



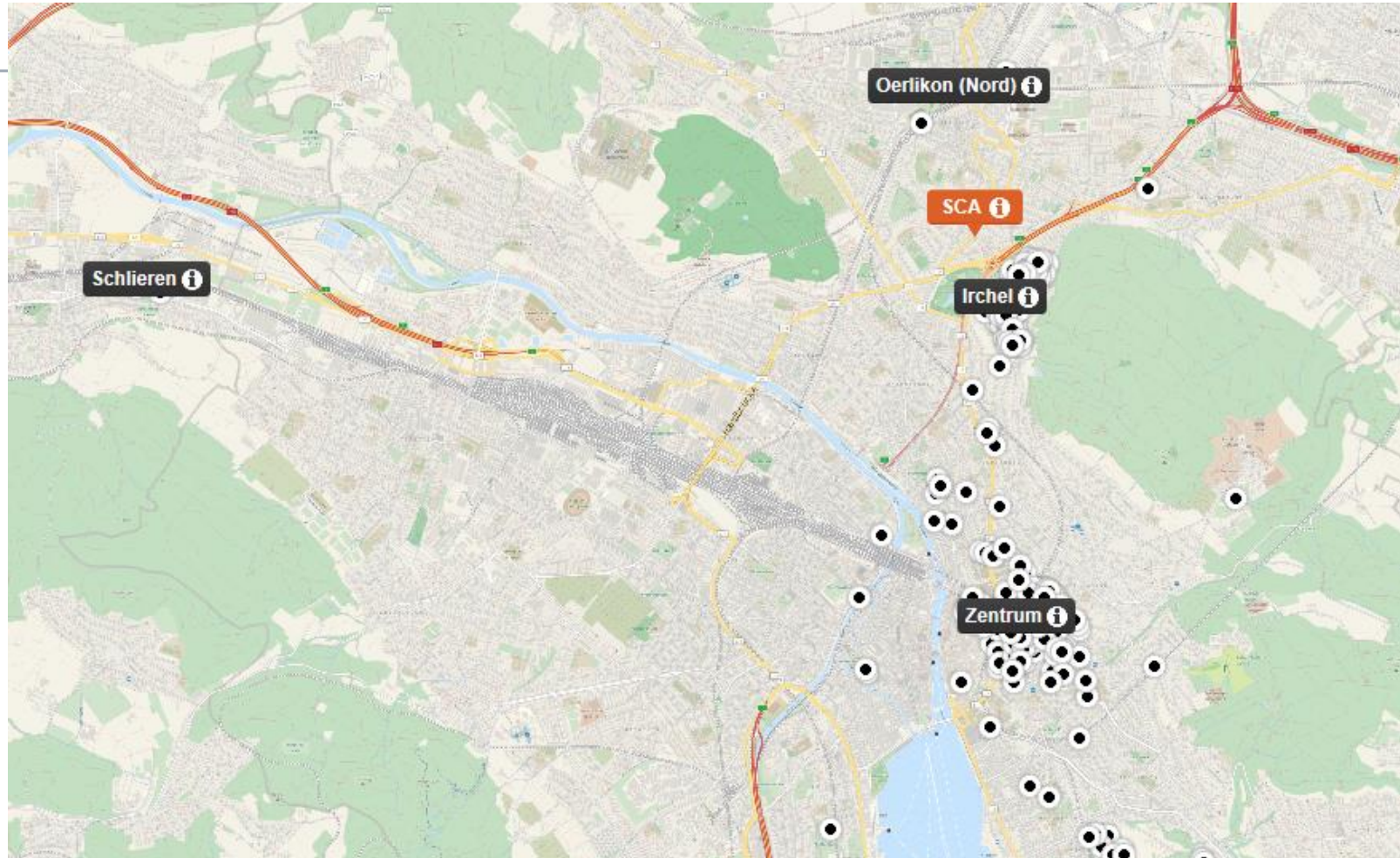
**University of
Zurich** ^{UZH}

Zentrale Informatik

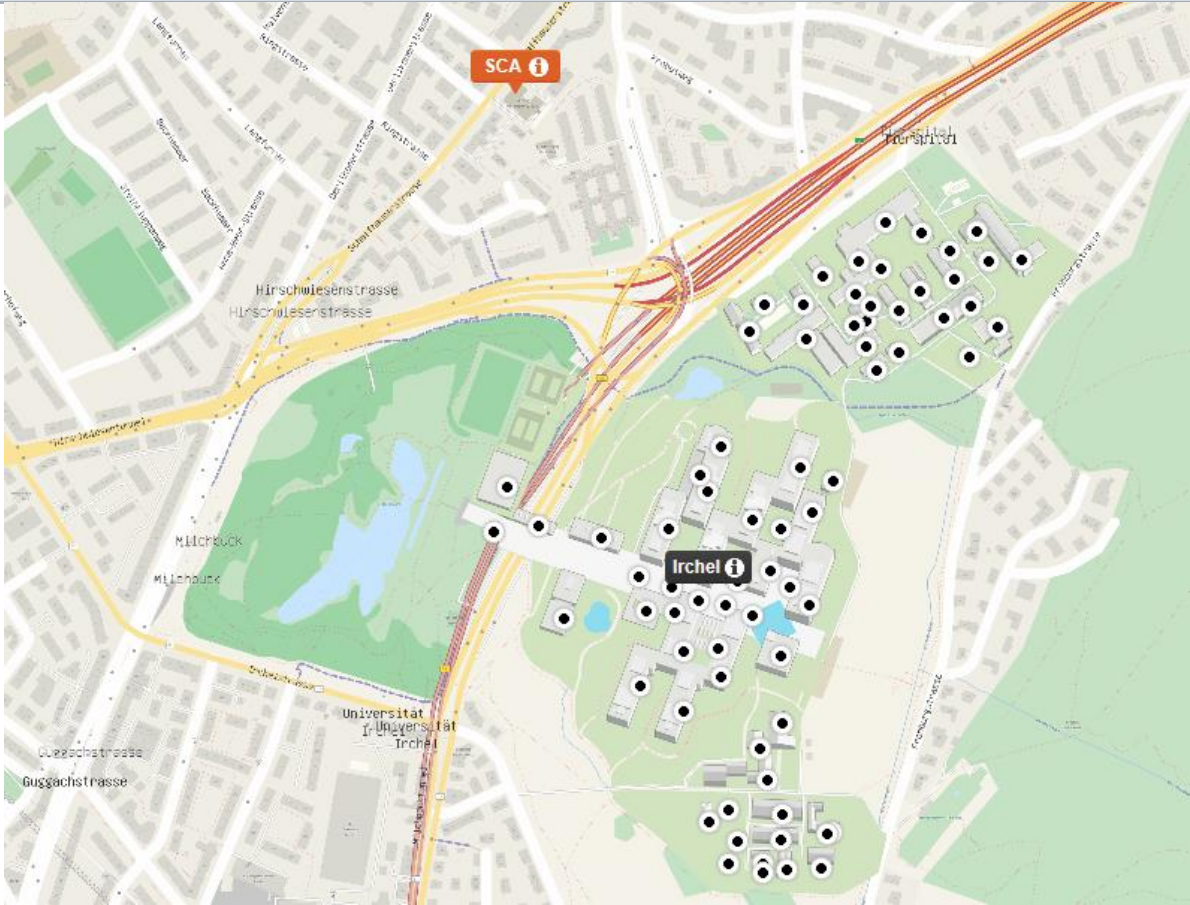
University of Zurich IT and Benchmarks

EUNIS Workshop Zurich

13.11.2018, Thomas Sutter, CIO



University of Zurich: Campus Irchel





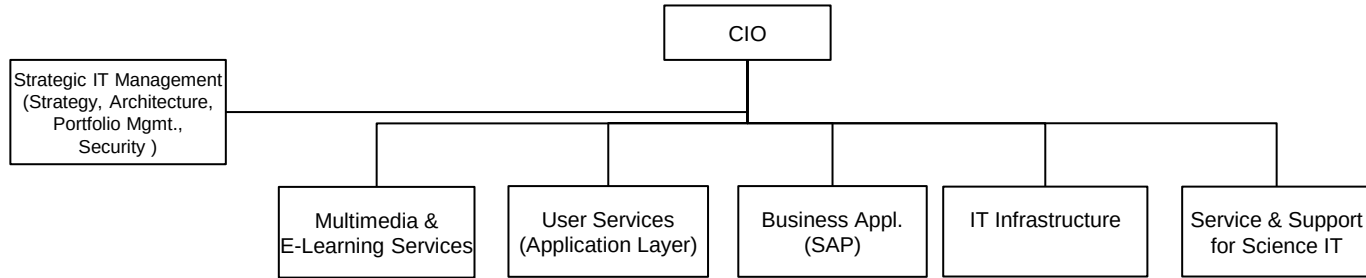
Switzerland's largest and best ranked
comprehensive university

University of Zurich

- Founded in the year 1833
- Switzerland's largest university
with the widest range of study courses
(faculties of Theology, Law, Business/Economics and Informatics, Medicine, Vetsuisse, Arts and Social Sciences, Sciences (mathematics, physics, chemistry, biology etc.)
- 12 Nobel Prizes
- Top 50 to 80 in international rankings
- 26'000 students
- 660 Professors
- 9'000 employees (6'500 employees FTE)
- Budget CHF 1'350 Mio. (Euro 1'230 Mio.)



Information Services (Zentrale Informatik)

