

# Meet the Crowd: The Political Economies and Cultural Meaning of Digital Labor



<http://research.microsoft.com/crowdwork>

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Faculty Summit  
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# Intro

- Name: Rajesh Patel
- Company : Microsoft ( Bing )
- Working on platforms and services to enable Machine Learning, big data scenarios easy
- Doing research and development in Crowdsourcing/ Cloudsourcing
  - Delivered Enterprise Crowdsourcing Platform, business models and processes
- Passion:
  - Help enable engineers do their job 10x efficient through building platforms and services
  - Human task creation, compilation, execution at scale, real-time HCOMP
  - Dream: “Anything that can be outsourced can be Cloudsourced ! “



# Our Business need

Repeated, higher quality, and high volume human generated data in *timely* manner:

- Some examples:
- Machine learning – measurement and training needs
- Classification/Categorization
- Data verification and correction
- Speech collection
- Survey
- Natural language data collection
- Documentation A/B testing

Need for higher experiment agility, cost effective options



# Learning – few nuggets

## Workers

- Trust
- Association
- Fairness
- Worthless wondering

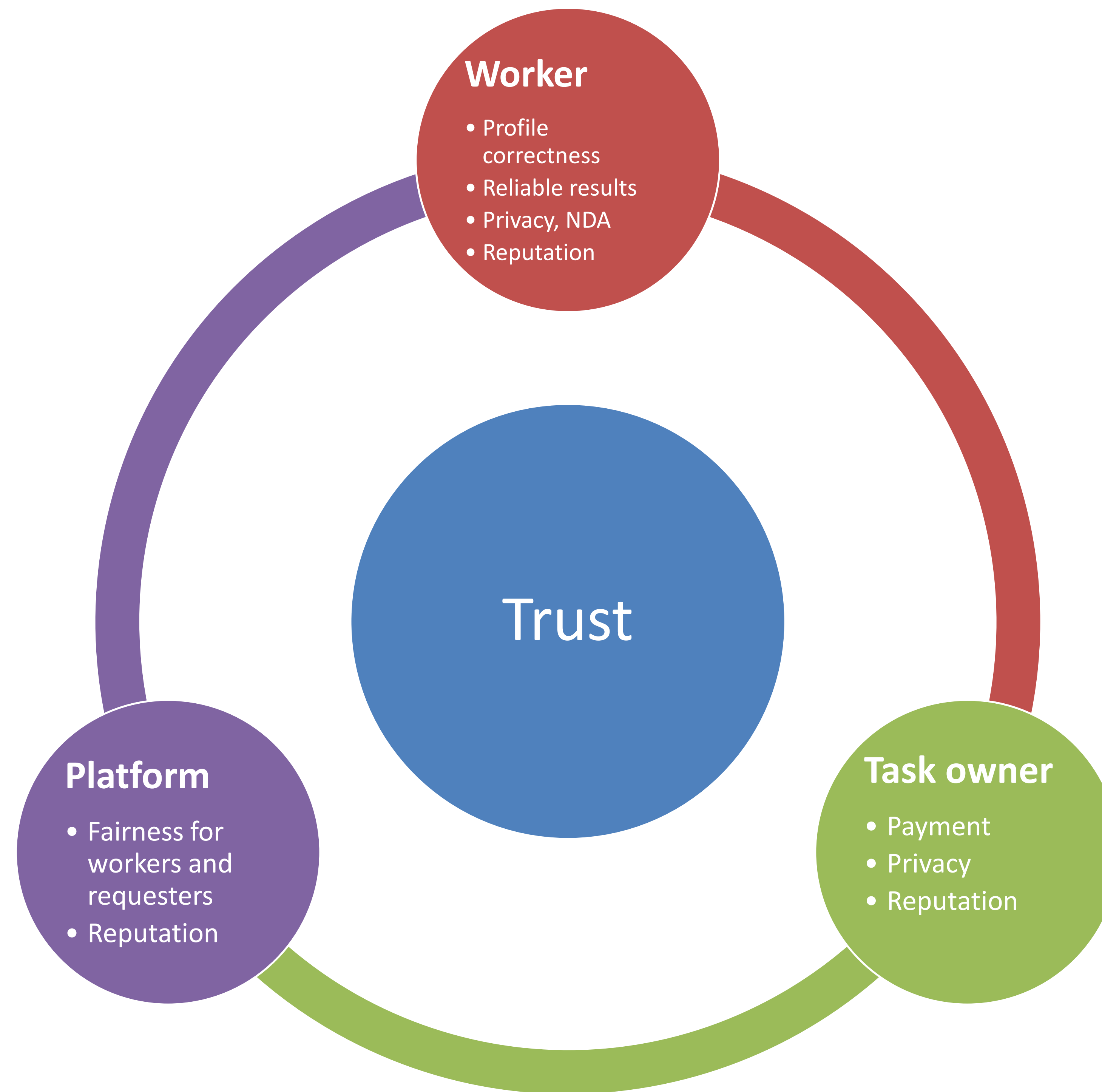
## Requester

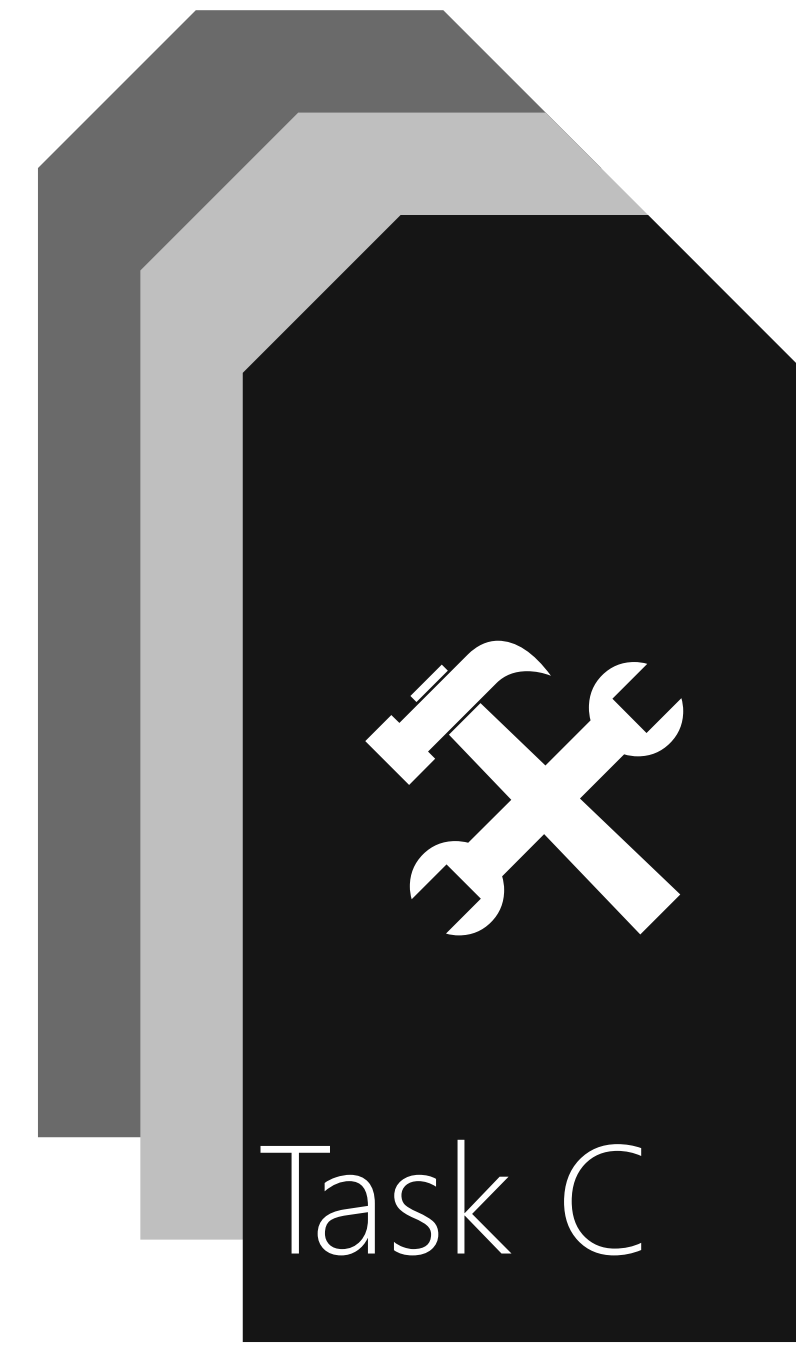
- Trust
- Task design is an ART
- Task owners want to focus on use of labels and have data collection as someone else's problem

