Are We Taking the Wrong Approach to Digital Changes?

Sut I Wong, Professor
Department of Communication and Culture
Director of Nordic Centre for Internet & Society
sut.i.wong@bi.no
Uber's Otto hauls Budweiser across Colorado in self-driving truck
Pepper robot to work in Belgian hospitals

Pepper, the humanoid robot programmed to "understand" human emotions, is to take a new job - as a receptionist in two Belgian hospitals.
New order? China restaurant debuts robot waiters

By Chuck Thompson and Elaine Yu, CNN

Updated 0419 GMT (1219 HKT) April 20, 2016
If an Algorithm Wrote This, How Would You Even Know?

By SHELLEY PODOLNY
MARCH 7, 2015
University opens without any teachers

By Matt Pickles

26 October 2016

Brittany Bir says students used to teaching themselves are better self-starters in work
Digital is Driving Revenue
At a company level, digital will increase revenues on average by over 10%, which means digital will touch every aspect of a company’s strategy and operations.

Figure 2  Source: Cognizant Center for the Future of Work, 2016
How Companies Compare Applying Digital

Executives appear realistic for 2015, with most on par with competitors, but delusional about the future, when most believe they will be ahead of others in their industry.

How does your company compare to others applying digital technology?

2018

2015

Above par
On par
Below par

- 70%
- 60%
- 50%
- 40%
- 30%
- 20%
- 10%

Congnizant Center for the Future of Work 2016
The 4th industrial revolution

• New ways of working
• New challenges for leaders, organizations, and policy makers

Source: 2017 Deloitte Global Human Capital Trends
90% - their industries will be largely disrupted by digital trends

44% - their organizations are preparing for it

(MIT Sloan Management Review, 2016)
My organization primarily drives digital business adoption and engagement internally through:

Percentage of respondents

80%

60%

40%

20%

0%

Mandate

Expect

Cultivate

Mandating from management

Expecting employees to be motivated to embrace digital business opportunities

Cultivating a strong digital business culture that strives for risk-taking, collaboration, agility, continuous learning

Only top responses for the three maturity levels are shown.

(Kane et al., 2017)
Will Robots Take Our Children’s Jobs?

Nine jobs
By Judith Aquino
Business Insider
better plan now late
Larry Elliott
Her er robotguruens beste råd til deg som vil unngå å miste jobben

Halvparten av jobbene kan forsvinne som følge av automatisering, viser ny
People should feel like technology is being made to work for them. Instead, they often feel they are being made to work for technology.
Technology-centric model

Employees are more likely to accept and use new technology at work when they believe that...

- Technology is easy to use
- Technology is useful for doing their work

Organizational factors

Technological factors

Personal factors

New work technology acceptance and usage

What is mindset?

Fundamental beliefs about the truth or existence of something

**Fixed/Growth Mindset**

Beliefs about basic *personal resources* like competence or ability, and the extent to which they are malleable

(e.g., Dweck, 2000; Dweck et al., 1995)

**Zero-/Expandable-Sum Mindset**

Beliefs about *situational resources* and the extent to which they are finite, such that a gain for some implies a loss for others

(e.g., Sirola & Pitesa, 2017)
Fixed versus growth mindset: beliefs about personal resources

A person’s level of technological competence is something basic about them, and there isn’t much that can be done to change it.
Zero- and expandable-sum mindset: beliefs about situational resources
Fixed x zero-sum mindset: Non-compliance crafting

“With every customer I try to provide a personalized and positive customer service experience. To remind people that a machine cannot replace hospitality.”

*Waitress, 25 years old*
Fixed x expandable-sum mindset:
Complementary crafting

“With the help of team member [who] will do the R&D work, I integrate the new changes”

Web-developer, 36 years old
Growth x zero-sum mindset: Competitive advantage crafting

“Anytime I acquire new information about a new job or skill, I like to note it into my smartphone. My smartphone contains a long list of skills learned that I will never forget.”

Security guard, 32 years old
Growth x expandable-sum mindset: Social innovative crafting

“ I created a WhatsApp group for my coworkers that excluded company managers, so that we can discuss our needs and problems [with new technologies being introduced in the workplace.]”

Android developer, 26 years old
Manager’s mindsets also matter

“I complain to my fellow managers about the useless changes. Then I put on a happy face, attend the WebEx calls explaining how to utilize the programs. Continue to smile and talk up the program as I teach other RN's how to access and utilize it.” Health clinic manager, 56 years old

“"I feel hopeful about [the new call management system], although there is a huge learning curve for myself and my employees.”... “I have implemented a new 90 day policy of no coaching for errors related to the new system. This 90 days will be a training period so that we all perfect our knowledge of the software.” Call center manager, 39 years old
Technology as colleagues, partners, inspectors or competitors

New forms of interaction between humans and machines emerge. There will be a coexistence of forms in the future.
“The future is not some place we are going to, but one we are creating. The paths are not to be found, but made. And the making of them changes both the maker and the destination.”

John Schaar, futurist, 1999
Funded by the Norwegian Research Council and the European Union, the Nordic Research Centre for Internet and Society aims, as a think-and-do-centre, to **bring together leading scholars and practitioners from Norway, Scandinavia, and the rest of the world** to explore the re-invention of work and organizing in a digital, networked, and media-rich environment.
thank you for your time

Norwegian Business School (BI)
Nordic Center for Internet & Society
Nydalsvn. 37 / N-0442 Oslo
bi.edu/cis @BI_NCIS
sut.i.wong@bi.no