

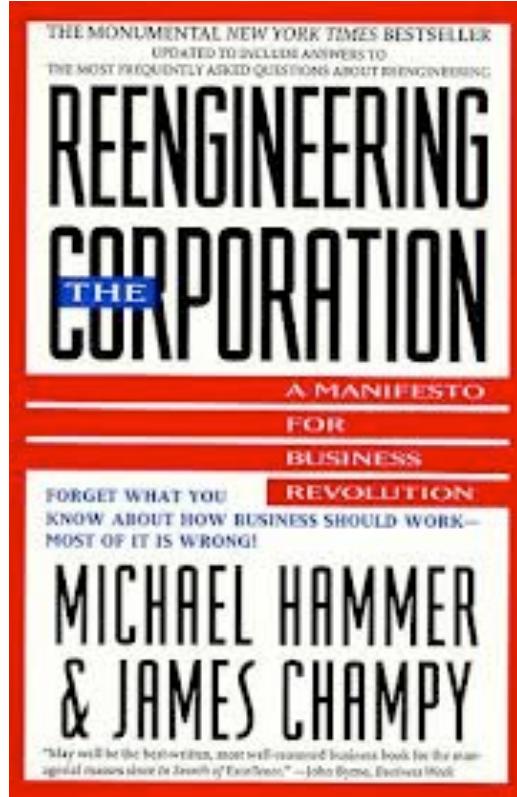
# Pembelajaran di Era Disrupsi: Memanfaat Teknologi Informasi

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Universitas Gadjah Mada, Yogyakarta, 6 Juli 2018



“Most executives and managers know how to **think deductively**. That is, they are good at defining [a] **problem or problems**, then seeking and evaluating different solutions to it. But, applying information technology to business reengineering demands **inductive thinking**—the ability to first recognize a **powerful solution** and then seek the problems it might solve, problems the company probably doesn’t even know that it has.”

Hammer, M. & Champy, J. (1993). Reengineering the Corporation: A Manifesto for Business Reengineering. London: Nicholas Brealey Publ.

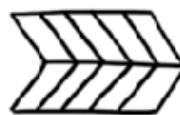
**disrupsi**/dis·rup·si/

*n* hal tercabut dari akarnya

**disruption**/dɪs'ruptʃən/

*n* an interruption in the usual way that a system, process, or event works

# INNOVATION



DOING THE SAME  
THINGS A BIT  
BETTER

# DISRUPTION



DOING NEW  
THINGS

MAKING THINGS THAT  
MAKE THE OLD THINGS  
OBSOLETE

## UBER | FACEBOOK | ALIBABA | AIRBNB

The world's  
largest taxi  
company  
owns **zero**  
vehicles

The world's  
most popular  
media owner  
creates **zero**  
content

The world's  
most valuable  
retailer  
has **zero**  
inventory

The world's largest  
accommodation  
provider owns  
**zero** real  
estate

# Google doesn't care where you went to college

by [Logan Whiteside](#) [@LoganWhiteside](#)

🕒 April 9, 2015: 8:30 PM ET



5

Here's how to get a job at Google



## Social Surge - What's Trending



Sam Nunberg's epic, jaw-dropping, media circus



What's an inclusion rider? Here's what Frances McDormand meant



China's global trade plan is piling huge debt on smaller nations

## Mortgage & Savings

[Mortgage](#)

[Personal Loans](#)

[Credit Cards](#)

Fakta pencelik mata

MATTER OF DEGREES

# For a career at IBM, you can skip the college education



# Pertanyaan

- Apakah kita masih membutuhkan universitas? Yang seperti apa? Sampai kapan? Bagaimana kalau tidak lagi menarik bagi calon mahasiswa?
- Apakah perusahaan-perusahaan yang memperkerjakan orang tanpa gelar berjalan **ke arah yang salah** – atau mereka **mendahului zamannya**?

# Karakter universitas: fakta/fiksi?

- Pembelajaran tidak praktis
- Dosen di luar jangkauan dan tidak menyenangkan
- Biaya kuliah mahal
- Persyaratan menghabiskan waktu
- Peluang kerja menurun

**FACT**

or

**FICITION**

# Permainan berubah

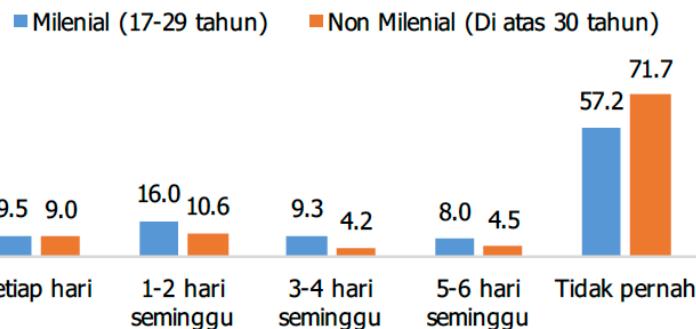
- Karakter konsumen/(calon) mahasiswa
- Teknologi baru (gawai, Internet, media sosial, komputasi awan, dll)
- Tuntutan pengguna/industri/masyarakat
- Kompetitor/pemain baru
- Aturan/regulasi