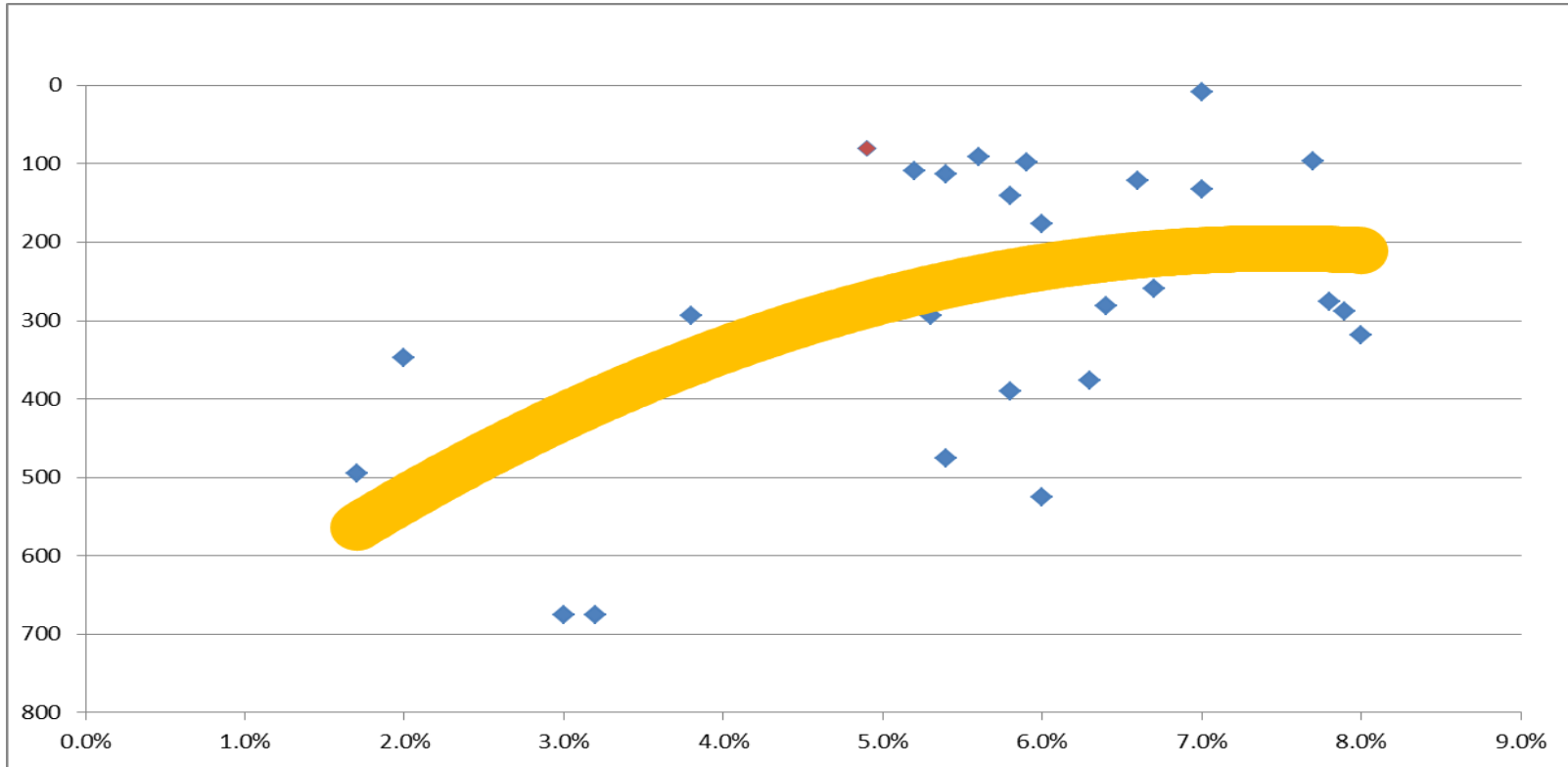


- **1.5 Mio. SAP records per year**
- **228'000 student module bookings per year, up to 4'500 in 15 minutes**
- **80'000 web users per day**
- **700'000 mails per day**
- **Network to 200 buildings**
- **Around 80 projects per year**
- **140 FTE in central IT**
- **many FTE in decentral IT**
- **streams/podcasts > 750'000 downloads per year**
- **250 multimedia productions per year**
- **55'000 active users in eLearning Management System**
- **95'000 science publication in 'Zurich Open Repository and Archive', 11'000 new publications per year**
- **240 IT courses per year**
- **Service and Support for Science IT Team**
- **Large Science Cloud**

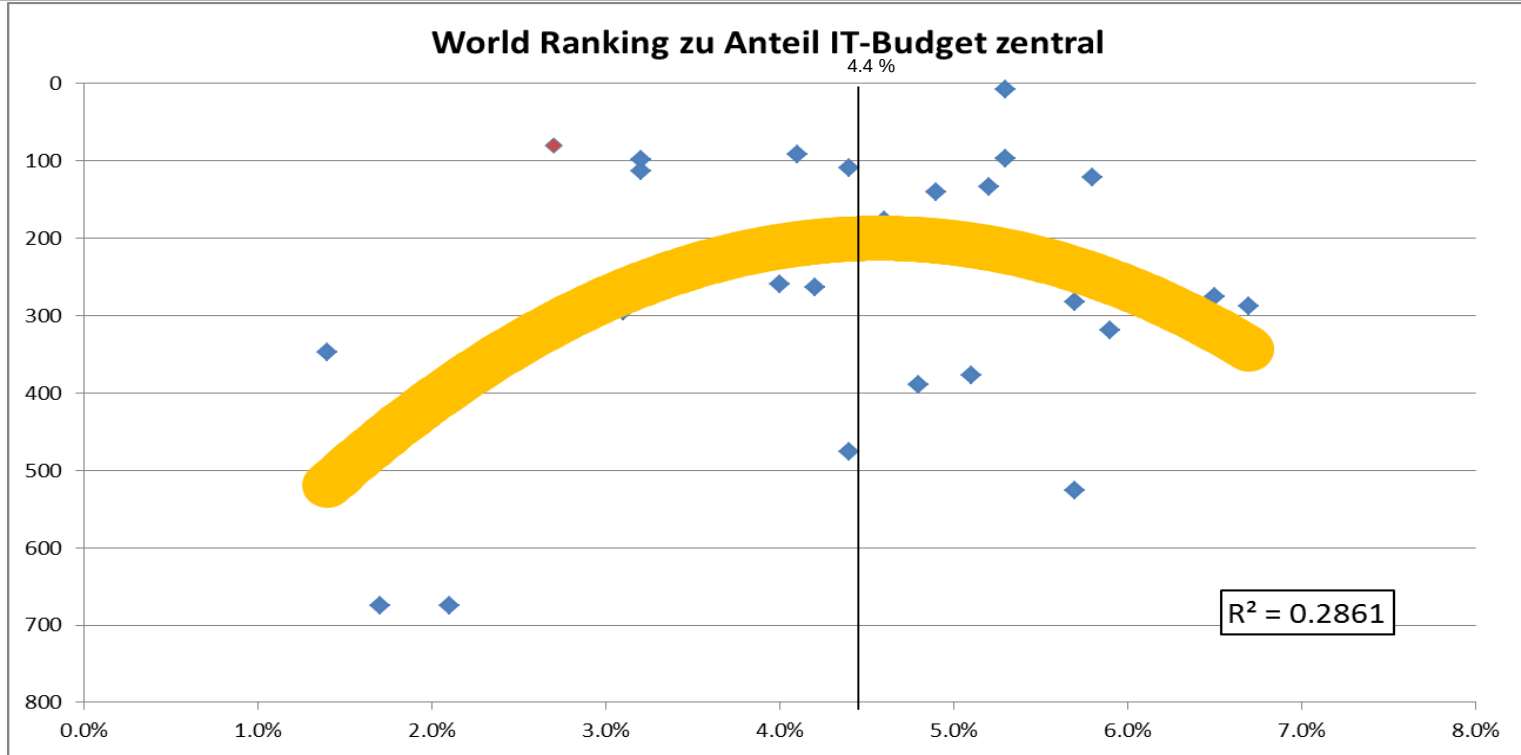
What is our challenge..

And is IT worth...

