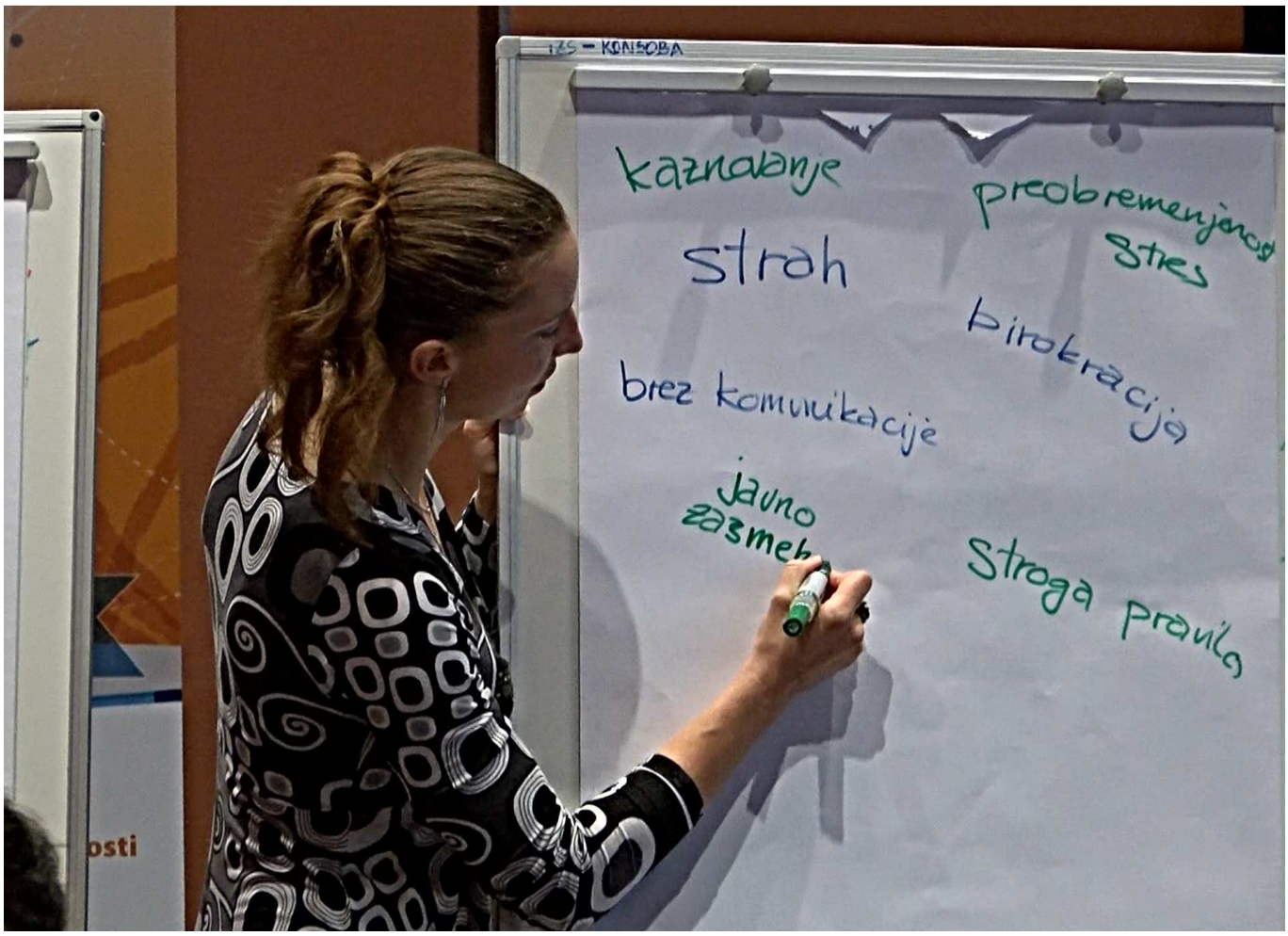
Kultura
Nenapisana pravila.
YouTube
Gospodarska zbornica Slovenije


kaznovanje
preobremenjenost
stres
strah
birokracija
brez komunikacije
javno
zasmeh
stroga pravila

Ustvarjalna
raznolikost

IZZIV
SEDANJE STANJE
CILJNO STANJE
PREPREKE
AKTIVNOST
PRIČAKOVANJE
ČASOVNA
UČINEK

Toyota Kata - kako spremeniti
kulturo vodenja v podjetju

1. Izziv
4. Prepreke? Izberi eno.
3. Ciljno
stanje?
2. Sedanje stanje?

SODOBNA DELOVNA MESTA

zgodnjih
srednjih
let
Kriza
smrtnosti

Stanislav Rožman
Nuklearna elektrarna Krško, Krško
Bogomir Strašek
KLS Ljubno, Ljubno ob Savinji
dvorana a
a

ThinkPad

Dan najboljše prakse 2016
Konferenca o digitalni preobrazbi stalnih izboljšav
29. in 30. september 2016
glavni sponzor
O.K. Consulting
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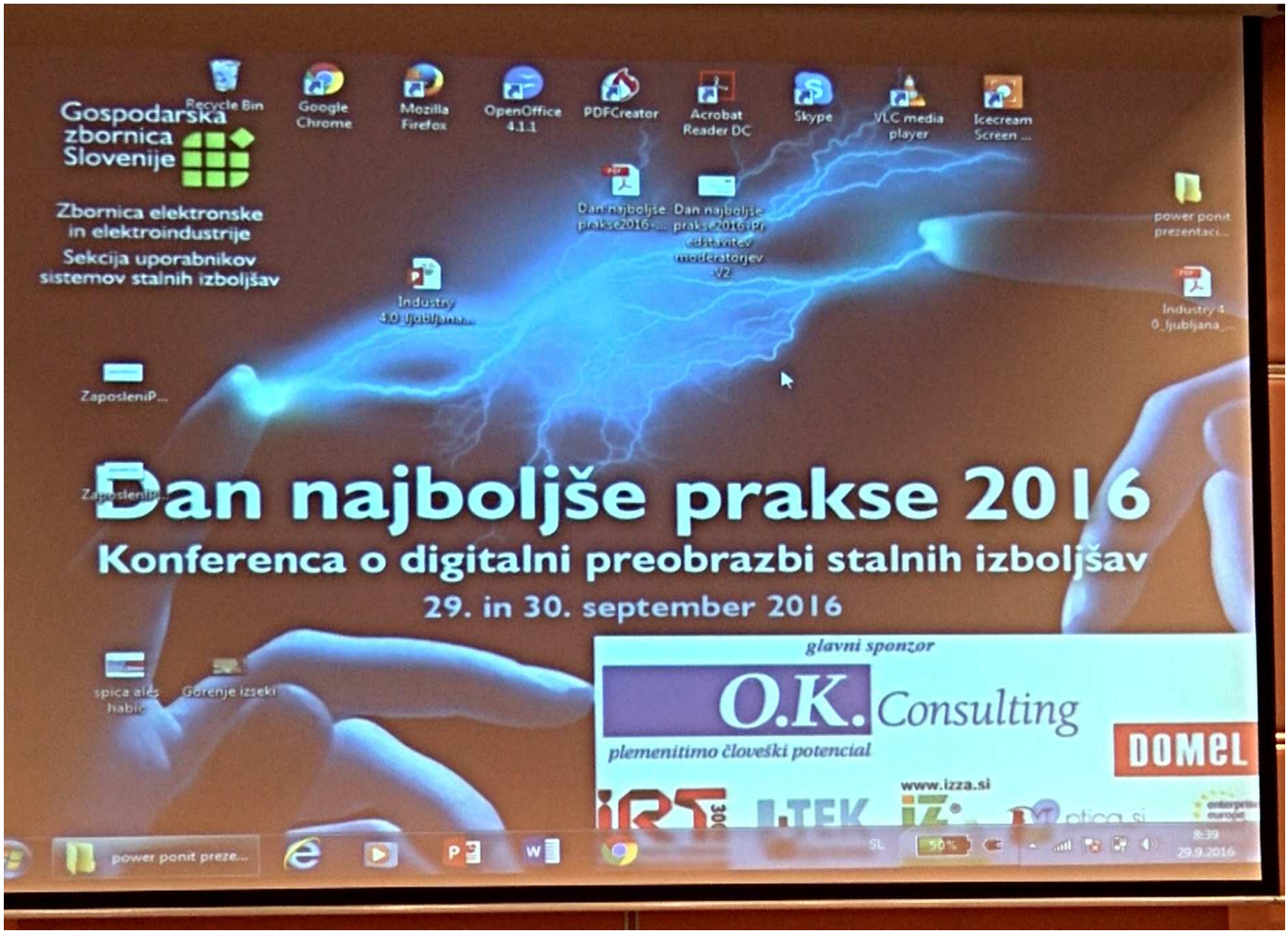
najboljše prakse 2016
O.K. Consulting


