



Welcome to the Apple Store. Our stores share many of the same products across the US. Some of our most popular items include the iPhone, AirPods, iPad, and MacBook.

That is cool. What can you tell me about these products?

Building Digital Competences Through Virtual Reality

Tim Cook

Customer

Mark Frydenberg,
Bentley University, USA

mfrydenberg@bentley.edu

Diana Andone
Politehnica University Timisoara, Romania

diana.andone@upt.ro



Talk Tech



Mark Frydenberg



Diana Andone



Google



Virtual mobility – learn, work online with limited supervision

Multicultural

Entrepreneurship

Motivation

Global workspace environment

Open Education

Digital skills

International Collaboration

TalkTech 2018 - 2021 each year

- 26 -35 Bentley Students
- 28 - 45 UPT students
- Ages 18-21
- Ages 21-23

- Most never created AR/VR before
- Most used online storage and collaboration tools
- Spoke English
- Frequently use the web, computers, and mobile devices

TalkTech Themes



Business Applications in Digital Reality : 2020

January 19th, 2021

For more information: [View 20 Students here](#)
[View Project 2020 Description](#)



VR/AR in Digital Culture: 2018, 2019

January 19th, 2021

For more information: [View 18 Students here](#)
[View Project 2018 Description](#) [View 19 Students here](#) [View Project 2019 Description](#)



Virtual Reality in Cities: 2017

January 19th, 2021

For more information: [View 17 Students here](#)
[View Project 2017 Description](#) Virtual Reality: TalkTech 2017 TalkTech 2017 promoted Virtual Reality (VR) and digital culture, as []



Augmented Reality: 2016

January 19th, 2021

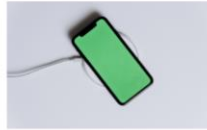
For more information: [View 16 Students here](#)
[View Project 2016 Description](#) Augmented Reality: TalkTech 2016 TalkTech 2016 introduced Augmented Reality (AR), as advances in []



Tech Trends: 2014, 2015

January 19th, 2021

For more information: [View 14 Students here](#)
[View Project 2014 Description](#) [View 15 Students here](#) [View Project 2015 Description](#) [Tech Trends](#) []



Going Mobile: 2013

January 19th, 2021

For more information: [View 13 Students here](#)
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- Creative Industries with Virtual Reality: 2021
- Business Applications in Digital Reality : 2020
- VR/AR in Digital Culture: 2018, 2019
- Virtual Reality in Cities: 2017
- Augmented Reality: 2016
- Tech Trends: 2014, 2015
- Going Mobile: 2013
- Web 2.0 and Entrepreneurship: 2011, 2012
- Moving to the Cloud : 2010
- The Early years - websites : 2008,2009