Eunis Benchmark: share of IT budget vs. World Ranking



Eunis Benchmark: share of central IT budgets vs. World Ranking

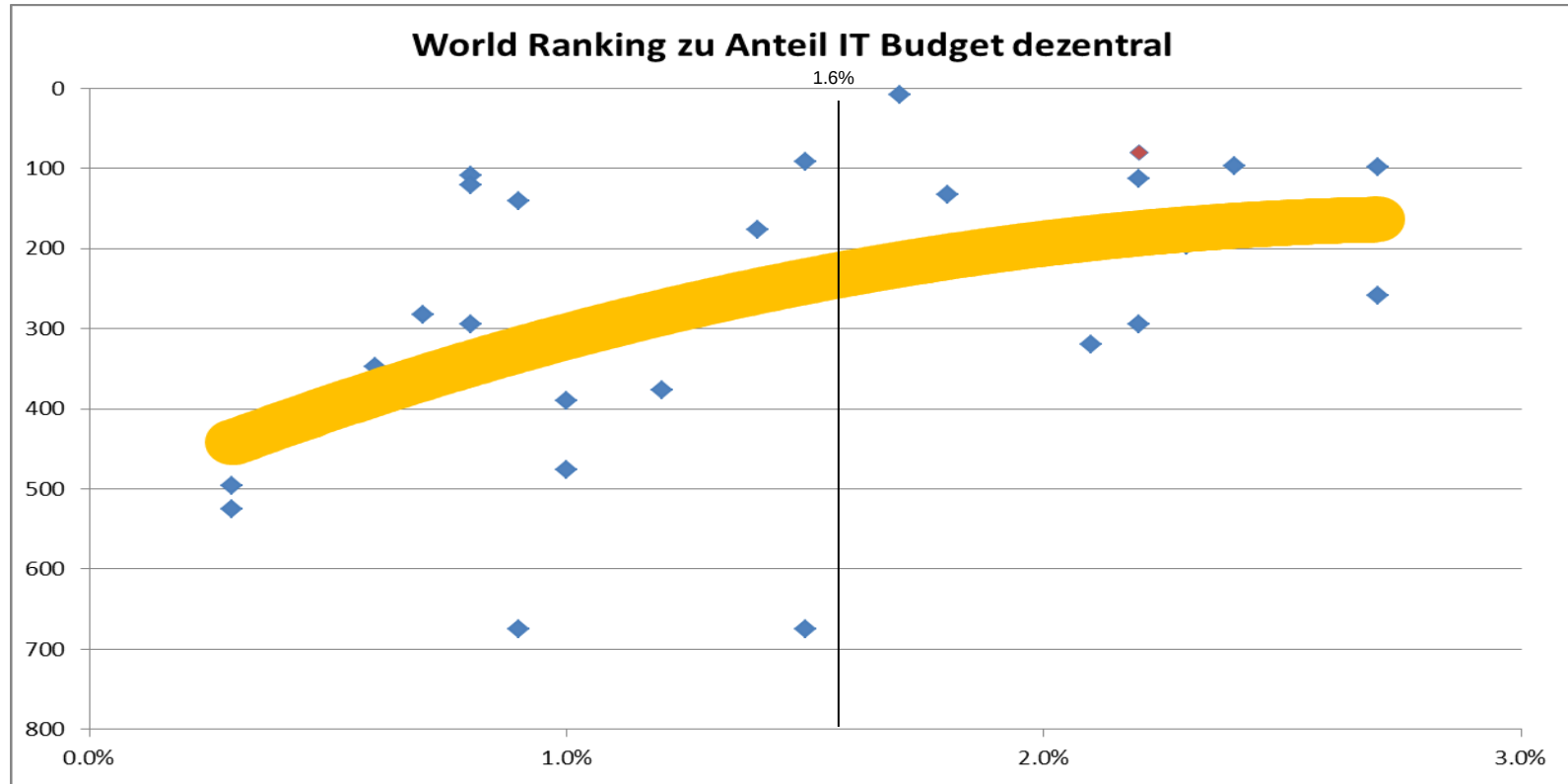


28 Datenpunkte, Trendlinie polynomisch (Reihenfolge 2), Durchschnitt 4.3%, max. 4.6%

Bestimmtheitsmass (r^2) = 29%

Quadrat des Pearsonschen Korrelationskoeffizienten: Gibt an, welcher Anteil der Varianz in beiden Variablen durch gemeinsame Varianzquellen bestimmt wird. (<http://www.methodenberatung.uzh.ch/de/datenanalyse/zusammenhaenge/korrelation.html>)

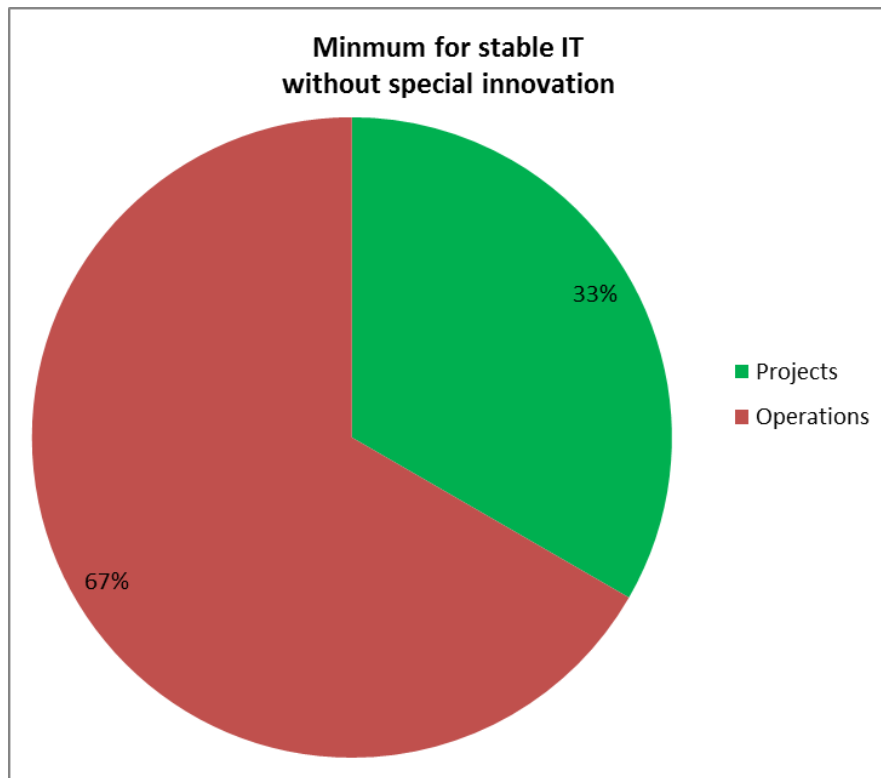
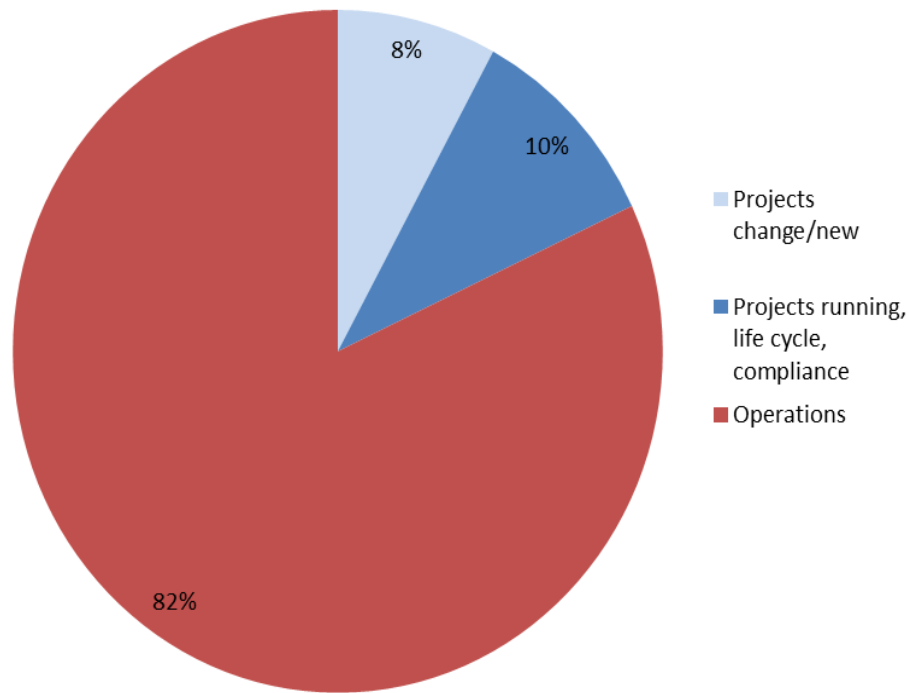
EUNIS Benchmark: share of decentral IT budgts vs. World Ranking



