

# Technopreneurship: budi and hisStory

Budi Rahardjo

{instagram, twitter, gmail, youtube} @rahard

<https://www.youtube.com/@rahard>

kesamaan dengan dunia IT. Keduanya sama-sama membutuhkan kreativitas, tandasnya.

Saya biasa mengisi blog dimana dan kapan saja. Saat sedang di rumah, mobil atau kereta. Biasanya, kalau tidak

bagi banyak orang untuk melakukan kreativitas lewat sarana website. Dan kita tak perlu membayar saat memakainya. Alias gratisan.

belum kesampaian. Saya akan berusaha terus untuk mewujudkannya.

# Business, IT & Rock'n Roll







BNI



solidarity forever

12-14 OCTOBER 2018

ENERGY OF ITB 2018



MANDIRI OIL

PERTAMINA

PERTAMINA

Inalum

abjar

dimension data

PARAGON

170K BNI ITB ULTRA MARATHON

INSAN MUSIC PROJECT

Marshall

13

GREAT

GREAT

04

GREAT

**what is technopreneur?**

- (1) technology**
- (2) entrepreneur**

an entrepreneur involved with high technology



# The 4 Industrial Revolutions



1st

Industrial revolution

Mechanisation through  
waterpower, steam power



2nd

Industrial revolution

Mass production through  
electric assemble line



3rd

Industrial revolution

Computer led robotics  
and automation



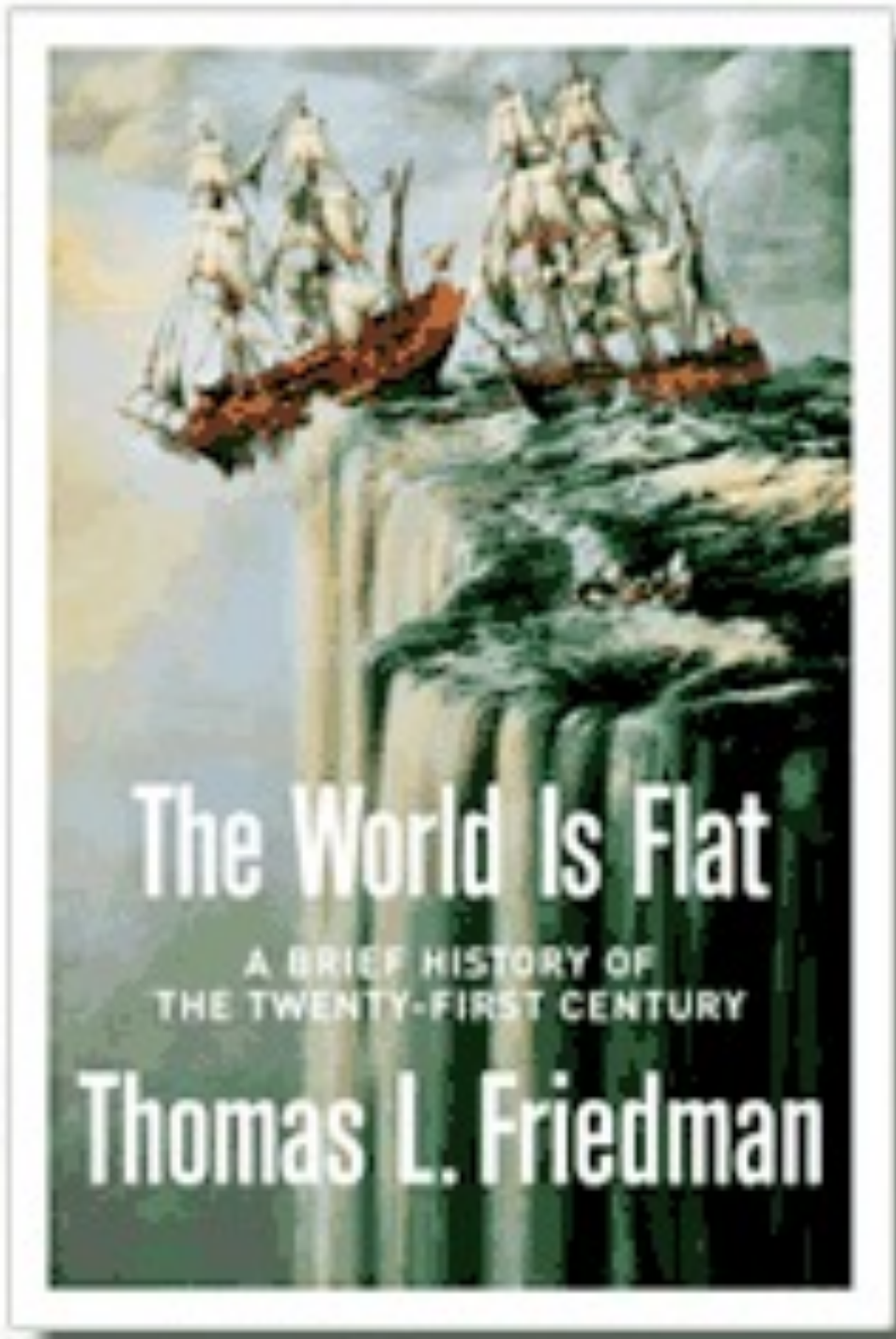
4th

Industrial revolution

Cyber physical  
systems

**budi rahardjo**

version 3.5

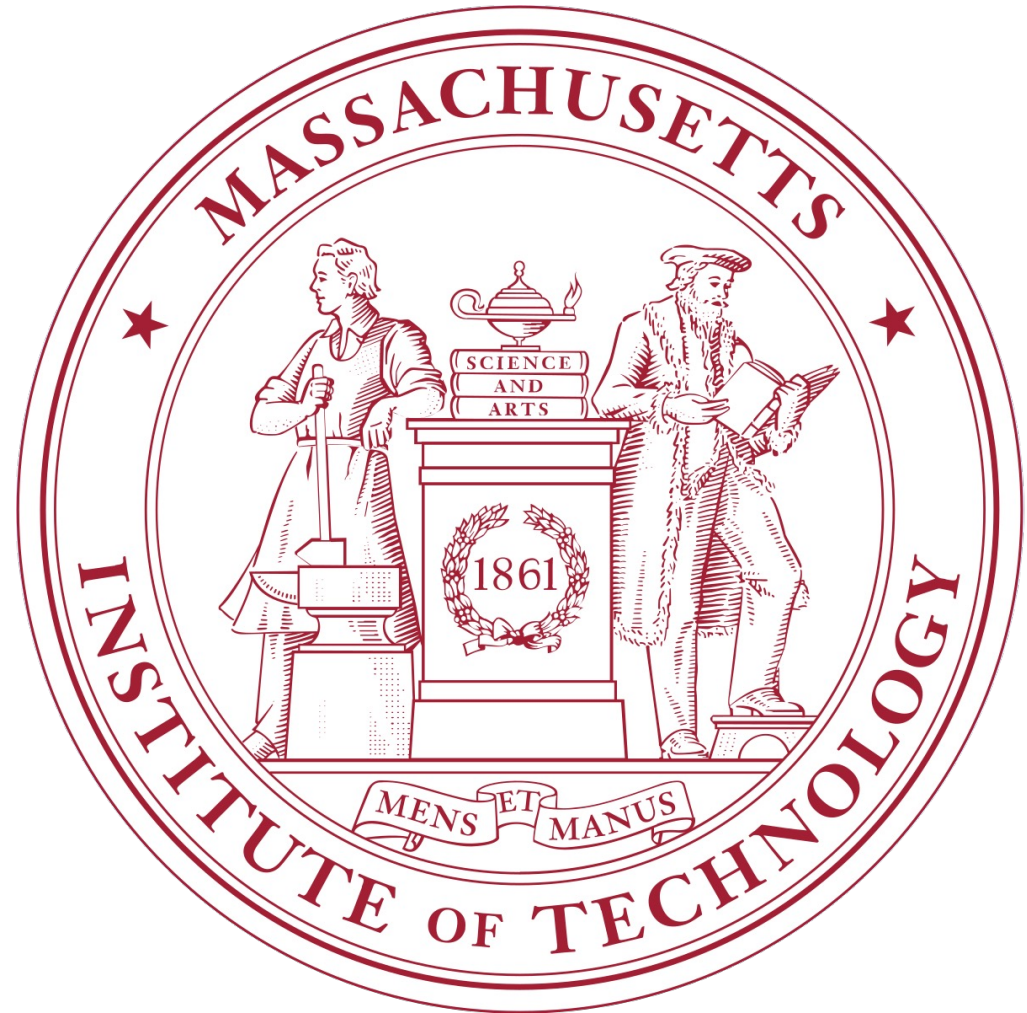


- Globalization 1.0
- Globalization 2.0
- Globalization 3.0



# Budi Rahardjo 1.0

- Go abroad ...





