



As we were saying...

“The changes in the global economy calls for a discussion of the role of the education system, not only to respond to the employment market but to have a proactive influence. Education could play an active role rather than the thoroughly passive one it is accustomed to.”

Jòn Torfi Jonasson at the ECNAIS conference in Warsaw, November 2011

APRENDIZAJE INVISIBLE

HACIA UNA NUEVA ECOLOGÍA DE LA EDUCACIÓN

CRISTÓBAL COBO Y JOHN W. MORAVEC



COL·LECCIÓ
TRANSMEDIA
XXI





HELLO
MY NAME IS

John

A shift in paradigm.

Society 1.0

The 1.0 Paradigm

- **Interpreted data**
- **Hierarchical**
- **Siloed jobs and roles**
- **Chaos and ambiguity avoided at all costs**

ca·reer [kuh-**reer**]

-noun

1.

an occupation or profession, esp. one requiring special training, followed as one's lifework.

Society 2.0

Knowledge Age

- **Interpreted information**
- **Personally-constructed meanings**
- **Socially-constructed meanings**
- **Chaos and ambiguity are managed**

ca·reer [kuh-**reer**]

-noun

2.

a person's progress or general course of action through life or through a phase of life, as in some profession or undertaking.

- Undo Move Object ⌘Z
- Can't Repeat ⌘Y
- Cut ⌘X
- Copy ⌘C
- Copy to Scrapbook ⇧⌘C
- Paste ⌘V**
- Paste from Scrapbook ⇧⌘V
- Paste Special...
- Paste as Hyperlink
- Clear
- Select All ⌘A
- Duplicate ⌘D
- Delete Slide
- Find... ⌘F
- Replace...
- Go to Property...
- Object
- Special Characters...



**EDUCATION 3.0
GREATEST HITS**

JOHN W. MORAVEC, PHD
UNIVERSITY OF
MINNESOTA

Citizen Journalists

Anti-War march gathering under war-like setting. Watch <http://theuptake.org/> for live updates. Hoping for calm #RNC08 02:58 PM September 04, 2008 from web

Reports are that one of our CJs has been detained while filming the demonstrations. Working on confirmation. #RNC08 05:48 PM September 04, 2008 from web

All 3G cell phone service is out in demonstration area - no live streaming possible right now. #RNC08 06:05 PM September 04, 2008 from twirl

RT: @theuptake UpTake CJ Suzanne taken away in the paddywagon. #RNC08 06:32 PM September 04, 2008 from web







