
MENU
mp3

MP3 is retired – to the next dominant design!

- The Fraunhofer Institute for Integrated Circuits writes,

- *"Although there are more efficient audio codecs with advanced features available today, mp3 is still very popular amongst consumers. However, most state-of-the-art media services such as streaming or TV and radio broadcasting use modern ISO-MPEG codecs such as the AAC family or in the future MPEG-H. Those can deliver more features and a higher audio quality at much lower bitrates compared to mp3."*

http://www.ubergizmo.com/2017/05/creators-of-the-mp3-retiring-format/

INFO5992 Understanding IT Innovations

Week 10: Judging IT Innovations

A/Prof Jinman Kim

Semester 1, 2017

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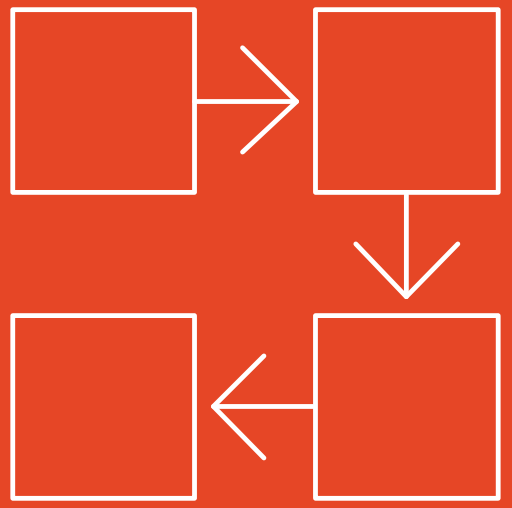
UoS Outline

Week	Lecture Topics	Activity
1. 6 Mar	UoS Introduction; Definition of Innovation; Innovation System; Innovation in Australia	*N/A*
2. 13 Mar	Introduction to Technological / IT innovation	***Tute 1*** *– Massive Open Online Courses – Enabling technologies and Peer-review*
3. 20 Mar	Dynamics of Technological / IT Innovation; Source of Innovation; Adoption of Technology; Dominant Design	***Tute 2*** *– Design Dominance in the Smartphone market*
4. 27 Mar	Disruptive Innovation; Industry Value Chain; Value Network analysis	***Tute 3*** *– Innovative Tech Practice – Cognitive services* *Group Presentation Introduction – Topics Released*
5. 3 Apr	Distributed innovation I: Open / Closed innovation; Platform innovation; Web APIs; Crowdsourcing / crowdfunding	*Mid-semester Quiz* *Group Presentation – Topic Selection* *Individual Assignment Introduction*
6. 10 Apr	Distributed innovation II: User innovation; Free and Open source software; Open Data	*Peer-review Introduction* ***Tute 4*** *– Innovative Tech Practice – Open source Geolocation and Maps*
	Easter (Break)	
7. 24 Apr	Platform ecosystems	Group Presentations I – IT Innovation Case Studies *Peer-review of Group Presentations*
8. 1 May	Group Presentations II – IT Innovation Case Studies	*Peer-review of Group Presentations*
9. 8 May	Group Presentations III – IT Innovation Case Studies	*Peer-review of Group Presentations*
10. 15 May	Judging Innovation - Innovation in Industry sectors	Group Presentations IV – IT Innovation Case Studies *Peer-review of Group Presentations*
11. 22 May	Innovation ecosystem; Sydney's innovation ecosystem Organisational Culture; Structure supporting innovation **(Bill Simpson – Data61)**	***Tute 5*** *– Sharing Economy* *Individual Assignment Submission*
12. 29 May	Innovation by Start-up companies and Opportunities	***Tute 6*** *– Business Model Canvas*
13. 5 Jun	Organisational Culture; Structure supporting innovation UoS Review	*UoS comments / questions*

Agenda

- Judging IT innovation

- Group Presentations Session IV – submission of the Peer review is due at the end of the this Friday (19th)



Judging IT Innovations

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Microsoft
Imagine Cup 2016

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Imagine Cup

Microsoft ImagineCup

- For the past 15 years, the Imagine Cup has been the world's **premier student technology competition**. Since 2003, Microsoft has provided a global platform for students to turn their dreams into reality.
- Students from across the globe build amazing teams to bring their biggest, boldest ideas to life. Working with mentors and industry leaders, they get feedback to further hone and develop their projects.
- Imagine Cup National Finals competitions happen in dozens of countries all over the world.
- All World Finalist teams win an all-expenses paid trip to the World Finals, where they will compete with the best and brightest teams from across the globe for the title of World Champion, $100,000 cash prize and the chance to take home the Imagine Cup!

https://compete.imagine.microsoft.com/en-us/category/0?skillLevel=0

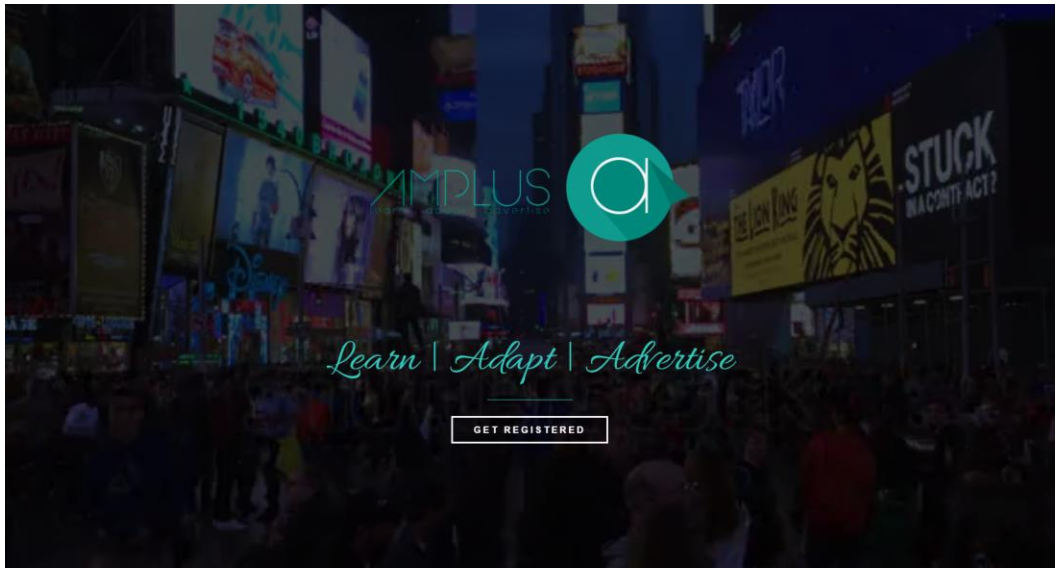
How do we judge IT Innovations?

- Will briefly present four finalist from last year

- ! Do not go and look for the winners
- ! If you are aware of the winners, do not reveal them

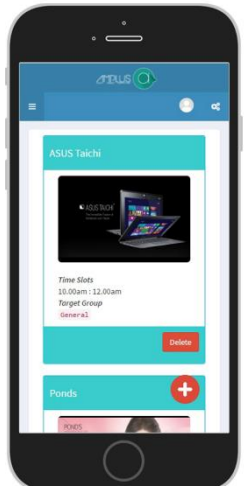
- Lets Vote!