TalkTech Themes



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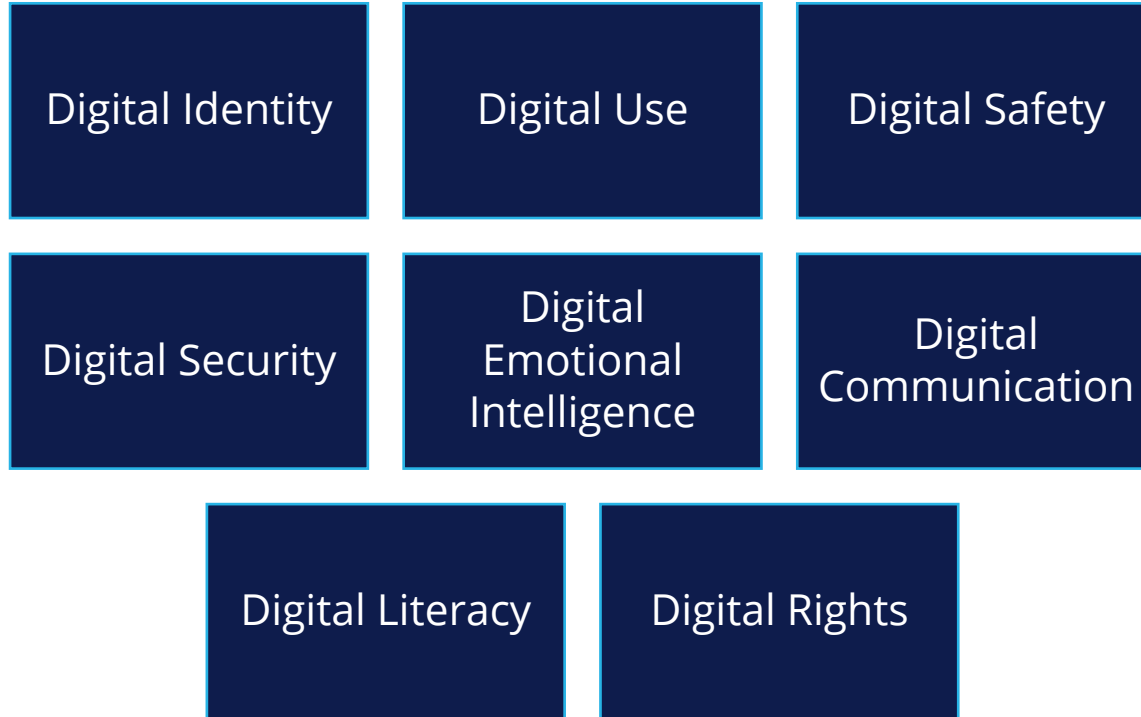
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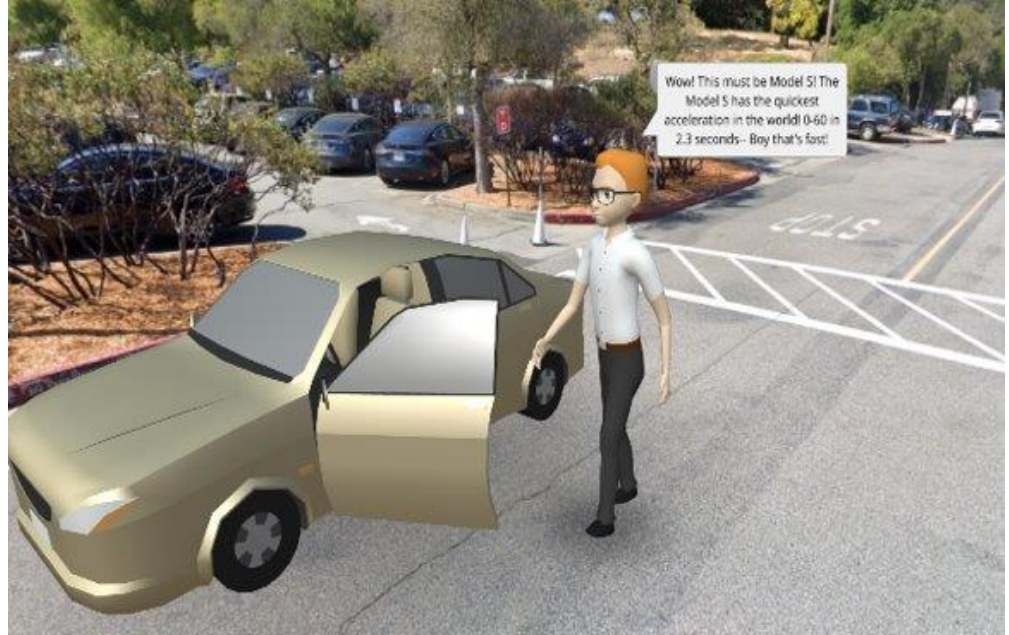


IEEE DQ Digital Intelligence Framework



Digital Literacy (IEEE)

finding, reading,
evaluating,
synthesizing,
creating, adapting
and sharing
information, media
and technology



TalkTech 2020 Study question

How is digital intelligence influenced by an international project where students co-create multimedia artefacts as members of international teams?

