Digital Transformation in Investing: Building a Portfolio for Generation Z

Doddy Prayogo
(Doddy Bicara Investasi)

GALERI INVESTASI ANNIVERSARY 20
Laboratorium Galeri Investasi FISIP UPN "Veteran" Jawa Timur
Surabaya, 21 September 2024

Doddy Prayogo, S.T., M.T., M. Sc., Ph. D

- Dosen Teknik Sipil di Universitas Kristen Petra, Surabaya
- Investor sejak 2013
- Content Creator sejak 2019 (Doddy Bicara Investasi)

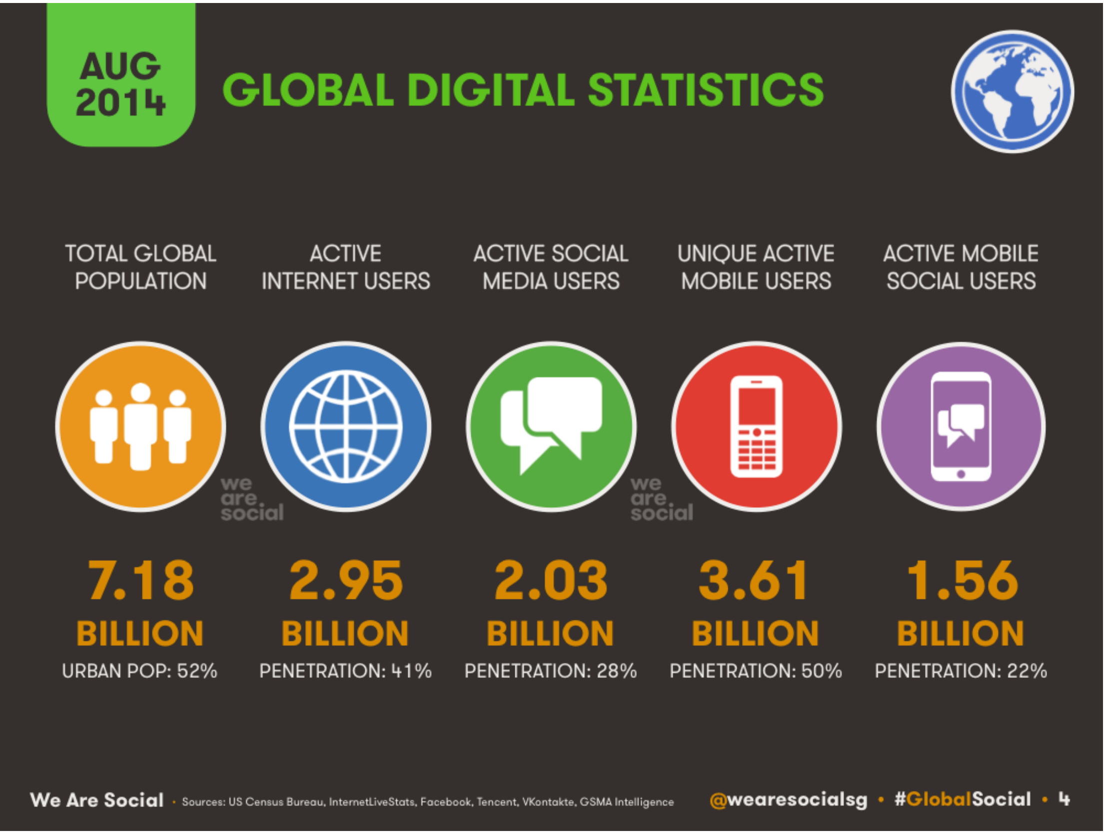
Table of Contents.

Why now?