What are we doing?

some impressions about
our IT

Internal IT workforce



Education

lectures, tutorials, audio-video, podcasts, live streaming, eLearning, eAssessments, App, MOOCs, student platform, workflows...



Covering the widest spectrum of disciplines

Investments in digitalisation, usability, functions for students, open science etc.

Neue Zürcher Zeitung

Die Universität Zürich schafft 18 neue Professuren im Bereich der Digitalisierung

Seit zwei Jahren verfolgt die Universität Zürich ein interdisziplinäres Projekt zur Digitalisierung. Jetzt hat Rektor Michael Hengartner bekanntgegeben, 18 neue Professuren zu generieren – ein historischer Schritt.

Nils Pfändler
24.10.2018, 05:30 Uhr

DIE UZH IN ZAHLEN

Das digitale Wissen der UZH

Seit 2006 besteht an der UZH das öffentlich zugängliche Repository ZORA (Zurich Open Repository and Archive). Die Forscherinnen und Forscher der UZH hinterlegen in diesem elektronischen Archiv vollständige Fassungen ihrer publizierten Arbeiten. Dabei können die Originalpublikation sowohl aus einem Open-Access-Journal als auch aus einer traditionellen Subskriptions-Zeitschrift stammen. Auch Buchpublikationen und weitere Publikationsformate sind unter den ZORA-Einträgen. Dadurch stehen viele Volltexte der Allgemeinheit zur Verfügung.

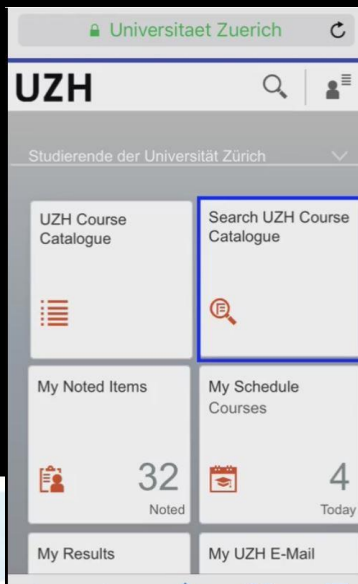


58
Prozent
mit Volltext,
davon sind
knapp zwei Drittel
(37 Prozentpunkte)
frei zugänglicher
Volltext
(Open Access)

42
Prozent
der Einträge haben
keinen Volltext.



Die Publikationen
wurden insgesamt
6'567'964
mal abgerufen
(Downloads).



Best of Swiss Apps

08.11.2018

Drei Auszeichnungen für UZH Now

UZH now ist die benutzerfreundlichste App 2018. An der Preisverleihung der Best of Swiss Apps 2018 gewann die offizielle App der UZH zwei weitere Preise für Innovation und Funktionalität.

Kommunikation



UZH Now: Der mobile Begleiter für alle Angehörigen der UZH erhielt an der Preisverleihung «Best of Swiss Apps 2018» mehrere Auszeichnungen.

Science

A female scientist with blonde hair tied back, wearing a white lab coat and blue nitrile gloves, is holding a blister pack of purple pills. She is looking intently at the pills. The background is a blurred laboratory setting with various equipment and bottles.

A new patent every two weeks,

Science IT Systems Roadmap (S3IT)

Situation today

Diverse Systems

- ScienceCloud
- Hydra (Large Memory)
- Vesta (GPU)
- Piz Daint (HPC)
- Bulk storage
- ZI-NAS
- ZI-Backup



2020

Integrated Systems / Platforms

- ScienceCloud expanded with
 - Large Memory flavors
 - GPU flavors
 - ZI-services more integrated
- Platforms
 - S3IT data manager
 - Advanced data analysis (ML / AI)

Motivation

- Provide researchers the most convenient way to access leading edge research IT systems
 - ScienceCloud integrations
 - Establish platforms for “standard” use-cases
- Simplified management, efficient use of investments

Culture, processes and infrastructure



with seven faculties and 150 institutes

IT value

- 1. Education:** user friendly learning support systems
user friendly, integrated administration processes
- 2. Science:** growing and specialised infrastructures / services,
(integrated) science support
- 3. Central services, support processes:** user friendly, integrated, efficient;
increasing process maturity - as well within IT
- 4. Support, embrace and initiate innovation**
- 5. Know how about usability and process integration**
- 6. Know-how about long-term management of data, integrated processes and infrastructures**
- 7. Know-how to work cross organisations and optimise central / decentral**