INTERNET

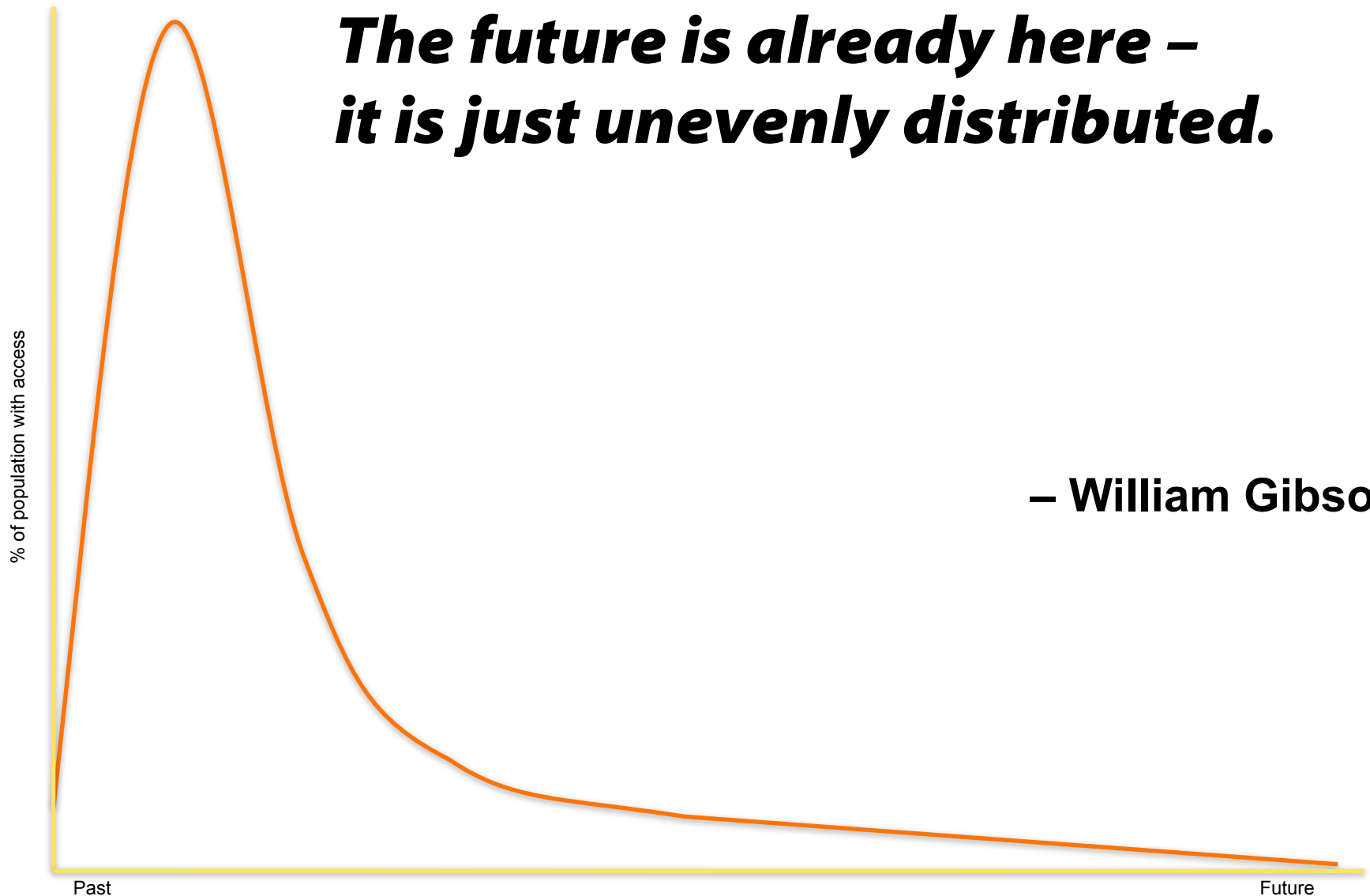


**How do organizations
make **the most** from a
cut-and-paste society?**

Society 3.0

***The future is already here –
it is just unevenly distributed.***

– William Gibson



Innovation and Design Age

- **Contextually applied knowledge**
- **Horizontalized diffusion of knowledge**
- **Heterarchical relationships**
- **Chaos and ambiguity are embraced and attended to**

ca·reer [*kuh-reer*]

-noun

3.

To be (re)defined.