Project Goals

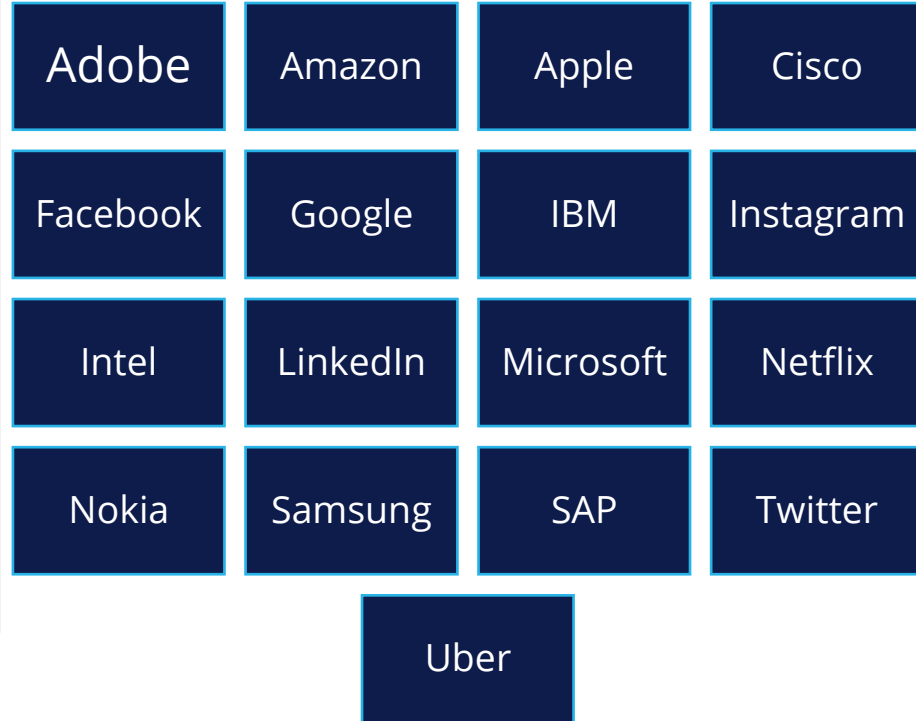
- Produce a tangible deliverable within a short time while working as a member of a global team
- Develop digital literacy skills with ICTs
- Communicate using both synchronous and asynchronous tools
- Increase cultural awareness / impact of globalization
- Critique and review VR scenes from a cultural perspective



TalkTech Companies

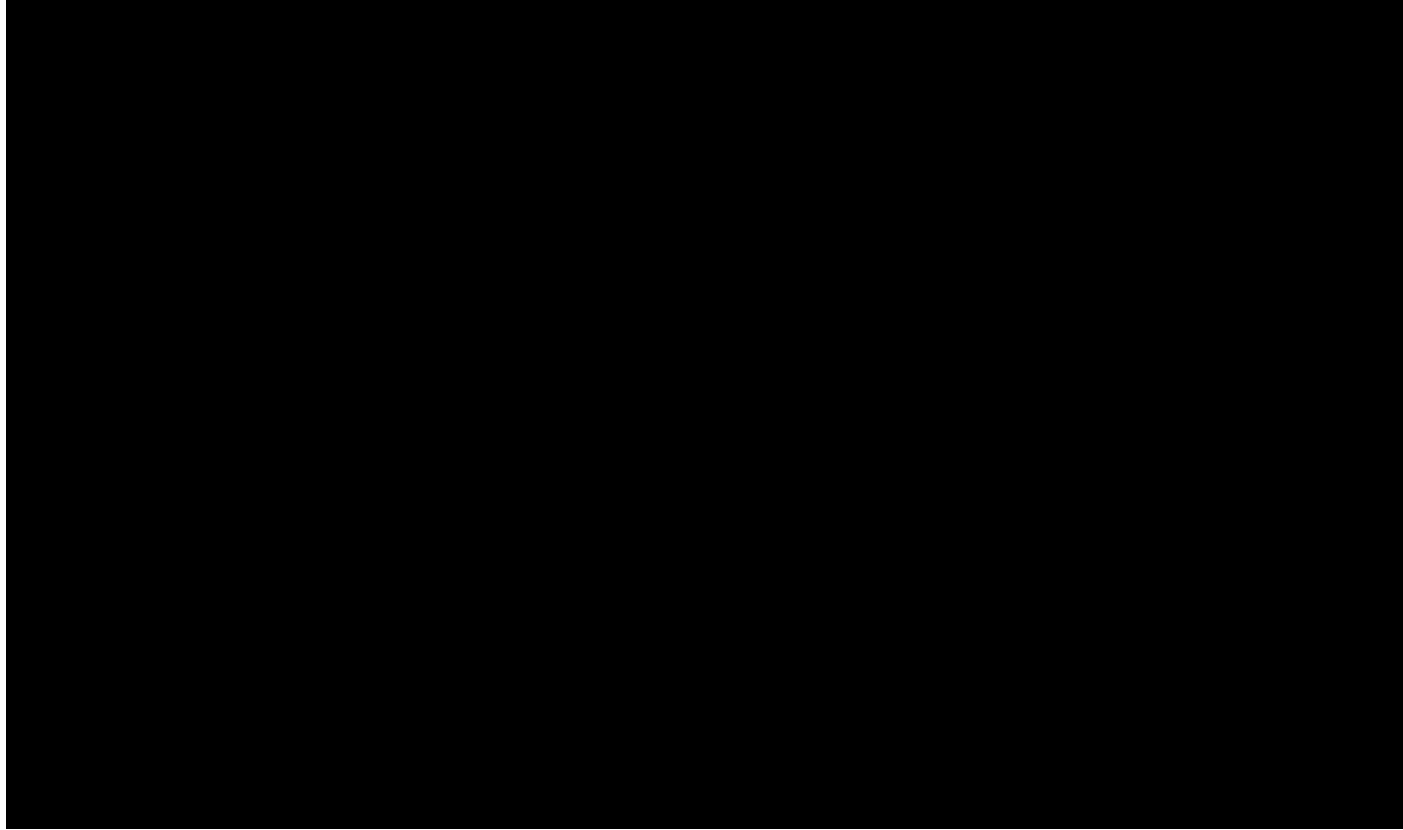
Research the products, services, innovations, history, and any localized aspects of one of these companies