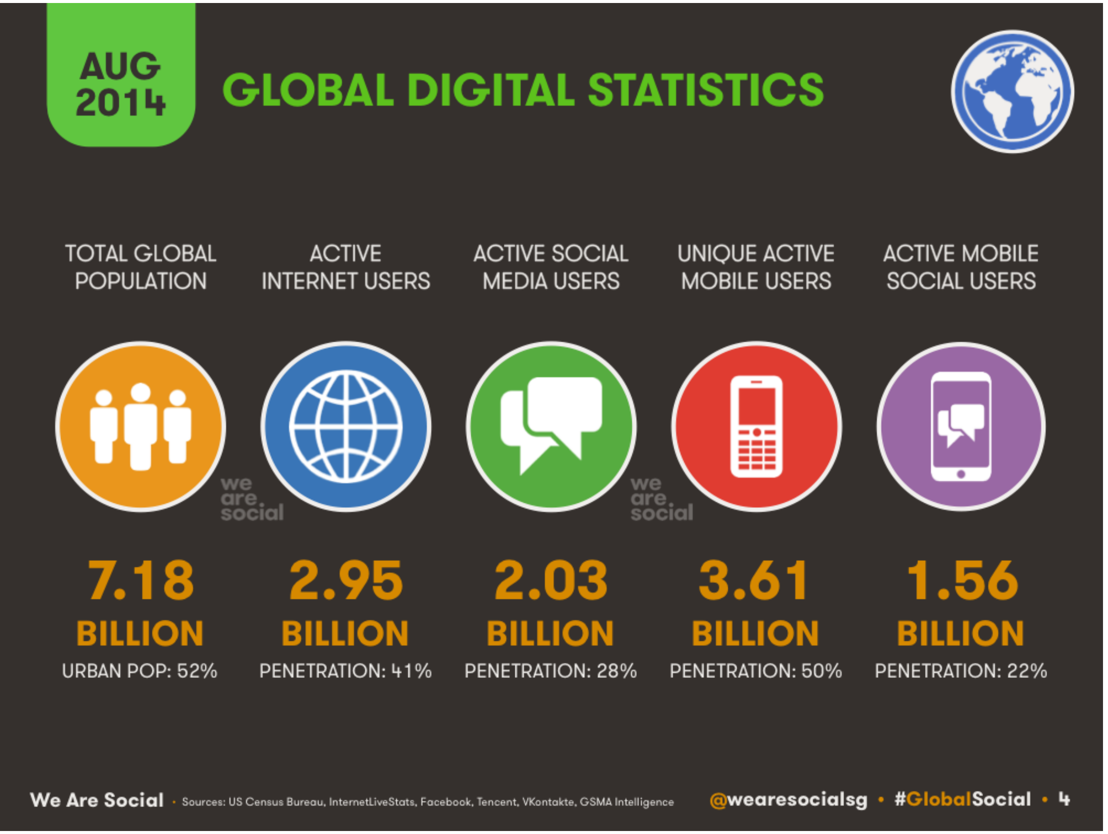
- Faster computing
- Ubiquitous devices (mobile phones, pads, Apple Watch, vehicles, etc.)
- Larger and smaller memory
- Faster and more reliable internet
- More efficient and more intelligent algorithms

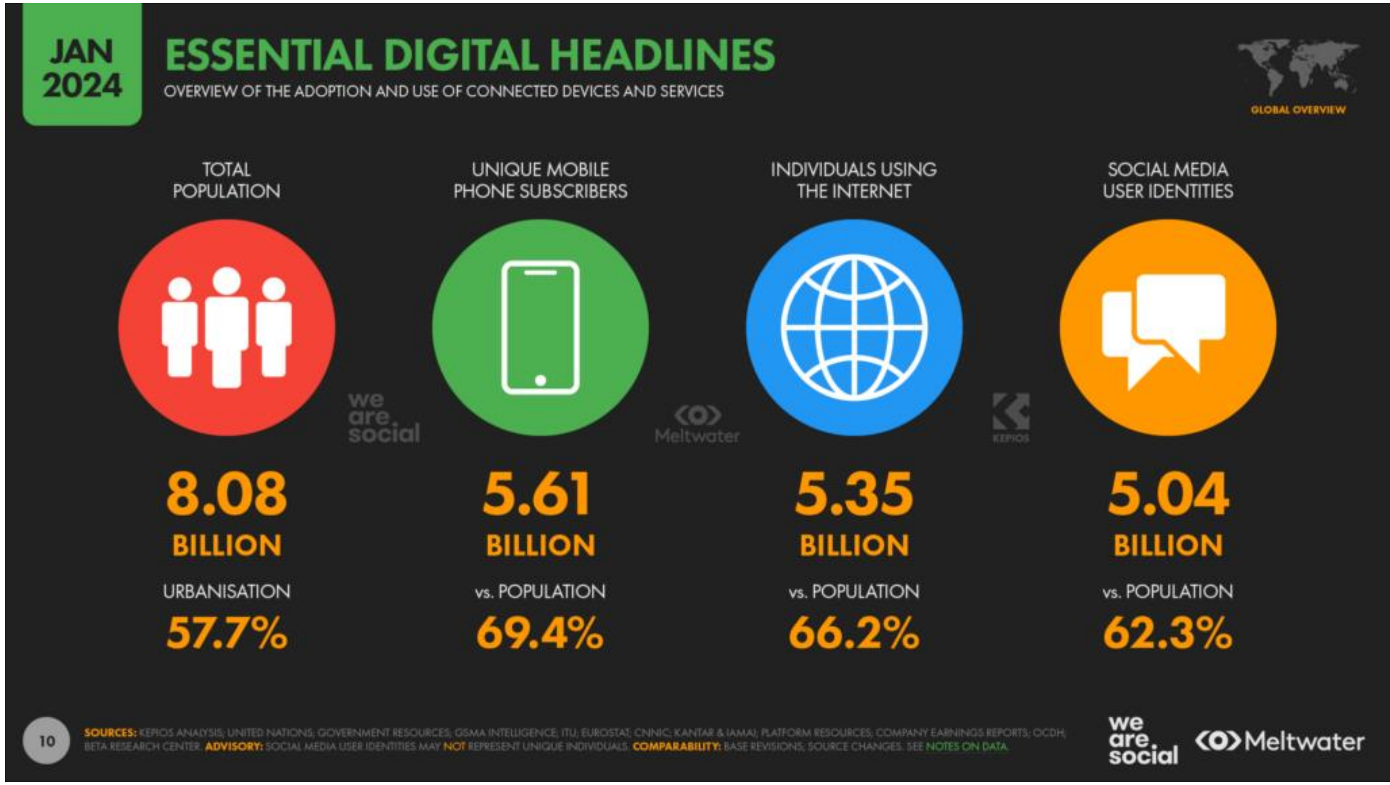
In 1956, a forklift is needed to put a 5-megabyte hard drive, then the size of two refrigerators. Today, you can buy a 16-gigabyte flash drive for $60 that fits on a keychain.