Amplus



Digital signage platform for advertising, using IoT technology

Designed with HD camera module, the device can be used with any digital display



Easy to use, low cost, and intelligent device

Intelligent and targeted advertising. Real time feedback

http://www.amplus.tech

HealthX

https://youtu.be/DPtTK6BUl-s

A game played using only your eyes to help diagnose and treat lazy eye i.e. amblyopia

Uses a video game and an off-the-shelf eye tracking tool

HealthX's software can quickly screen young children, recording how they acquire targets on screen

One game mode is designed for diagnosis and the other one is used for treatment.

https://www.onmsft.com/news/microsoft-imagine-cup-finalist-developing-technology-help-overcome-challenges
http://www.zdnet.com/article/wearables-health-tech-impress-at-microsofts-2016-imagine-cup-finals/

ENTy

Monitor balance and posture in real time using a device and app

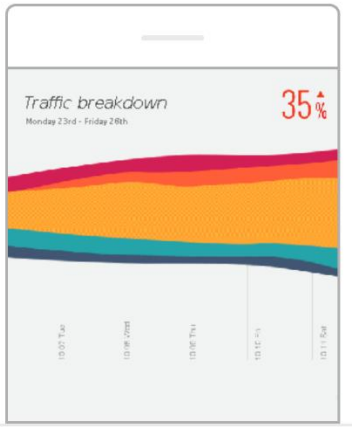
Helps doctors diagnose and check up on inner ear problems like vertigo

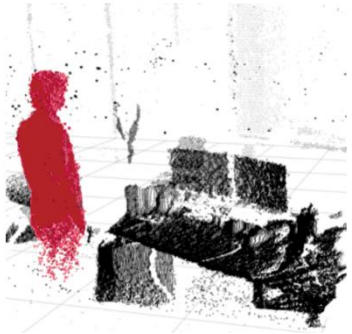
Patient straps on the small device to their back, a set of sensors send data to the app

Real time read out of position

https://techcrunch.com/2016/07/29/microsoft-awards-hardware-startup-enty-the-2016-imagine-cup/
http://www.entymed.com

Black AI





Platform using AI to make the world better & smarter place

Automated observation, context driven insights, queried from anytime anywhere

Can be used for keyless homes, smart traffic management, and smart cities

Can be used for early detection of Alzheimer's and Dementia

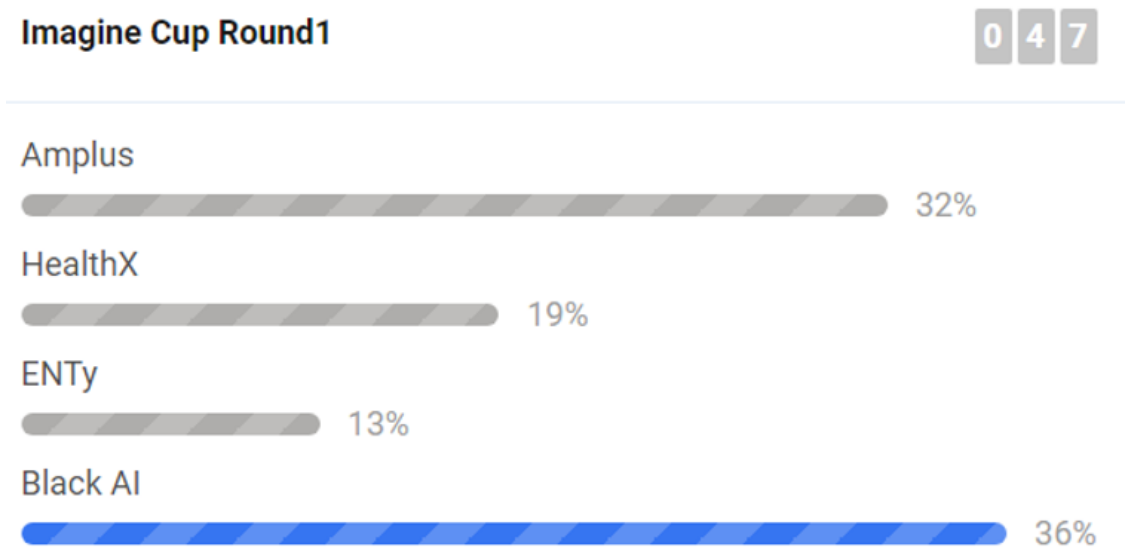
http://black.ai/ http://www.smartcompany.com.au/startupsmart/profiles/how-this-melbourne-entrepreneur-wants-to-use-artificial-intelligence-to-make-the-world-a-better-place/

INFO5992 MS Cup Vote – round 1

- Sli.do
- Event code #5992
- Imagine Cup Round 1
  - Multiple choice
  - Comment (include the project you selected)

- Vote for your favorite project!

INFO5992 Voted Winners – Round 1



- Black AI was the most ambitious project and had great potential. It did use a fancy technology…. But was it the state of the art?
- Good to see a nice distribution of the projects – all had good ideas

Judging Criteria

TECHNOLOGY 01

50% Innovation in User Experience & Technical Design, Use of Azure

INNOVATION 02

20% New Product/Service, Innovate Beyond Existing Products

CONCEPT 03

15% Need, Broad Appeal, Global Impact

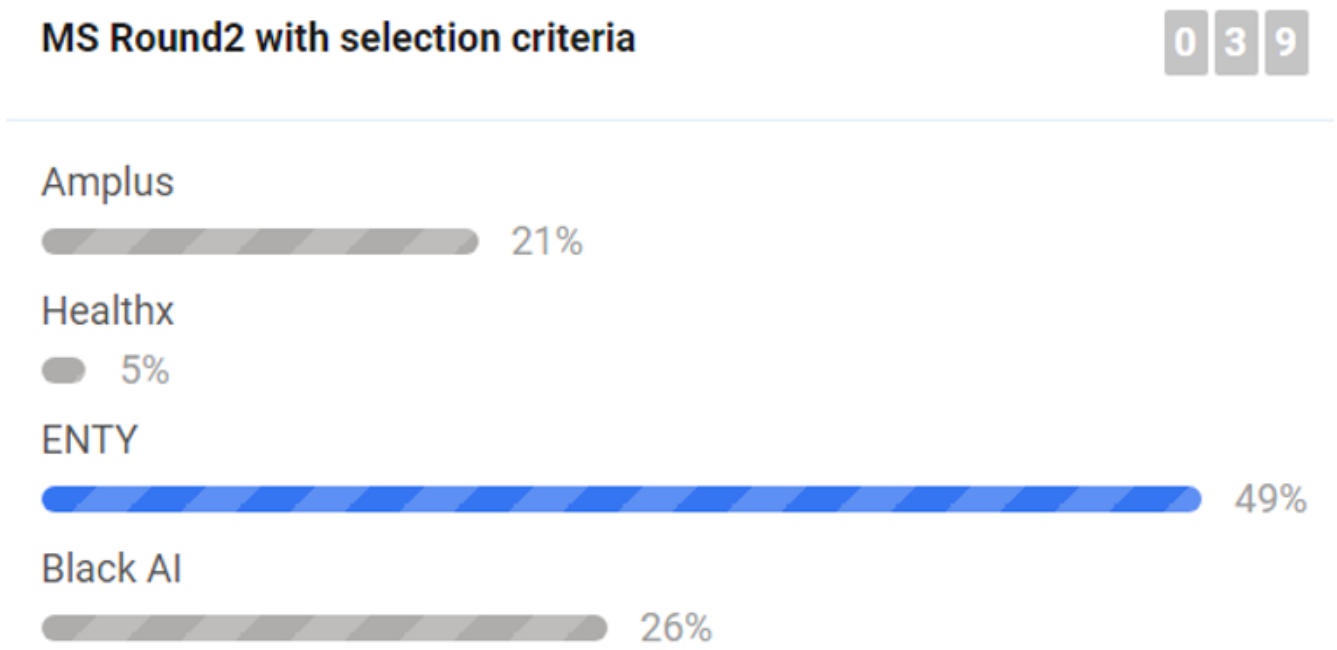
FEASIBILITY 04

15% Sustainability, Business Model, Partnerships

https://blogs.msdn.microsoft.com/uk_faculty_connection/2016/11/30/microsoft-imagine-cup-2017-starter-pack-get-your-teams-ready/