Create a VR scene that conveys a what you learned about this company, and share with your partners.



TalkTech: Visiting International Businesses

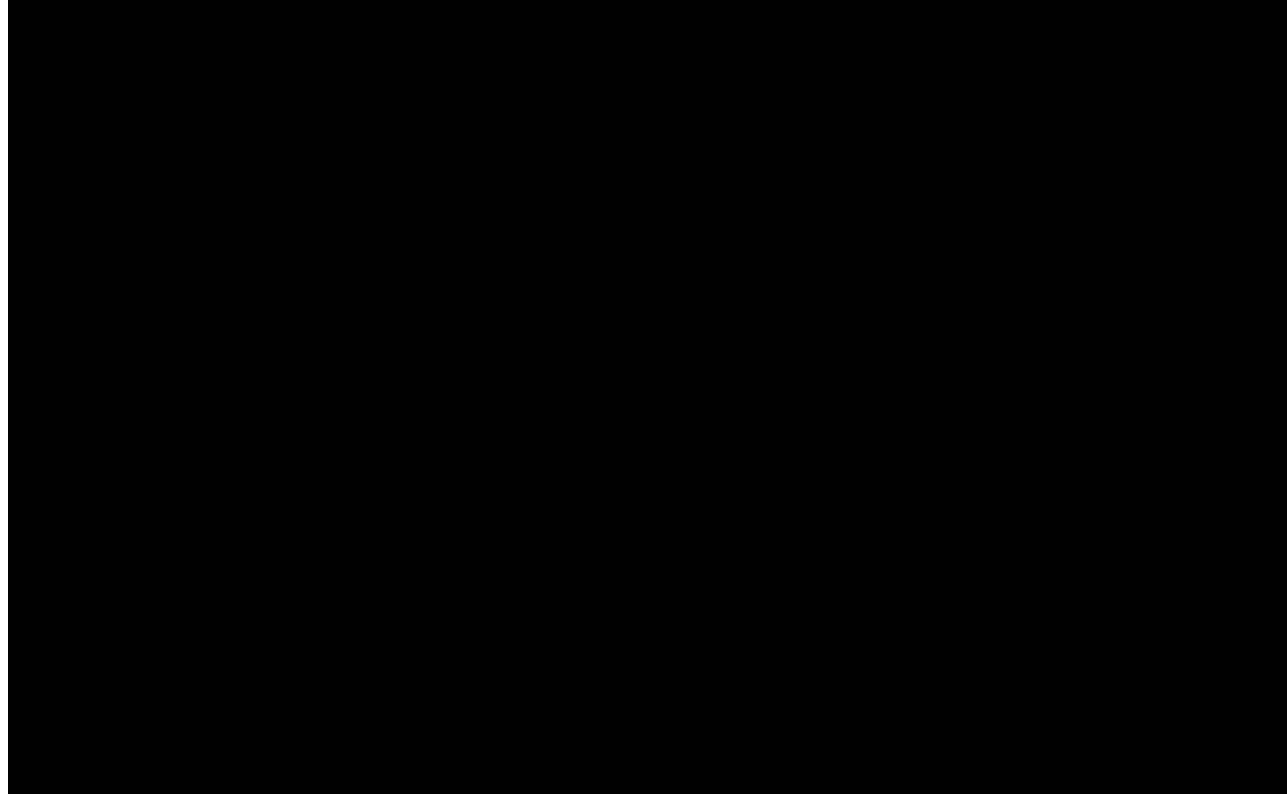
- UP Timisoara and Bentley University
- Students select common industries and research AR/VR applications in their own countries to create a VR scene
- Create scenes conveying a use of AR/VR in that industry in your home country from a cultural perspective