Canada 





# Winnipeg

*Tim Hortons*





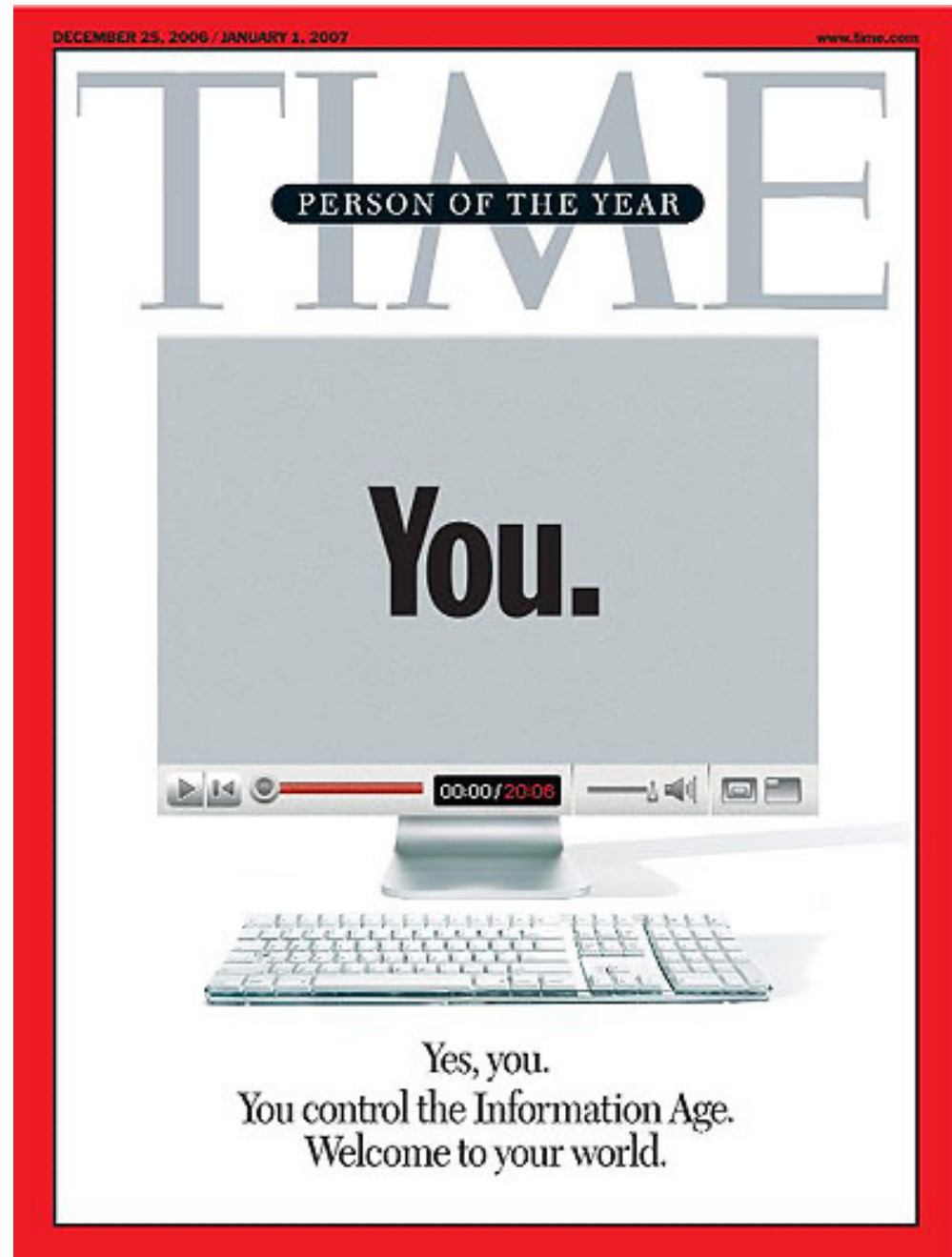
# Budi Rahardjo 2.0



Budi  
Rahardjo  
3.0

