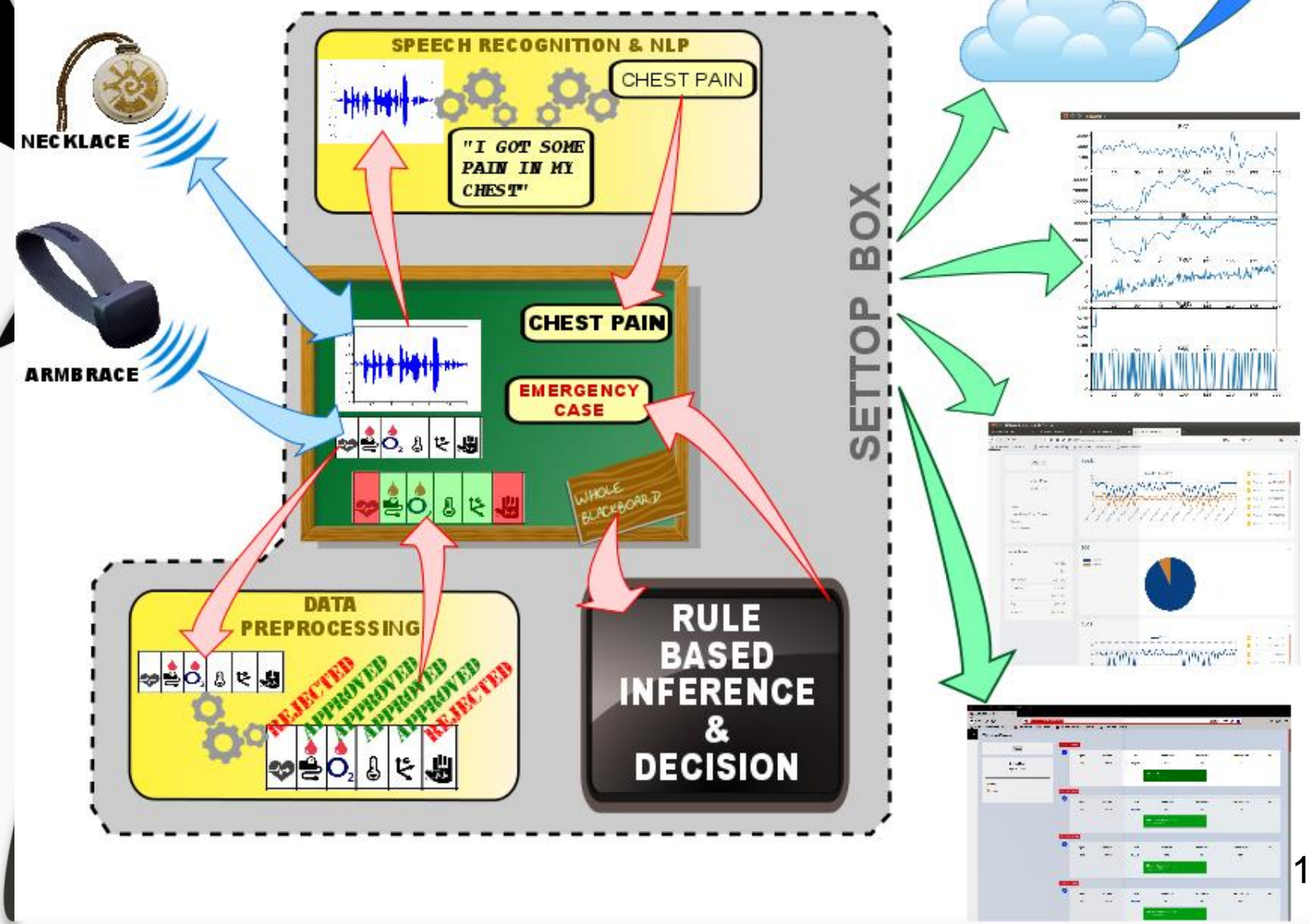


- ❖ VESTEL strategy to foster Android Products (STB, HDTV, Mobile Phones) sales offers E3 applications by default as they are easy to use (Everybody) and accessible Everywhere.
- ❖ VESTEL is under discussion with Turkish Health Service Providers to provide extended versions of these services like professional support and emergency services.