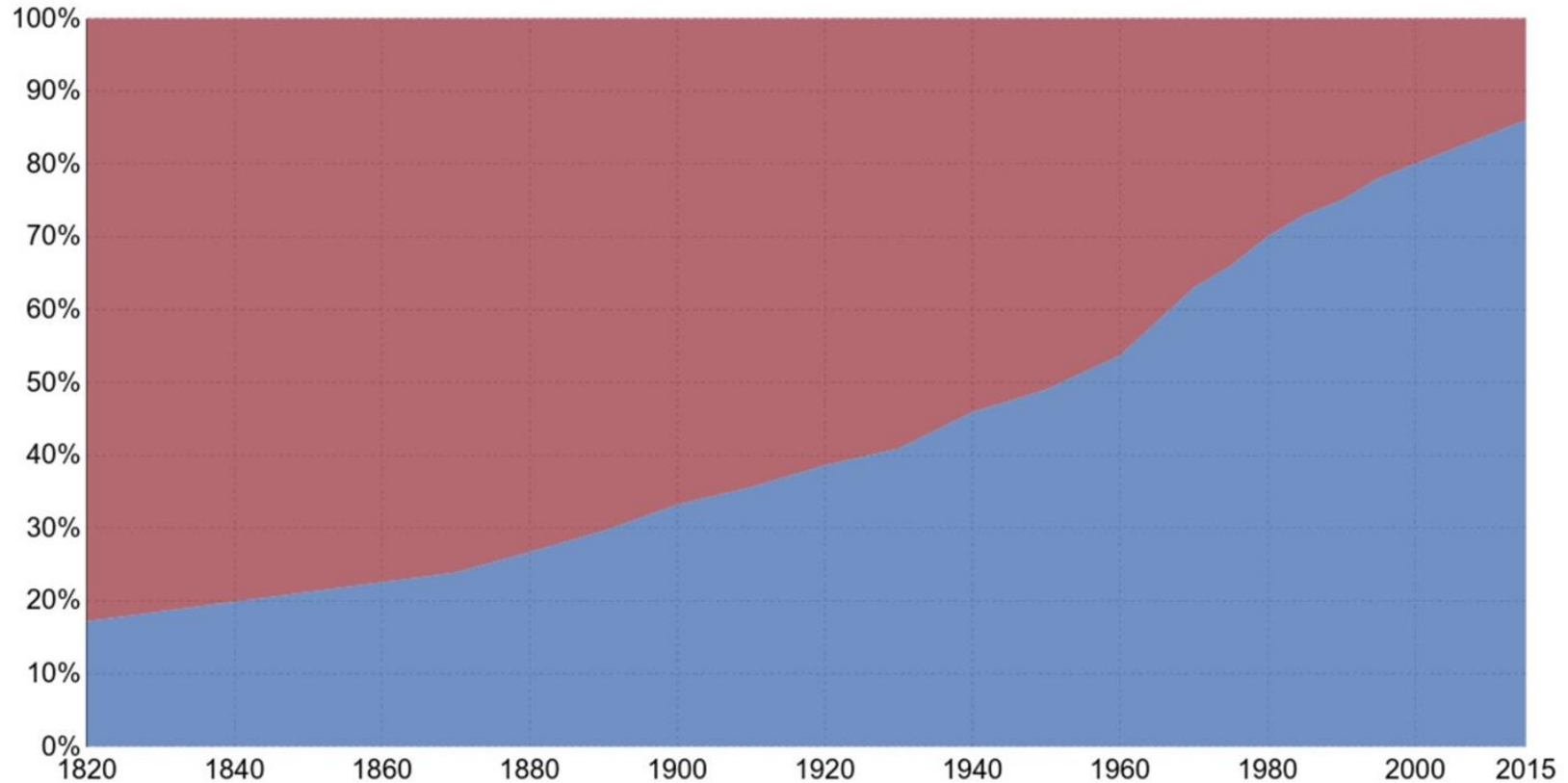
Again:
Is it worth...

...all these investments, trouble,
integration and increasing complexity?

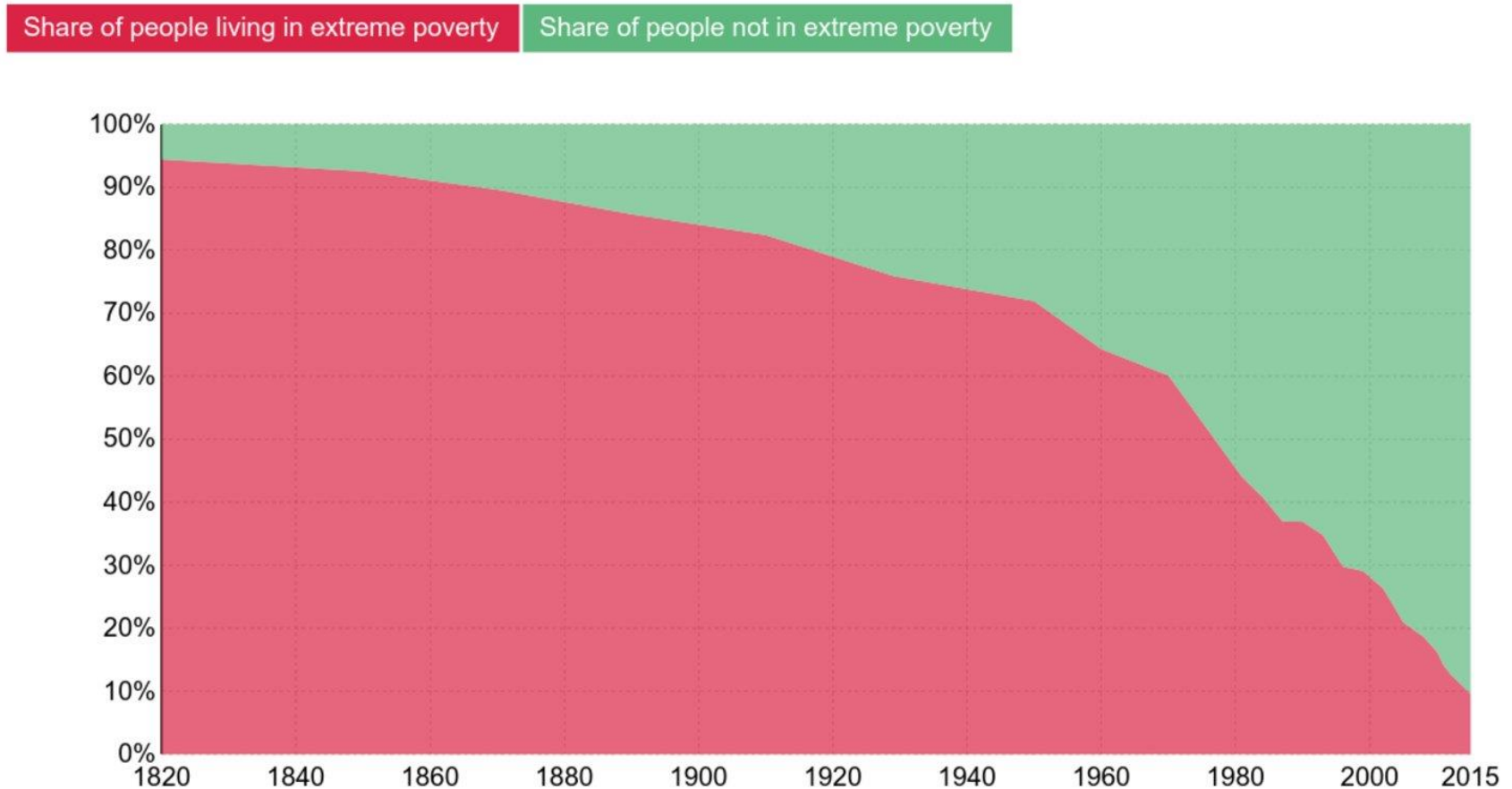
World – Share with some formal basic education