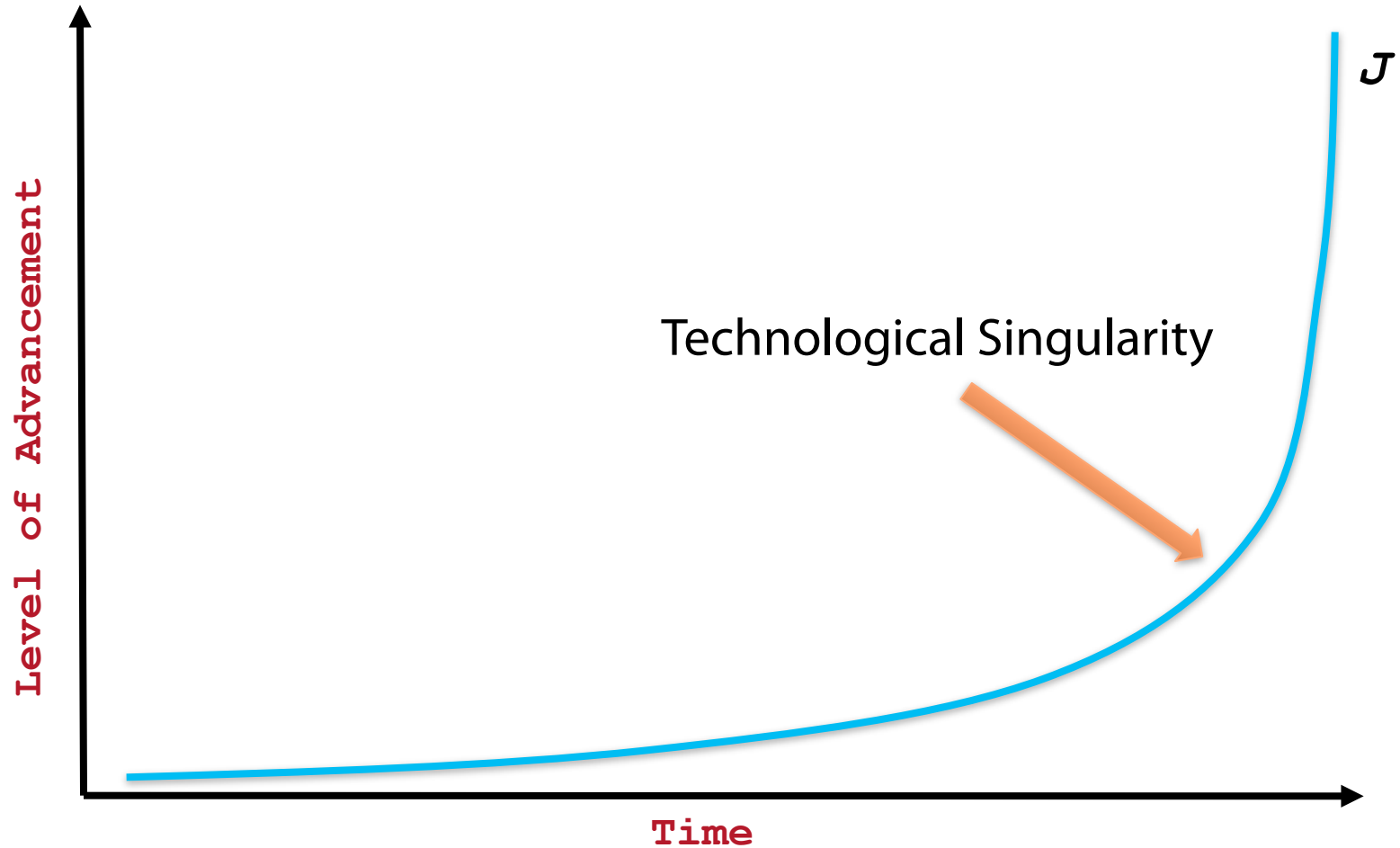
Three drivers of Society 3.0

- 1. Accelerating change**
- 2. Continuing globalization**
- 3. Innovation society fueled by knowmads**



Accelerating Change

The future is becoming impossible to predict



Accelerating change impacts the half-life of useful knowledge.

- **The amount of information available is doubling at an exponential rate**
- **The half-life of knowledge is decreasing exponentially**

“
INTELLECTUAL PROPERTY HAS THE
SHELF LIFE OF A BANANA.”

- Bill Gates

Sources of innovation in Society 3.0...

Everything is

OPEN

A large, glowing red neon sign with the word "OPEN" in capital letters. The sign is mounted on a dark, curved surface, possibly a building facade. The neon tubes are bright red and form the outline of the letters. The background is dark, making the sign stand out.