Gospodarska zbornica Slovenije
Zbornica elektronske in elektroindustrije
Sekcija uporabnikov sistemov stalnih izboljšav
Dan najboljše prakse 2016
Konferenca o digitalni preobrazbi stalnih izboljšav
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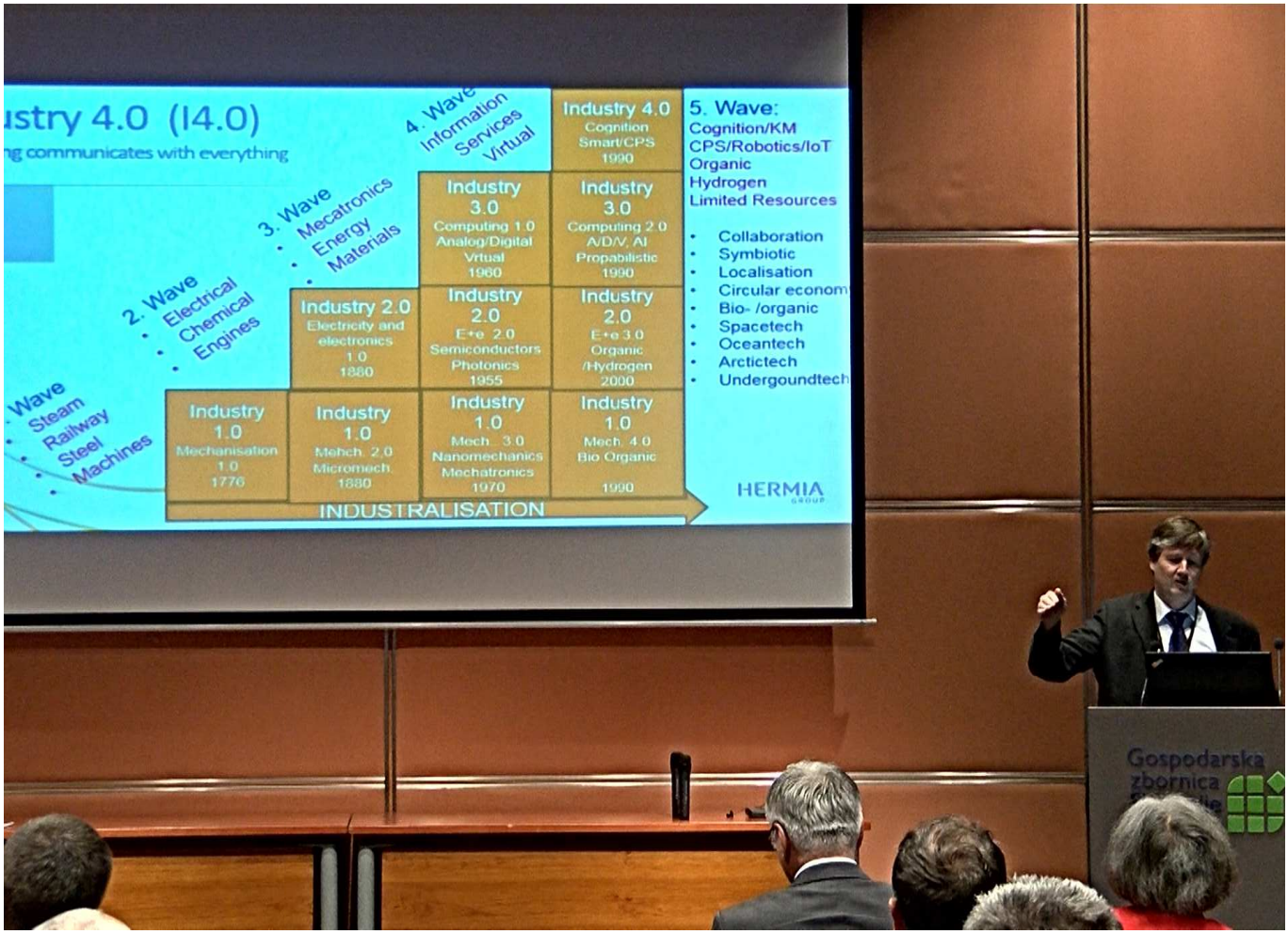
ustry 4.0 (I4.0)
ng communicates with everything
4. Wave
Information
Services
Virtual
Industry 4.0
Cognition
Smart/CPS
1990
5. Wave:
Cognition/KM
CPS/Robotics/IoT
Organic
Hydrogen
Limited Resources
• Collaboration
• Symbiotic
• Localisation
• Circular econom
• Bio- /organic
• Spacetech
• Oceantech
• Arctictech
• Undergoundtech
3. Wave
• Mecatronics
• Energy
• Materials
Industry 3.0
Computing 1.0
Analog/Digital
Virtual
1960
Industry 3.0
Computing 2.0
A/D/V, AI
Propabilistic
1990
2. Wave
• Electrical
• Chemical
• Engines
Industry 2.0
Electricity and electronics 1.0
1880
Industry 2.0
E+e 2.0
Semiconductors
Photonics
1955
Industry 2.0
E+e 3.0
Organic
/Hydrogen
2000
Wave
• Steam
• Railway
• Steel
• Machines
Industry 1.0
Mechanisation 1.0
1776
Industry 1.0
Mehch. 2.0
Micromech.
1880
Industry 1.0
Mech. 3.0
Nanomechanics
Mechatronics
1970
Industry 1.0
Mech. 4.0
Bio Organic
1990
INDUSTRALISATION
HERMIA
GROUP
Gospodarska
zbornica

Evolution of embedded systems

HURRICANE

in 4 generacija
CIM (CIMOSA) – avtomatizacija
Holonski sistemi
Flexiblini Manufacturing Systems
Complex Adaptive Systems – usklajeno delovanje prek:
Kooperacije
Tekmovanja med avtonomnimi agenti
==========
Kompleksnost::
odsotnost formalnega opisa objekta,
stohastična narava parametrov z notranjimi in zunanjimi motnjami,
ne-stacionarnost obnašanja,
odpor do krmiljenja,
perturbacije in nelinearnost
P
P
G
H
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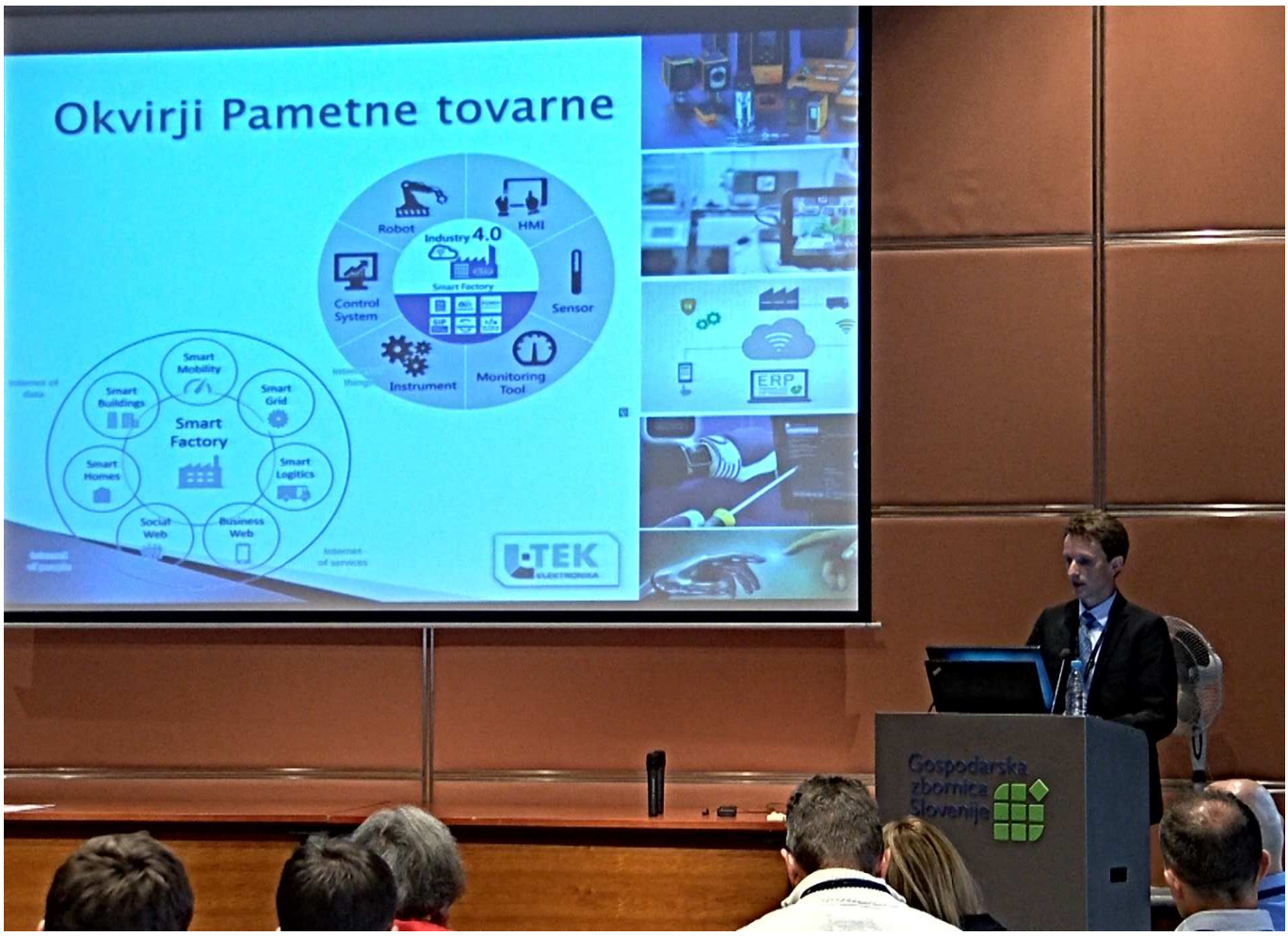
3 in 4 generacija