Make Your Own Virtual Reality



cospaces.io/edu



VR Scene with CoSpaces



Blog Posts Summarizing Research

About Tesla Model 3

This car is perfectly for a family is an electric four-door fastback sedan.

The Model 3 Standard Range Plus version delivers an EPA-rated all-electric range of 263 miles and the Long Range versions deliver 353 miles.

The Model 3 carries full self-driving hardware, with periodic software updates adding functionality. Tesla Model 3 is instead more of an all-electric alternative to compact luxury sedans !

Model 3 comes with the option of dual motor all-wheel drive. Performance Brakes and lowered suspension. all allowing Model 3 to accelerate from 0-60 mph in as little as 3.1 seconds.

Safety is the most important part of the overall Model 3 design. The metal structure is a combination of aluminum and steel, for maximum strength in every area. In a roof-crush test, Model 3 resisted four times its own mass, even with an all-glass roof: that's the same weight as two full-grown African elephants.

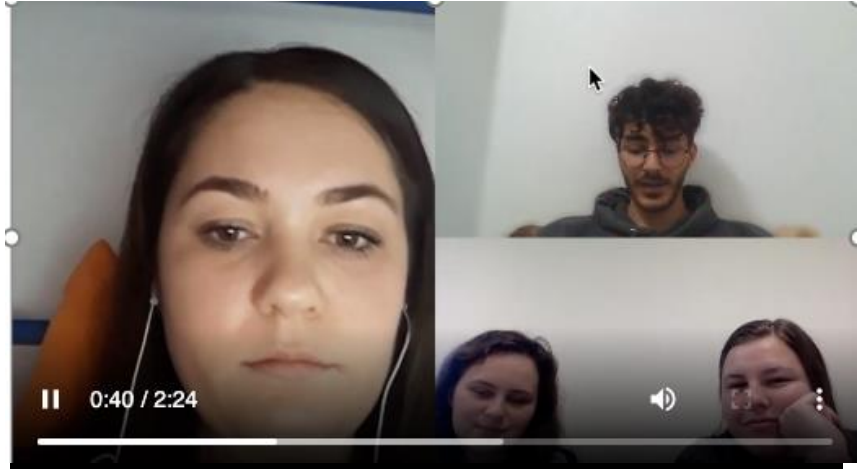
Source

https://www.tesla.com/en_ca?fbclid=IwAR3gFbwlC0McTq-JjOiFZ72CAXjm_EvLqHMUmLHto3G6mrcsSemEopiD55s

The exterior and interior of Tesla Factory were found on an Youtube 360 degree video. I downloaded the video and made caption on two scenes the parking spot and the Interior factory. Sadly the quality of the video and of the images were not enough for a good quality in cospaces.