Ubiquitous devices

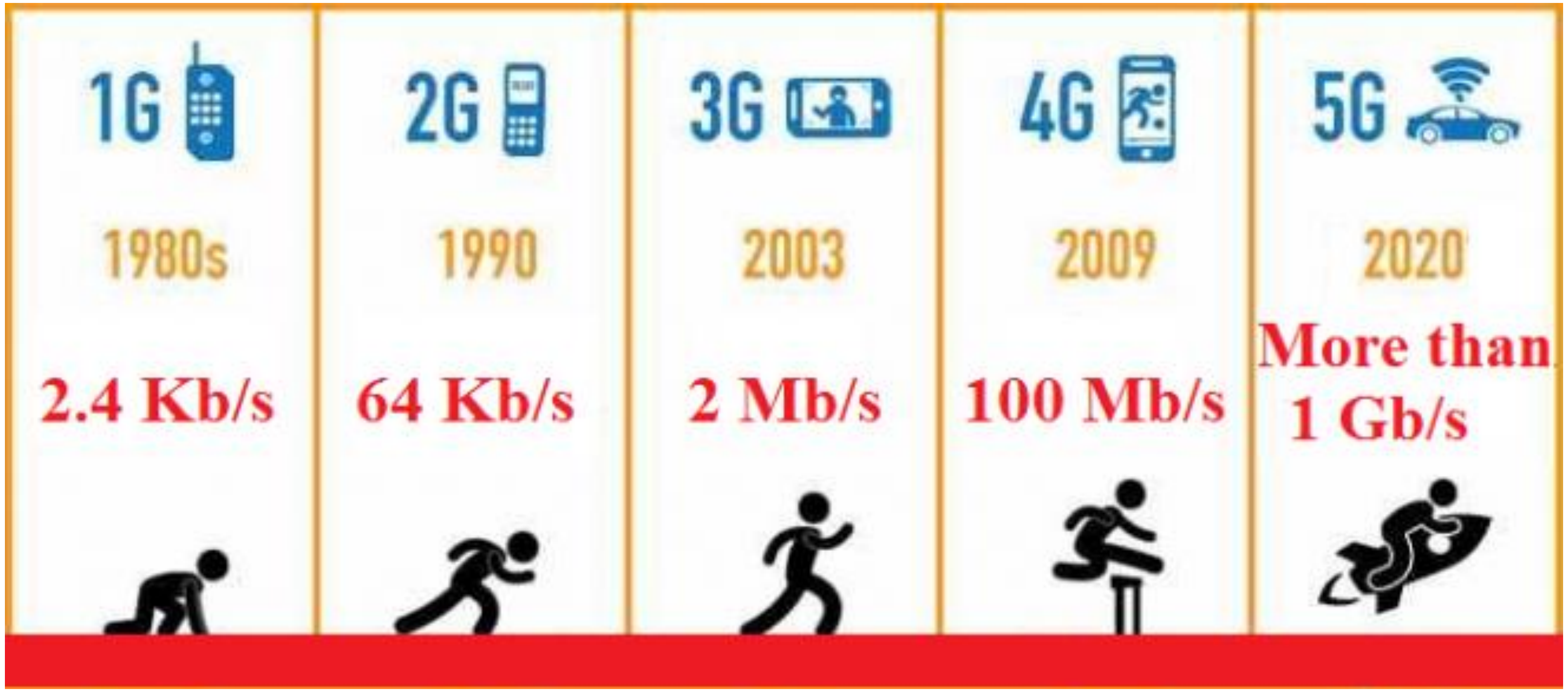


Ubiquitous devices

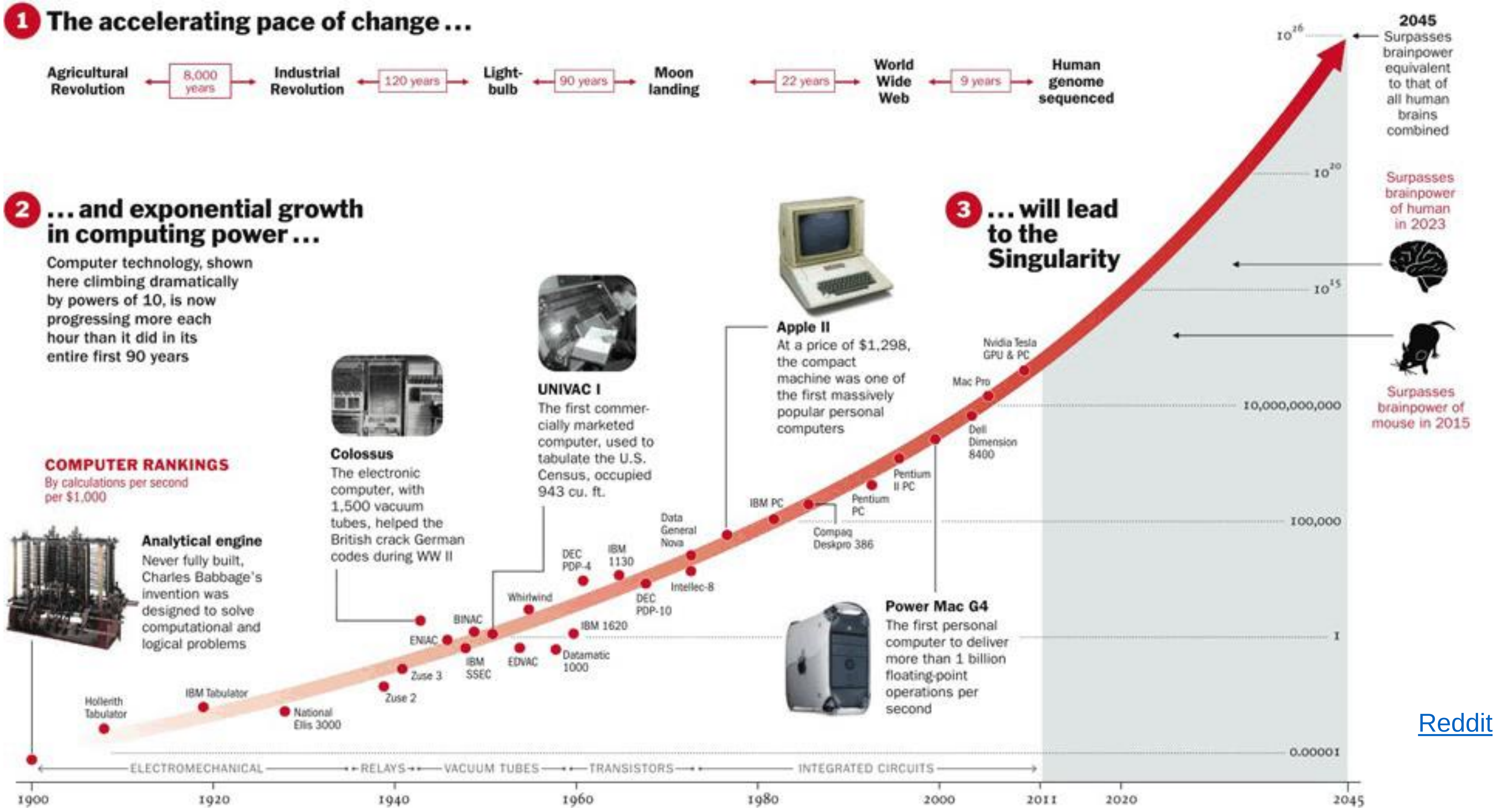




How fast is enough?