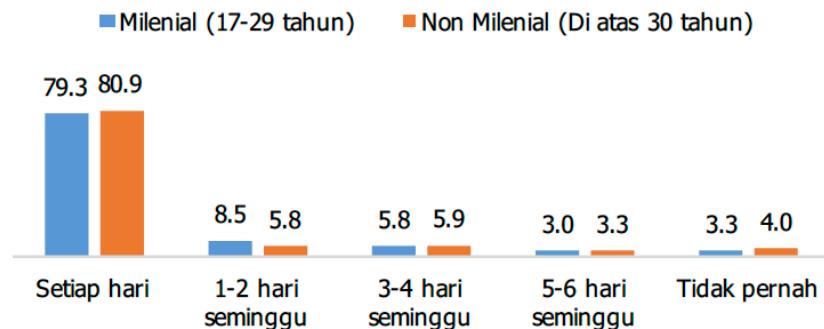
# Penetrasi media sosial

CSIS (2017)

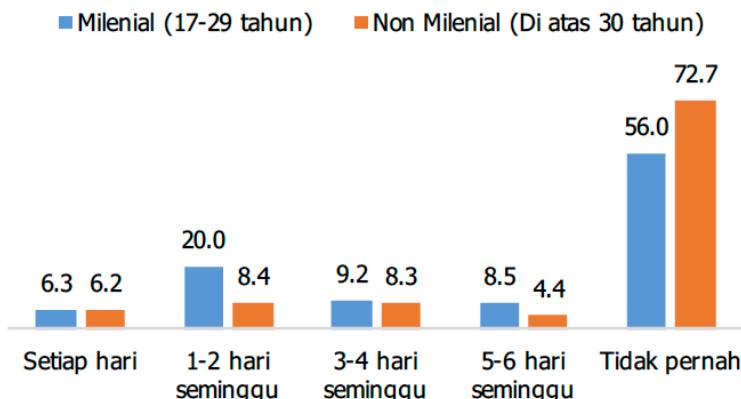
## Radio



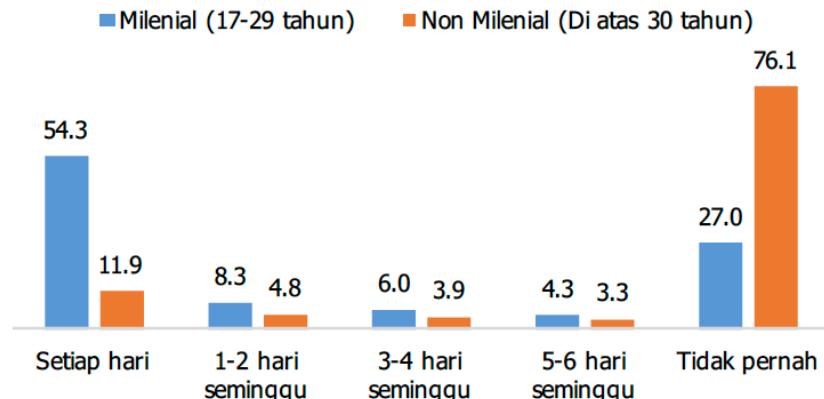
## Televisi



## Surat kabar

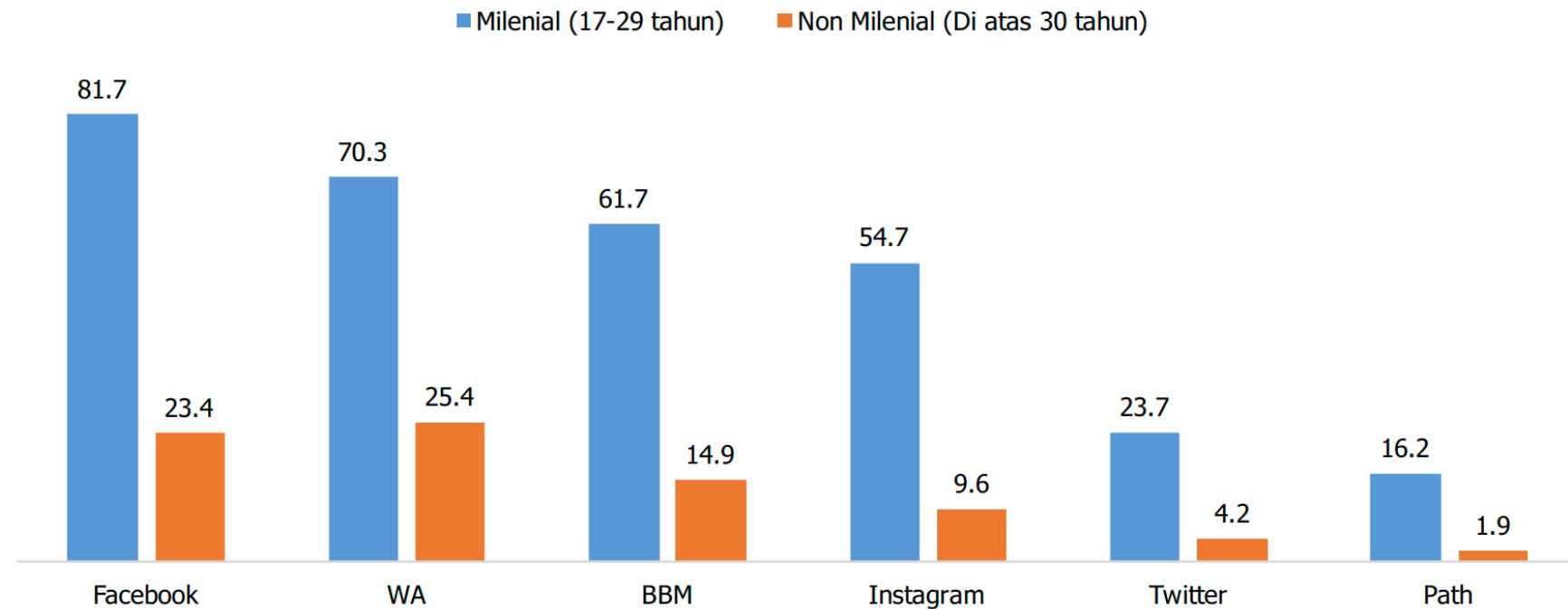


## Media online



# Kepemilikan akun media sosial

CSIS (2017)



# Tren pendorong perubahan

Persaingan  
yang semakin  
ketat

Teknologi  
digital

Demokratisasi  
pengetahuan  
dan akses

Kolaborasi  
dengan  
industri dan  
masyarakat

Mobilitas  
global

# Karakter klasik universitas

- Organized anarchies
- Loosely coupled systems

## Implikasi

- Mengelola univesitas sangat menantang, seperti dalam
  - Menyamakan visi
  - Mengorkestrasikan sumber daya
  - Menggerakkan orang

# Universitas [baru]

- Peran universitas
  - Penghasil pengetahuan baru (?)
  - Penghasil teknologi/inovasi (?)
  - Penghasil tenaga kerja (?)
  - Pencetak cendekiawan/pemimpin/entrepreneur/engineer (?)
  - Pendorong pergerakan ekonomi bangsa (?)
- Pendekatan pembelajaran
  - Fokus pada capaian pembelajaran
  - Pembelajaran berpusat ke mahasiswa
- Kurikulum
  - Fleksibel, relevan, komprehensif
  - Pengayaan konten pembelajaran
  - Asesmen yang jelas

# Universitas [baru]

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  - Pencetak cendekiawan/pemimpin/entrepreneur/engineer (?)
  - Pendorong pergerakan ekonomi bangsa (?)
- Pendekatan pembelajaran
  - Fokus pada capaian pembelajaran
  - Pembelajaran berpusat ke mahasiswa
- Kurikulum
  - Fleksibel, relevan, komprehensif
  - Pengayaan konten pembelajaran
  - Asesmen yang jelas

# Universitas [baru]

- Dosen
  - Kapabel (konten dan teknologi) - selebritas akademik
  - Responsif
  - Paham dengan mahasiswa milenial
- Strategi manajemen
  - Digitalisasi menjadi bagian dari visi besar universitas
  - Pengambilan keputusan berbasis data (raya)
- Infrastruktur teknologi (lintas universitas?)
  - Infrastruktur teknologi informasi yang andal
  - Pembelajaran daring (pengembangan MOOC = massive open online course atau MCOC?)