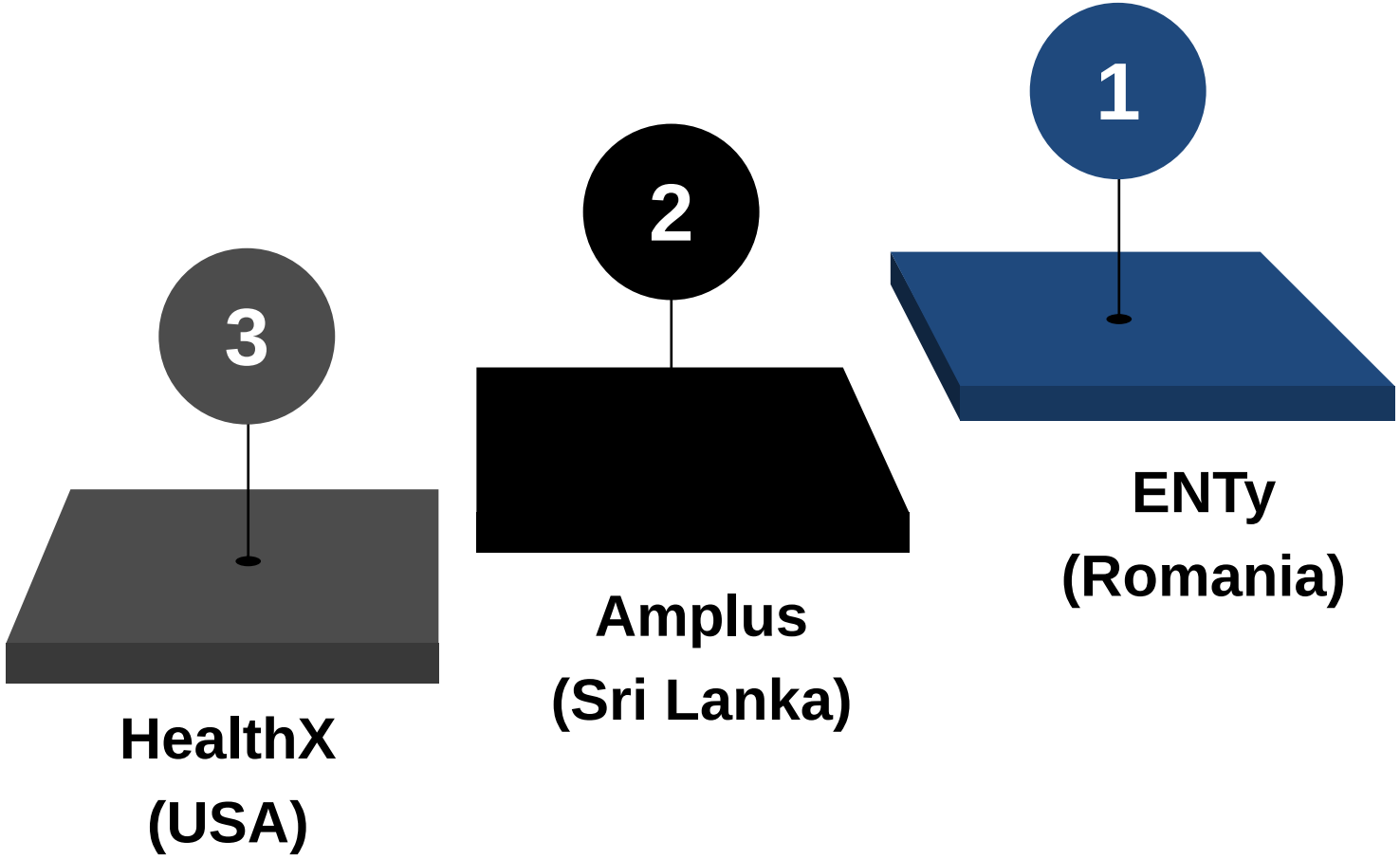
Criteria	Description	Weighting
Technology	-Does the project make effective and appropriate use of the Azure technology features of its chosen platform(s)? -Does the project include innovations in user experience? -Does the project include innovations in technical design and/or implementation?	**50%**
Innovation	-Does the project create a new category of product or service? -Does the project clearly and meaningfully innovate beyond existing products or services?	20%
Concept	-Does the project address a clear need, problem, or opportunity and is the solution clearly explained? -Does the project have broad appeal and global impact?	15%
Feasibility	-Does the team have a credible plan for getting their project to market in terms of business model, any required partnerships, or other factors?	15%

MS Round 2 with Selection Criteria



- Selection criteria is important when judging innovation. With Tech as the focus, the selection changed a lot
- Depending on the competition / event, there is a different focus – we have an advantage when its IT focused
- Its useful to know the skill to break down the project and see how the quality of the technology as well as its innovative potential

Actual Winners



Harvard i3 Innovation Challenge 2017

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invent-imagine-impact (i3) Innovation

- Harvard's premier student startup competition
- Students compete for project grants and incubator space to help them realize their innovative visions.
- i3 is a year-long program that cultivates, coaches and showcases Harvard's rapidly growing group of student entrepreneurs. Every year we receive innovative applications from students in all 12 houses, 4 class years, and almost every concentration.

- Technology and Entrepreneurship Centre at Harvard
  - *Renegade—Regulation—Resource—Requirement*