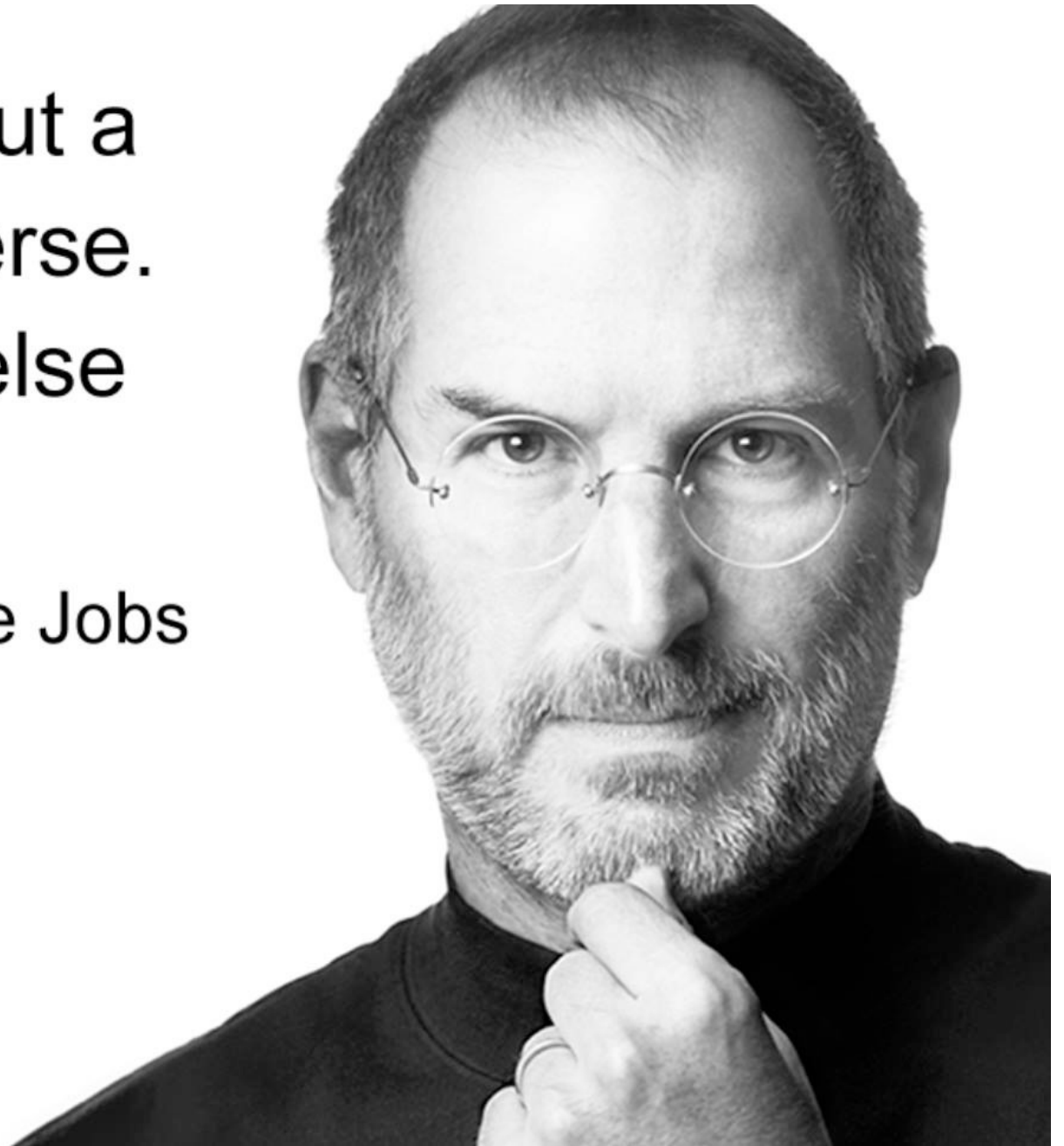
---

2006



“We're here to put a dent in the universe. Otherwise why else even be here?”