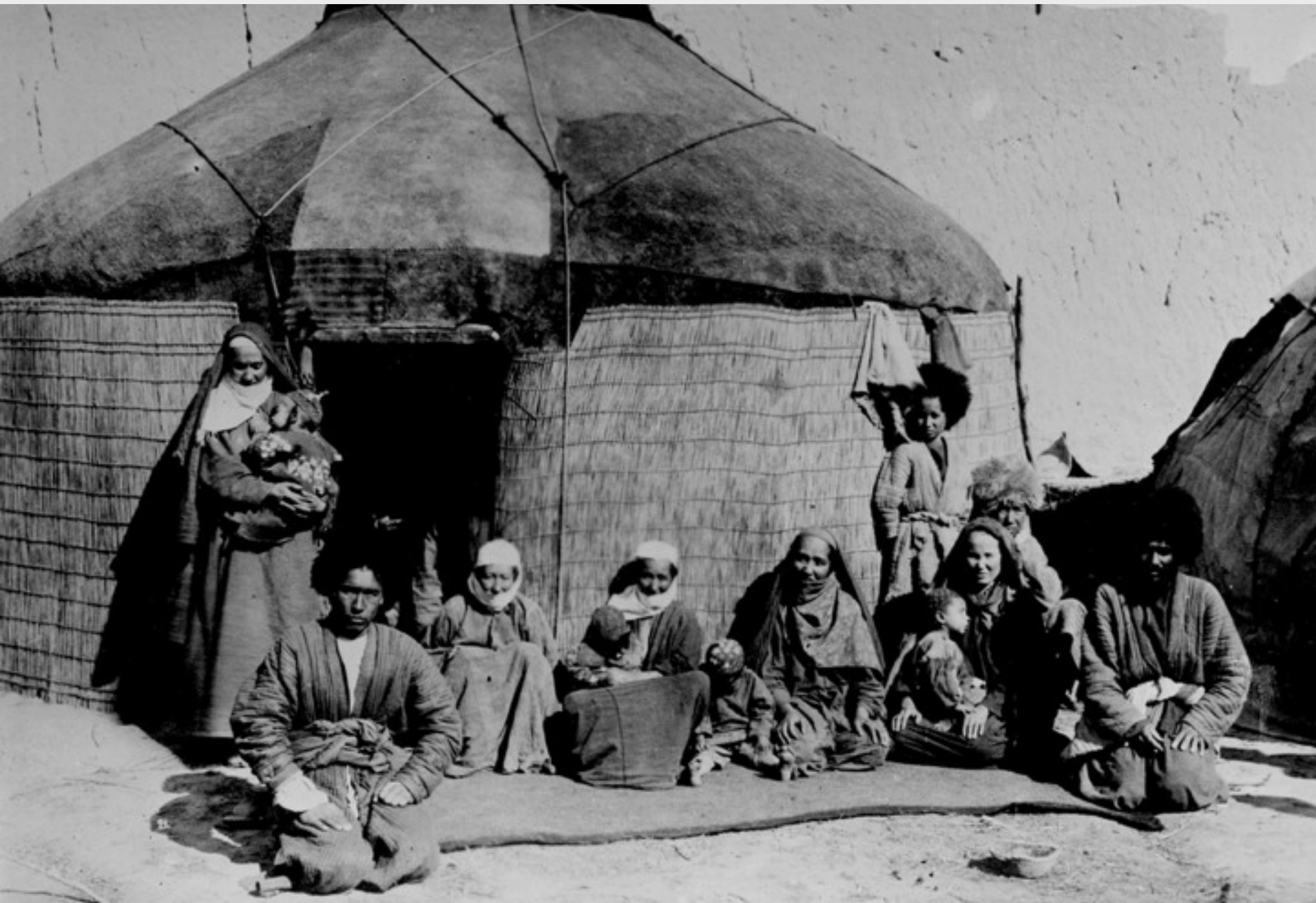


Boundless

Crowd sourcing



Pre 1.0 nomads



Entrepreneurs 3.0: Knowmads



Knowmads...