World - Share that has at least some formal basic education

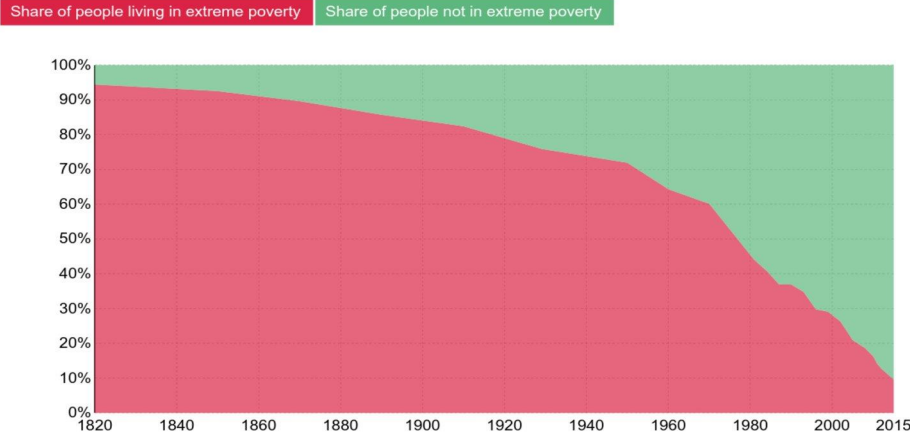
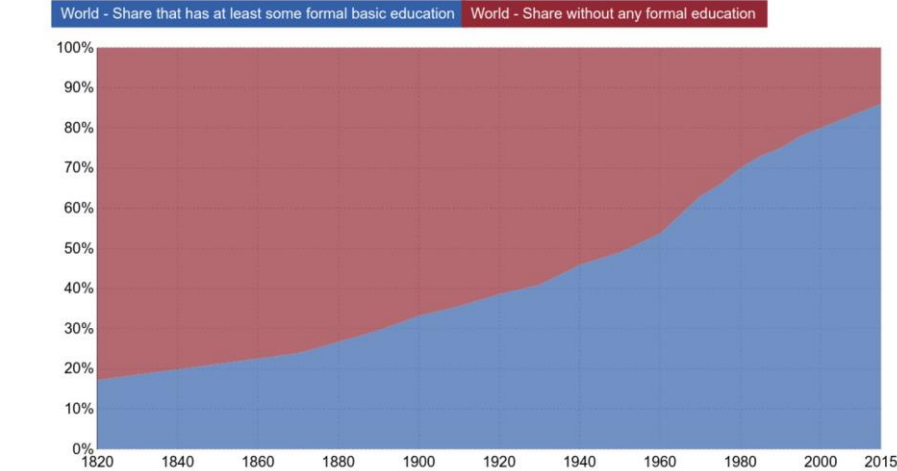
World - Share without any formal education