http://tech.seas.harvard.edu/harvardi3/

Judging Criteria

Innovative Approach, Substantial & Measurable Impact

Skills, Commitment, Complementary Talent, & Resources

Realistic, Financially Sustainable

http://i-lab.harvard.edu/wp-content/uploads/Judging-Rubric-Sheet-110216.pdf

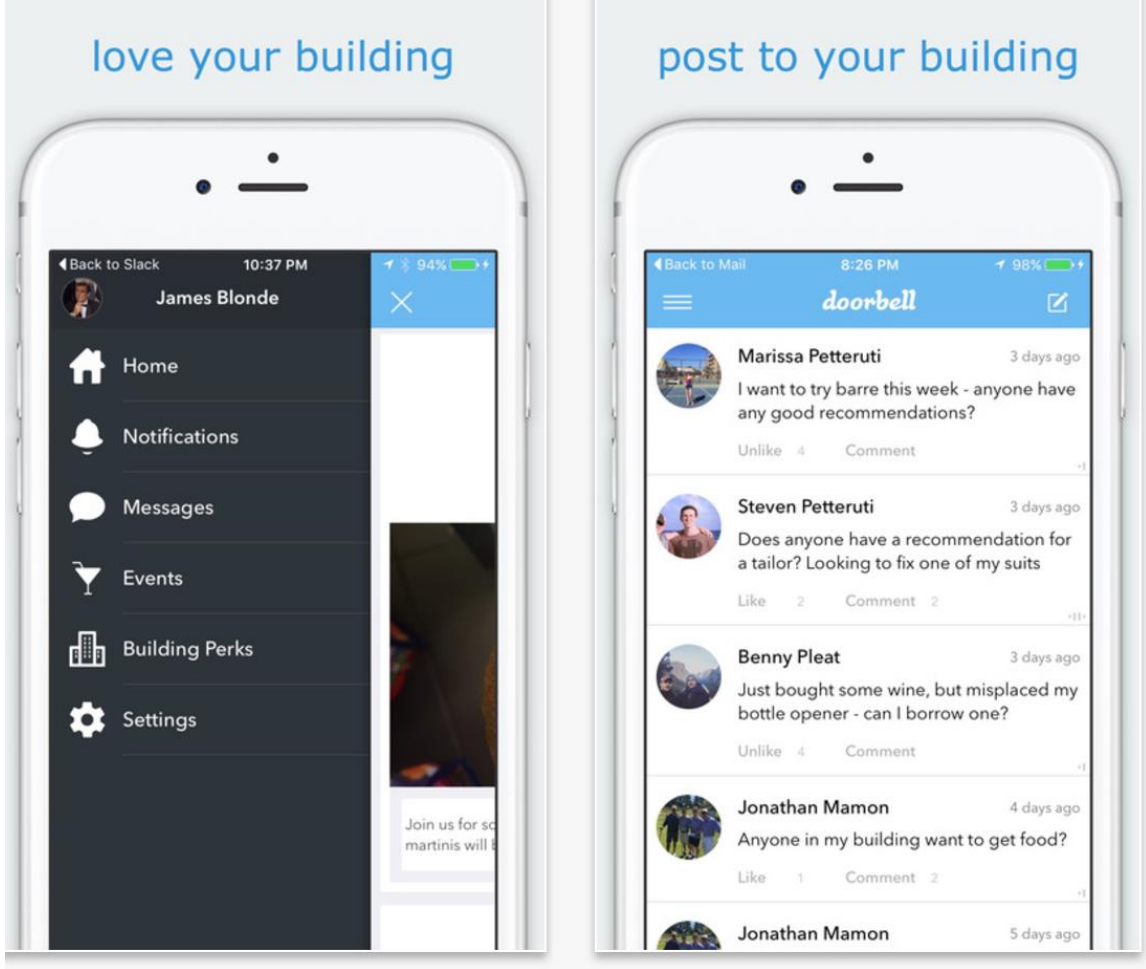
New (very different) Judging Criteria

- Will briefly present three finalist from last year

- ! Do not go and look for the winners
- ! If you are aware of the winners, do not reveal them

- Lets Vote!

Doorbell.me



01 Real estate tech startup that makes the apartment living experience amazing for residents and landlords

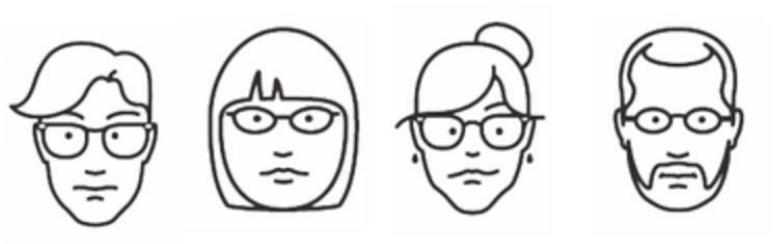
02 Uses a resident portal, a property management software for residents

03 The app streamlines all residential interactions – maintenance requests, resident-to-resident communication, rent payments, mail notifications etc.

04 Creating the only mobile-first resident portal for the 28 million households in multifamily buildings in the US.

https://i-lab.harvard.edu/meet/venture-team/doorbell-me/
https://www.doorbell.me/

Parachute Teachers



A marketplace for part-time teachers.

BECOME A PARACHUTE TEACHER

01 Boston-based startup that “parachutes” community professionals into classrooms to teach their areas of expertise.

02 Parachute Teachers teach robotics, scratch coding, theatre, creative writing, sound engineering etc.

03 Re-imagining the substitute teacher

04 Quality subjects, 24 hours customer service, less hassle, flexible bookings

http://www.parachuteteachers.com/
https://i-lab.harvard.edu/meet/venture-team/parachute-teachers/

NeighborGood

NeighborGood

CONNECTING NEIGHBORS TO LEND A HELPING HAND

01 NeighborGood believes communities are bound by good neighbors and good people

02 Connects individuals with neighbors for companionship or home help when they need it most

03 Matches chronically ill, disabled, and elderly individuals with volunteers in their neighborhood for help with home tasks and errands.

04 Uses an online platform for the matching process

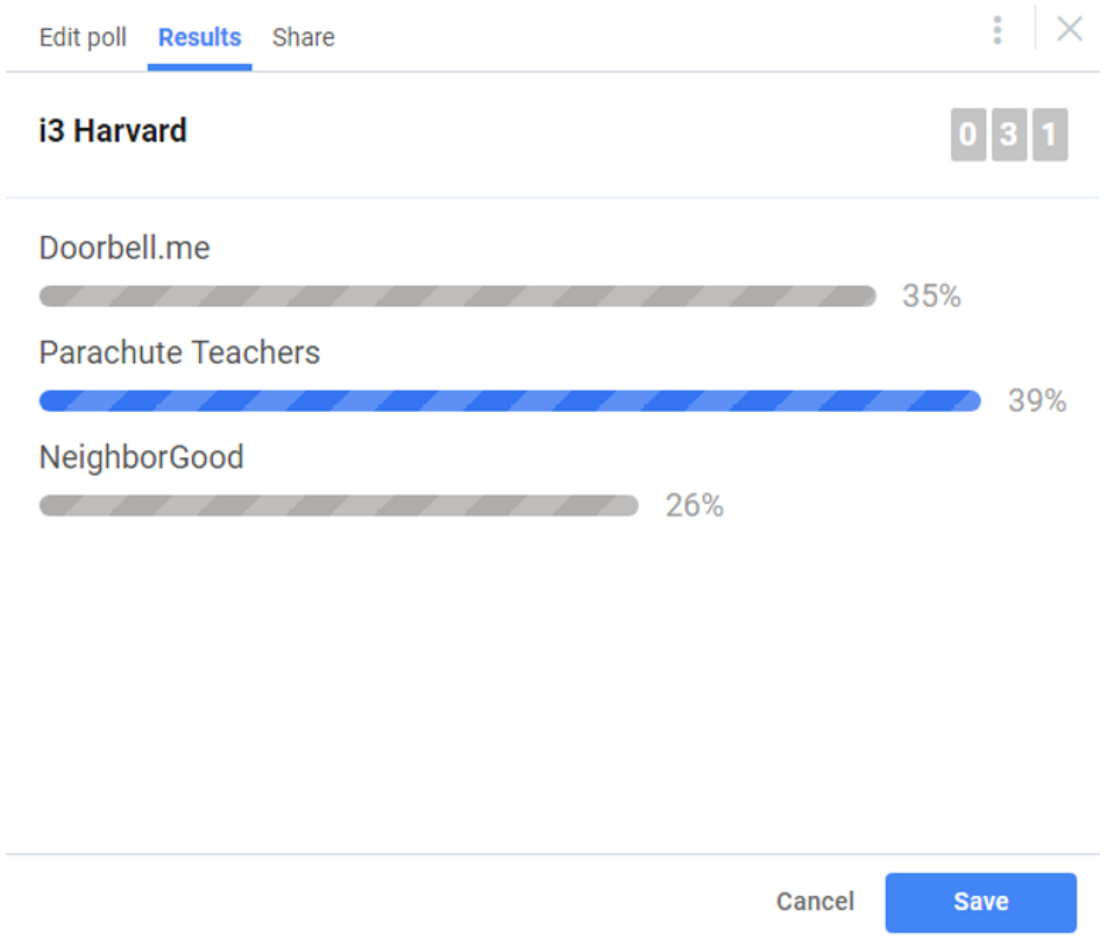
https://i-lab.harvard.edu/meet/venture-team/neighborgood/
https://neighborgoodus.com/