- Are not restricted to a specific age.
- Build their personal knowledge through explicit information gathering and tacit experiences, and leverage their personal knowledge to produce new ideas.
- Are able to apply their ideas and expertise *contextually* in various social and organizational configurations.
- Are highly motivated to collaborate, and are natural networkers, navigating new organizations, cultures, and societies.
- *Purposively* use new technologies to help them solve problems and transcend geographical limitations.
- Are open to sharing what they know, and invite the open access to information, knowledge and expertise from others.
- Develop habits of mind and practice to learn continuously, and can unlearn as quickly as they learn, adopting new ideas and practices as necessary.
- Thrive in *non-hierarchical* networks and organizations.
- Are not afraid of failure.





 **seats2meet.com**



CODE?

0

ZP'ERS **KNOWMADS** NIEUWE WERKERS...



EEN WERKPLEK MET KOFFIE/THEE
EN EEN HEERLIJKE LUNCH?

BOEK JE WERKPLEK IN S2M030 DAN NU VIA
UTRECHT.SEATS2WORK.COM







Knowmadic



Meet your seat-mate

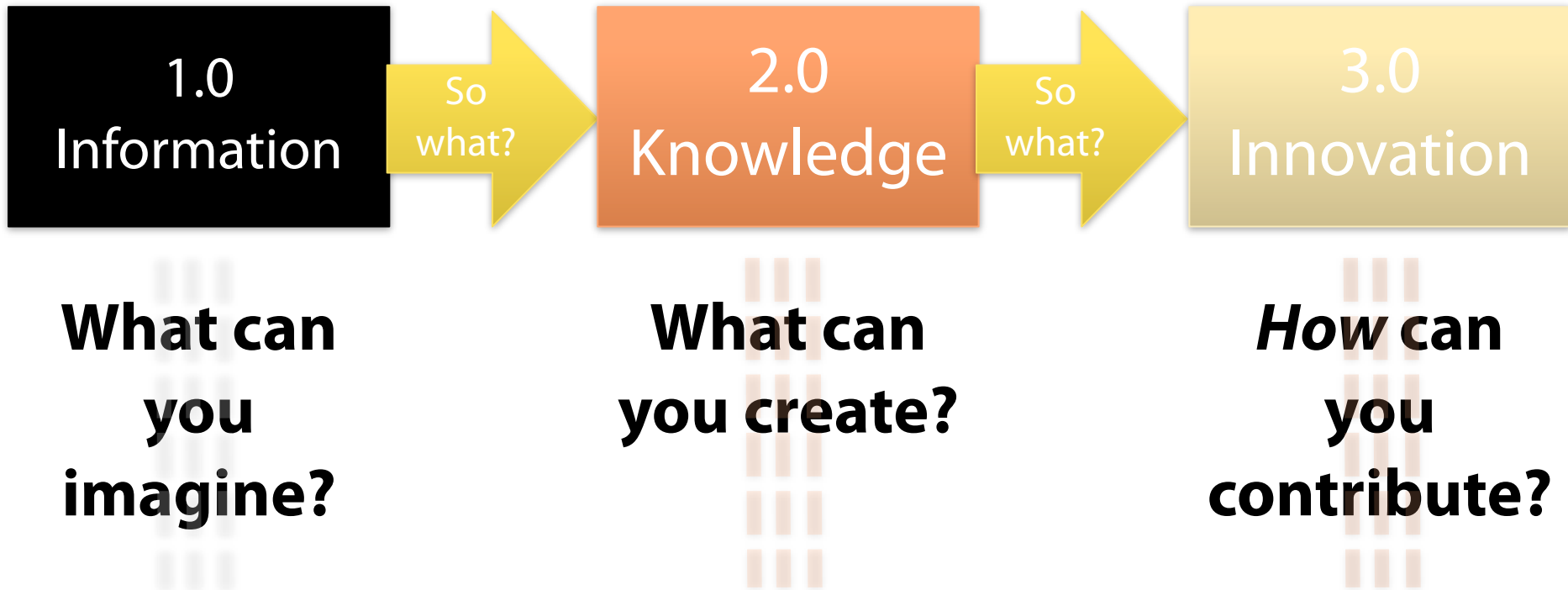
Now expanded to include more routes, KLM Meet & Seat is a service that connects passengers with each other. Passengers can link their Facebook or LinkedIn profiles to the next intercontinental KLM flight they will

be on. All passengers on a given flight who have signed up can see each other's profiles and – if they see a connection – get in touch. For a demo video, visit **youtube.com/klm** and search 'Meet & Seat'.