## Platform

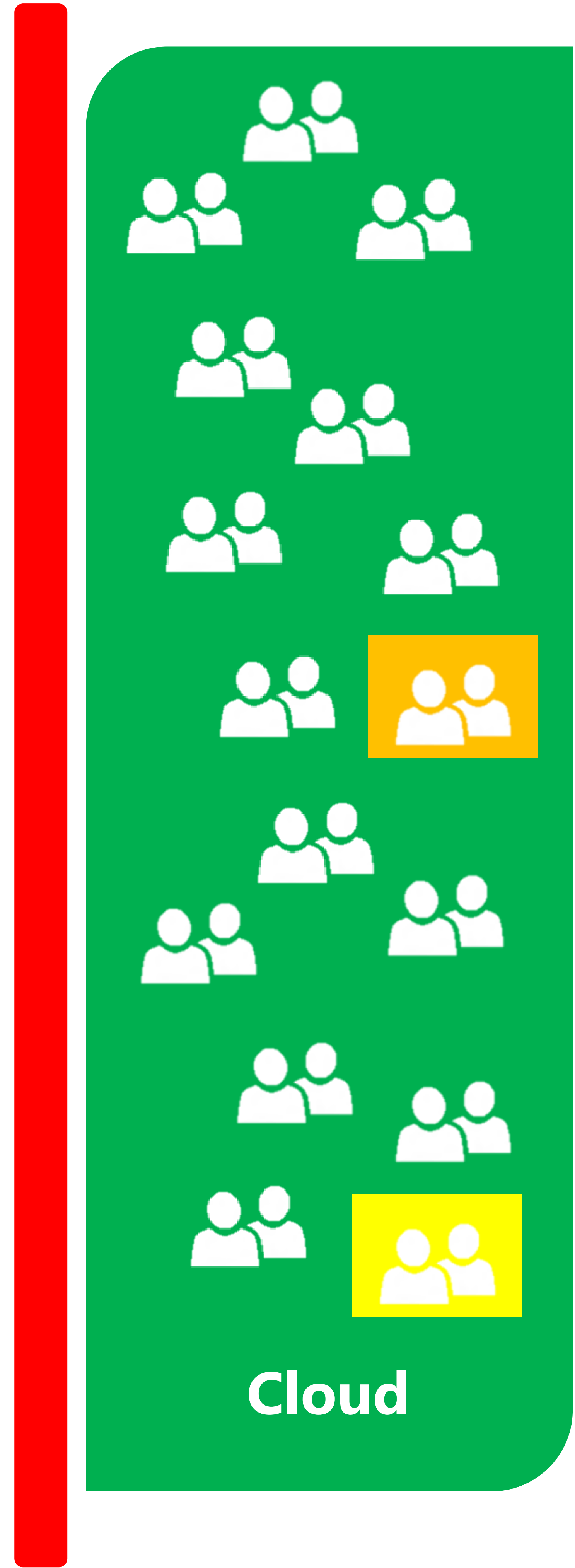
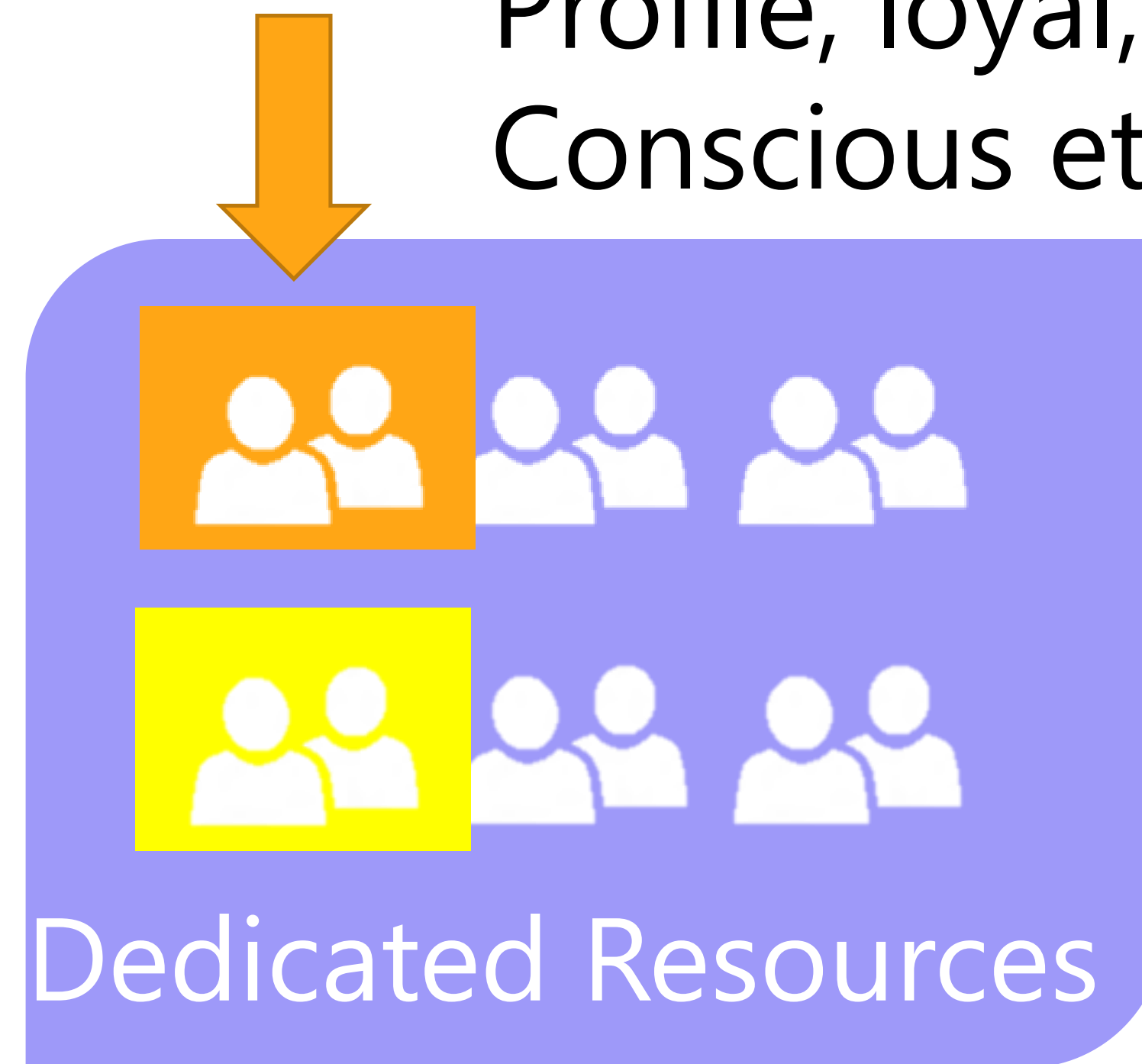
- Worker quality, Trust
- Market place dynamics
- Performance and scalability of platform
- Security and privacy of workers
- Payment fairness