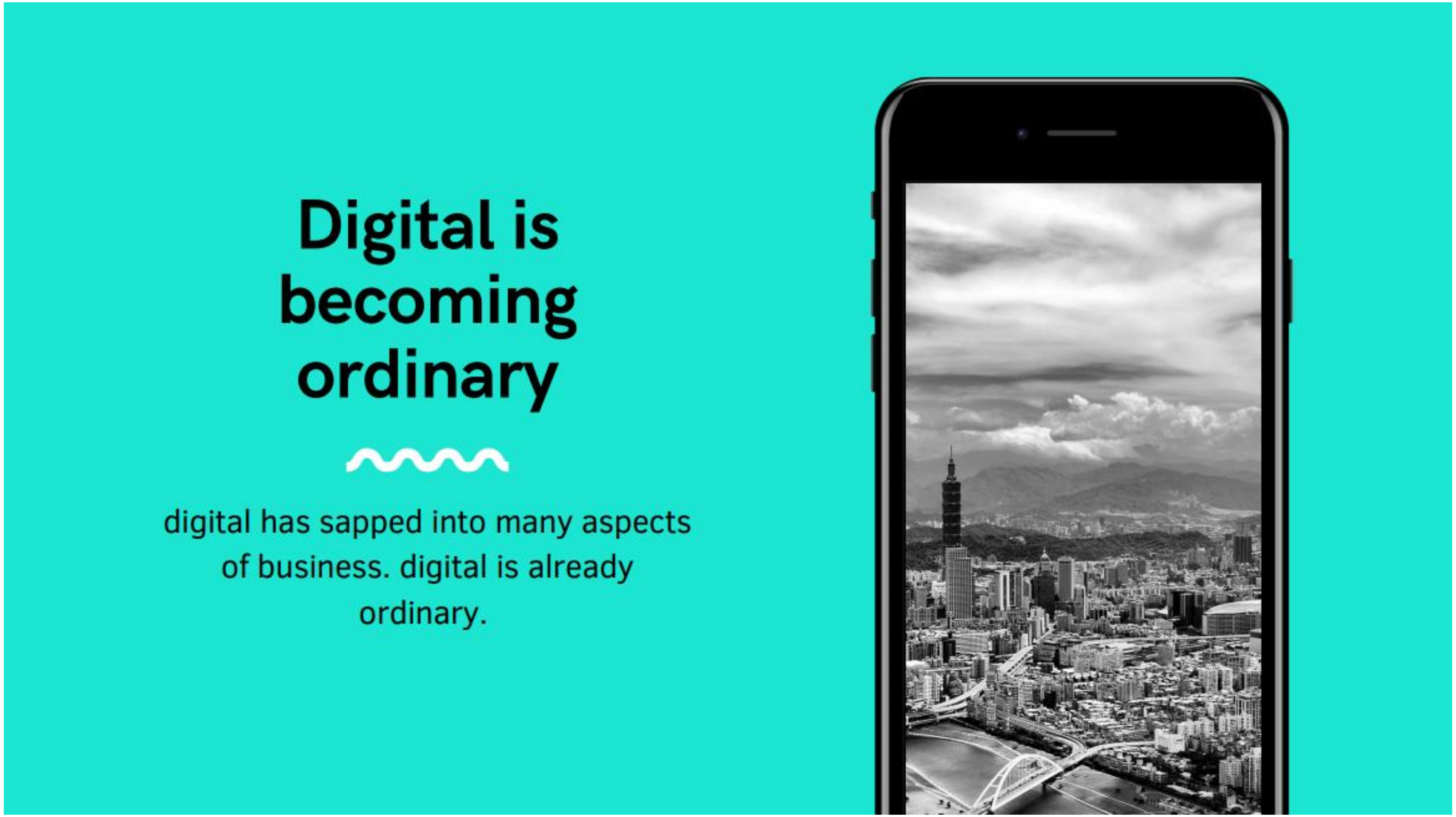


ItInfoZone


1 The accelerating pace of change . . .
Agricultural Revolution
8,000 years
Industrial Revolution
120 years
Light-bulb
90 years
Moon landing
22 years
World Wide Web
9 years
Human genome sequenced
2045
Surpasses brainpower equivalent to that of all human brains combined
Surpasses brainpower of human in 2023
Surpasses brainpower of mouse in 2015
2 . . . and exponential growth in computing power . . .
Computer technology, shown here climbing dramatically by powers of 10, is now progressing more each hour than it did in its entire first 90 years
3 . . . will lead to the Singularity
COMPUTER RANKINGS
By calculations per second per $1,000
Analytical engine
Never fully built, Charles Babbage's invention was designed to solve computational and logical problems
Colossus
The electronic computer, with 1,500 vacuum tubes, helped the British crack German codes during WW II
UNIVAC I
The first commercially marketed computer, used to tabulate the U.S. Census, occupied 943 cu. ft.
Apple II
At a price of $1,298, the compact machine was one of the first massively popular personal computers
Power Mac G4
The first personal computer to deliver more than 1 billion floating-point operations per second
Hollerith Tabulator
IBM Tabulator
National Ellis 3000
Zuse 2
Zuse 3
ENIAC
BINAC
IBM SSEC
EDVAC
Whirlwind
IBM 1620
Datamatic 1000
DEC PDP-4
IBM 1130
DEC PDP-10
Data General Nova
Intellec-8
IBM PC
Compaq Deskpro 386
Pentium PC
Pentium II PC
Dell Dimension 8400
Mac Pro
Nvidia Tesla GPU & PC
10^{26}
10^{20}
10^{15}
10,000,000,000
100,000
1
0.00001
ELECTROMECHANICAL
RELAYS
VACUUM TUBES
TRANSISTORS
INTEGRATED CIRCUITS
1900
1920
1940
1960
1980
2000
2011
2020
2045

[Reddit]

New Economy


Digital is becoming ordinary
digital has sapped into many aspects of business. digital is already ordinary.