Student Reflections



Tools Used: Prior Experience

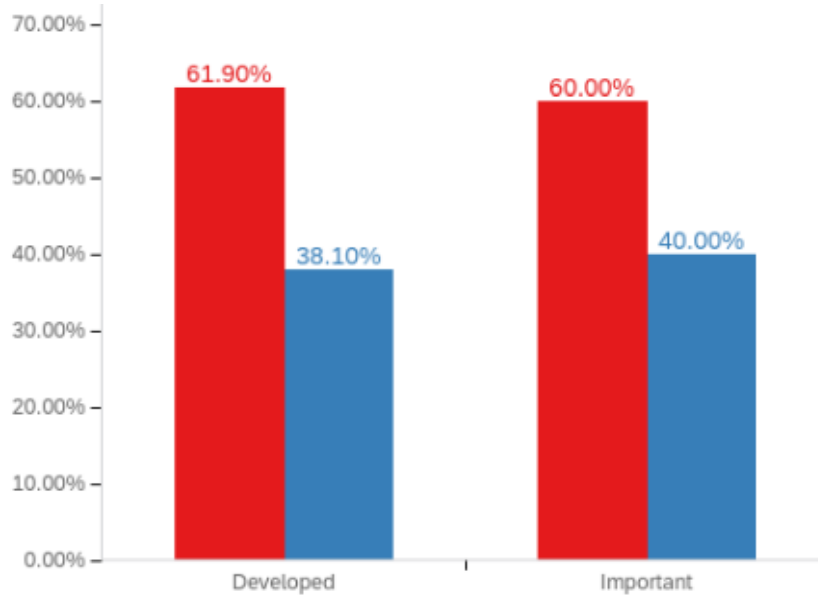
Field	Min	Max	Mean	Std Dev	Var	Count
American Students						
Search engines	1	5	4.62	0.95	0.9	21
Mobile messaging	4	5	4.67	0.47	0.22	21
Video Conferencing	1	5	4.62	0.9	0.81	21
Team Conversations	1	5	3.24	1.44	2.09	21
YouTube	1	5	4.33	1.28	1.65	21
Collaborative Documents	1	5	3.95	1.4	1.95	21
Augmented Reality	1	4	1.9	1.06	1.13	21
Virtual Reality	1	5	2.05	1.33	1.76	21
Romanian Students						
Search engines	2	5	4.69	0.77	0.59	16
Mobile messaging	1	5	4.56	1	1	16
Video Conferencing	2	5	4.25	0.83	0.69	16
Team Conversations	1	5	3.75	1.15	1.31	16
YouTube	2	5	4.44	0.79	0.62	16
Collaborative Documents	1	5	3.31	1.21	1.46	16
Augmented Reality	1	5	2.56	1.32	1.75	16
Virtual Reality	1	5	2.88	1.58	2.48	16

Critical Thinking through Coding



```
1 ▶ When Play clicked
2 run parallel
3   move Car 10 meters forward
   in 10 sec.
4   move Fancy boy 15 meters forward
   in 10 sec.
5 when Beige Car is clicked
6   go to scene InteriorSediu
```

Digital Citizenship



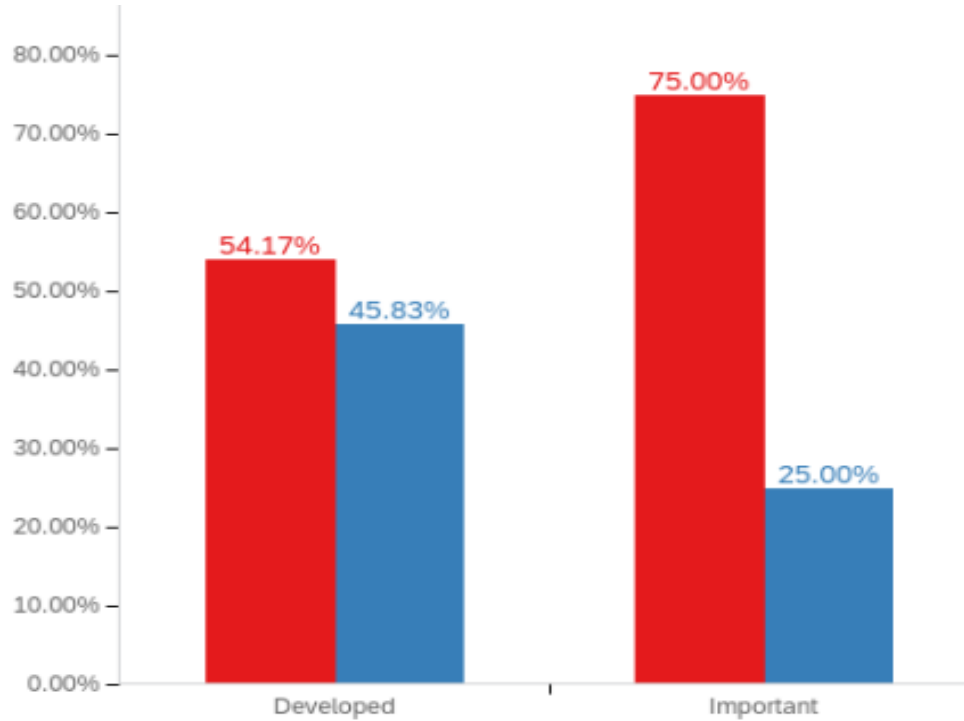
Well-informed and proficient use of technology (Developed and Importance).

