

# Another digital divide?

Digitalization and work as 'calling'



1. 'Good work' as 'calling' - a Protestant view
2. Frameworks of labour
3. Digitalization of work - challenges and opportunities
4. Labour revisited - criteria of good work and two scenarios



# Another digital divide?

## Digitalization and work as 'calling'

### 1. 'Good work' as 'calling' - a Protestant view

„work“

until early modern age: physical hardship

Renaissance - Reformation: 'calling', poverty antidote

John Locke: origin of legitimate ownership

Adam Smith: source of public wealth

propagation by bourgeois and proletarians alike

'labour society': production and distribution of wealth connected through the labour contract



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### 1. 'Good work' as 'calling' - a Protestant view

Reformation: doctrine of justification delegitimizes religious separation  
universal calling: everyday work as serving one's neighbour

God's freely given grace as source of the good life

the good life: leisure and action

action: freely serving one's neighbour motivated by love and self-esteem

promise: fulfillment in active life for everyone



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### 1. 'Good work' as 'calling' - a Protestant view

Reformation: doctrine of justification delegitimizes religious separation  
universal calling: everyday work as serving one's neighbour

stratified society  
„calling“ as obedience



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## 1. 'Good work' as 'calling' - a Protestant view

The normative groundwork of modern labour society

„labour promise“

productively engaging nature

recognition

a share of society's wealth

political participation

the good life



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## Digitalization and work as 'calling'

### 1. 'Good work' as 'calling' - a Protestant view

modern capitalist globalized democracies  
„calling“ in market, state, civil society

free service to one's neighbour

everyone is called - no one is to spare

service to be done in dignity (Lk 10,7: worker deserves his wages)

the neighbour as addressee: specification, universality, sustainability

implication: human dignity (as human creature and justification addressee)

serving one's neighbour through gainful employment

serving one's neighbour outside the labour market



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## 1. 'Good work' as 'calling' - a Protestant view

work as calling - freely serving one's neighbour - preconditions

personal preconditions:

motivation  
qualification

education  
judgement

ressource preconditions

prosperity

economical freedom: basic  
prosperity according to society's  
standards, freedom from basic want

enable

grant  
participation

cultural capital

capital

social capital

empower

economic capital

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## 2. Ambivalent frameworks of modern labour

precarious/atypical  
employment

erosion of classical employment

permanent and temporary staff

gendered division of labour

intensivisation/  
responsibilization

delimitation

compression of work

'worker entrepreneur'





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Some of the world's most recognized companies use Topcoder for crowdsourcing.

Crowdsourcing

...eg Topcoder

Ev

amazon

facebook

IBM

Microsoft

salesforce

“We are identifying sparks of genius in a way that we have never been able to do before. Thanks to the computing resources we have, thanks to really clever organizations like topcoder, we can tap into all those sparks of genius.”

- Andrew McAfee, MIT

SIGN UP



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## Digitalization and work as 'calling'

**amazon**mechanical turk  
Artificial Intelligence

Your Account | HITs | Qualifications

Already have an account?  
Sign in as a Worker | Requester

Introduction | Dashboard | Status | Account Settings

### Mechanical Turk is a marketplace for work.

We give businesses and developers access to an on-demand, scalable workforce. Workers select from thousands of tasks and work whenever it's convenient.

**483,243 HITs** available. [View them now.](#)

### Make Money by working on HITs

HITs - *Human Intelligence Tasks* - are individual tasks that you work on. [Find HITs now.](#)

#### As a Mechanical Turk Worker you:

- Can work from home
- Choose your own work hours
- Get paid for doing good work



[or learn more about being a Worker](#)

### Get Results from Mechanical Turk Workers

Ask workers to complete HITs - *Human Intelligence Tasks* - and get results using Mechanical Turk. [Get Started.](#)

#### As a Mechanical Turk Requester you:

- Have access to a global, on-demand, 24 x 7 workforce
- Get thousands of HITs completed in minutes
- Pay only when you're satisfied with the results



eg  
Mechanical  
Turk

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## 3. Digitalisierung und Industrie 4.0 - Herausforderungen und Chancen

Big Data

velocity, volume, variety

integration by wearables, CPS

Crowdsourcing

eg consumer feedback

eg 'cloud working'

eg microtasking

advanced manufacturing

internet of things/industrial internet

cyber-physical systems (CPS)

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## 3. Digitalization of work - challenges and opportunities

A German example: the „Industrie 4.0'-campaign

agenda-building

strategy to safeguard production location

advanced manufacturing



# Another digital divide?

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## 3. Digitalization - challenges and opportunities

### Industrie 4.0

agenda-building-Konzept

strategy to safeguard location

advanced manufacturing

main tasks

horizontal integration

vertical integration

complete digitalization

state-funded support

standards across industries

cooperative networks

transformation of labour and qualification

security solutions

legal frameworks





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## 3. Digitalization - challenges and opportunities

### Issues

job losses (Frey/Osborne 2013)

data sovereignty

services

social security

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## 3. Digitalisierung und Industrie 4.0 - Herausforderungen und Chancen

job losses

job losses

15% of all jobs susceptible to 70% (IAB 2015)

especially simple routine jobs fall away

concept of qualification

'living working capacity' irreplaceable  
(Pfeiffer 2004, 2015)

dynamic needs of markets and environments

technical dynamics of complexity

shop floor knowledge of products and processes

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## 3. Digitalization - challenges and opportunities

### irony of automation

(Bainbridge 1983)

machines are supposed to work more precise and less vulnerably than humans, but it's humans who are responsible for...

programming

surveillance

maintenance

...and whose competencies diminish with automation



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## 3. Digitalization - challenges and opportunities

data sovereignty

horizontal integration

complexity problems and vulnerability in open networks (across companies)

conflicting interests: company security - privacy (wearables)

vertical integration

data mining through automation

company security interests heighten delimitation of work



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## 3. Digitalization - challenges and opportunities

services

job losses vs. job creation

severe job losses in banking, insurance and office services

job creation in different areas

ccc services

become relatively more expensive (when adequately paid) (Baumol's paradox)



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### 4. Labour revisited - criteria of good work and two scenarios

criteria

secular labour promise

structural feasibility of acquiring recognition, a fair share of society's wealth, political participation, the good life through work

Christian concept of 'calling'

- everyone has a calling - no 'superfluous'
- serving one's neighbour holds a promise
- serving one's neighbour is conditional:

capabilities \* participation \* power  
to freely serve one's neighbour  
(and not starve while doing so)

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## 4. Labour revisited - criteria of good work and two scenarios

scenario one: digitalization as the end of good work

extensive job losses

rationalization, profits, competition  
as sole goals

increasing delimitation and  
compression of work due  
to digitalization

security interests as front  
for increasing monitoring and control

increasing pressure on  
employees due to  
precarization

intensive losses in social security

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## 4. Labour revisited - criteria of good work and a scenario

opportunities for good work in the context of digitalization

increasing transparency  
breeds opportunity for  
participation and empowerment

condition: digital transformation with  
regard to human resources and  
empowerment

increasing efficiency breeds  
opportunity for better funded  
caring and education sector

condition: public awareness and funding  
of personal and cultural services

increasing productivity  
breeds opportunities of  
biographical flexibility and self-  
governed work-life balance

condition: increased and adjusted  
public social security ('life time working  
accounts'; educational sabbaticals;  
basic income schemes etc.)