



APICS2018

# The 4<sup>th</sup> Industrial Revolution and the Supply Chain

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# APICS 2018 Session Evaluation

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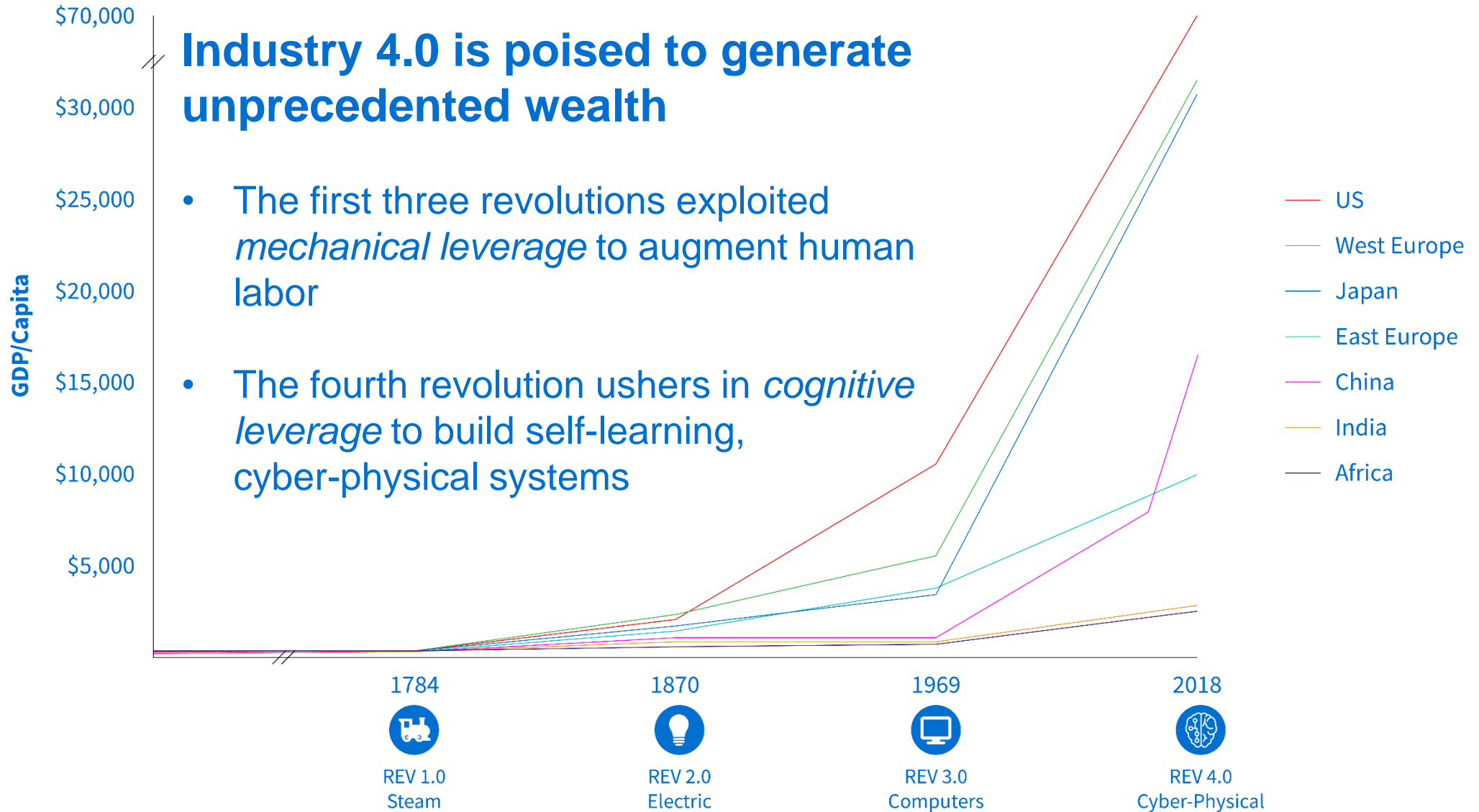
# Manufacturers want to make sense of the digital noise

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# Industry 4.0 is poised to generate unprecedented wealth

- The first three revolutions exploited *mechanical leverage* to augment human labor
- The fourth revolution ushers in *cognitive leverage* to build self-learning, cyber-physical systems



Sources: Derek Thompson, "The Economic History of the Last 2000 Years", *The Atlantic*, 6/20/12; Bruce Hoy (CEO Genesis NanoTech), "The Fourth Industrial Revolution"



# A vision for US Manufacturing

*Every part better than the last*



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# A higher purpose for digital manufacturing