# Circle of Trust

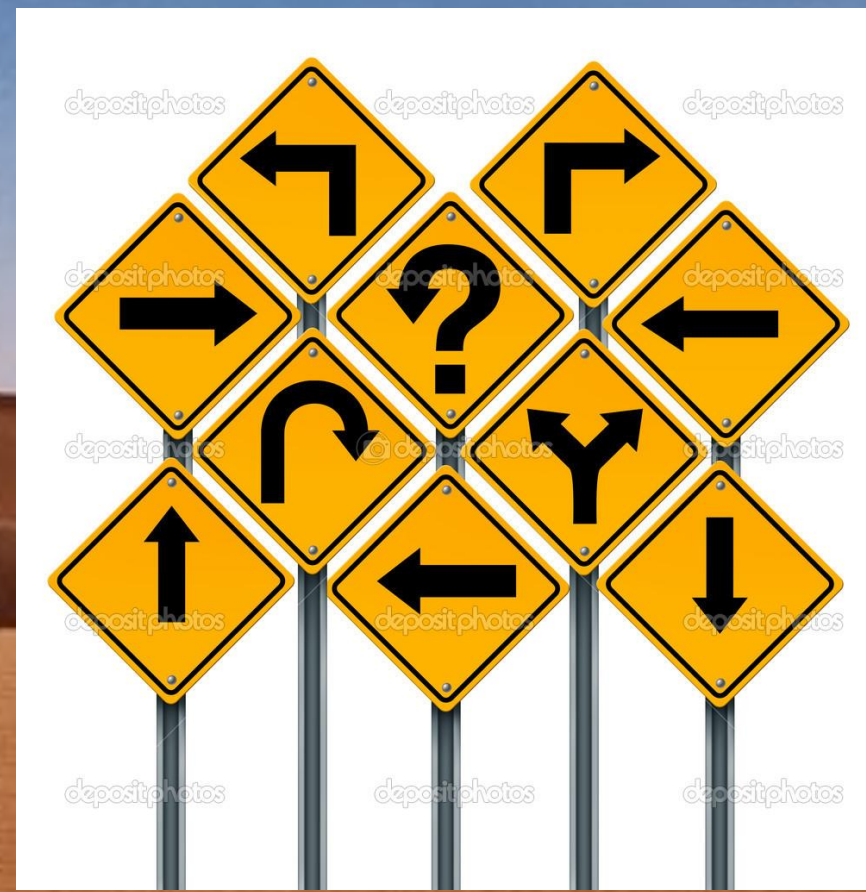




**Matt** Face = Reputation Profile, loyal, Conscious etc



# Worthless wandering

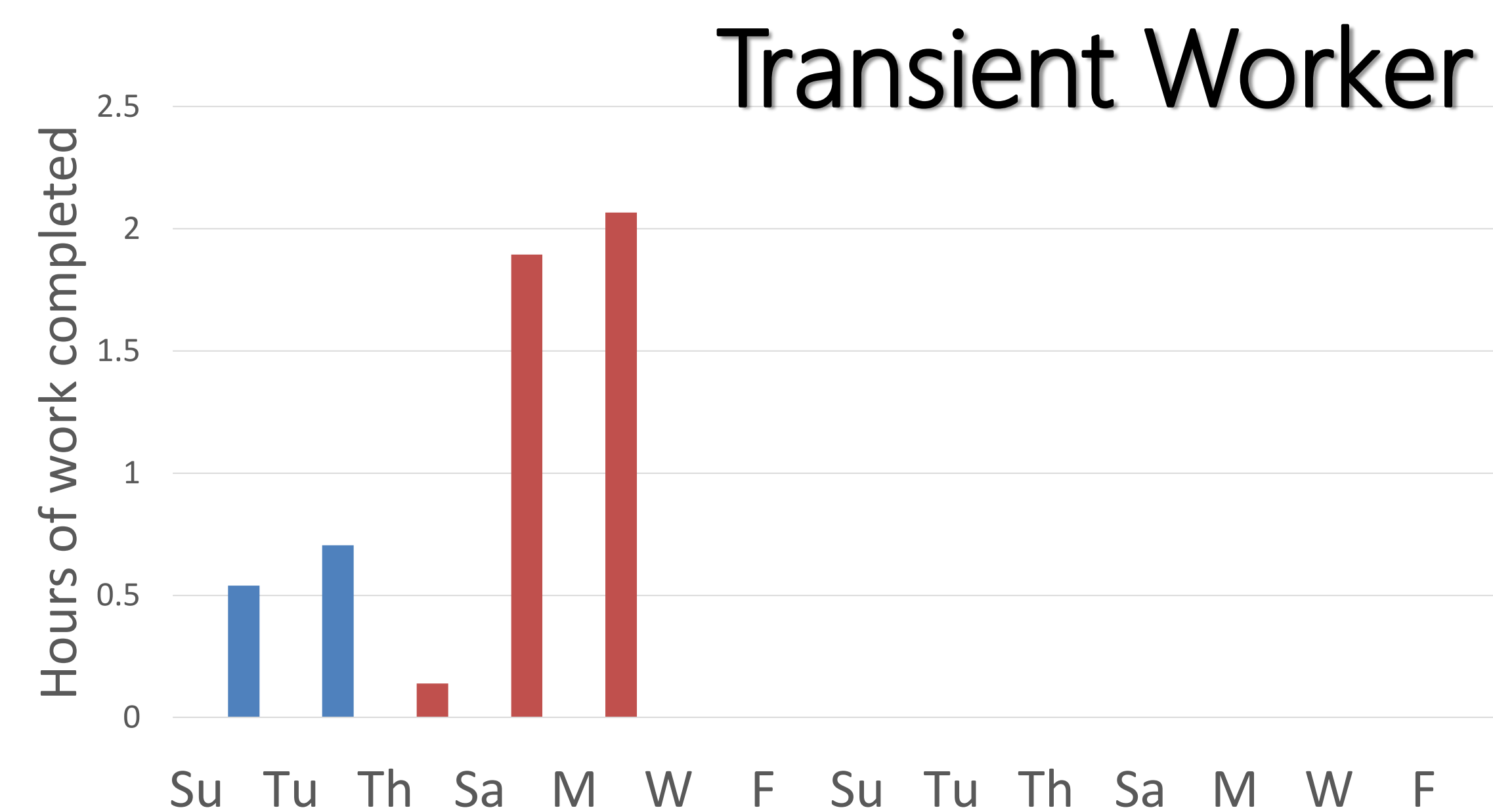
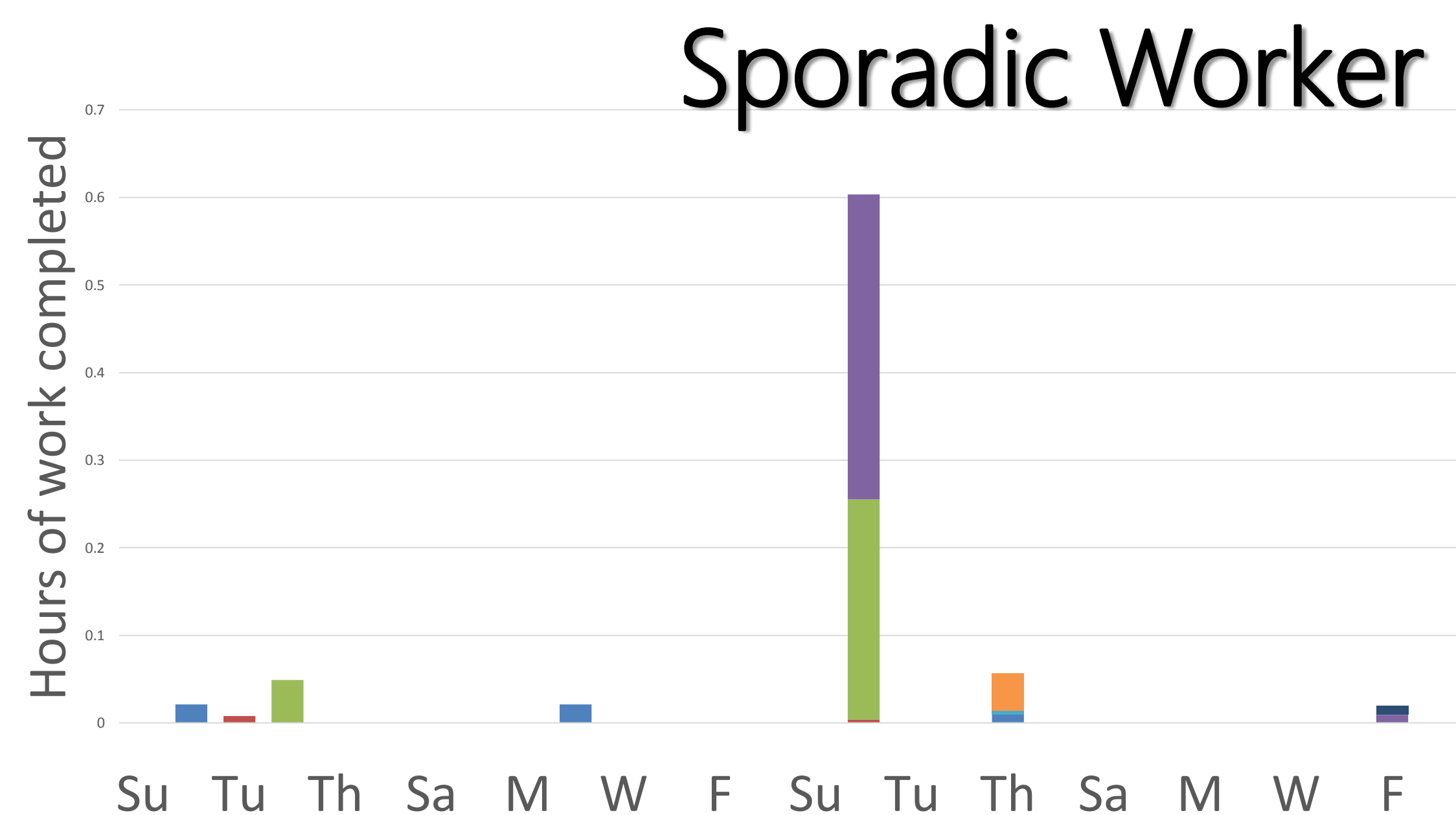