~ Steve Jobs



**what's your dent?**



**I was lucky,  
I was in the right place,  
in the right time ...**



budi.rahardjo.id

the history of world wide web

# **BLOG**

[gbt.blogspot.com](http://gbt.blogspot.com)

[rahard.wordpress.com](http://rahard.wordpress.com)

[medium.com/@rahard](https://medium.com/@rahard)



@rahard  
@buditweet



@rahard

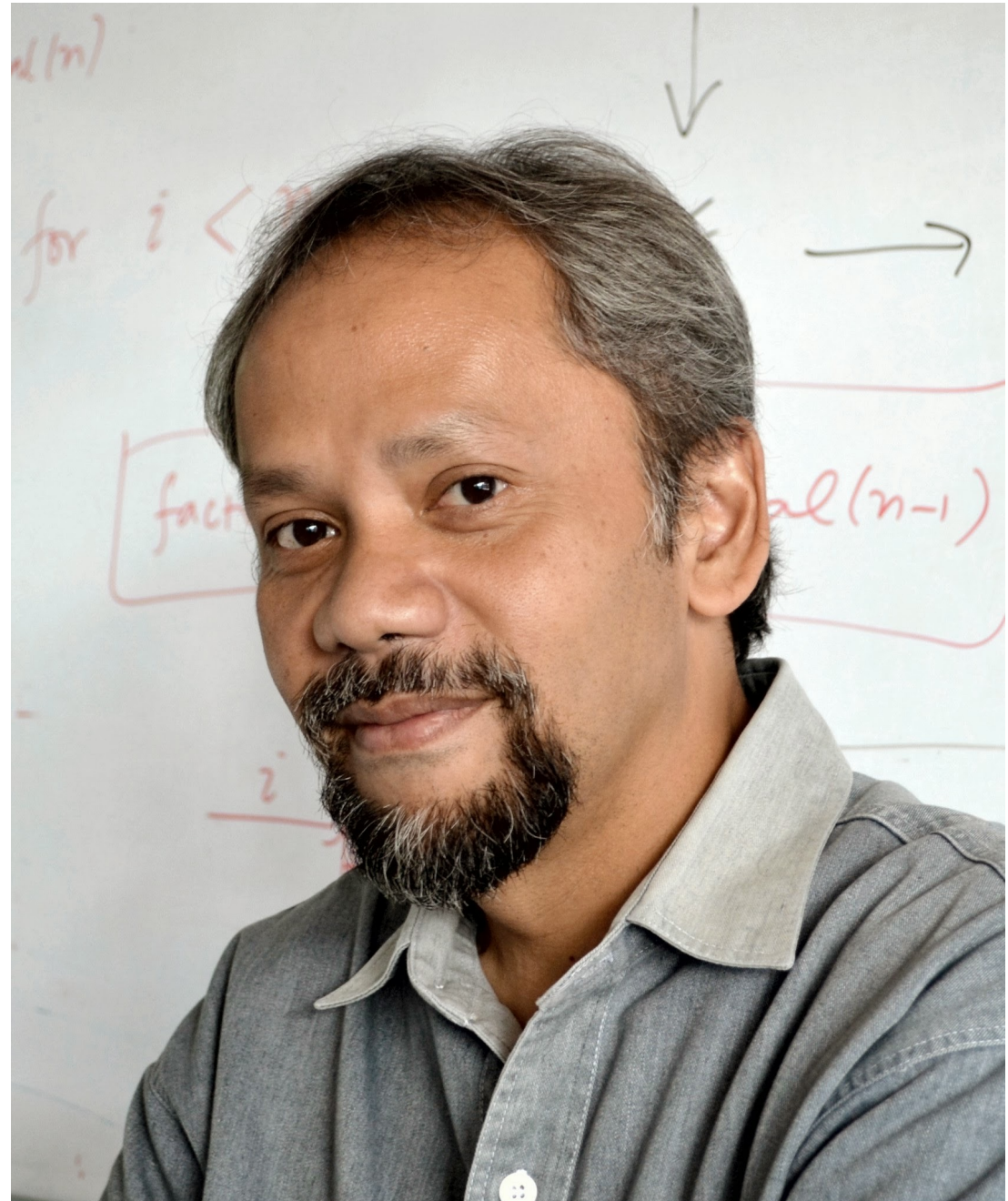


budi.rahardjo  
[www.facebook.com/pages/Budi-Rahardjo/105078089534462](http://www.facebook.com/pages/Budi-Rahardjo/105078089534462)