*Enabling the Transformation Economy*

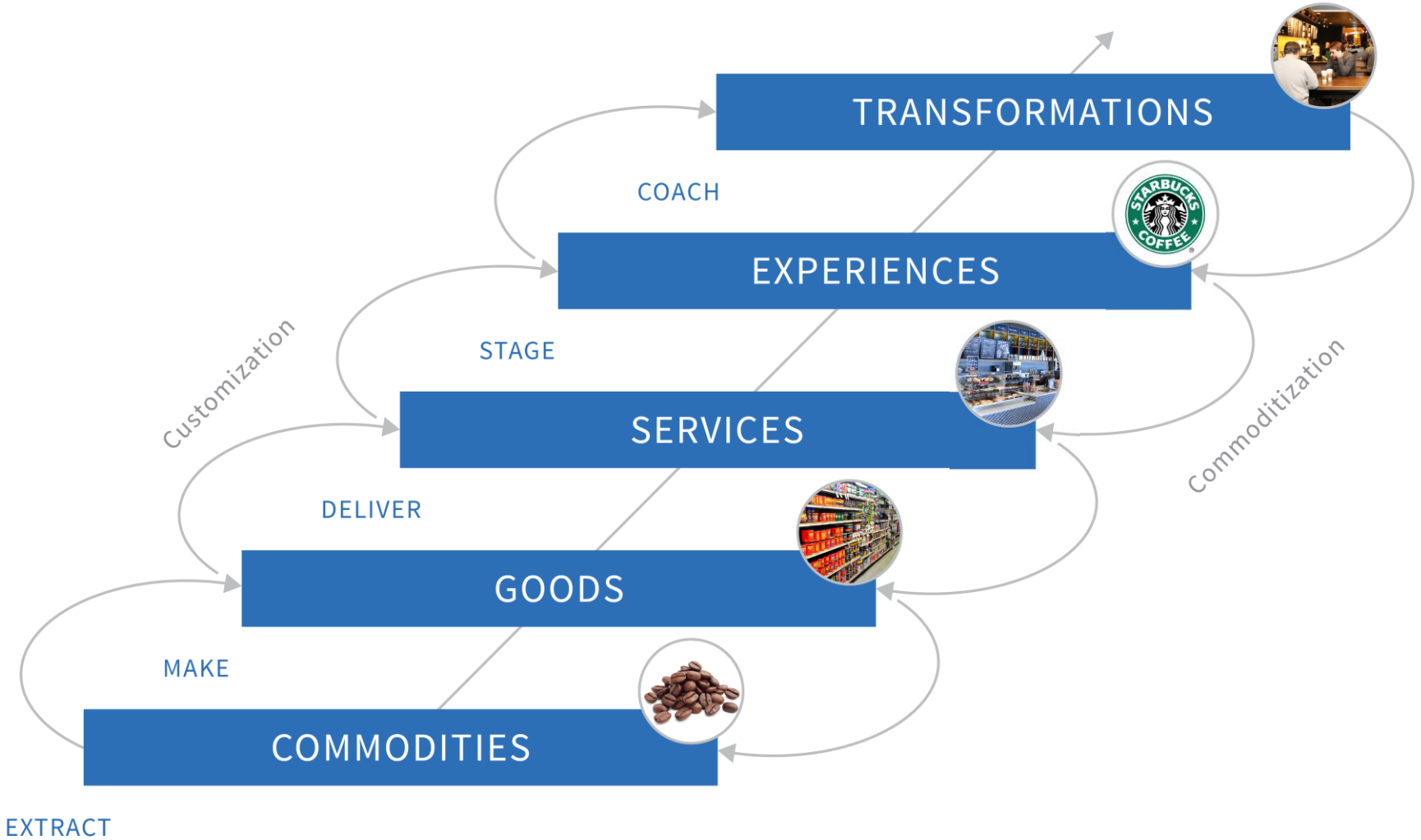


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# Digital technology can enable mass customization to power the transformation economy



EXTRACT

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74%

UNIT GROWTH IN 2017

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ZARA

# 3 week

## PRODUCT REPLACEMENT CYCLE

NEW IN  
BEST  
SELLERS

ZARA



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# 5x

## REVENUE GROWTH

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e(g)p  
engineered glass products™

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# Real-time welding feedback project

led by  
University of Illinois at Chicago

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# Integrated Part Variation Management

led by  
Caterpillar Inc.

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# Smart Printed Circuit Board Digital Factory

led by  
Lockheed Martin Corp.

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PARTNERS IN CONNECTION

# THE DIGITAL WORKFORCE SUCCESSION IN MANUFACTURING

DIGITAL MANUFACTURING  
DESIGN ROLES TAXONOMY



# Next steps for all levels of sophistication...

- **Early Stage:** join a consortium like DMDII, embrace a vision tied to your top-level KPIs and start with small projects
- **Mid-Journey:** Focus on workforce development and culture change through hackathons and follow-on development organized around your transformation vision
- **Advanced:** propagate your vision and success stories, invest in solutions that enable AI to operate on your E2E enterprise data to maximize value creation



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THANK YOU



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