Old Business vs New Business

- Lock on supply
- Low cost win
- Business wins
- Win by gaining pricing power

- Lock on customer
- Best user experience wins
- Customer wins
- Win by building better products (solve user needs, acquired users)


UBER


Jago
Search
Plan Ahead
Hide
Don't forget to pay your bills.
Create Payment Plan
Shortcuts
Edit
Pay & Send
My Balance
Home
Pockets
Contact
Cards
More
Jago

Indonesia Fintech Map

Powered by: FINTECH SINGAPORE fintechnews.sg

Terjebak Investasi Digital Bodong / Ilegal

Robo Trading

Binary Options

Crypto Fraud

Bagaimana Robot Trading Fahrenheit Mengambil Uang dari Korbannya?

Kompas.com - 26/03/2022, 20:20 WIB

Ia juga bilang, ada anggota yang dijanjikan profit 30 persen sebulan dan profit sehari sebesar 1 persen. Namun, di awal investasi para anggota diharuskan membeli robot trading sebesar 10 persen dari nominal dana investasi yang disetor.

Money Kompas.com

Waspada Binary Option, "Judi Online" Berkedok Trading Online - Kompas.com

Berbagai jenis platform binary option sebenarnya telah berkali-kali diblokir oleh Bappebti, seperti yang paling dikenal masyarakat, Binomo.

Jan 31, 2022

NASIONAL /

Bareskrim: Total Kerugian dari 118 Korban Binomo Capai Rp 72 Miliar

Kamis, 21 April 2022 / 12:13 WIB

Komponen Investasi

MODAL

CASHFLOW

WAKTU

PASIF

Komponen Investasi

MODAL

CASHFLOW

WAKTU

PASIF

+

OTORITAS
JASA
KEUANGAN

BAPPEBTI
Badan Pengawas Perdagangan Berjangka Komoditi
Departemen Perdagangan Republik Indonesia

