How can we use technology to shape the future of work?

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GBSN Conference, November 2019
We are Sitting on a Tinderbox

- End of the “Social Lift”?
- Income Inequality
- Backlash against Trade—Winners & Losers
- Fear that Technology “Eat” Our Jobs
- End of Good Jobs/Standard Employment?
- Deep Political Divides
- Social Tension

Source: Thomas Kochan, 2019
The Future of Work: Structure of work polarized Biased Technological Change

Note: Changes in occupational employment shares among working-age adults, 1970-2016. Source: US data (David Autor, 2019)
The Future of Work: Structure of work polarized Biased Technological Change

Panel A. Non-college

Panel B. College

Note: Changes in occupational employment shares among working-age adults, 1970-2016. Source: US data (David Autor, 2019)
Routine jobs that could be automated were concentrated in the middle of the skills distribution

- Non-Routine cognitive jobs (manager) paid even better because there are complementarities to computers
- Routine jobs (clerk) have negative shock because they are easily replaced by computers
- Non-Routine manual jobs (janitor) survive because it is not easy to substitute them by computers but they do not benefit from them so their wages stagnate
The Future of Work: Outsystems case study

- The world is changing rapidly.
- A few years ago, artificial intelligence was no more than a fictional HAL 9000 in Space Odyssey.
- Today, there are Alexas and Peppers, and apps that mix real universes with virtual ones.
- At OutSystems, the goal is to keep pace with this ever-changing world. More than that, they strive to be one step ahead.
The software delivery industry is the most manual industry in the world.
The Future of Work: Outsystems case study

Pedro Raposo, Catolica Lisbon

GBSN conference: Lisbon, October 2019

Low-code is about applying automation to software delivery.
OutSystems low-code development platform

Visual Full-Stack Development
Get an app really fast...
8 weeks is average

Deploy to Any Touchpoint
Responsive Web Apps
Native Mobile Apps
Voice Assistants/Bots

Full Life Cycle
Create > Deploy >
Monitor > Manage
”Software is eating the world, but AI is going to eat the software”
Jensen Huang, CEO Nvidia

”AI will decode software for everyone”
Paulo Rosado, CEO OutSystems

Now in Outsystems:
AI is helping developers to develop the software the user needs, proposing new code, finding and correcting bugs
In the future: AI might substitute developers

”If software is eating the world and AI is eating the software, we might as well have a glass of wine”
Adapted by the House of Beautiful Business, Paulo Rosado CEO OutSystems
The Future of Work: Concluding Remarks

• Structure of work polarized and workers adapted
• Outsystems is transforming the way the software delivery industry works
• AI might substitute the software engineers but according to the humankind history we will adapt
• Time to shift the debate about technology & Future of work:
  – From: Wild predictions of how many jobs digital Tech will eliminate and how many it will create
  – To: How can we use advancing technologies to shape the future of work in productive, equitable and inclusive ways (Tom Kochan, 2019)