Okvirji Pametne tovarne
Robot
HMI
Industry 4.0
Smart Factory
Control System
Sensor
Instrument
Monitoring Tool
Smart Mobility
Smart Buildings
Smart Grid
Smart Factory
Smart Homes
Smart Logistics
Social Web
Business Web
ERP
I-TEK
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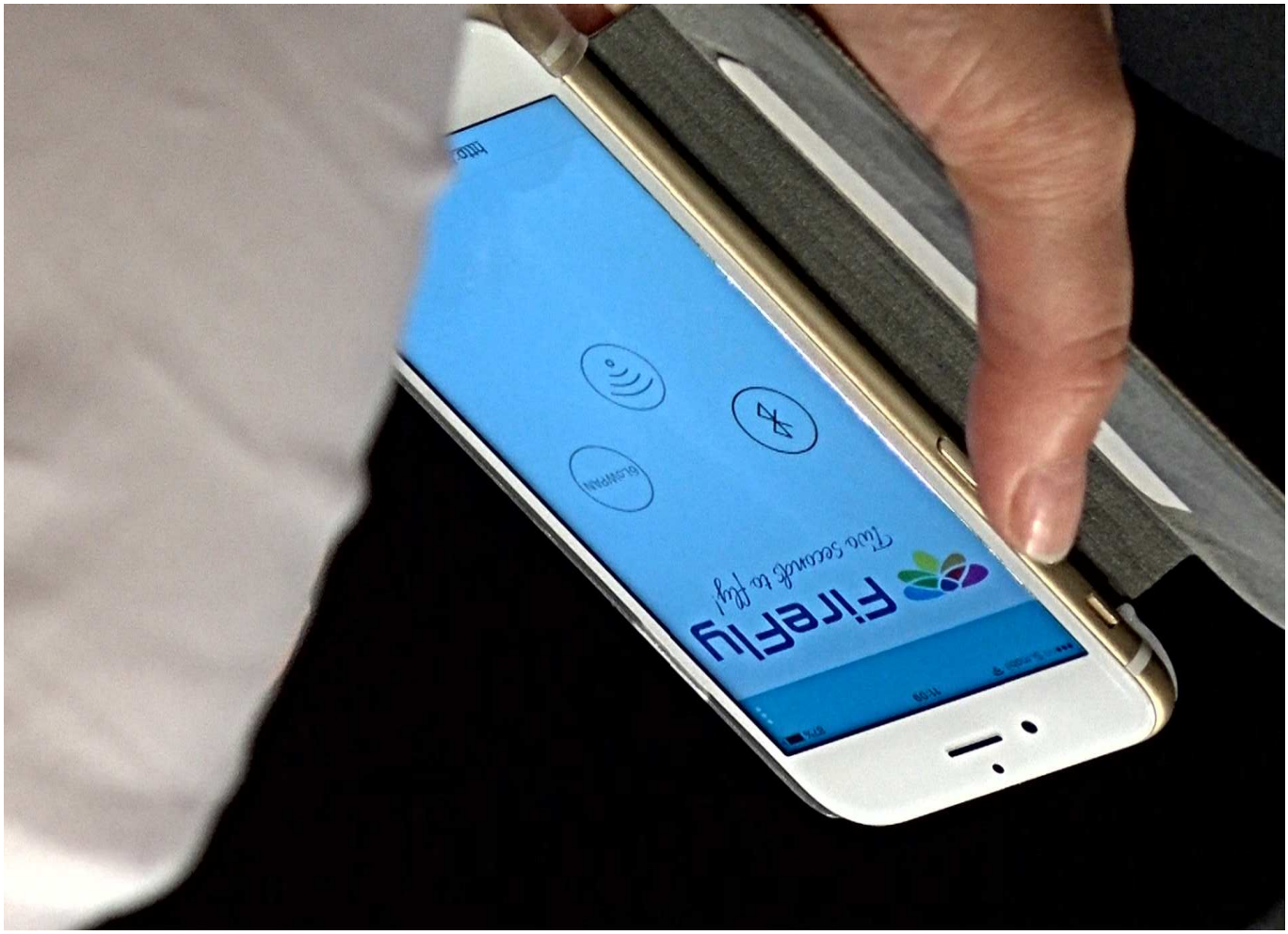