# SPEEDTEST

@Speedtest by Ookla

1/23/2018

4:02 AM GMT



PING

DOWNLOAD

UPLOAD

2 ms

229.38 Mbps

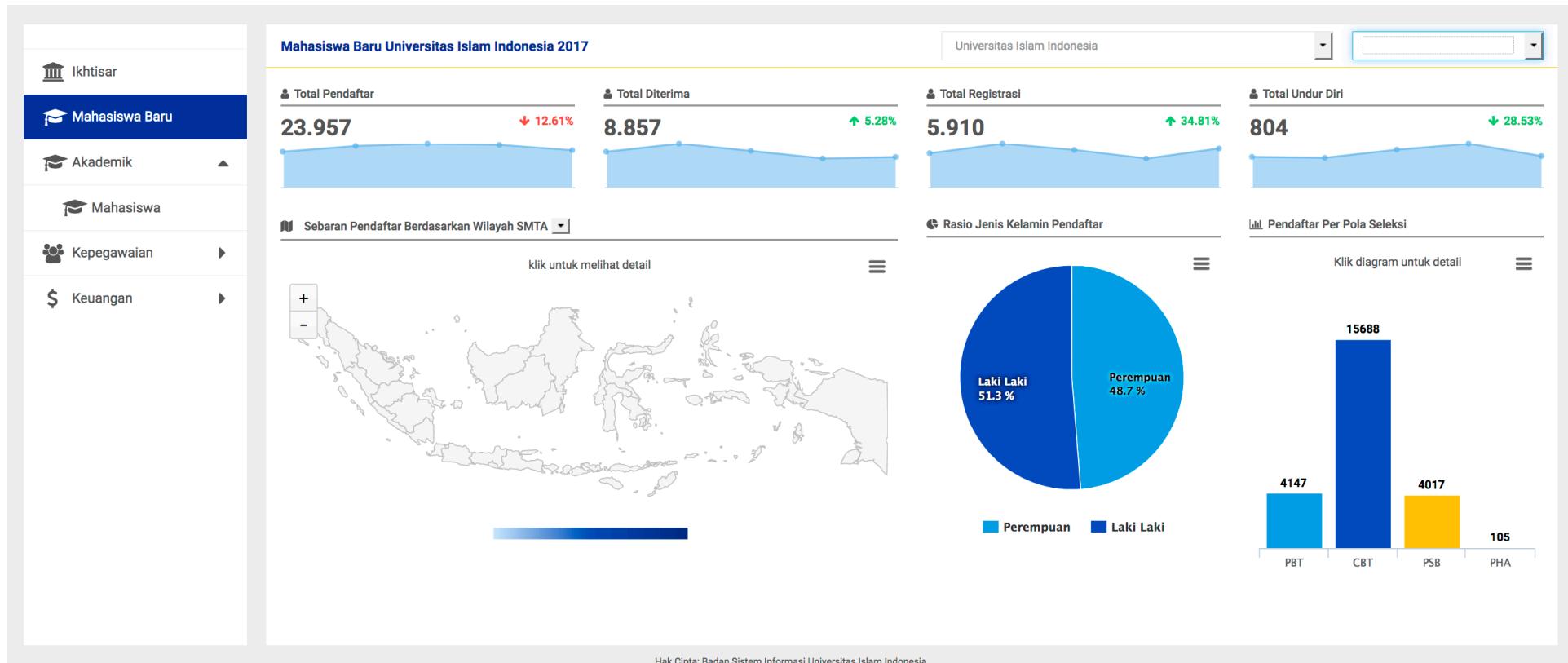
239.61 Mbps

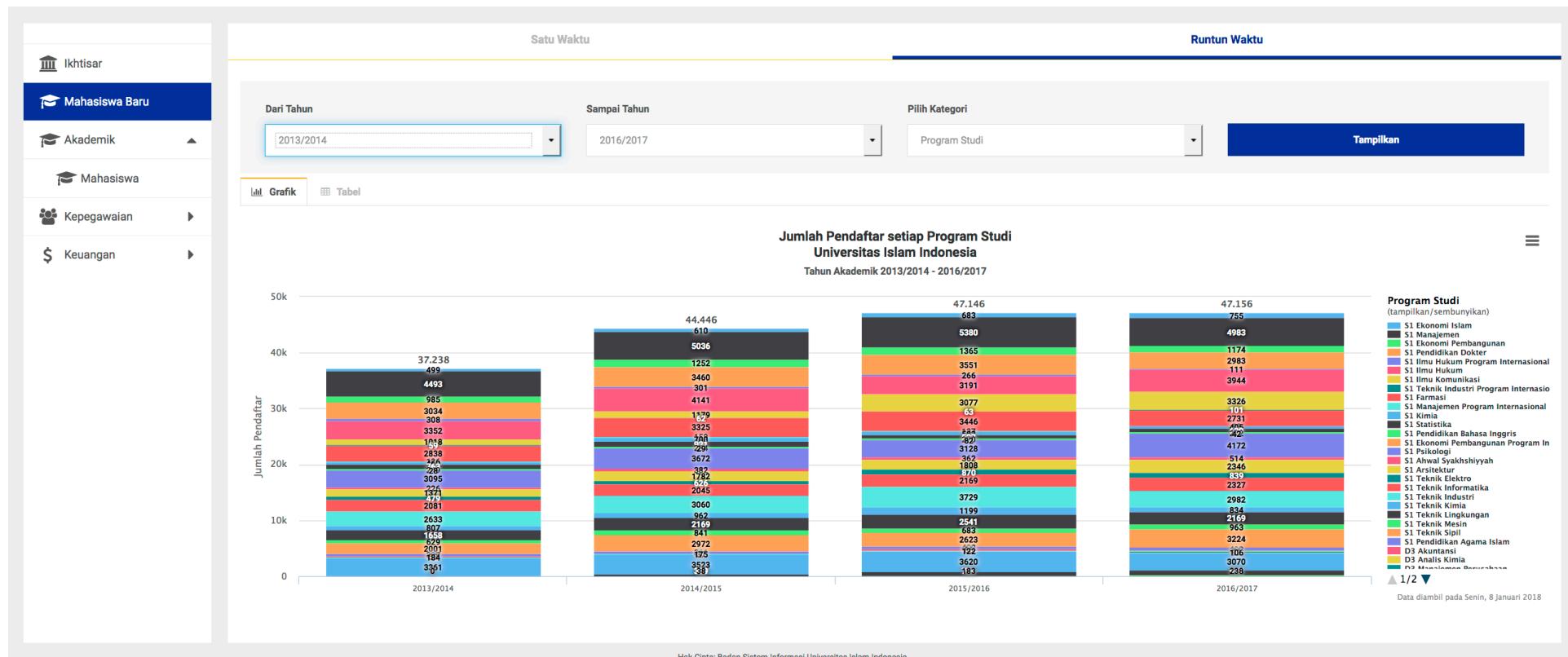
DEVICE

MI 6

CARRIER

HOST





# Tantangan

- **Sindrom “zaman saya dulu”**
  - Pemahaman karakter konsumen baru/generasi milenial/pribumi digital dan kompetitor, dengan cara yang baru dan berbeda
- **Sindrom “begini saja bisa”**
  - Pengubahan gaya kerja sembari mengadopsi teknik, kakas, dan kapabilitas baru
- **Sindrom “ah sedikit-sedikit teknologi”**
  - Budaya penghambat pengembangan/penggunaan teknologi baru
- **Sindrom “nanti begini loh”**
  - Tingkat kepercayaan terhadap layanan digital yang masih rendah (terkait dengan keandalan dan keamanan)

# Renungan

Jika universitas model baru menjadi pilihan, di mana nilai-nilai (values) dan etika (ethics) akan ditempatkan/ditransfer?

# Prinsip pendidikan (dalam Islam)

- **Ta'lim**
  - to know, be informed, perceive, discern
  - transmission and acquisition of knowledge
- **Tarbiyah**
  - to grow, increase
  - individual development
- **Ta'dib**
  - to be refined, disciplined, cultured
  - social and moral development

Sumber: Halstead (2004)



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# The apostle of MOOCs?



# Debate #1

- **Point:** In terms of learning outcomes, MOOCs are inferior to traditional in-class instruction.
- **Counterpoint:** Probably. But a focus on learning outcomes is too narrow for at least three reasons. First, it undervalues other benefits to students, such as flexibility in terms of timing. Second, factoring in cost makes online technology much more competitive. And finally, focusing on current relative positions discounts the importance of technological change—which, over time, will make online models more competitive.

Source: <https://hbr.org/2014/08/what-business-schools-dont-get-about-moocs>

## Debate #2

- **Point:** Irrespective of the economic pressures, institutions with massive endowments don't have to change.
- **Counterpoint:** Maybe. But are these institutions that stick to traditionalism doing the best they can for their students? If not, that's an abdication of their roles as stewards (of those endowments) and as professional educators. The question should be, *Can we do better?*

Source: <https://hbr.org/2014/08/what-business-schools-dont-get-about-moocs>

## Debate #2

- **Point:** The traditional learning model is about social learning, and therefore invulnerable to substitution threats.
- **Counterpoint:** This might have been true approach in years past, when you could leave the classroom after 80 minutes of discussion without a clear idea of what the discussion leader actually thought about the topic at hand—an approach intended to foster independent thinking. Today, it's more or less routine for faculty—especially the younger ones—to present a list of “takeaways” at the end of class. This is exactly the kind of material that can, and should, be delivered online.