INFO5992 i3 Vote

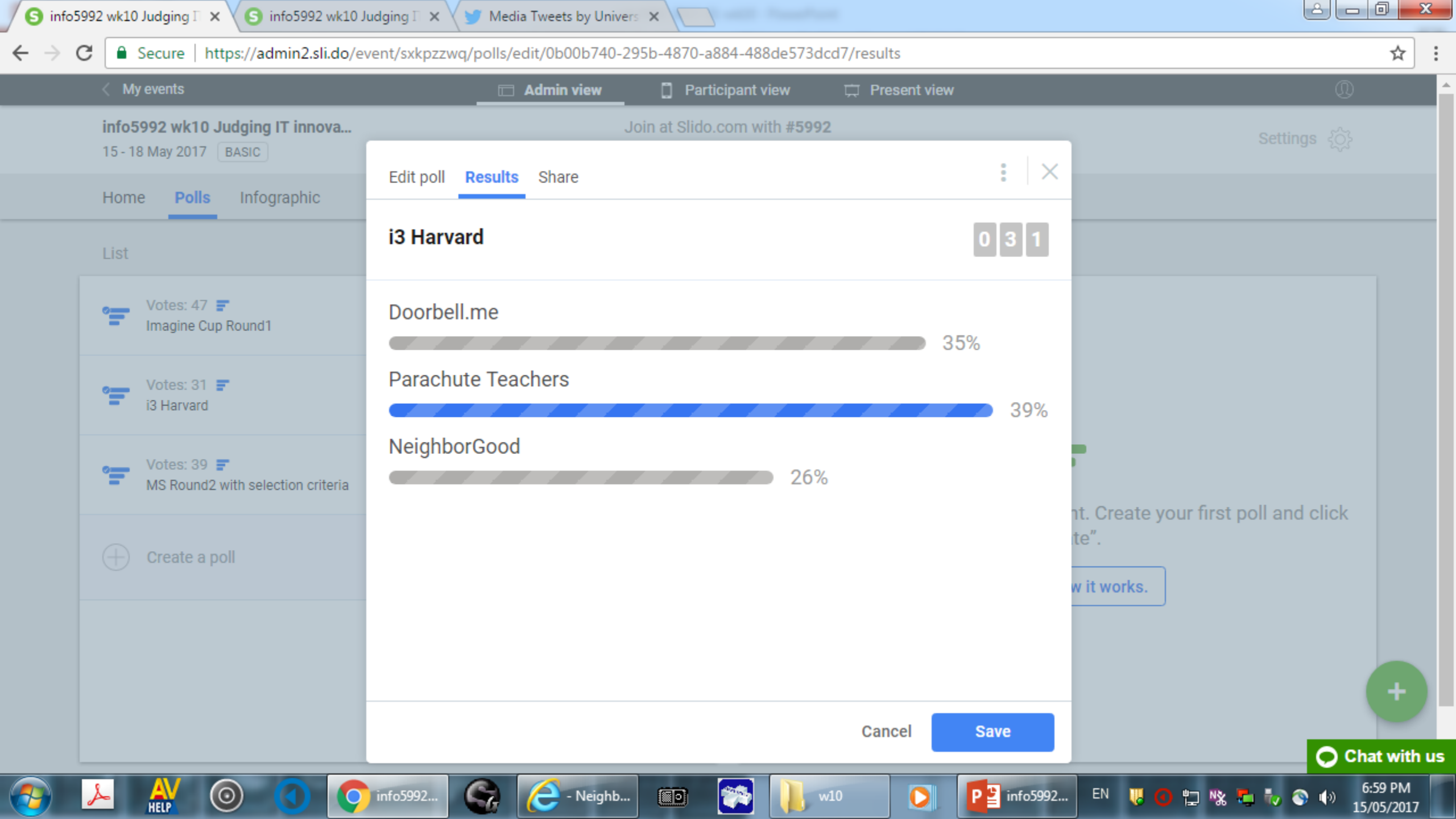
- Sli.do
- Event code #5992
- i3 Harvard
  - Multiple choice
  - Comment (include the project you selected)

- Vote for your favorite project!

INFO5992 Voted Winners



- Comments:
  - The class correctly picked the winner!
  - This particular competition, even if its open to all Faculties, has IT as the enabler for innovation
  - Platform economy is opening up a lot of opportunities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Media Tweets by Univers
Secure
https://admin2.sli.do/event/sxkpzzwq/polls/edit/0b00b740-295b-4870-a884-488de573dcd7/results
My events
Admin view
Participant view
Present view
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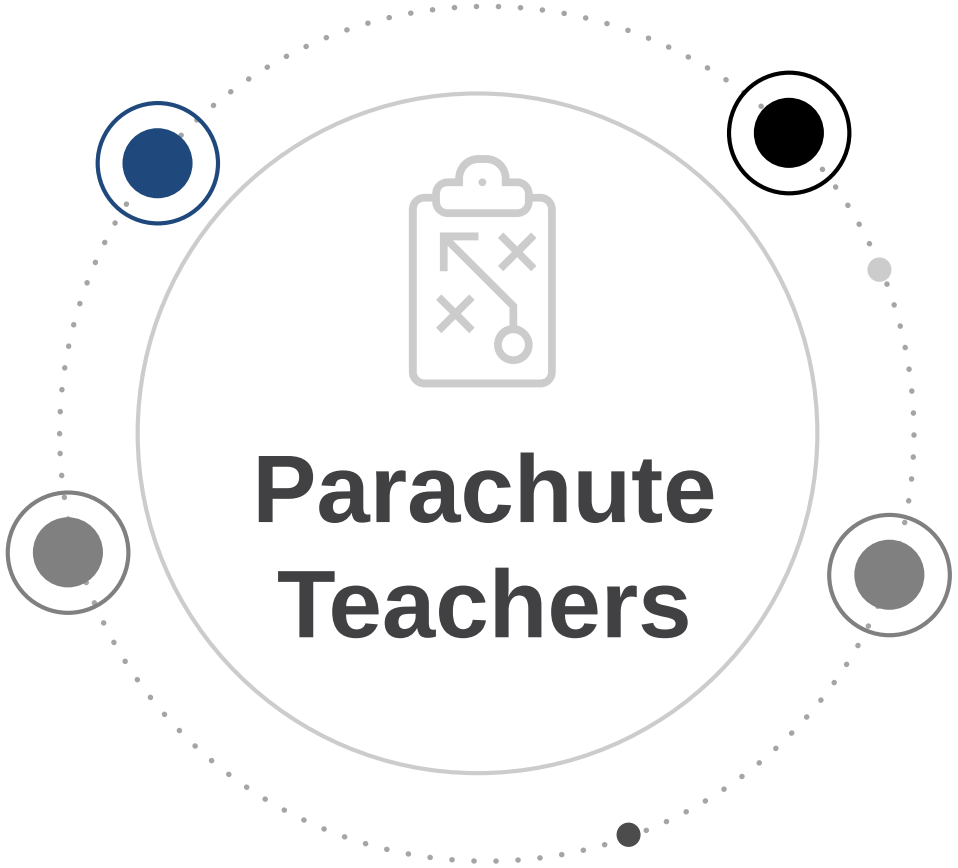
15 - 18 May 2017
BASIC
Join at Slido.com with #5992
Settings
Home
Polls
Infographic
List
Votes: 47
Imagine Cup Round1
Votes: 31
i3 Harvard
Votes: 39
MS Round2 with selection criteria
Create a poll
Edit poll
Results
Share
i3 Harvard
0 3 1
Doorbell.me
35%
Parachute Teachers
39%
NeighborGood
26%
Cancel
Save
Chat with us
6:59 PM
15/05/2017