Tipe Instrumen Investasi

Physical Asset

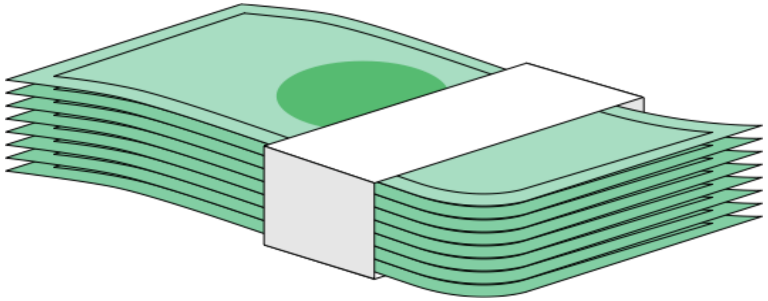
- Emas
- Properti

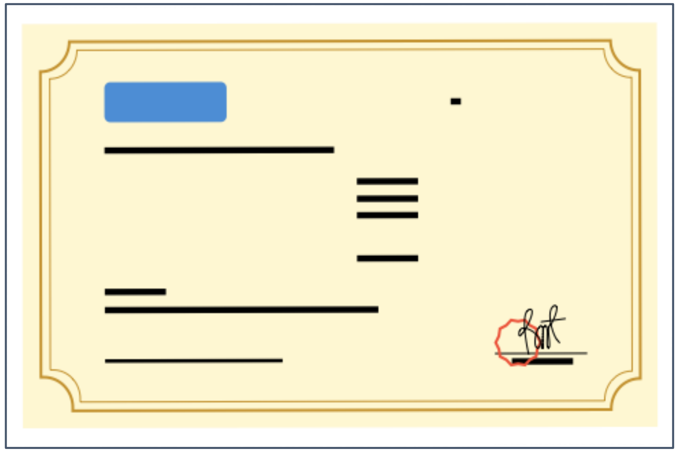
Financial Asset

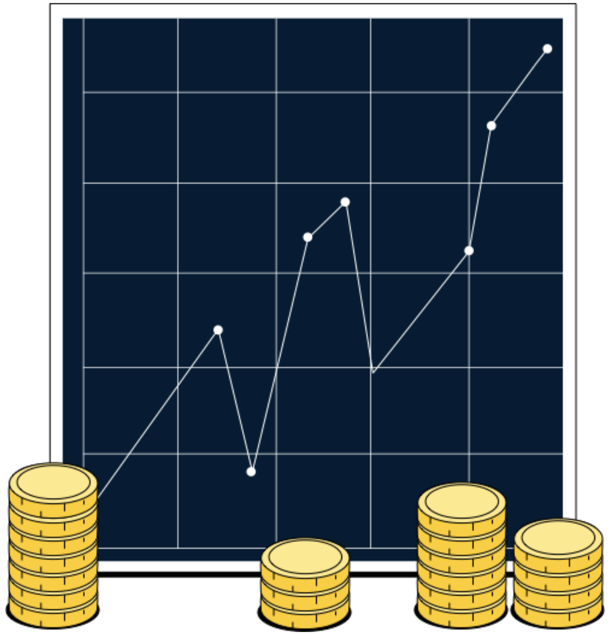
- Deposito
- Obligasi
- Reksadana
- Saham IDX
- Saham US

Digital Asset

- Bitcoin
- Altcoin







1. Deposito

- Bank Umum (max 4.25% p.a.)
- BPR (max 6.75% p.a.)

2. Obligasi

- SBN Ritel (ORI, SR, SBR, ST) – 6.4% p.a.
- FR, SBSN, dkk (6 – 7% p.a.)
- Obligasi korporasi (7% p.a.)