Sekolah Teknik  
Elektro dan  
Informatika  
(STEI)  
&  
Sekolah Bisnis  
dan  
Management  
(SBM)

---



# Google Scholar



**Budi Rahardjo** ✎

School of Electrical Engineering and Informatics, [Institut Teknologi Bandung](#)

Verified email at paume.itb.ac.id - [Homepage](#)

[Security](#) [VLSI](#) [Information Technology](#) [Cryptography](#)

 FOLLOW

Cited by

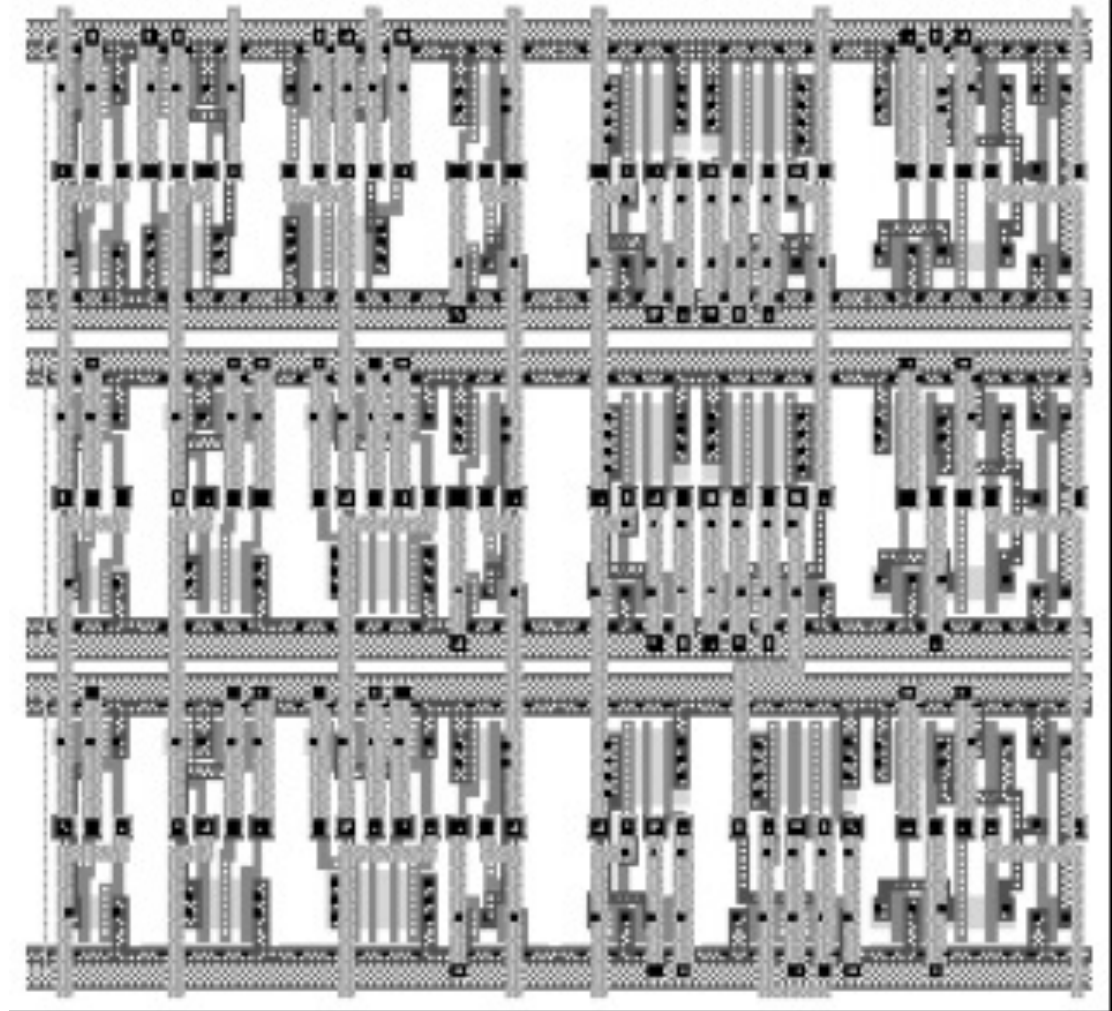
[VIEW ALL](#)