"The project showed us how important technology was to them"

"It was cool to see the street view from Romania and the US and see how similar they are. I learned that we are a lot more similar than I thought."

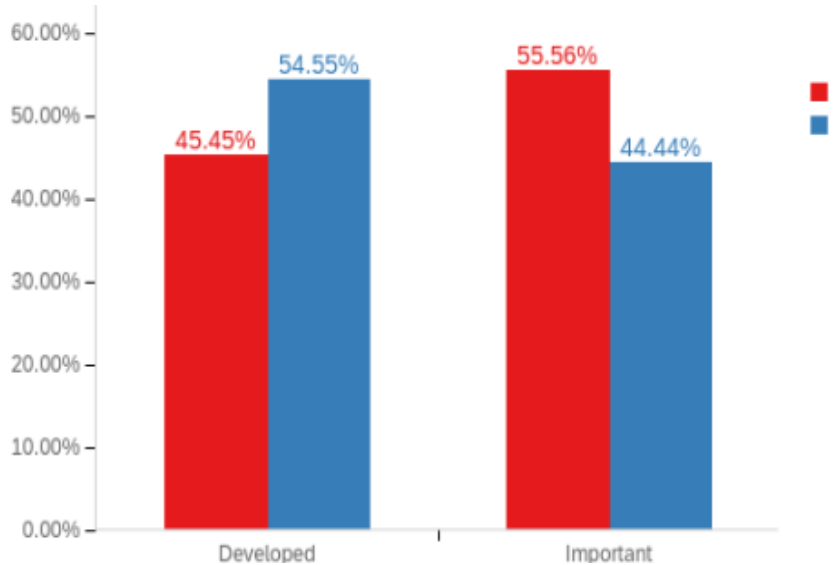
"This was most certainly different than any other academic project I ever had to take on previously"

Digital Creativity



Creativity (Developed and Importance).

Digital Competitiveness



Competitive Edge: solving global challenges, innovating, and creating new opportunities in the digital economy (Developed and Importance).