Winner

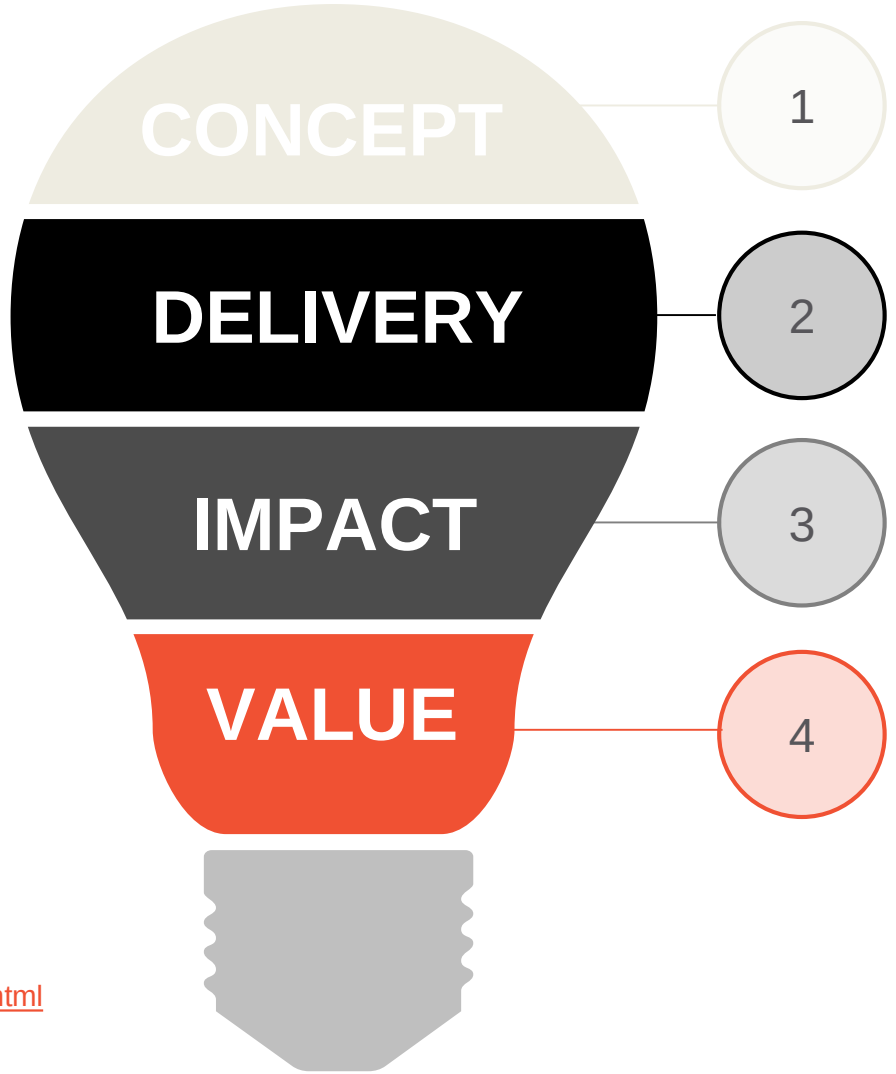


How To Judge IT Innovations ?

Judging IT Innovation

“ Innovations that not only address a need and solve a problem but also seize an opportunity and create a new market or industry. “

“ The immediate and longer term impact the innovation has on the environment and society as a whole is important. “



Opportunity, conception, method, and development

Need/desire, differentiation, cost, and advantage

Message, engagement, availability, and achievement

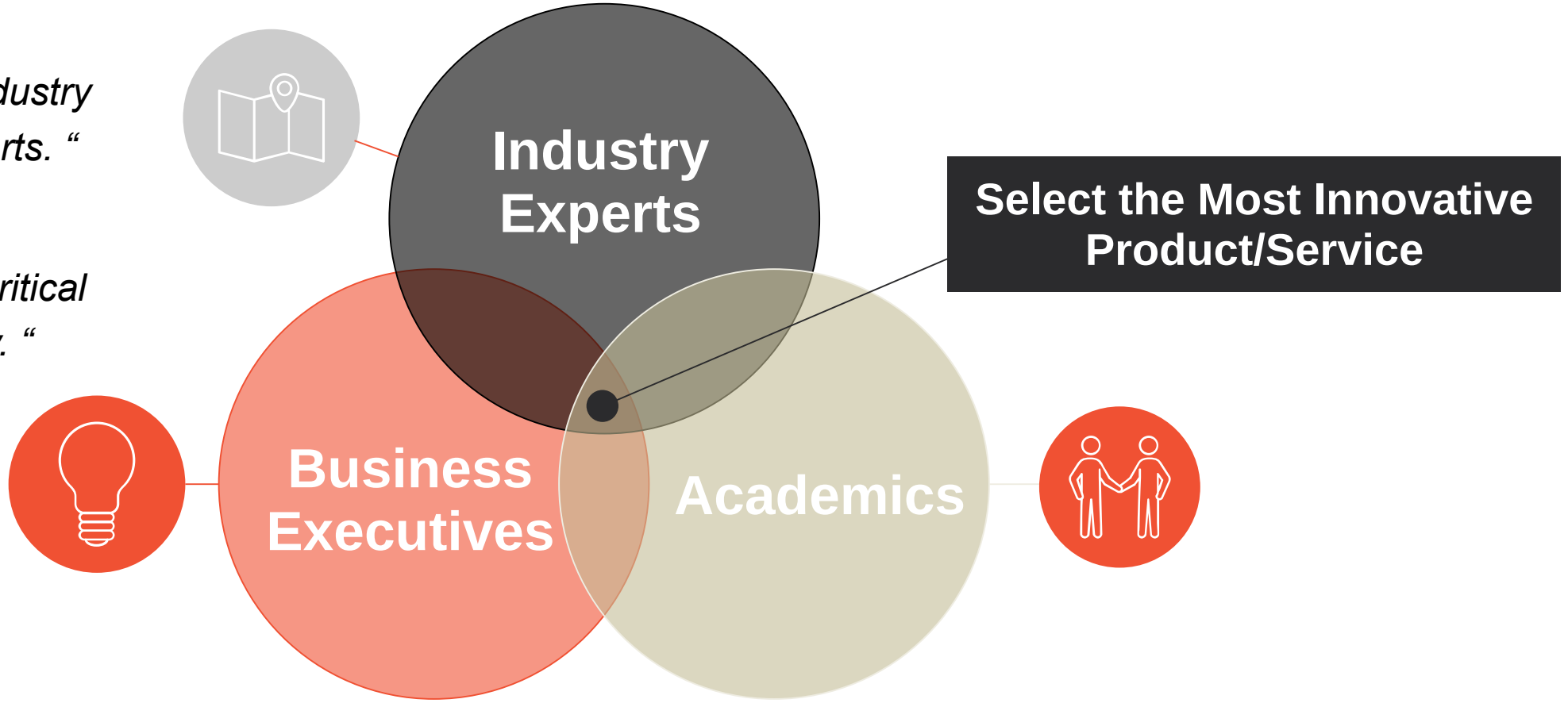
Sustainability, social responsibility, and potential

http://www.edisonawards.com/criteria.php
http://bigideas.berkeley.edu/toolkit-judging/
http://innovationinaction.umich.edu/competition/criteria.html

Judging Panel

" Diverse pool of industry and academic experts. "

" Judge training is critical to ensure uniformity. "



http://www.ces.tech/Events-Programs/Innovation-Awards/Meet-the-Judges
http://bigideas.berkeley.edu/toolkit-judging/
http://www.edisonawards.com/criteria.php