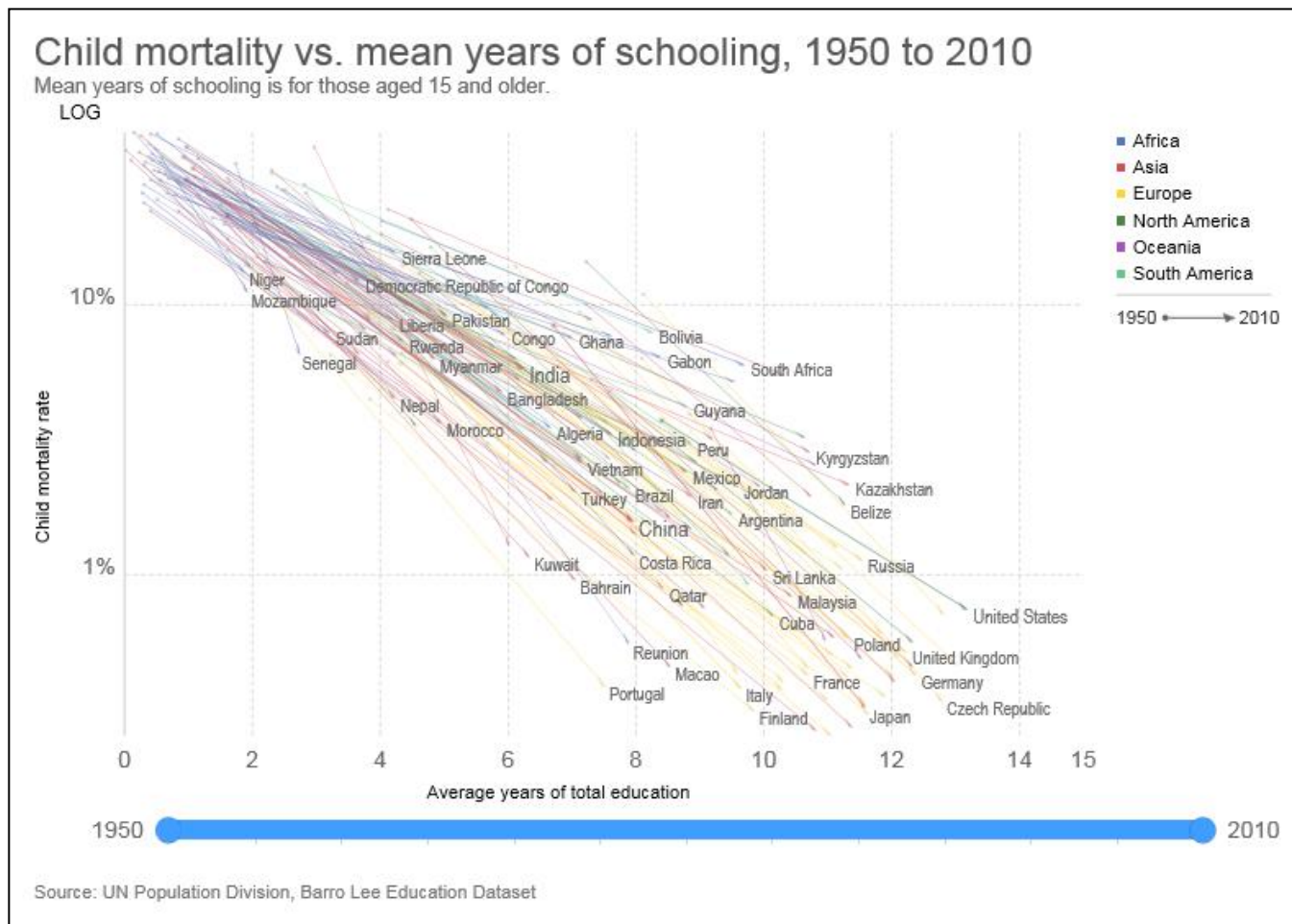
World – Share not living in extreme poverty



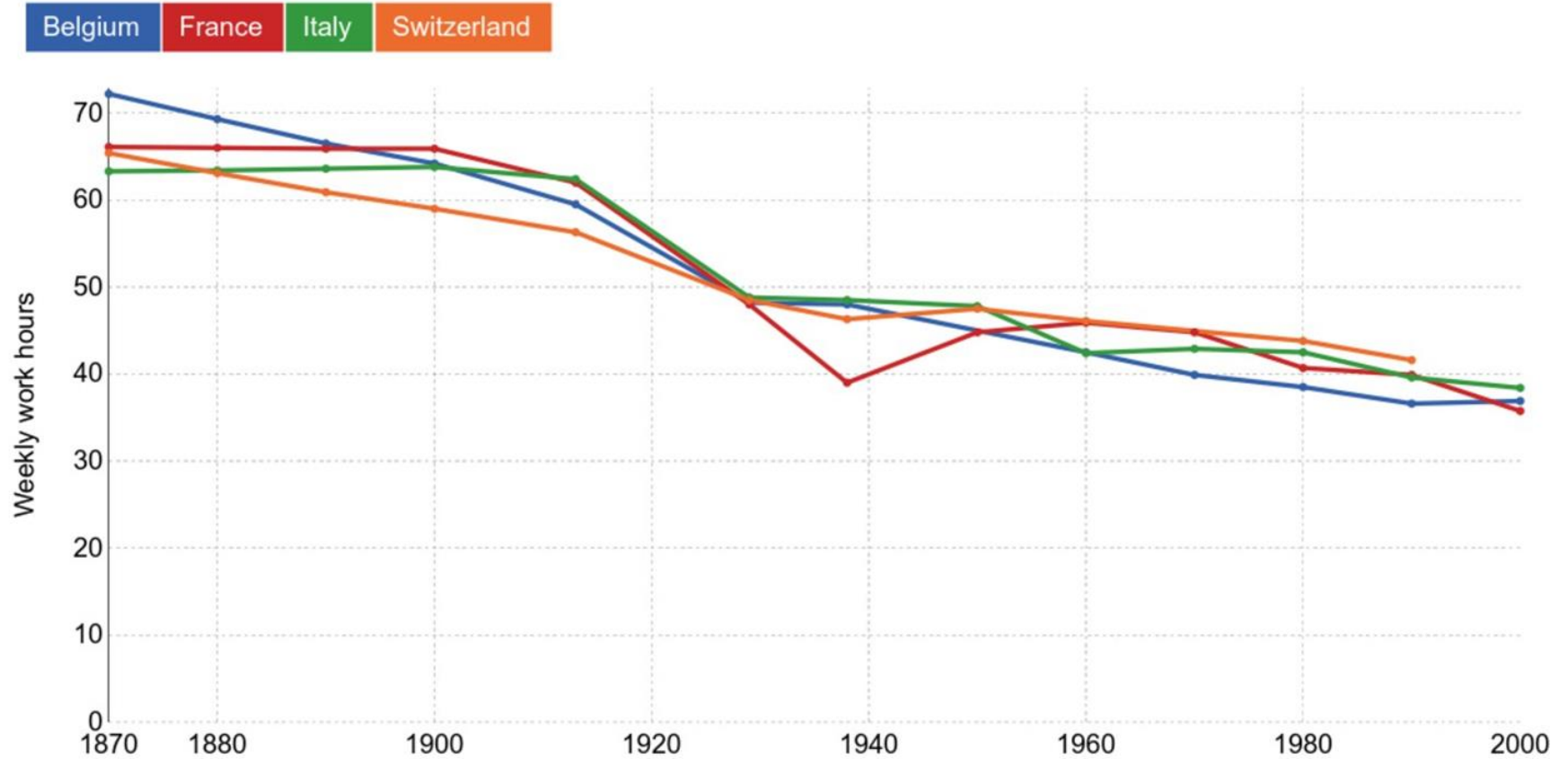
World – Education vs. share not living in extreme poverty



Child mortality vs. mean years of schooling: strong correlation



Weekly work hours





University of
Zurich^{UZH}

Zentrale Informatik

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