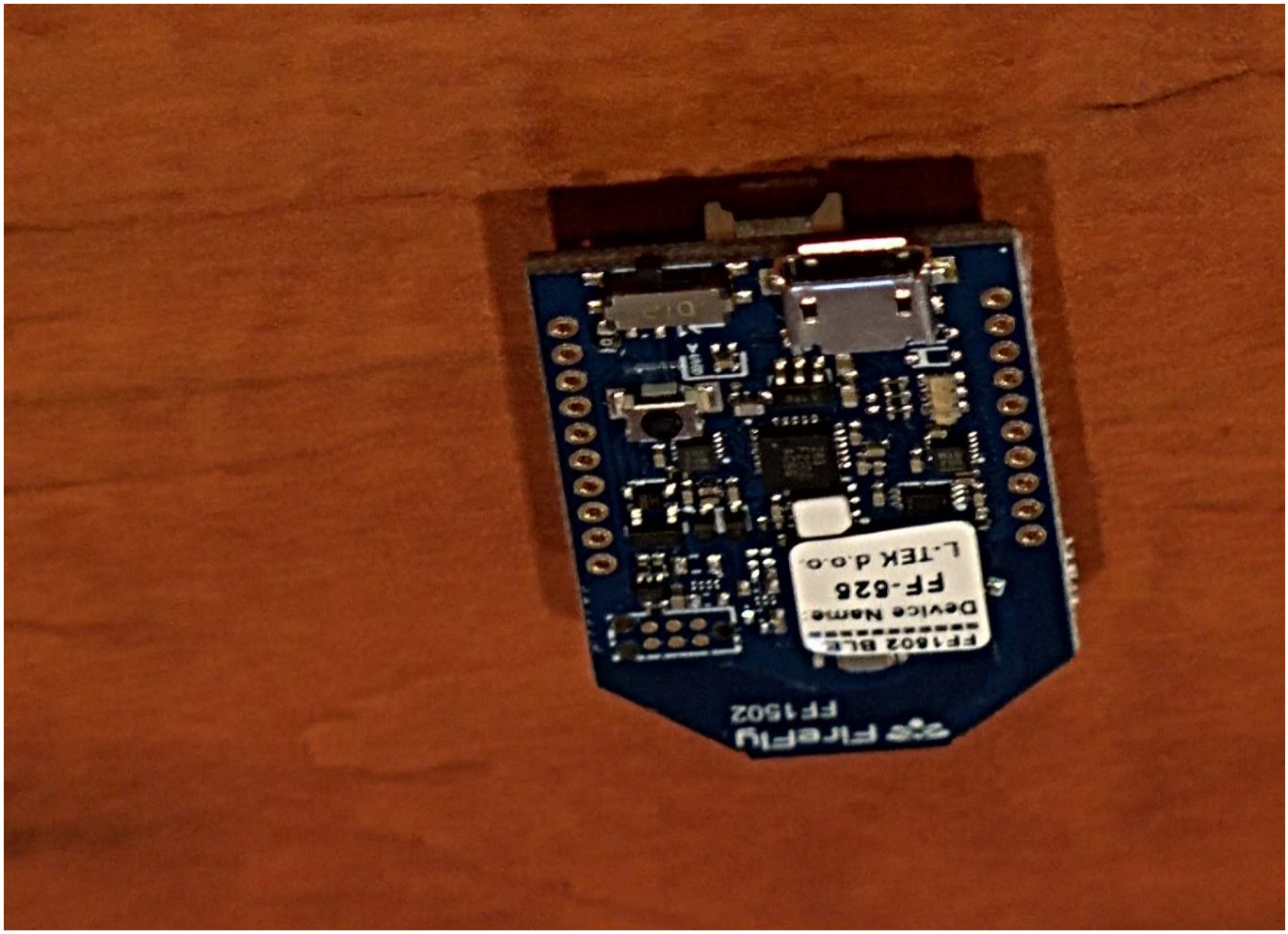
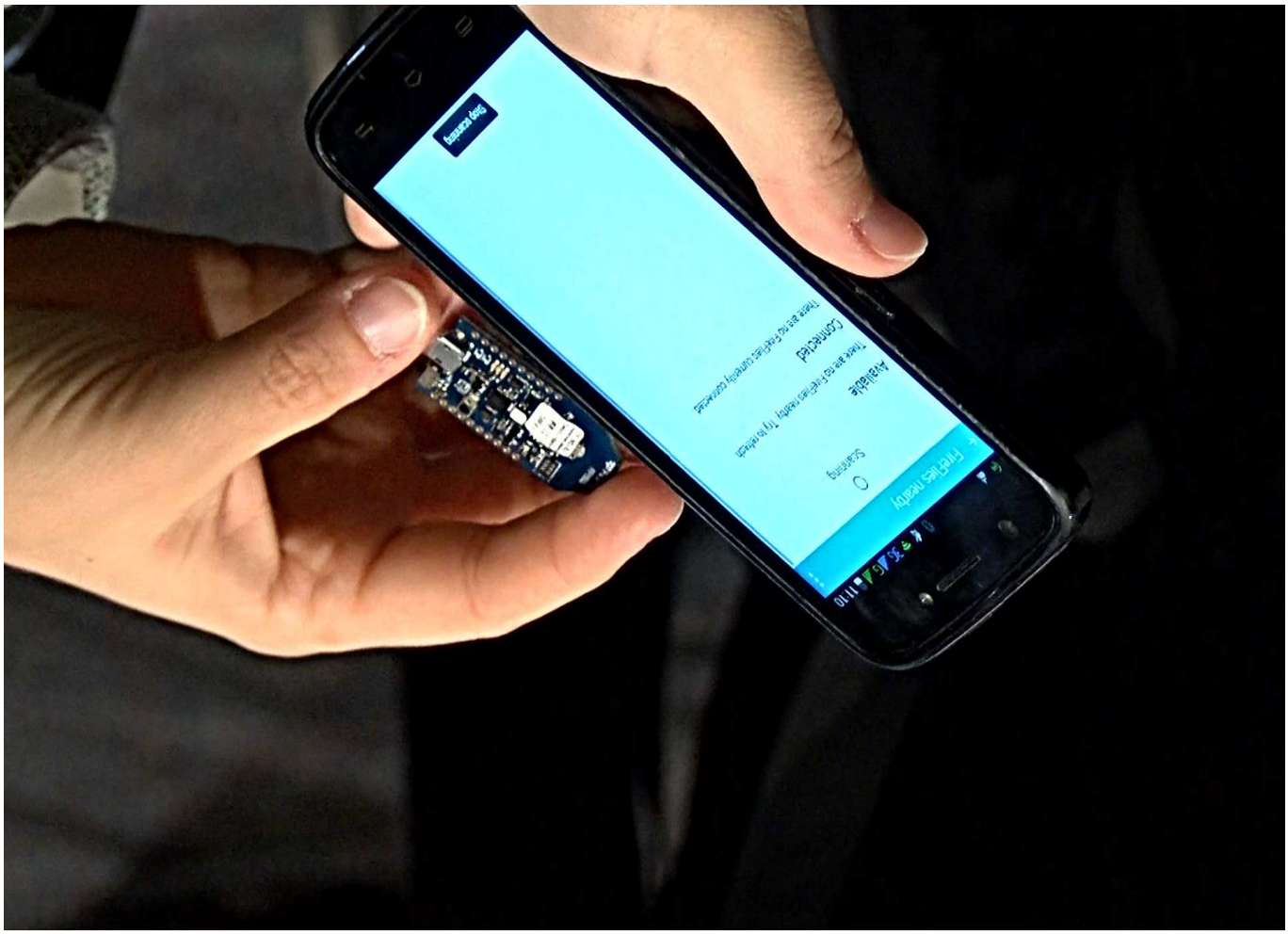
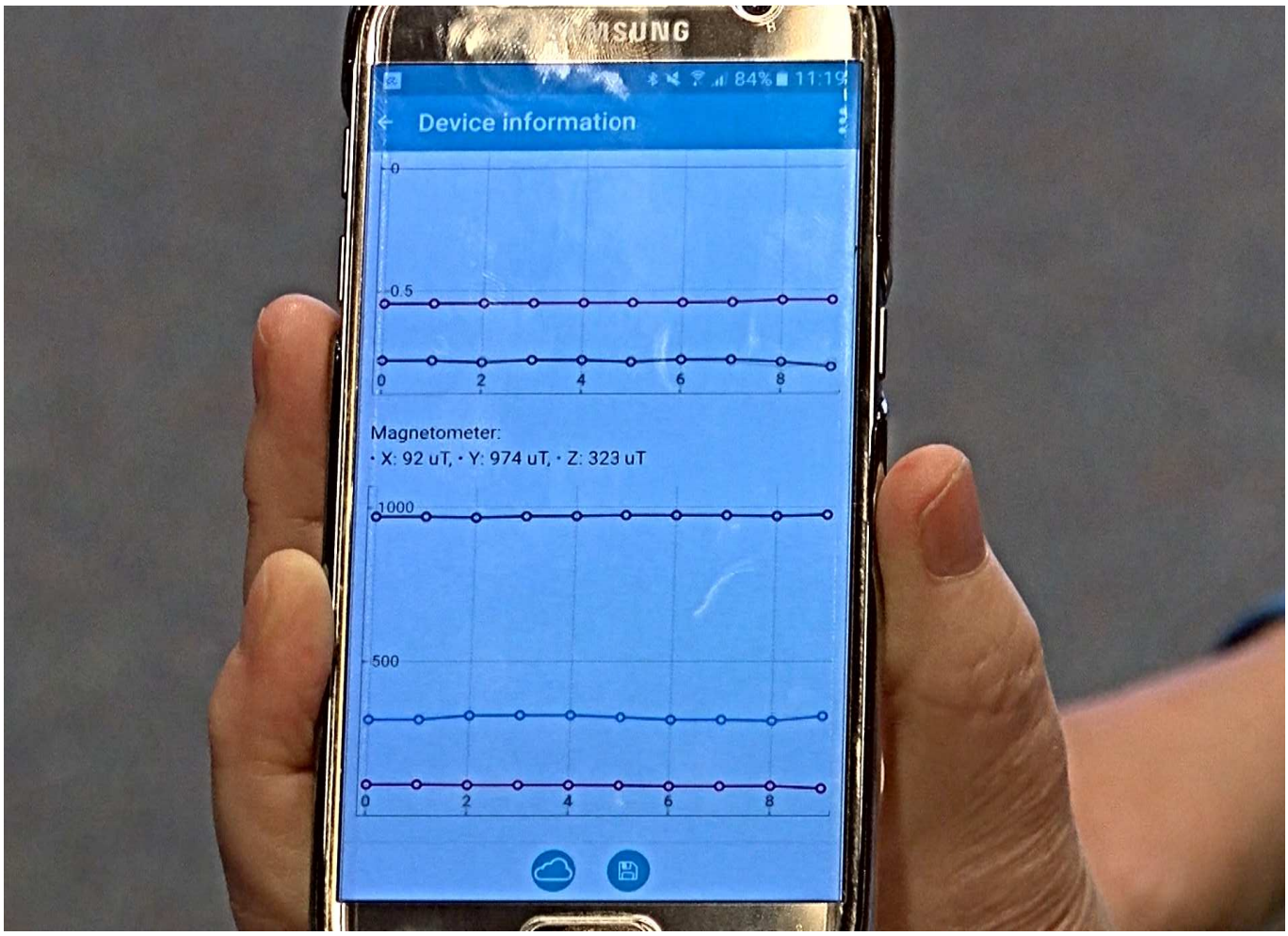
network
enterprise europe
Europe Network Mednarodne priložnosti
novo tržišče
slovne partnerje
pravo tehnologijo
Gospodarska zbornica Slovenije

