



Before We Get Started...

▶ definitions ▶ definitions

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Kittur et al. (2013)

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↳ definitions ↳



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On-demand work Crowd work and gig work, collectively

1>takeaway<1>1>takeaway

**On-demand work is a modern instantiation of a
much older phenomenon — piecework.**

**The historical arc of piecework can shed light on persistent questions in this
ongoing phenomenon of on-demand work.**

Old Wine in New Bottles



4 definitions

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Piecework Payment for output rather than for time

Payment for *output* rather than for *time*



Textiles



Automobiles



Metalwork



Payment for *output* rather than for *time*



Textiles



Automobiles



Metalwork



Crowd work



Upwork

UBER

Gig Work



What will be the future of work?

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- How will **technology** affect the complexity of the work that on-demand workers do?

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- How will **technology** affect the complexity of the work that on-demand workers do?
- What are the **limits** of complexity in on-demand work?

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- What are the **limits** of complexity in on-demand work?

The answers to these questions may predict the *reach* of on-demand work

Thesis



This question — and others like it — has been asked before.

History can help us answer them today.

We'll reach into the history of **piecework** — of human computers, match stick makers, and metalworkers — and show how the **history** of their work can inform answers to questions about the **future** of digital work.

Introduction



We hope you come away with:

- An **ontological lens** for making sense of on-demand work as a resurgence of piecework
- A renewed interest in the use of **historical analysis** to make sense of contemporary phenomena

Comparative Historical Analysis



HCI researchers have used historical analysis in the past

Bødker (1993) and Wyche, Sengers, and Grinter (2006)

... But we haven't applied this method to make sense of on-demand work,
which is a missed opportunity to...

- Provide some basic framing for *ostensibly* new phenomena
- *Explicate* our theoretical grounding
- Flesh out *differences* and their implications