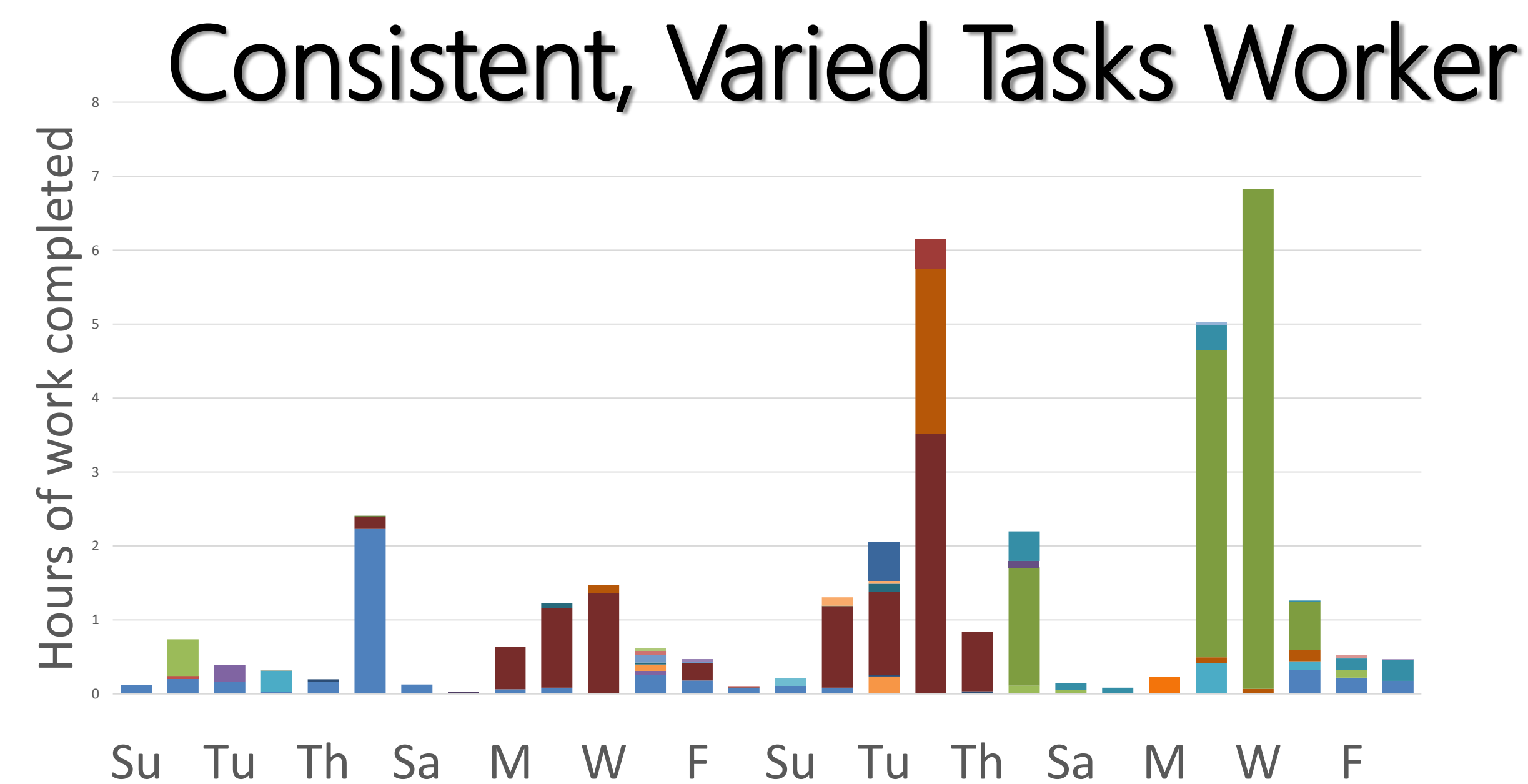
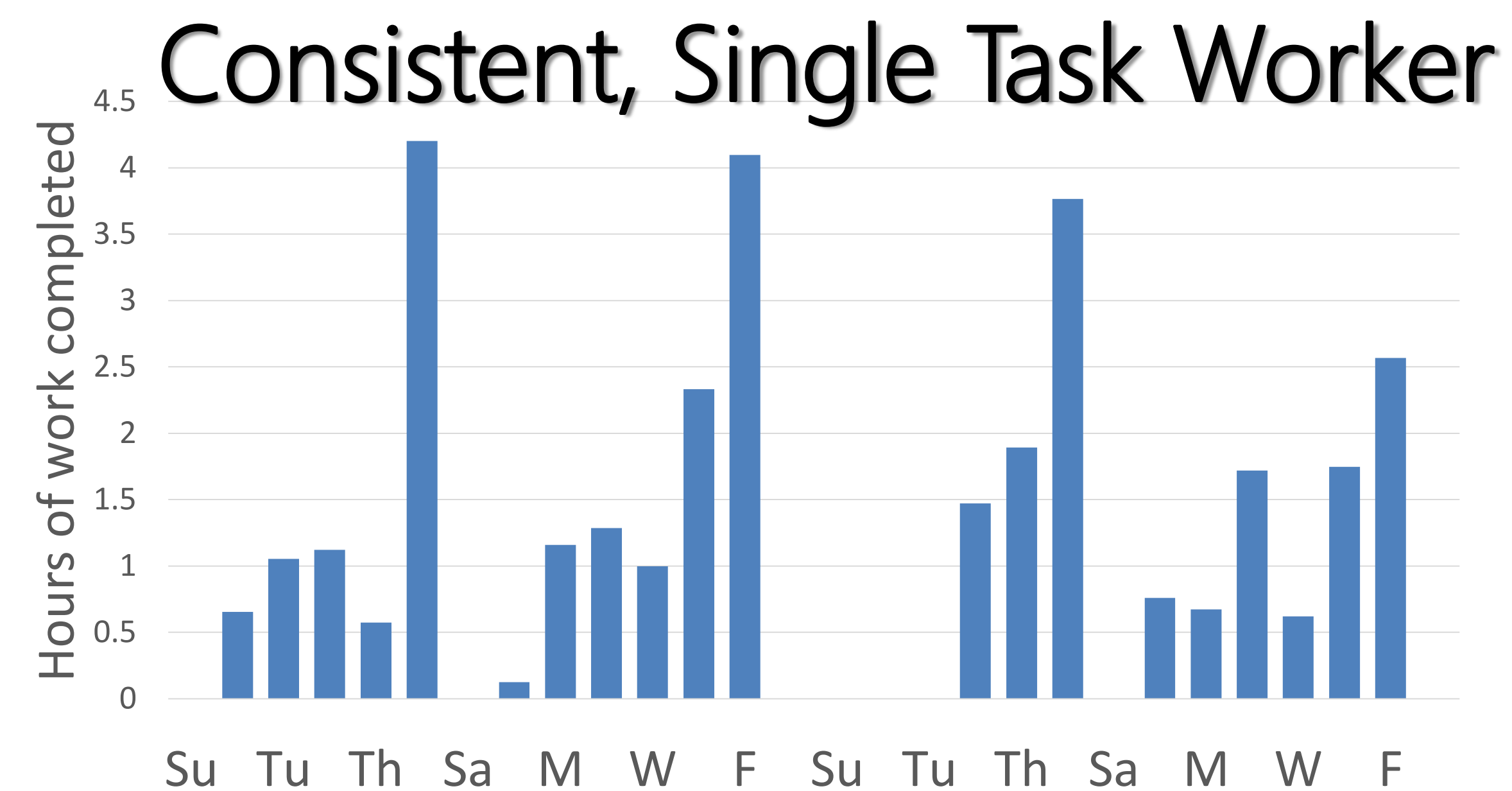