Domain	Paradigm		
	1.0	2.0	3.0
Fundamental relationships	Simple	Complex	Complex creative (teleological)
Conceptualization of order	Hierarchic	Heterarchic	Intentional, self-organizing
Relationships of parts	Mechanical	Holographic	Synergetic
Worldview	Deterministic	Indeterminate	Design
Causality	Linear	Mutual	Anticausal
Change process	Assembly	Morphogenic	Creative destruction
Reality	Objective	Perspectival	Contextual
Place	Local	Globalizing	Globalized

From Information to Innovation.



So?

Society 3.0 drives Education 3.0.

	Education 1.0	Education 2.0	Education 3.0
Meaning is...	Dictated	Socially constructed	Socially constructed and contextually reinvented
Technology is...	Confiscated at the classroom door (digital refugees)	Cautiously adopted (digital immigrants)	Everywhere (ambient, digital universe)
Teaching is done ...	Teacher to student	Teacher to student and student to student (progressivism)	Teacher to student, student to student, student to teacher, people-technology-people (co-constructivism)
Schools are located...	In a building (brick)	In a building or online (brick and click)	Everywhere (thoroughly infused into society: cafes, bowling alleys, bars, workplaces, etc.)
Parents view schools as...	Daycare	Daycare	A place for them to learn, too
Teachers are...	Licensed professionals	Licensed professionals	Everybody, everywhere
Hardware and software in schools...	Are purchased at great cost and ignored	Are open source and available at lower cost	Are available at low cost and are used <i>purposively</i>
Industry views graduates as...	Assembly line workers	As ill-prepared assembly line workers in a knowledge economy	As co-workers or entrepreneurs

3.0 schools

- **Produce** knowledge-producing students, not automatons.
- **Share**, remix and capitalize on new ideas.
- **Embrace** accelerating **change** rather than fighting it.

3.0 schools are not...

...based on hardware

...based on software

**3.0 schools
are built on
mindware.**

SCHOOLS NEED USE NEW TECHNOLOGIES PURPOSIVELY

It looks like you're trying to give a presentation. Would you like me to...

- [Teach you how to mail merge.](#)
- [Insert a video of Steve Balmer.](#)
- [Crash your computer now.](#)



**DON'T USE NEW
TECHNOLOGIES
TO TEACH THE
SAME OLD STUFF.**

Some challenges?