	All	Since 2014
Citations	538	275
h-index	10	6
i10-index	10	6

Microelectronic  
s

Integrated  
Circuit (IC)  
Design

---





**Network & Application Security  
Insan Infonesia**

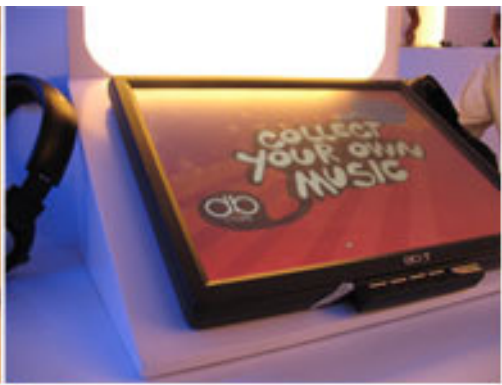
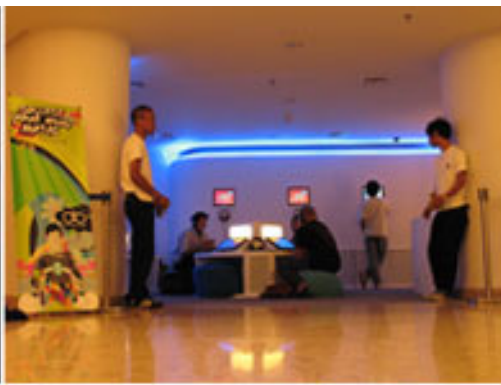




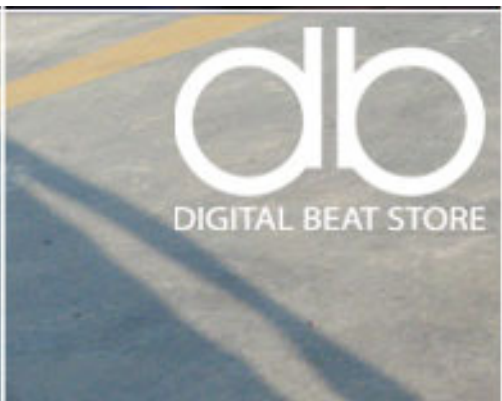


**Indonesia Computer Emergency  
Response Team**

**digital music**



# Digital Beat Store @ blitzmegaplex



NOW OPEN  
AT  
**blitzmegaplex**  
PARIS VAN JAVA MALL SUKAJADI,  
BANDUNG



Insan Music  
Store  
[insanmusic.id](http://insanmusic.id)

---





**MP3 LEGAL**



**INSAN  
MUSIC STORE**



**REGISTRASI**





BNI

solidarity forever

12-14 OCTOBER 2018

ENERGY UP ITB 2018

INSAN MUSIC PROJECT

MANDIRI OIL

PERTAMINA

PERTAMINA

inalum

abgor

dimension data

PARAGON

170K BNI ITB ULTRA MASTRION

100

WALAN ALUMNI ITB

PLN

AQUA

m2 and

ASTRA Chopart

Celnusa

HONDA

SASMITA

Salon JET SPRAY

RD-7000X Roland

Marshall

GREAT

GREAT

14

13





Demo Toll Gate License Plate Recognition

# Artificial Intelligence (AI) – Machine Learning

## RISET.AI – PT Riset Kecerdasan Buatan (RKB)

# Coding Kids





# Coding Mum



# Coding for Disabilities





# mentoring



FOUNDER  
INSTITUTE





# Why Starting Tech-based Companies

- This time. This era.
- We live in a tech-ready environment
- Technology has the highest value



