



UNIVERSITY *of*
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Automation in Manufacturing

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Agenda

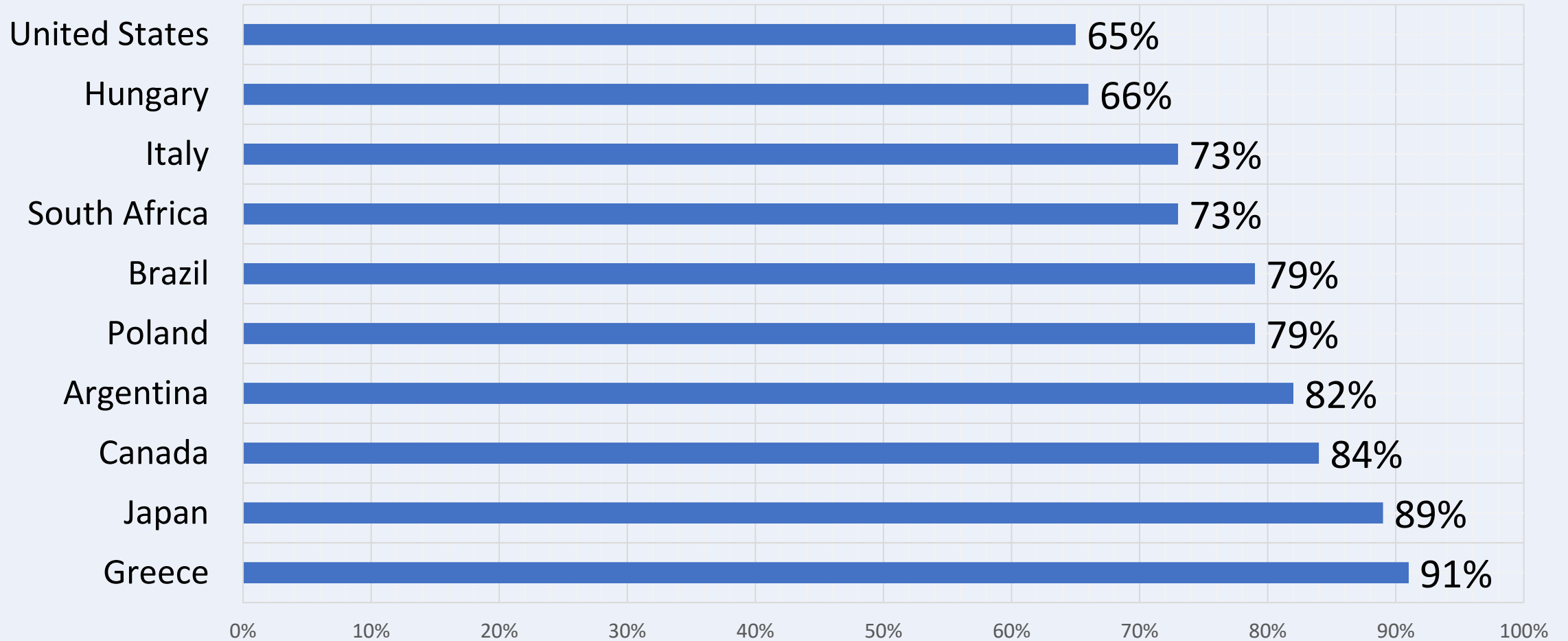
- Background
- Relationship between automation and employment
- Benefits
- Challenges
- The issue
- Recommendations

Background



- Current use of automation
- Why should we care?
- Public's opinion on automation



Percentage of people that believe robots will take the jobs of humans by country



Automation and Employment

- Generates more jobs (directly and indirectly)
- Jobs generated can be better paid than the jobs replaced
 51.6k\$/yr  26.3k\$/yr
- Use of automation is inversely related to unemployment