E3Nurse A Conversing Intelligent Patient Monitoring System

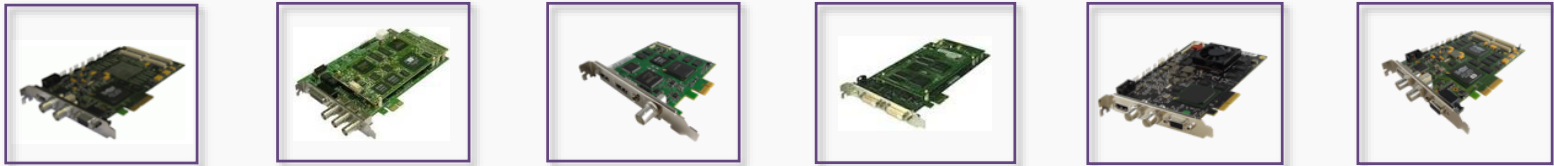


❖ Exploitation plans targeting medical sector are:

COTS: Hardware and Software Products

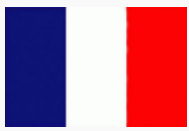


COTS: Integration Products with SDK



Custom Design Products





- ❖ A start-up is under creation with the support of Lorraine Incubator to exploit data hiding patented algorithm for smart videos

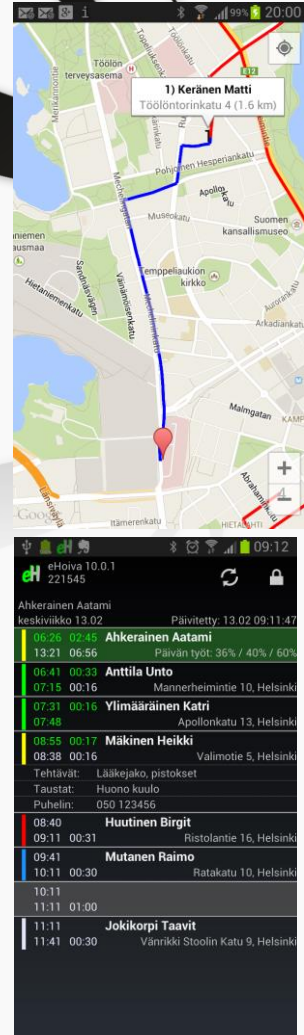




eHoiva



- ❖ Planning / management solutions for HealthCare Professionals giving service mainly at the homes of customers / patients and nursing homes.
- ❖ Improving customers' efficiency by tens of percent's, data accuracy, shortening invoicing processes etc.



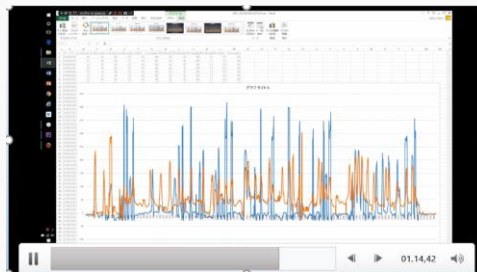
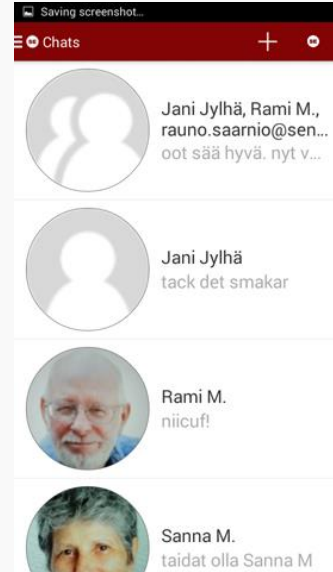


SENIOR *Some*

- ❖ SENEScreen NO touch UI allow elderly to voice manage the healthcare platform
- ❖ The ecosystem allows seniors, healthcare industry and communities to work more efficient.
- ❖ SeniorSome service with myData-model and adaptive video/voice transmission
- ❖ Allows to build up best possible contents.
- ❖ Point to point videoconference
- ❖ On distribution in Europe, US and Oceania



E3 PROJECT
e-health solutions





E3 PROJECT
e-health solutions

Thank you!
Questions?



TUBITAK

Narodowe Centrum
Badań i Rozwoju



Smart Connected World



EUREKA
3181



MINISTERIO
DE ECONOMIA
Y COMPETITIVIDAD



CDTI

Centro para el
Desarrollo
Tecnológico
Industrial



UNIÓN EUROPEA
Fondo Europeo de
Desarrollo Regional (FEDER)
Una manera de hacer Europa



DIRECTION GÉNÉRALE
DES ENTREPRISES



SENIOR Some

so

Soft

TELECOM
hancy



VESTEL

VITEC
VIDEO INNOVATIONS