Challenges

New Tools and Technologies

Time Zones, Spotty Internet Connections

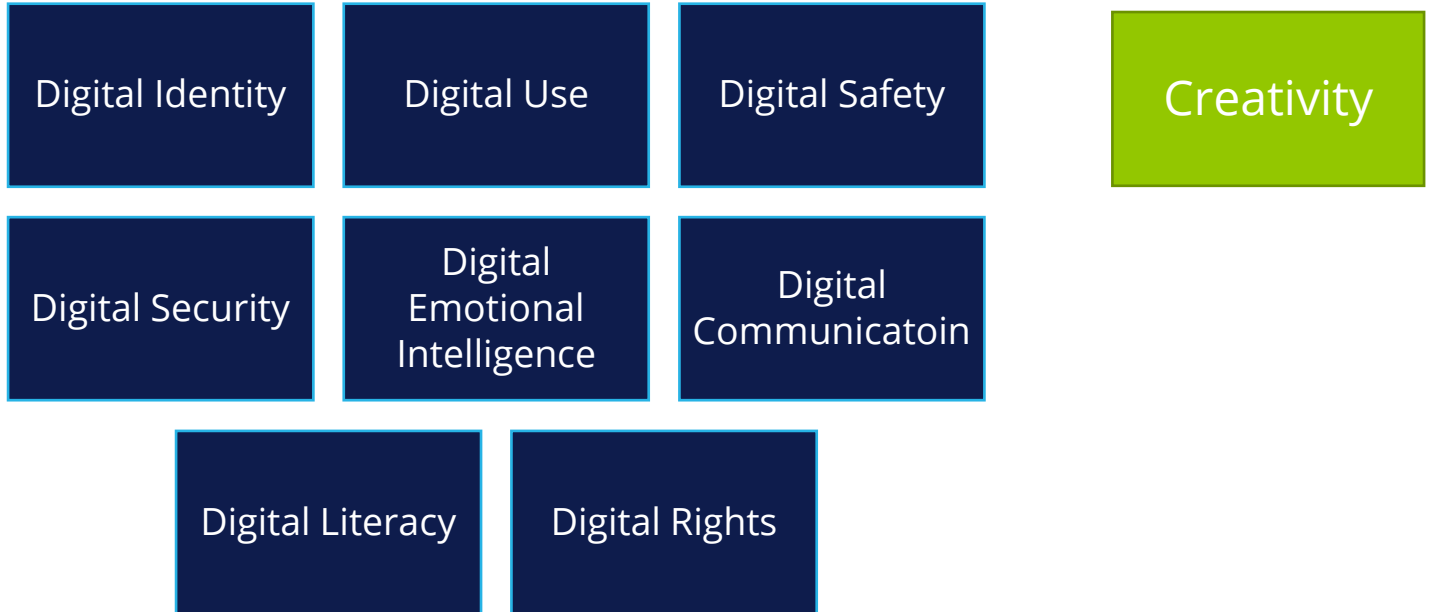
Teams and Appointments

Extensibility

Extend to other disciplines where immersive media is the backdrop to tell digital stories

Create immersive media using Google Earth, Street View

IEEE DQ Framework Revisited



TalkTech 2020 Presentation



Contact

Mark Frydenberg,

Bentley University, Waltham MA

mfrydenberg@bentley.edu

@checkmark

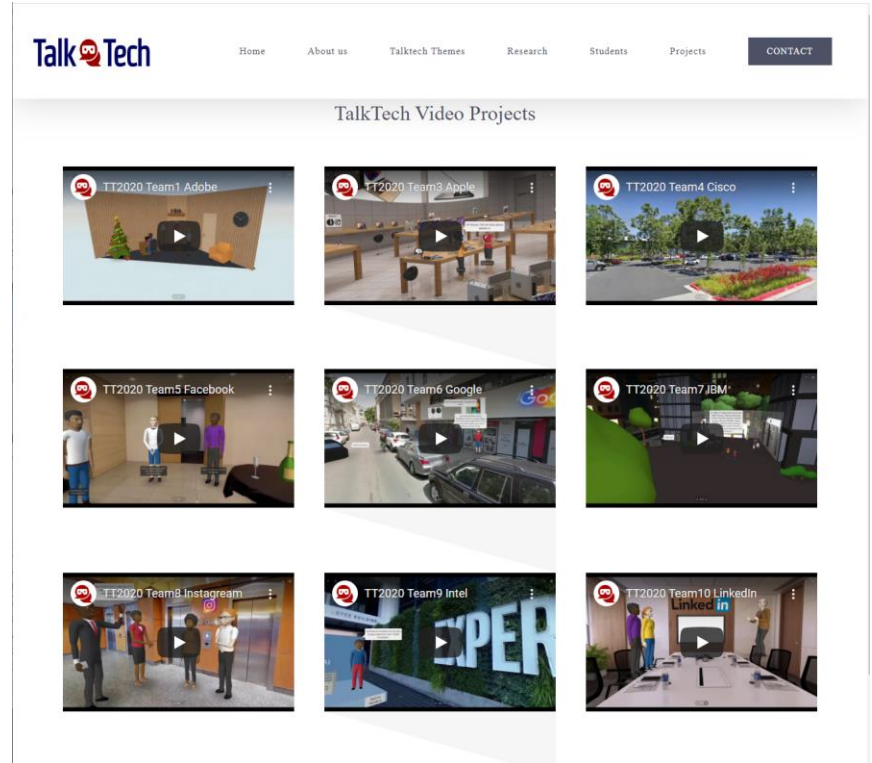
Diana Andone,

Universitatea Politehnica

Timisoara, Romania

diana.andone@upt.ro

@diando70



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