3. Saham

- Bluechip
- Second/Third liner

1. Deposito

- blu
- neo
- DepositoBPR by Komunal

2. Obligasi

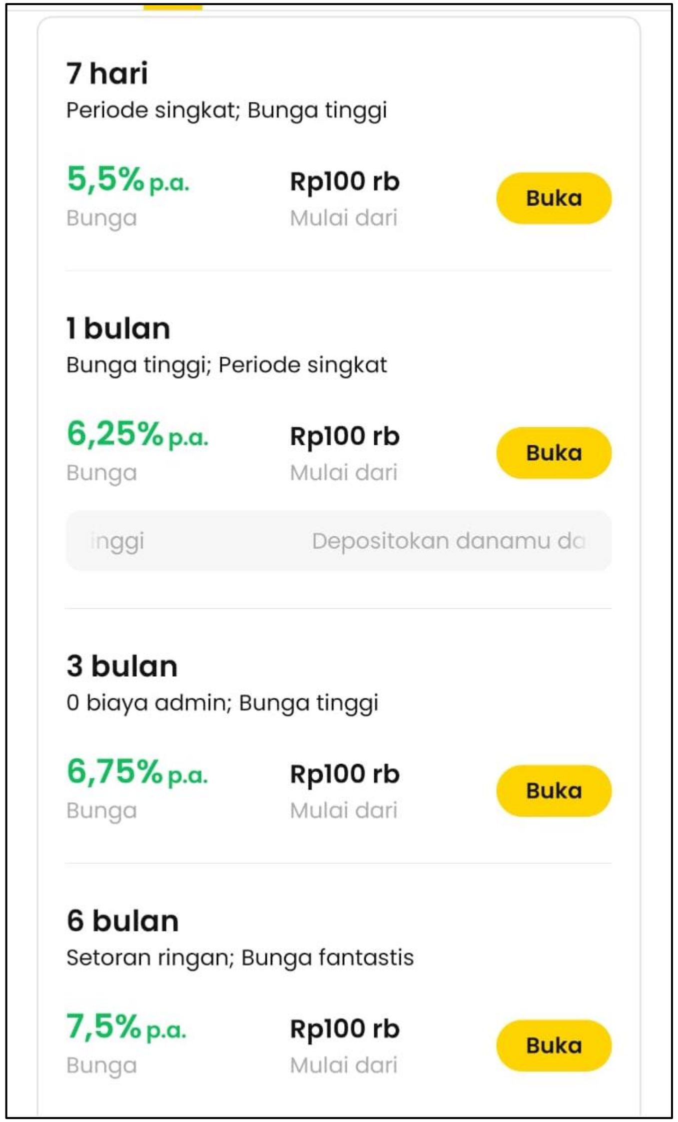
- bibit
- CIMB
- livin' by mandiri

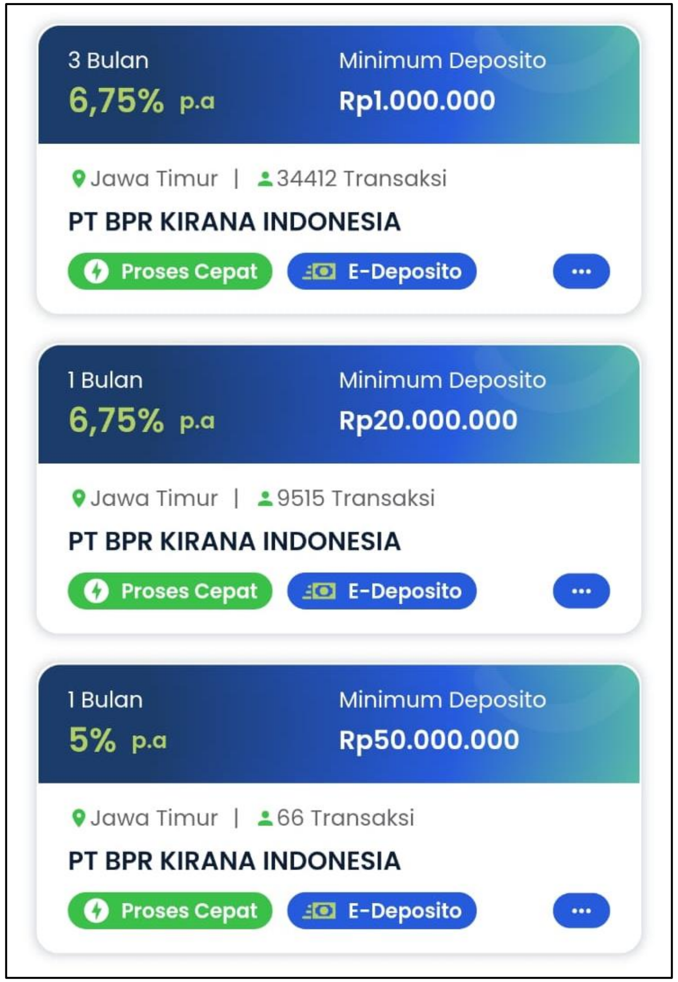
3. Saham

- Stockbit
- MIRAE ASSET
- ipot
- MOST by mandiri sekuritas

1. Deposito


Deposito Paling Diminati
6% p.a.
6 bulan
Mulai dari Rp 1.000.000
Buka Deposito
5% p.a.
1 bulan
Mulai dari Rp 1.000.000
Buka Deposito
5,5% p.a.
3 bulan
Mulai dari Rp 1.000.000
Buka Deposito


7 hari
Periode singkat; Bunga tinggi
5,5% p.a.
Bunga
Rp100 rb
Mulai dari
Buka
1 bulan
Bunga tinggi; Periode singkat
6,25% p.a.
Bunga
Rp100 rb
Mulai dari
Buka
3 bulan
0 biaya admin; Bunga tinggi
6,75% p.a.
Bunga
Rp100 rb
Mulai dari
Buka
6 bulan
Setoran ringan; Bunga fantastis
7,5% p.a.
Bunga
Rp100 rb
Mulai dari
Buka


3 Bulan
6,75% p.a
Minimum Deposito
Rp1.000.000
Jawa Timur | 34412 Transaksi
PT BPR KIRANA INDONESIA
Proses Cepat
E-Deposito
1 Bulan
6,75% p.a
Minimum Deposito
Rp20.000.000
Jawa Timur | 9515 Transaksi