## Largest US companies in 2018 vs 2008

2018				2008			
Rank	Company	Founded	USbn	Rank	Company	Founded	USbn
1.	Apple	1976	890	1.	Exxon	1870	492
2.	Google	1998	768	2.	General Electric	1892	358
3.	Microsoft	1975	680	3.	Microsoft	1975	313
4.	Amazon	1994	592	4.	AT&T	1885	238
5.	Facebook	2004	545	5.	Proctor & Gamble	1837	226
6.	Berkshire	1955	496	6.	Berkshire	1955	206
7.	J&J	1886	380	7.	Google	1998	198
8.	JP Morgan	1871	375	8.	Chevron	1879	192
9.	Exxon	1870	367	9.	J&J	1886	192
10.	Bank of America	1909	316	10.	Walmart	1962	184

Source: Bloomberg, Google

## Penetrasi Pengguna Internet

35,2%



**64,8%**



**171,17 JT**  
**JUTA JIWA**



DARI TOTAL POPULASI  
PENDUDUK INDONESIA

**264,16 JT ORANG**

### Survei APJII 2017



**54,68%**



**143,26**  
**JUTA JIWA**



DARI TOTAL POPULASI  
PENDUDUK INDONESIA

**262 JUTA ORANG**



### #1 Artificial Intelligence

AI /Machine Learning / Deep Learning



### #2 Internet of Things

IOT , IIOT, Sensors & Wearables



### #3 Mobile/Social Internet

Advancements - Search/Social/ Messaging/Livestreams



### #4 Blockchain

Distributed Ledger Systems, Apps, Infrastructure, Technologies + Cryptocurrencies & DApps

0 1 0 1  
1 0 1 1  
0 1 1 0

### #5 Big Data



### #6 Automation

Information, Task, Process, Machine, Decision & Action



### #7 Robots

Cons./Comm./Indus., Robots, Drones & Autonomous Vehicles



### #8 Immersive Media

- #VR/ #AR/ #MR/ 360°/ Video?Gaming



### #9 Mobile Technologies

Infrastructure, networks, standards, services & devices



### #10 Cloud Computing

SaaS, IaaS, PaaS & MESH Apps



### #11 3D Printing

Additive Manufacturing & Rapid Prototyping



### #12 CX

Customer Journey, Experience Commerce & Personalization



### #13 EnergyTech

Efficiency, Energy Storage & Decentralized Grid



### #14 Cybersecurity

Security, Intelligence Detection, Remediation & Adaptation



### #15 Voice Assistants

Interfaces, Chatbots & Natural Language Processing



### #16 Nanotechnology

Computing, Medicine, Machines + Smart Dust



### #17 Collaborative Tech.

Crowd, Sharing, Workplace & Open Source Platforms & Tools



### #18 Health Tech.

Advanced Genomics, Bionics & Health Care Tech.



### #19 Human-Computer Interaction

Facial/Gesture Recognition, Biometrics, Gaze Tracking



### #20 Geo-spatial Tech.

GIS, GPS, Mapping & Remote Sensing, Scanning, Navigation



### #21 Advanced Materials

Composites, Alloys, Polymers, Biomimicry, Nanomanufacturing



### #22 New Touch Interfaces

Touch Screens, Haptics, 3D Touch, Paper, Feedback & Exoskeletons



### #23 Wireless Power

Bio-/Enviro-Materials + Solutions, Sustainability, Treatment & Efficiency



### #24 Clean Tech.



### #25 Quantum Computing

+ Exascale Computing



### #26 Smart Cities

+ Infrastructure & Transport



### #27 Edge/Computing

+ Fog Computing



### #28 Faster, Better Internet

Broadband incl. Fiber, 5G, Li-Fi , LPN and LoRa



### #29 Proximity Tech

Beacons, .RFID, Wi-Fi, Near-Field Communications & Geofencing



### #30 New Screens

TVs, Digital Signage, OOH, MicroLEDs & Projections

# THE 30 TECHNOLOGIES OF THE NEXT DECADE



Created by: Sean Moffitt @seanmoffitt , Managing Director, @Wikibrands




# How Do I Start? Ideation

- Start with a **problem(s)**
- What problems are you trying to solve?

... follow Startup lifecycle ...





**Elon Musk** 

@elonmusk

Replying to [@NASASpaceflight](#)

**In a month or so**

6:51 PM - 13 Jul 2018

98 Retweets 1,991 Likes







**so, what's your dent?**

**are you  
up for the challenge?**