- Multiple options
- No roadmap
- No way out

- Random actions
- Exhaust energy in many tries
- Give up

Need: Stickiness, long duration, quality, follow task guideline

# Worker Variety



Total judgment time per day for sample judges. Different colors represent judgments for different Tasks.



# Marketplace dynamics



## # Tasks

- Task starvation
- Price
- Enterprise marketplace is different



## # Workers

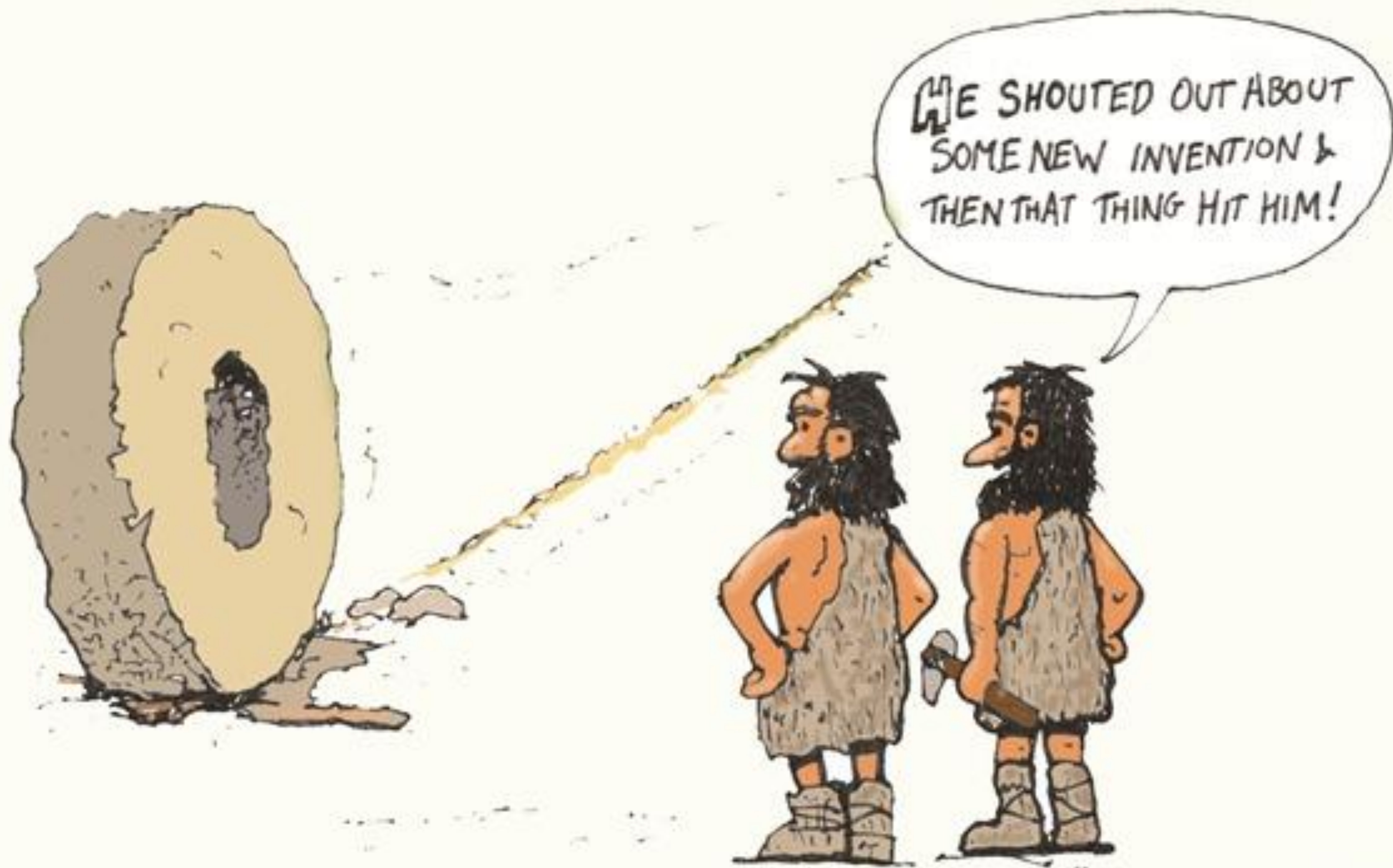
- Active workers matters
- Less earning potential per worker
- Quality



# Future

- There are 7 Billion + people in the world
  - We have tremendous opportunity to tap into these massively growing well connected distributed resources in the cloud (aka Cloud resources)
- Opportunity to match people skill with task at massive scale
  - Help people earn without employment
- World with ability to assign and complete the work from comfort of your home !





DeepFat '09



# Thoughts...

- Fill the gap between Cloudwork and physical world
- Go Beyond Microtasks !
- Anything that can be outsourced can be Cloudsourced!
- Join to contribute !
  - Email me if you have any questions: [rajeshpa@microsoft.com](mailto:rajeshpa@microsoft.com)
  - **Thank you !**