Source: <https://hbr.org/2014/08/what-business-schools-dont-get-about-moocs>

**“Learning and work are becoming inseparable.** Indeed one could argue that this is precisely what it means to have a knowledge economy or a learning society. It follows that if work is becoming learning, then learning needs to become work and universities need to become alive to the possibilities".

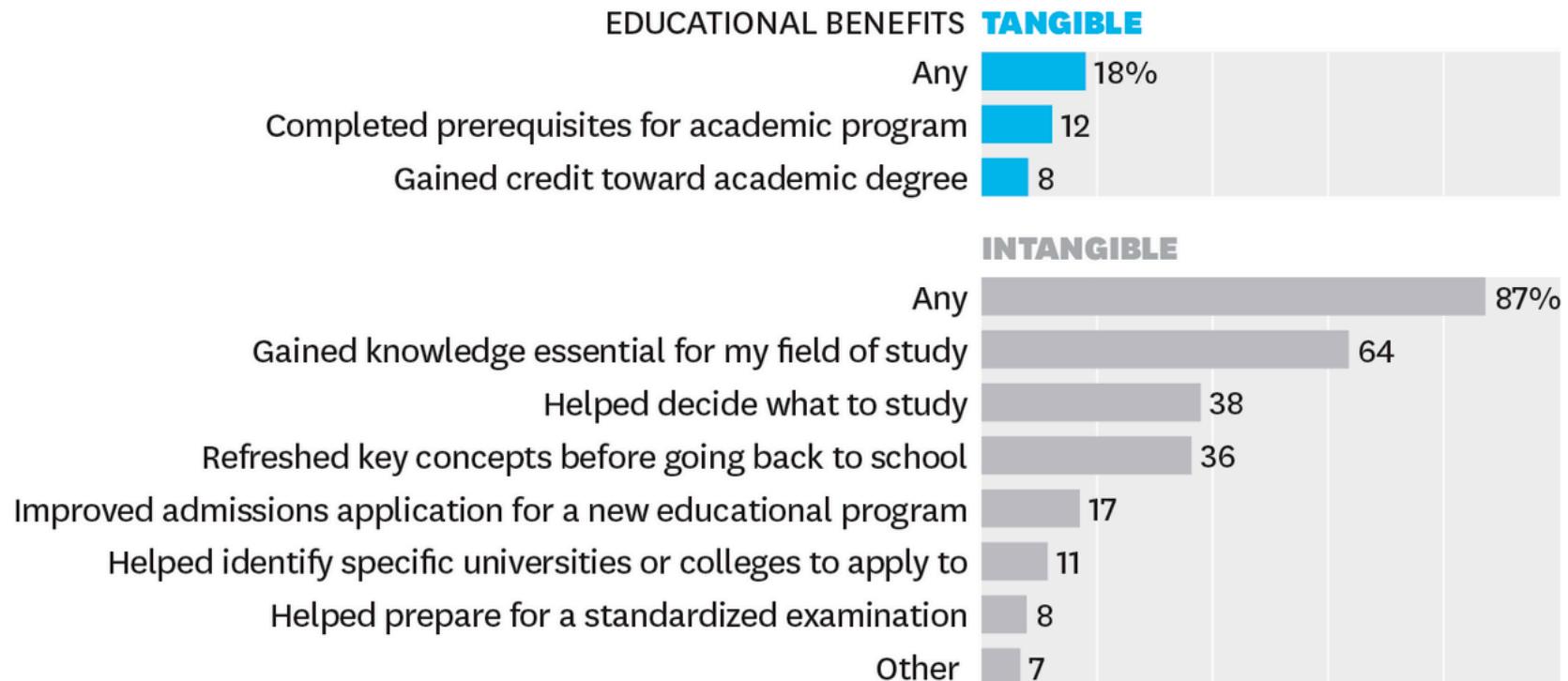
Michael Barber, Katelyn Donnelly, and Saad Rizvi, "An Avalanche Is Coming: Higher Education and the Revolution ahead," Institute for Public Policy Research, March 2013, p. 52, [http://www.ippr.org/images/media/files/publication/2013/04/avalanche\\_Iscoming\\_Mar2013\\_10432.pdf](http://www.ippr.org/images/media/files/publication/2013/04/avalanche_Iscoming_Mar2013_10432.pdf)

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# Educational benefits of MOOC