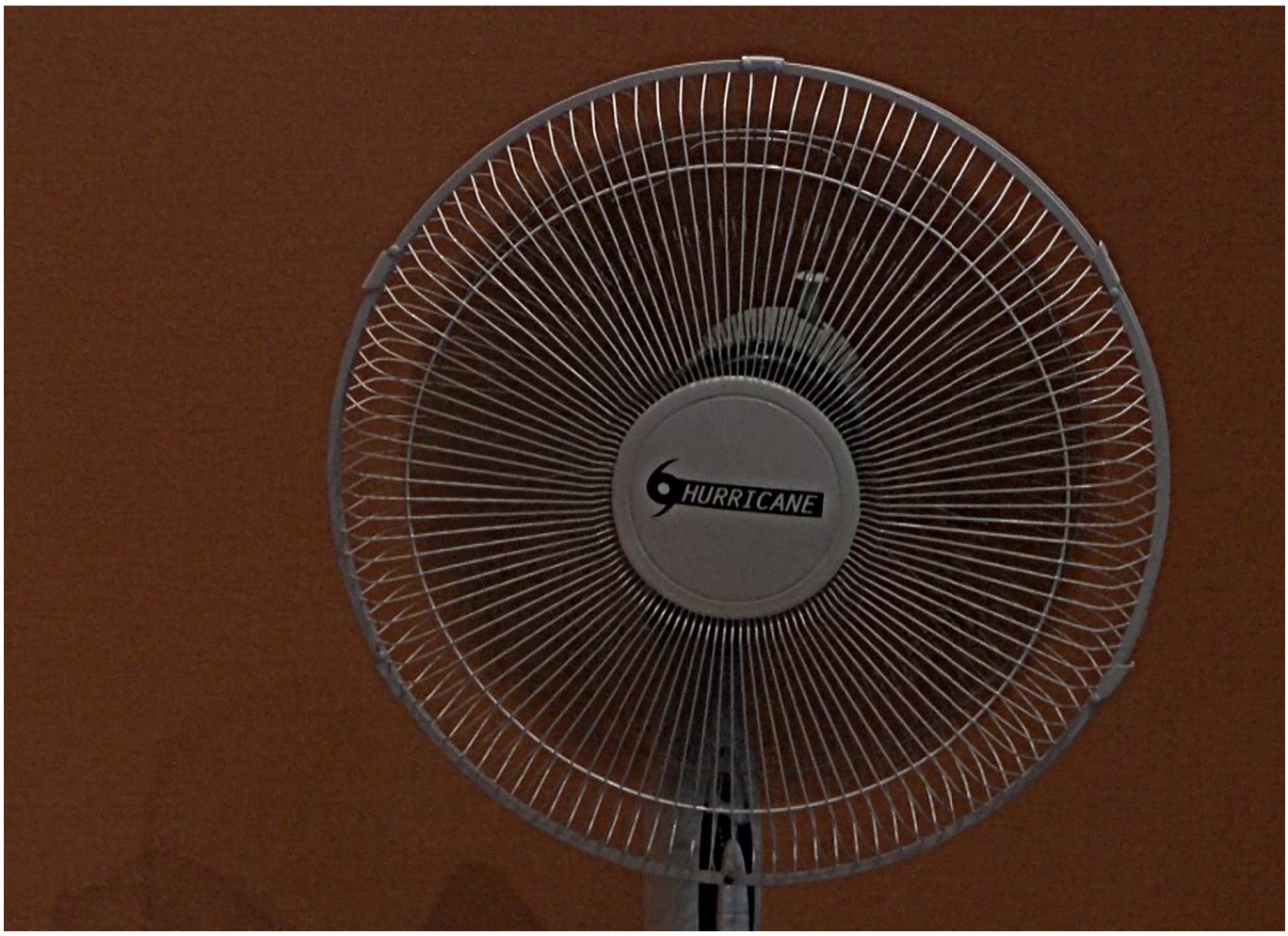

FireFly
Five seconds to fly!
Begin


FF1502
FF1502 BLE
Device Name
FF-628
L-TEK d.o.o.


FireFlies Inventory
Scanning
0
Available
There are no Fireflies nearby. Try to refresh
Connected
There are no Fireflies currently connected
Stop scanning


SAMSUNG
84% 11:19
Device information
0
0.5
0
2
4
6
8
Magnetometer:
• X: 92 uT, • Y: 974 uT, • Z: 323 uT
1000
500
0
2
4
6
8

SAMSUNG
84% 11:19
Device information
1
0.5
0
2
4
6
8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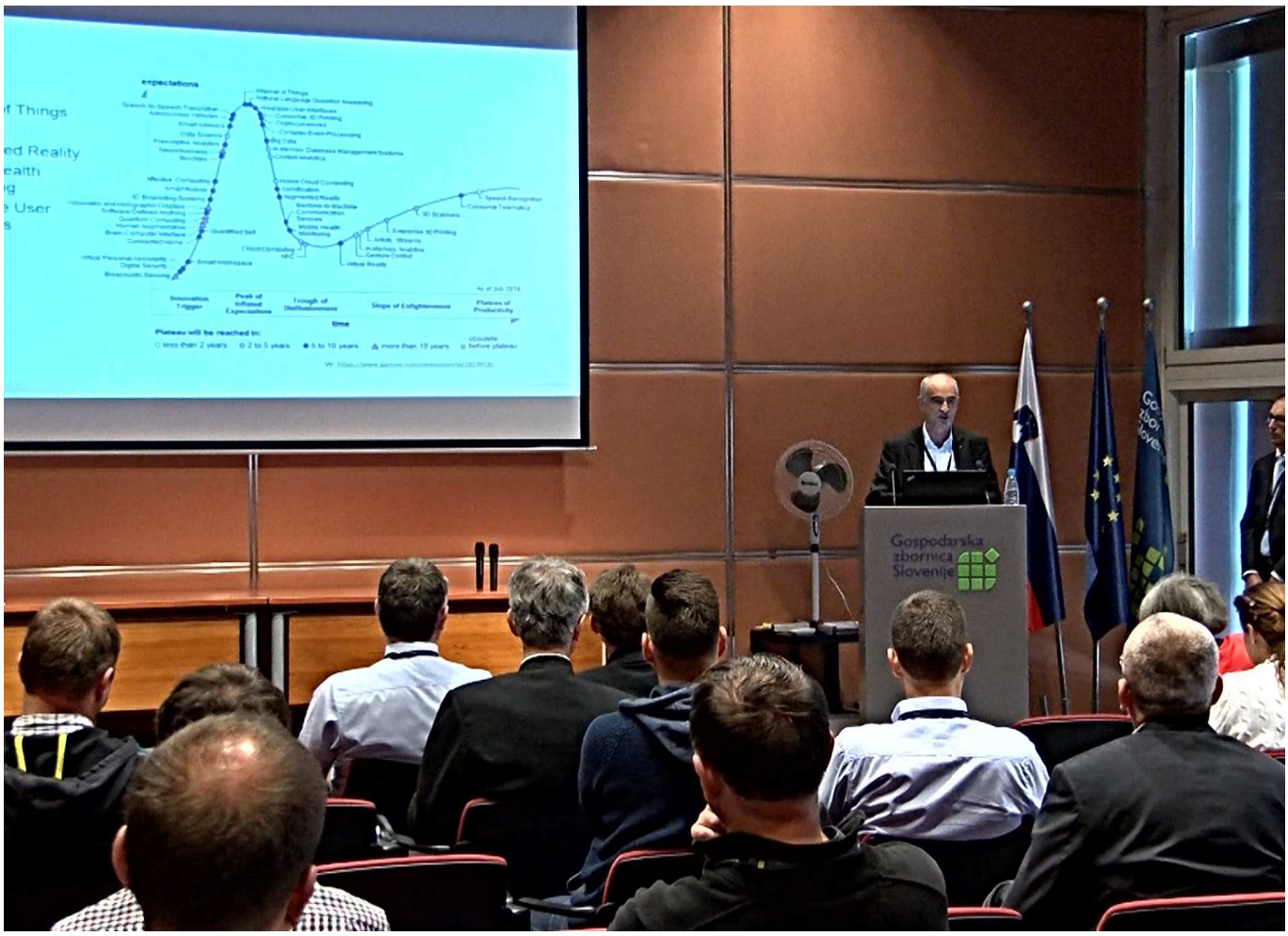
expectations
Innovation Trigger
Peak of Inflated Expectations
Trough of Disillusionment
Slope of Enlightenment
Plateau of Productivity
time
Plateau will be reached in:
less than 2 years
2 to 5 years
5 to 10 years
more than 10 years
obsolete before plateau
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DA!
Digitalna Akademija
Oktober 2016
DIGITAL TRANS-FORMATION
DIGITAL DATA
AUTOMATION
DIGITAL CUSTOMER ACCESS
CONNECTIVITY
Drones
Robotics
Additive manu-facturing
Social networks
Mobile internet/ apps
E-commerce
Broadband
Cloud computing
Smart factory
Big data
Wearables
Enablers
Propositions
Gospodarska zbornica Slovenije
Katedra za IKT
Source: Roland Berger