Semantics

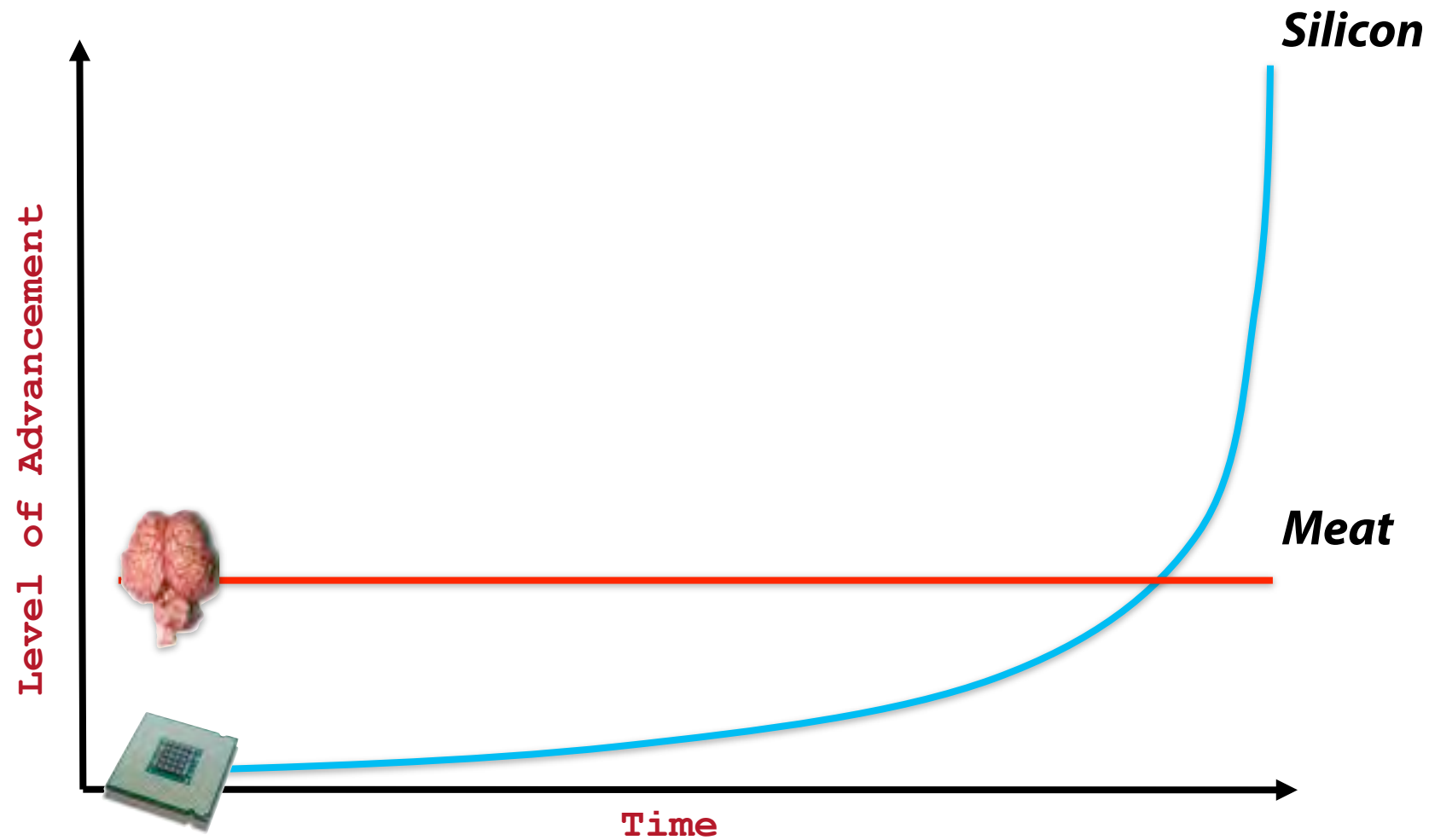
- **Data**
- **Information**
- **Knowledge**
- **Innovation**

**In the “invisible,”
experience-driven
economy,
awesomeness is the
new currency.**

But...

- **“Awesome fatigue”** : RT @edwardharran
So much rich input prevents me
(sometimes) from producing my own
output
- **We are not focusing on the broader
use of ICT**

THRILLIONAIRES?



VISION



So what?

**1.0 schools cannot
teach 3.0 kids.**

**HAVE SCHOOLS
REACHED THEIR
SINGULARITY?**

We all co-invent the future.

**We're all
white belts.**

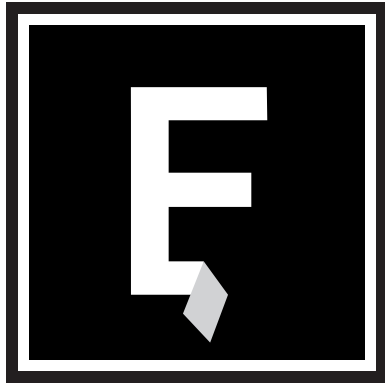


We can co-design the future.



“Innovate, baby, innovate!”

KNOWMAD
SOCIETY



**EDUCATION
FUTURES**

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john@educationfutures.com