#### HarvardX Research

# Students as Producers and Producers as Students: Designing Sustainable Learning and Innovation Platforms for the Web

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## **Agenda**

- The promise of learning on Web scale
- Mostly one sided information flow in MOOCs
- Examples of Learning & Innovation Platforms
- Key design principles
- Open problems

## Learning on Web scale is promising

- Increasing availability of the Internet allows to reach increasingly more people (2.8B people on the Internet in 2014 according to KPCB)
- Millions of users in HarvardX offerings on edX alone
- The possible innovation domino effect of educating more people is breathtaking

## So why not combine innovation and education?

## MOOCs have the attention but lack in design

- MOOCs are popular but one-directional: a user consumes information and leaves
- Low engagement, difficulty to track educational outcomes, and high cost of developing content are some of the issues with MOOCs
- What if online learners were allowed to also create knowledge in a meaningful way?

# Could allowing learners to innovate right in the same place address MOOC issues?

# There are many successful Online Learning and Innovation (OLI) Platforms on the Web, but (almost) none in the MOOC world

Examples of Online Learning and Innovation platforms:

Name	Description	Scale
Wikipedia	Encyclopedia	Massive
StackOverflow	Programming	Massive
Dribbble	Design	Large
Change.org	Social change	Massive
CNN iReport	Citizen journalism	Massive
Quora	Questions and Answers	Large
Databits	Creative coding	Small

## Design principles of OLI platforms

- Be free to participate for individuals\*
- Contain highly modular learning content
- Be interoperable with social networks
- Generate economic value for participants
- Allow to create knowledge & put it in context
- Allow to interact with peers
- Maintain standardized contribution recognition and rating mechanisms

### **Open problems**

- Designing optimal incentives for everyone to think it is worth their while is important. There are several distinct variants in existing OLIPs
- Evaluating educational outcomes is a hard but exciting problem where the research community gets to set the rules and there is a lot to look at
- Can (and should) MOOCs have more OLIP features?
- Can Online Learning and Innovation Platforms complement standard academic curriculum?