Gospodarska zbornica Slovenije

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zbornica
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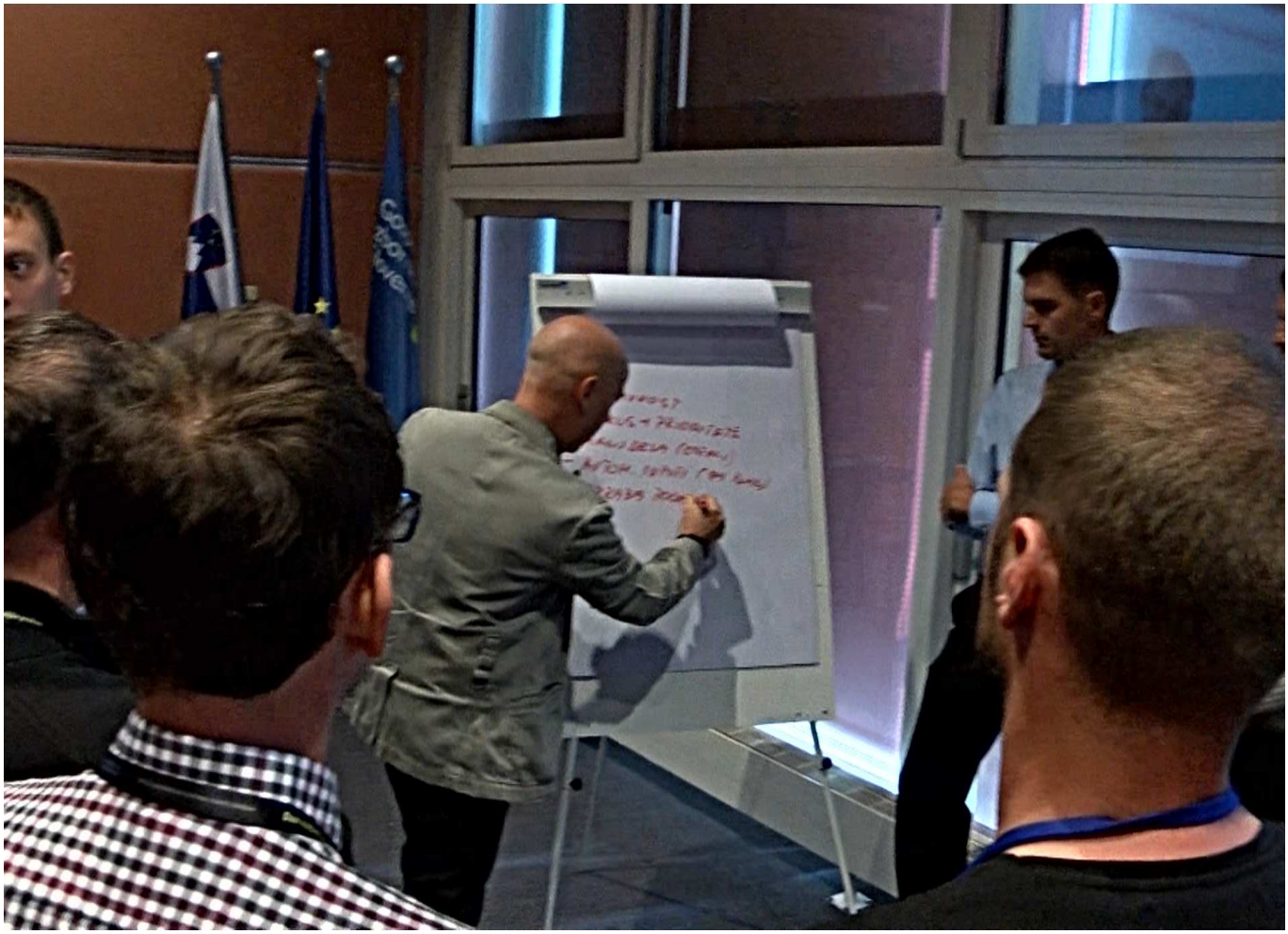
PREDSTAVITEV MODERATORJEV
doc. dr. Urban Sedlar, univ. dipl.inž.el.