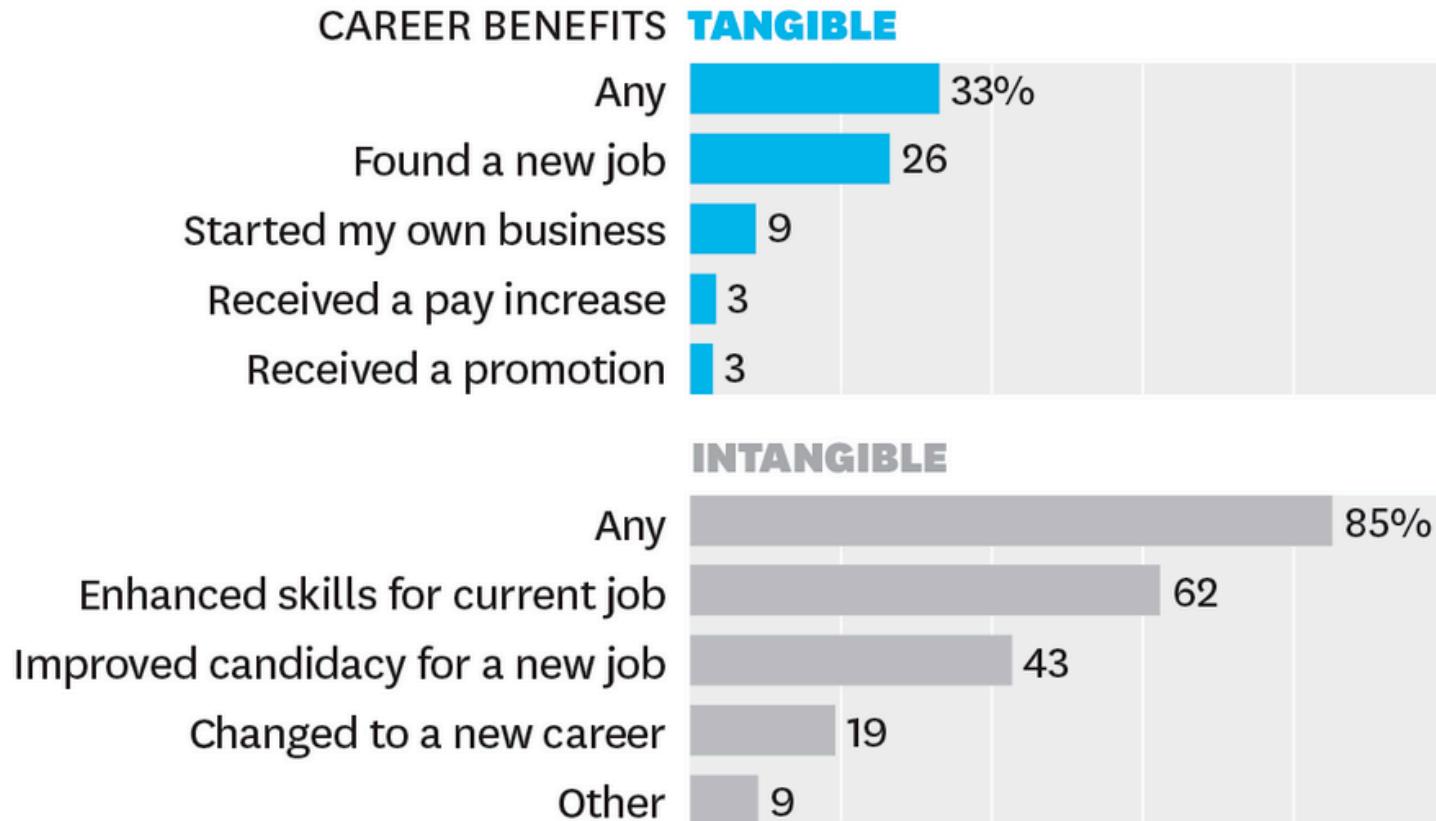


SOURCE COURSERA SURVEY DATA

© HBR.ORG

<https://hbr.org/2015/09/whos-benefiting-from-moocs-and-why>

# Career benefits of MOOC



SOURCE COURSERA SURVEY DATA

<https://hbr.org/2015/09/whos-benefiting-from-moocs-and-why>

**“The future education will be the recombination of new and old, not a battle between them.”**

<https://hbr.org/2014/08/what-business-schools-dont-get-about-moocs>



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EDUCATION

# The Real Revolution in Online Education Isn't MOOCs

# Critics on the ground

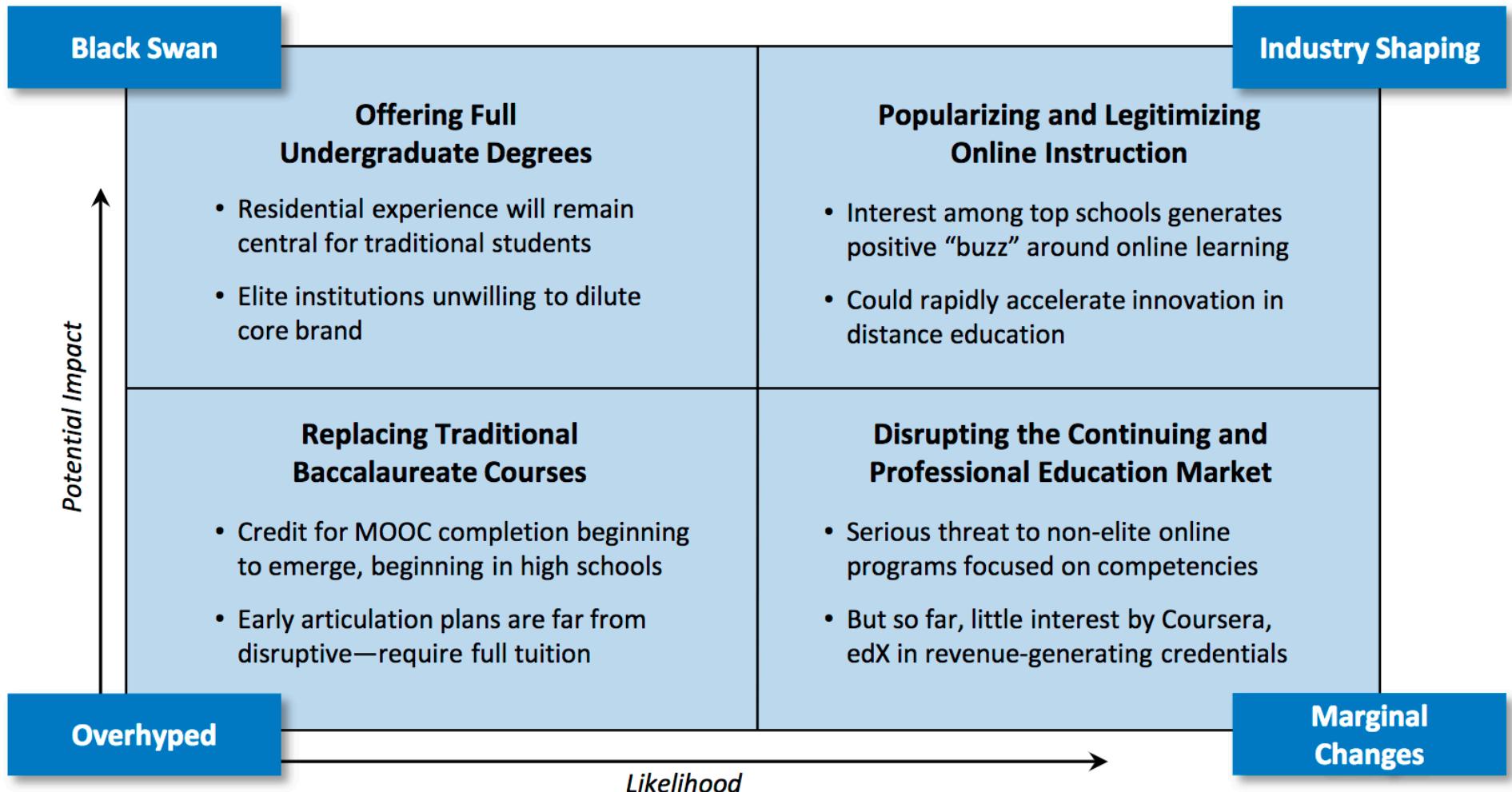
- **Recruiting** is an imprecise activity, and degrees don't communicate much about a candidate's potential and fit. Employers need to know what a student **knows** and **can do**.
- Graduates have the requisite skills for the workforce? Yes ...
  - 11% of business leaders
  - 96% of chief academic officers
- Academics designing courses that correspond with their own interests rather than the needs of the workforce, but now doing it online.

Source: <https://hbr.org/2014/10/the-real-revolution-in-online-education-isnt-moocs>

# Solution?

- **Online competency-based learning**
  - Nothing to do with offering free, massive, or open courses
  - It is not even building courses per se, but creating a whole new architecture of learning that has serious implications for businesses and organizations around the world
- Online competency-based education is **expected** to become the key to filling in the skills gaps in the workforce

Source: <https://hbr.org/2014/10/the-real-revolution-in-online-education-isnt-moocs>



University Leadership Council (2012). Understanding the MOOC Trend. <http://blogs.oregonstate.edu/engage/files/2012/12/Understanding-the-MOOC-Trend.pdf>

# Questions remain

- Will universities offer transferable credit or full credentials for MOOCs?
- Will traditional undergraduates consider virtual courses an alternative to a residential experience?
- Will working adults see MOOCs as an alternative to professional education courses?
- Will employers accept MOOC certificates as evidence of relevant skills?

# Terima kasih

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