Ambient Assisted Living

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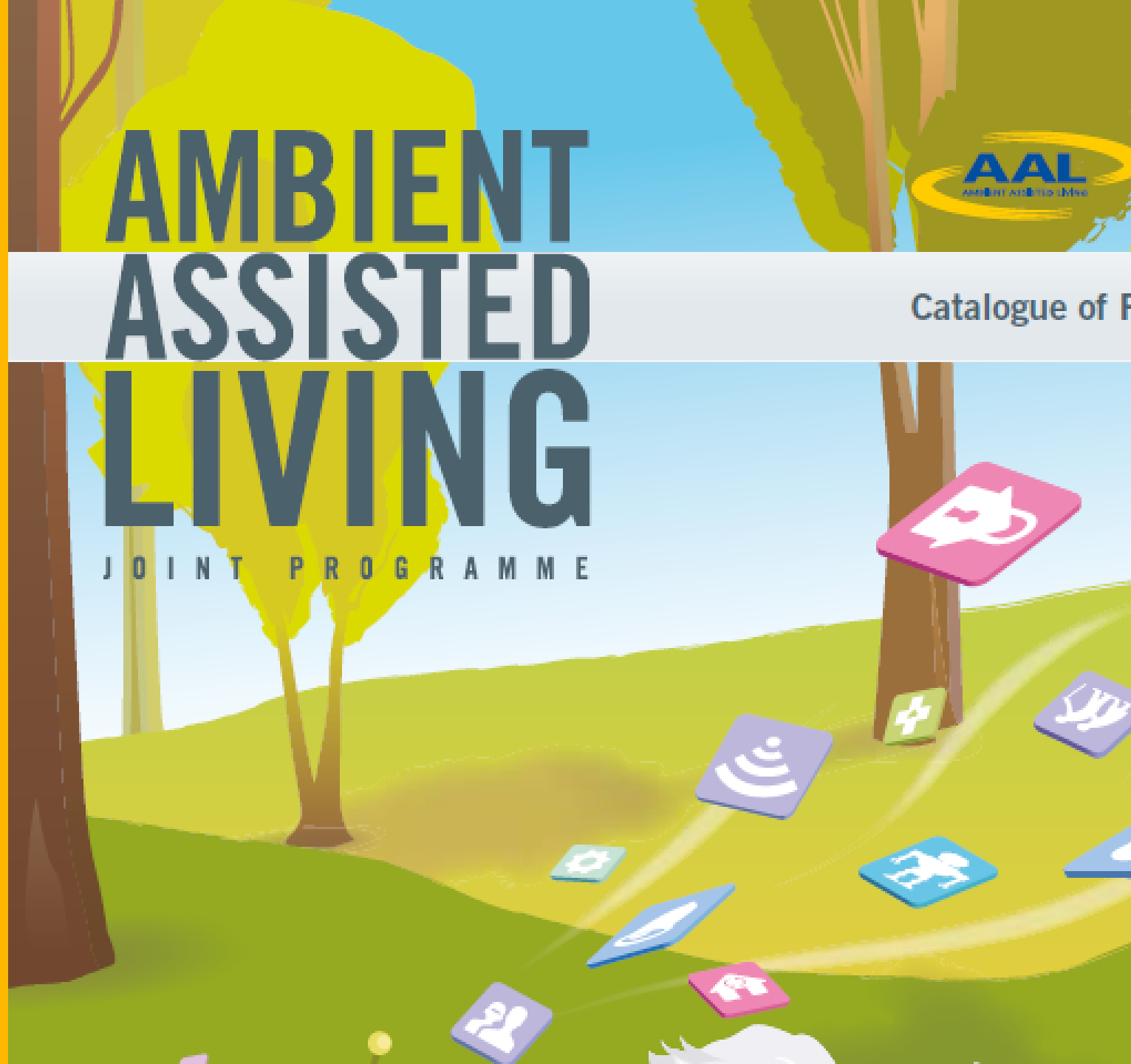
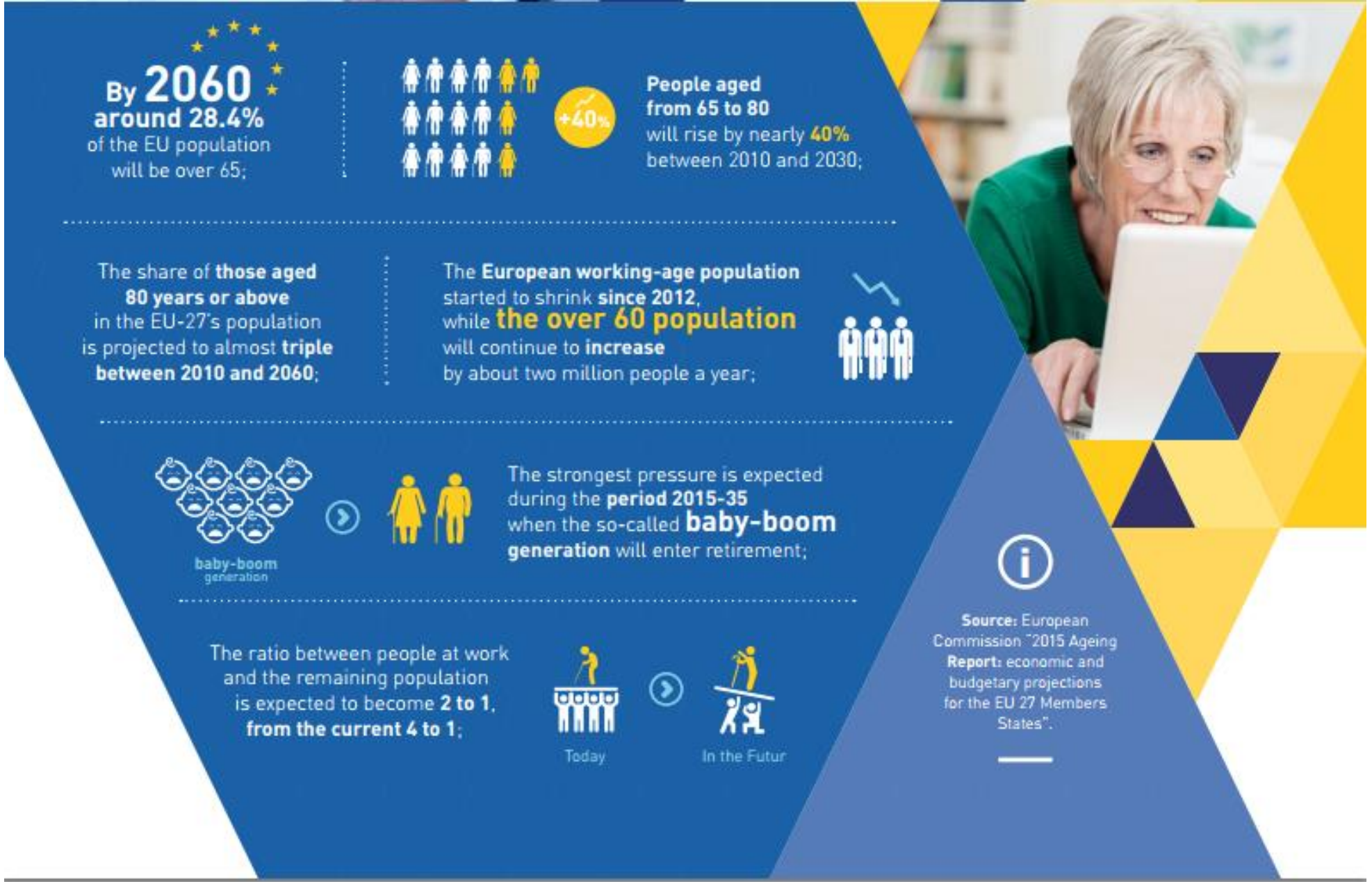




http://www.aal-europe.eu/wp-content/uploads/2015/09/A4_Brochure_Presentation_AAL_ONLINE.pdf

AAL

- The AAL Joint Program is initially set up for a duration of 6 years, from 2008 to 2013. The programme's planned total budget is 700 M€, of which approx. 50% is public funding - from the AAL Partner States and the European Commission - and approx. 50% is private funding from participating organisations.
- The objective of the AAL JP is to enhance the quality of life of older people and strengthen the industrial base in Europe through the use of Information and Communication Technologies (ICT).
- The most important activity of the AAL Joint Programme is the regular publication of calls for proposals for research, development and innovation projects in the field of ICT for Active and Healthy Ageing. The programme co-funds projects within the user-driven-innovation paradigms between minimum three partners from AAL JP Partner States.