network



Gospodarska
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Slovenije

KOLEKTOR
Dan najboljše prakse 2016
Uvajanje rešitev Industrije 4.0
v proizvodno okolje
Marko Mandel
KOLEKTOR
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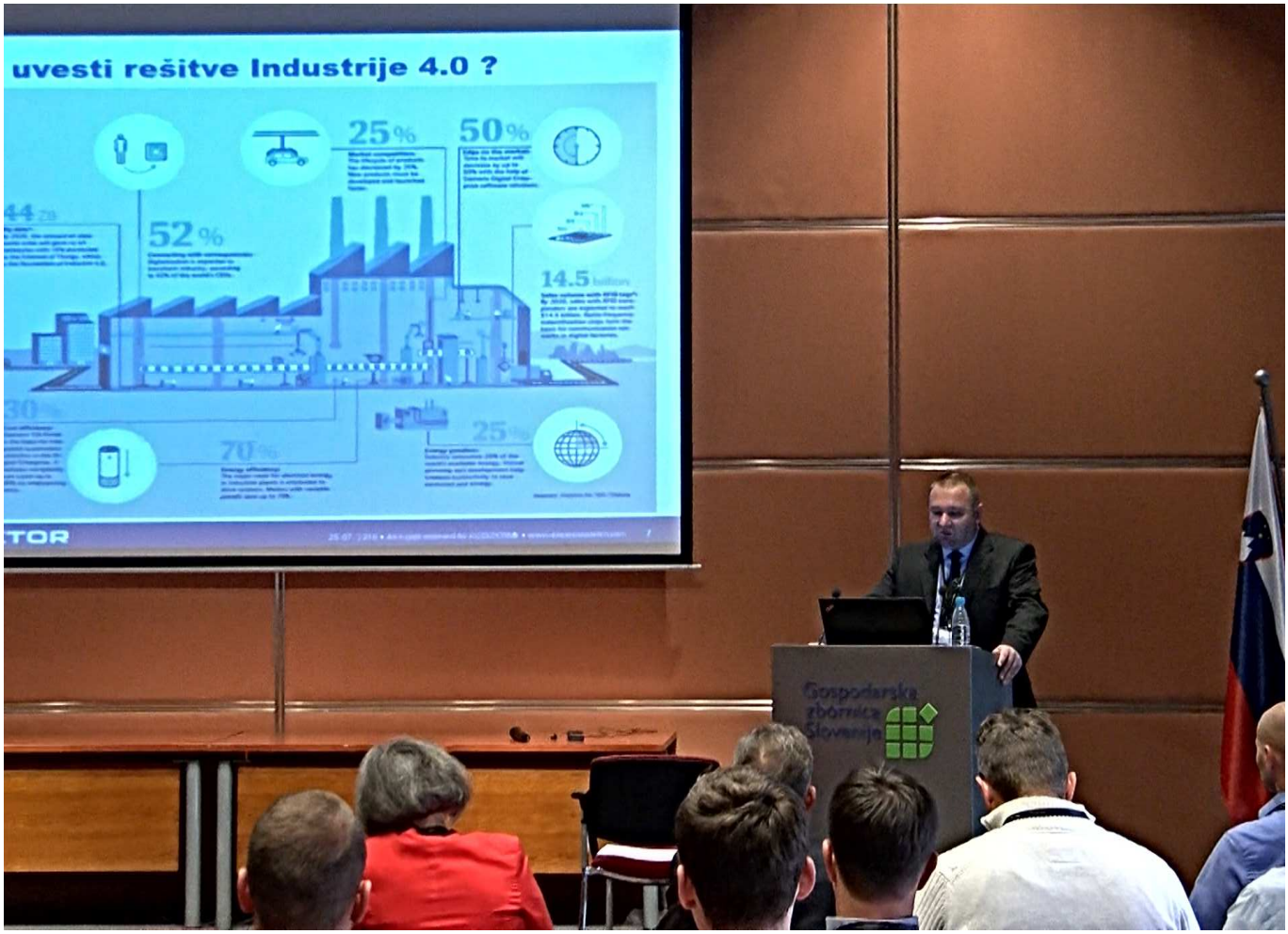
uvesti rešitve Industrije 4.0 ?
25%
50%
52%
14.5
70%
25%
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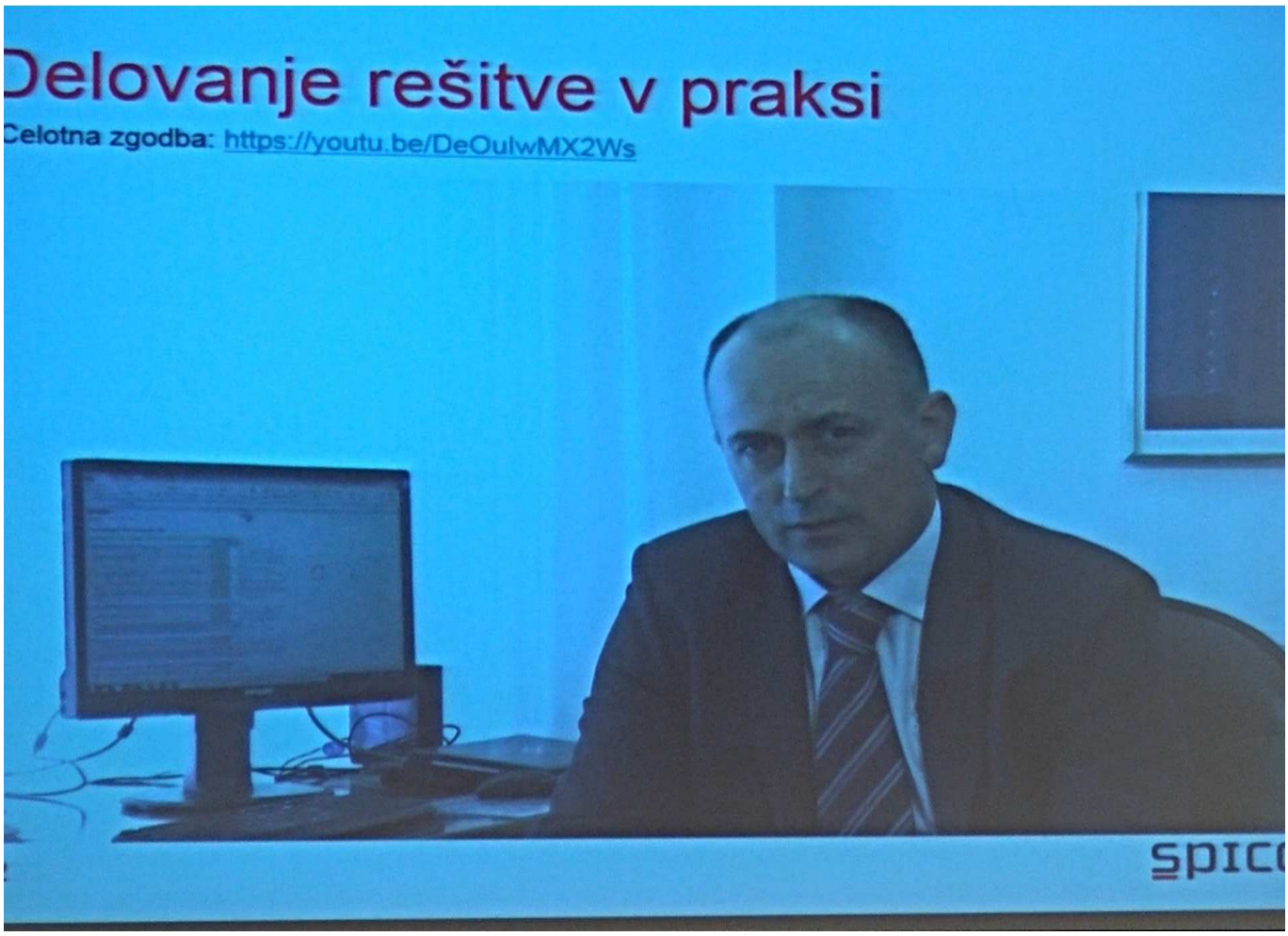
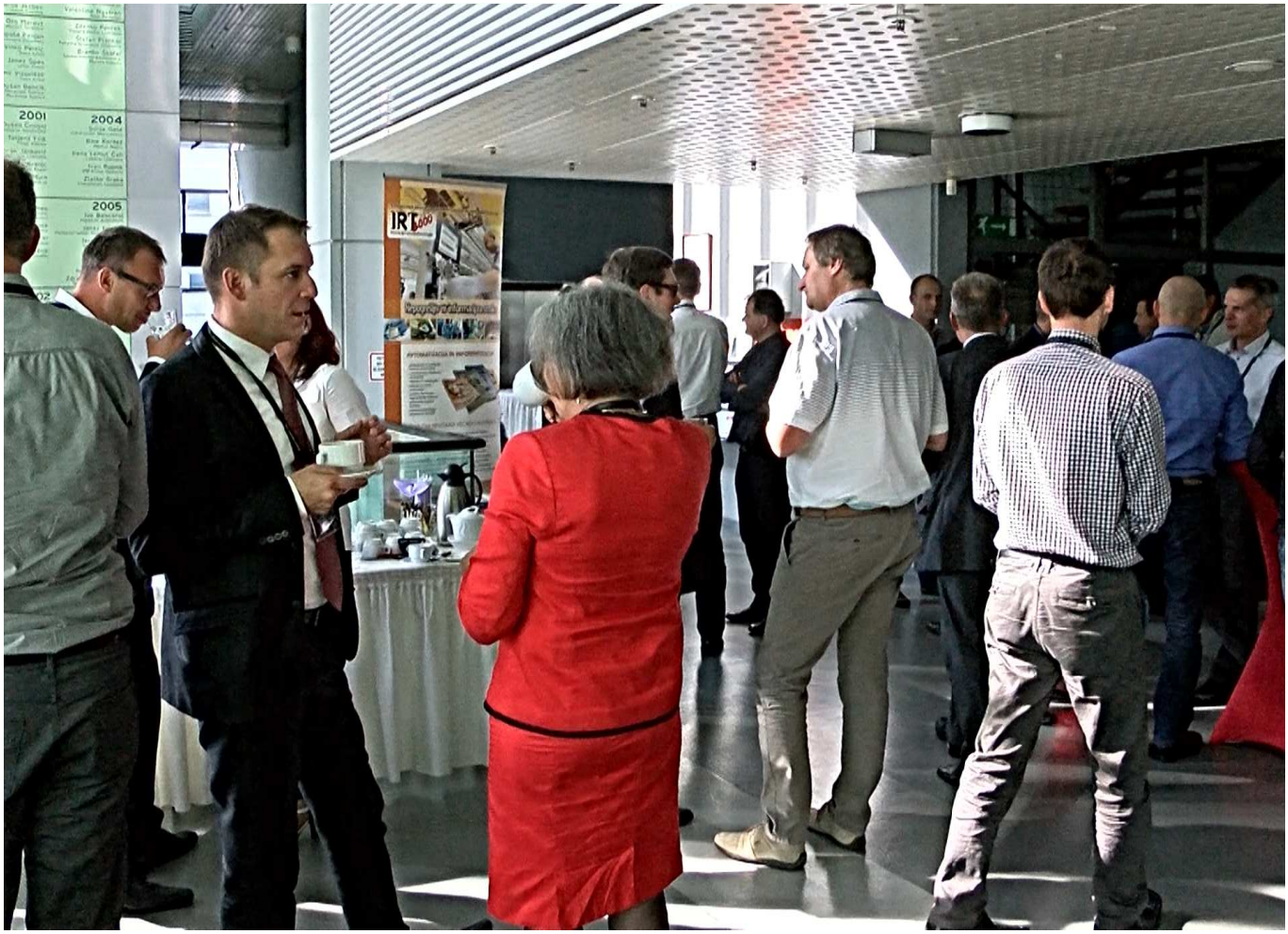
Gorenje Servis po reorganizaciji
spica


