THE FUTURE OF LEARNING MEETS THE FUTURE OF WORK

PRESENTED BY
Stephen Yadzinski, Managing Director,
Acceleration, JFFLabs
Lucretia Murphy, Senior Director
Introduction, JFFLabs
The Age of Automation
Q&A
Activity 1
Activity 2
Survey
• Acceleration
• Incubation
• Corporate Advising
• Investment
ACCELERATION

Leverage JFF core capabilities and networks to accelerate development and dissemination of innovative solutions we select.
JFFLabs works with entrepreneurs and growth stage companies to accelerate and scale their technology-based solutions.

**Identify and Select**
Great ideas, entrepreneurs, and companies who are stakeholder and mission aligned. Separating signal from noise in the market by vetting and organizing workforce and education technologies.

**Acceleration**
Leveraging JFF and JFFLabs networks, acceleration partner companies receive bespoke development support and opportunities uncommon among other accelerator programs.

**Market Engagement**
By engaging and catalyzing markets, we create value for companies, system stakeholders, and most importantly workers and employers.
STARTUPS AT THE FRONTLINES OF CHANGE

Join JFFLabs and three of their acceleration partners, Catalyte, LaunchPath, and Nepris, for an interactive session to discuss how startups today can help us drive to better education outcomes and career opportunities.

TOMORROW AT 11:AM
WHAT BENT THE CURVE OF HUMAN HISTORY?

SOURCE: The Second Machine Age, Erik Brynjolfsson and Andrew McAfee
EXTENDING HUMAN CAPABILITY AND UNDERSTANDING

AUTOMATION’S RICH HISTORY

GUTENBERG’S PRESS
1436

FORD ASSEMBLY LINE
1913

THE CLAPPER
1985

GOOGLE TRAFFIC
2007
Automation could kill 73 million U.S. jobs by 2030

Paul Davidson, USA TODAY  Published 7:00 p.m. ET Nov. 28, 2017 | Updated 8:39 p.m. ET Nov. 28, 2017

A new report from Paysa suggests automation jobs will put 10,000 people to work, and big companies will spend $650 million on annual salaries to make it happen. Sean Dowling (@seandowlingtv) has more. Buzz60
“Earlier they had incremental, 5 to 10 percent goals in reducing their workforce. Now they’re saying, ‘Why can’t we do it with 1 percent of the people we have?’”

— Mohit Joshi, the president of Infosys
Why AI Is Good News For The Human Workforce

Christian Reilly Forbes Council
Forbes Technology Council CommunityVoice

POST WRITTEN BY
Christian Reilly

Christian Reilly is CTO at Citrix.
AI may not be bad news for workers

A new report argues that it can help them with their jobs
RESPONSE TO AUTOMATION

A CONTINUUM

Nightmares!
“Despite the appearance of many new human jobs, we might nevertheless witness the rise of a new useless class.”
— Yuval Noah Harari, 21 Lessons for the 21st Century

Roses!
“If we do it right, we might actually be able to evolve a form of work that taps into our uniquely human capabilities and restores our humanity.”
— John Hagel
SUSCEPTIBILITY TO AUTOMATION

TECHNICAL FEASIBILITY

% of time spent on activities that can be automated by adapting currently demonstrated technology

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Least susceptible</th>
<th>Less susceptible</th>
<th>Highly susceptible</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>18</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>64</td>
<td>69</td>
<td>78</td>
<td></td>
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</tbody>
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Time spent in all US occupations, %

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applying expertise¹</td>
<td>7</td>
</tr>
<tr>
<td>Stakeholder interactions</td>
<td>14</td>
</tr>
<tr>
<td>Unpredictable physical work²</td>
<td>16</td>
</tr>
<tr>
<td>Data collection</td>
<td>12</td>
</tr>
<tr>
<td>Data processing</td>
<td>17</td>
</tr>
<tr>
<td>Managing others</td>
<td>16</td>
</tr>
<tr>
<td>Predictable physical work²</td>
<td>18</td>
</tr>
</tbody>
</table>

Technical feasibility of automation, %¹

Predictable physical work

78%

For example, welding and soldering on an assembly line, food preparation, or packaging objects

Unpredictable physical work

25%

For example, construction, forestry, or raising outdoor animals

¹% of time spent on activities that can be automated by adapting currently demonstrated technology.

SHIFT IN WORKPLACE SKILLS

Total hours worked in Europe and United States, 2016 vs 2030 estimate, billion

- Physical and manual skills: 203 (2016, 174) vs 140 (2030)
- Basic cognitive skills: 115 (2016, 97) vs 148 (2030)
- Higher cognitive skills: 140 (2016, 151) vs 119 (2030)
- Social and emotional skills: 119 (2016, 148) vs 73 (2030)
- Technological skills: 55 (2030)

Change in hours spent by 2030, %

- Physical and manual skills: -14
- Basic cognitive skills: -15
- Higher cognitive skills: 8
- Social and emotional skills: 24
- Technological skills: 55

Source: McKinsey Global Institute Workforce Skills Model; McKinsey Global Institute analysis
TECHNOLOGY SUPPORTED GUIDED PATHWAYS

FIGHT FIRE WITH FIRE

USING AI TO DEVELOP GUIDED PATHWAYS

CHATBOTS TO AID ENROLMENT AND COURSE SELECTION

AI SUPPORTED NUDGING AND COMPLETION SUPPORT
Questions and Discussion
~ 5 minutes
ACTIVITY 1

Group Brainstorming
GROUP BRAINSTORMING

ACTIVITY 1

When you consider the future of work and learning, how prepared are you to navigate anticipated changes? Where are you not ready?
ACTIVITY 2

Three, Two, One
THREE opportunities to use technology to address challenges you face.

TWO people to speak with about these opportunities.

ONE action you can take today.
THANK YOU

Please take our feedback survey:
https://www.surveymonkey.com/r/PSNFeedbackForm

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