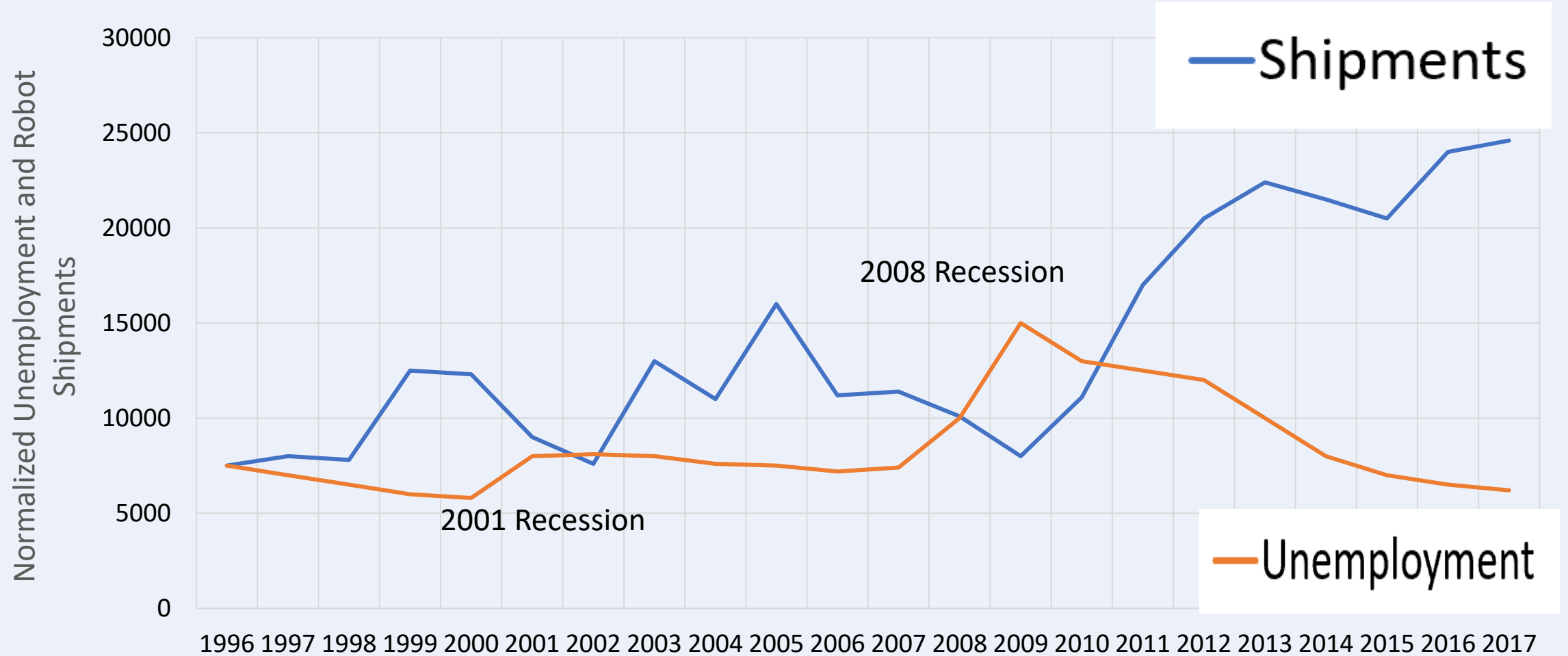


75 Million Jobs



208 Million Jobs

Shipments of Industrial Robots and Unemployment in the USA



Benefits

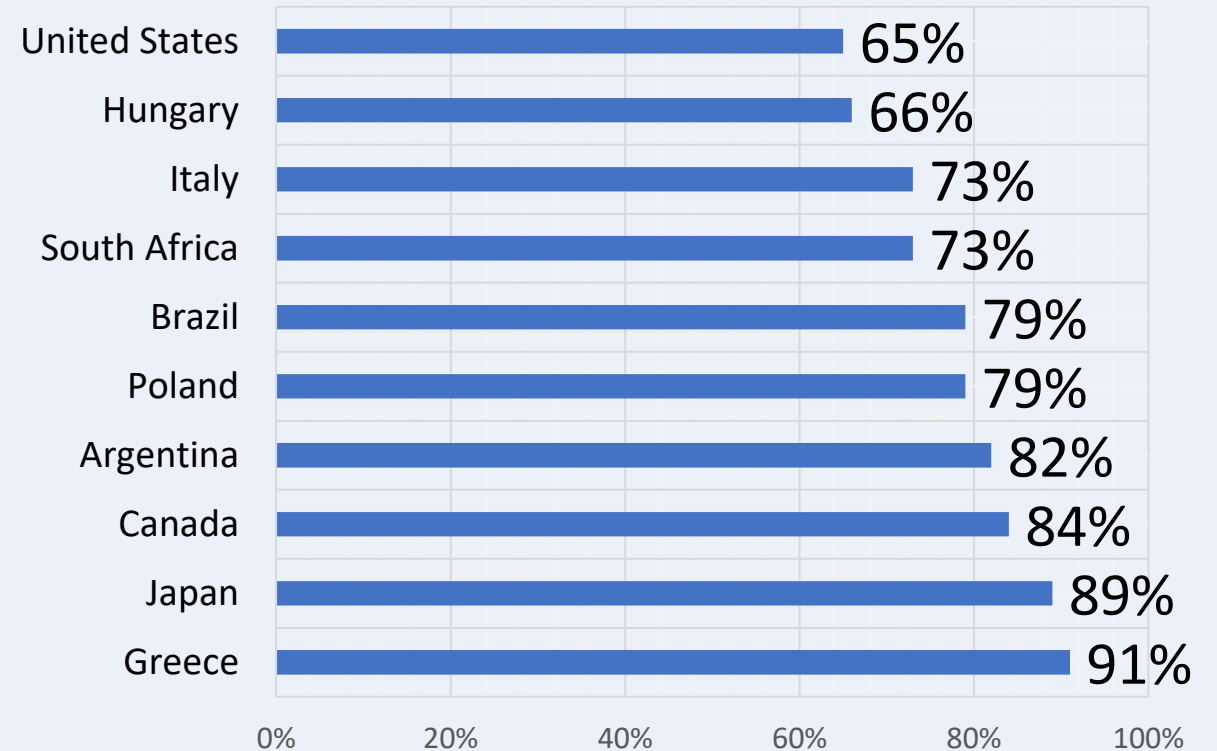
- Safer
- Higher yield
- Cheaper for producers
- Cheaper for consumers
- Less waste
- Better quality control
- Energy Savings
- Creates more and better-paid jobs



Challenges

- Public View
- Income Inequality
- Skill Gap
- High Initial Investment

Percentage of people that believe robots will take the jobs of humans by country



What is the issue?

1. What changed?
2. Who is affected?
3. Conflict
4. Power
5. Reactions



Recommendations

- Capacitation programs for lower-class workers
- Educate the public
- Invest on education in fields related to automation.

Conclusion

Automation can provide:

- More (and better paid) jobs overall
- Benefits to producers
- Cheaper products for consumers
- Higher quality

Questions

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