Delovanje rešitve v praksi
Celotna zgodba: https://youtu.be/DeOulwMX2Ws

Gospodarska

DEMETRA
Lean Way

DEMETRA
Lean Way
Gospodarska


2001
2004
2005
IRT

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Slovenije

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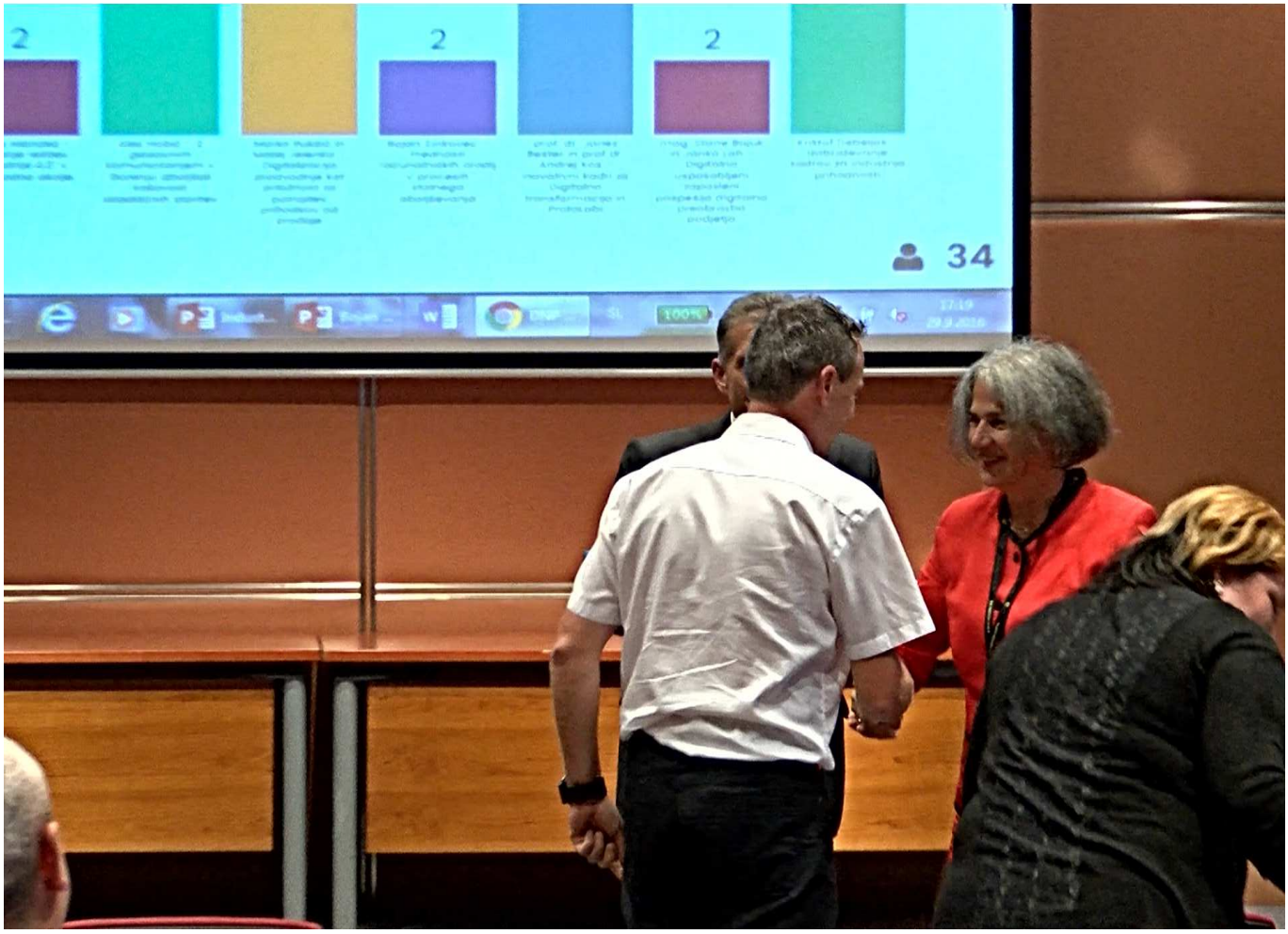
Sodobna oprema učilnice, v veliki meri opremljena z donacijami podjetij
Poudarek na individualnih delovnih mestih tej praktičnem izobraževanju.
•Praktotehnike
•Pnevmatike in hidravlike
•Programiranja
•Robotike
•Strojnega vida
•Avtomatizacije zgradb

glavni sponzor
O.K. Consulting
plemenitimo človeški potencial
DOMEL
Indust...
Bojan ...
DNP ...
SL
100%
17:07
29.9.2016

34
Indust...
Bojan ...
100%
17:17
29.9.2016


2
2
2
34

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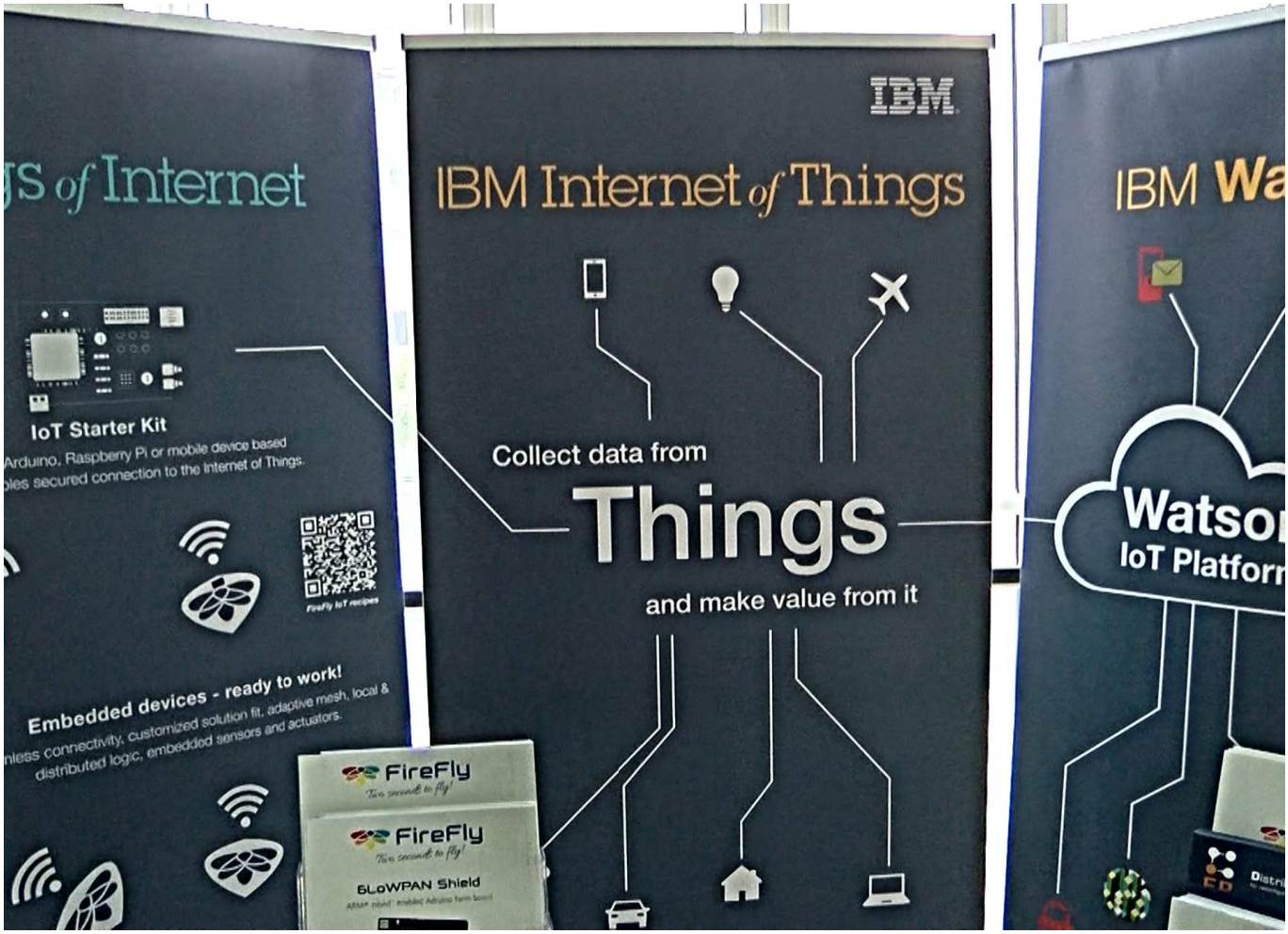
IBM
IBM Internet of Things
Collect data from
Things
and make value from it
IoT Starter Kit
Embedded devices - ready to work!
FireFly
FireFly
6LoWPAN Shield

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