Judging Criteria

- The successful finalists will be those that best meet the judging criteria outlined below:
- Criteria 1: Innovation
- Criteria 2: Internet Connected
- Criteria 3: Quality and Usability
- Criteria 4: Market Potential
- Criteria 5: Impact
- Criteria 6: Prototype

http://www.aalforum.eu/award

2016 Finalist

Alzhup
http://www.alzhup.com/Reta/en/
The first service of its kind, AlzhUp allows Alzheimer's patients and their caregivers to upload memories to the cloud in the form of photos, video, music and text and catalogue them to build a clear and recognisable picture of the patient's history.

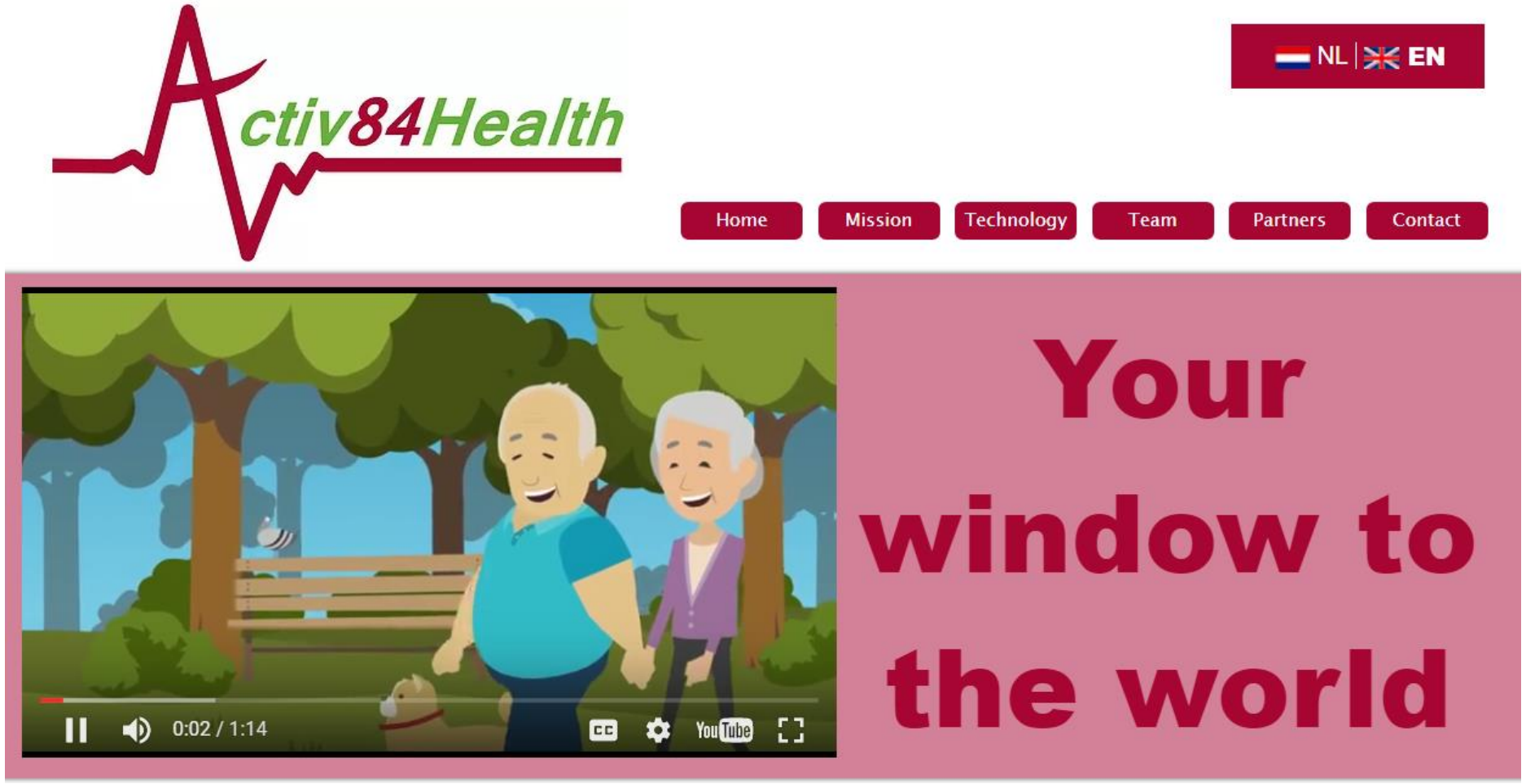
TAVLA
http://www.tavla.de/
TAVLA is a new app platform that empowers care providers to develop apps for their services and reach their customers more easily. This increases the quality of life and security of older adults in their homes.

Activ84Health
http://www.activ84health.eu/blank-k7ayx
The Activ84Health Explorer is a platform that allows users to freely explore known and new areas while being physically active, from within the safety and comfort of an indoor setting.

RelaxedCare
http://www.relaxedcare.eu/en/
RelaxedCare is a smart home IoT tool connecting seniors with loved ones, providing well-being status and simple communication.

GiveVision
http://www.give-vision.com/
Wearable, hands-free, vision-enhancement application powering smart glasses to assist visually impaired people.

Winner 2016


Activ84Health
NL | EN
Home
Mission
Technology
Team
Partners
Contact
0:02 / 1:14
Your window to the world

Feedback

- Peer review is due this week – make sure you submit by this Friday
- Assignment 2 – Next week – happy to iterate via email / in person

Group Presentations

Presentation Schedule and Peer Review

Group	Presentation Topic	Presentation Order	Presentation Week	Peer Assessment 1	Peer Assessment 2	Peer Assessment 3	Peer Assessment 4	Peer Assessment 5
Group 14		1	7	Group 22	Group 17	Group 3	Group 18	Group 13
Group 22	Augmented/Virtual/Mixed Reality	2	7	Group 14	Group 16	Group 10	Group 23	Group 12
Group 6	Commercial Drones/Autonomous Driving	3	7	Group 22	Group 5	Group 15	Group 11	Group 9
Group 17	Commercial Drones/Autonomous Driving	4	8	Group 6	Group 19	Group 8	Group 20	Group 4
Group 18	Virtual Reality (VR)	5	8	Group 14	Group 21	Group 7	Group 17	Group 3
Group 16	Smart Home	6	8	Group 22	Group 18	Group 13	Group 16	Group 10
Group 23	IoT Platforms	7	8	Group 6	Group 5	Group 12	Group 23	Group 15
Group 5	Sharing Economy	8	8	Group 14	Group 11	Group 9	Group 19	Group 8
Group 11	3D/4D Printing	9	8	Group 22	Group 20	Group 4	Group 21	Group 7
Group 19	Human Augmentation/Implantable sensors	10	8	Group 6	Group 17	Group 3	Group 18	Group 13
Group 20	Multi-modal Interation: Gesture/Speech/Brain Control	11	9	Group 14	Group 16	Group 10	Group 23	Group 12
Group 21	Cognitive Services	12	9	Group 22	Group 5	Group 15	Group 11	Group 9
Group 3	3D/4D Printing	13	9	Group 6	Group 19	Group 8	Group 20	Group 4
Group 13	IoT Platforms	14	9	Group 14	Group 21	Group 7	Group 17	Group 3
Group 10	Virtual Assistant	15	9	Group 22	Group 18	Group 13	Group 16	Group 12
Group 12	Internet.org	16	9	Group 6	Group 5	Group 10	Group 23	Group 15
Group 15	Sharing Economy	17	9	Group 14	Group 11	Group 9	Group 19	Group 8
Group 9	Cognitive Services	18	10	Group 22	Group 20	Group 4	Group 21	Group 7
Group 8	Quantum Computing	19	10	Group 6	Group 17	Group 3	Group 18	Group 13
Group 4	Big Data	20	10	Group 14	Group 16	Group 10	Group 23	Group 12
Group 7	Personal Analytics	21	10	Group 22	Group 5	Group 15	Group 11	Group 9

Group Presentation - Session I

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