PT BPR KIRANA INDONESIA
Proses Cepat
E-Deposito
1 Bulan
5% p.a
Minimum Deposito
Rp50.000.000
Jawa Timur | 66 Transaksi
PT BPR KIRANA INDONESIA
Proses Cepat
E-Deposito

2. Obligasi

SR021-T5
Sukuk Ritel

Imbal Hasil	Kuota Tersisa	Jatuh Tempo
6.45%	10.03%	10 Sep 2029

Periode Pembelian
23 Agt 2024 - 18 Sep 2024

SR021-T3
Sukuk Ritel

Imbal Hasil	Kuota Tersisa	Jatuh Tempo
6.35%	1.15%	10 Sep 2027

Periode Pembelian
23 Agt 2024 - 18 Sep 2024

ORI025-T6
Obligasi Negara Ritel

Imbal Hasil	Kuota Tersisa	Jatuh Tempo
6.4%	9.21%	15 Feb 2030

Periode Pembelian
29 Jan 2024 - 22 Feb 2024

ORI025-T3
Obligasi Negara Ritel

Imbal Hasil	Kuota Tersisa	Jatuh Tempo
6.25%	3.09%	15 Feb 2027

Periode Pembelian
29 Jan 2024 - 22 Feb 2024

FR0081
Obligasi FR

Yield	Harga Beli	Jatuh Tempo
5.91%	100.40%	15 Jun 2025

PBS036
FR Syariah

Yield	Harga Beli	Jatuh Tempo
5.72%	99.70%	15 Agt 2025

FR0086
Obligasi FR

Yield	Harga Beli	Jatuh Tempo
5.99%	99.28%	15 Apr 2026

PBS038
FR Syariah
Highest Yield

Yield	Harga Beli	Jatuh Tempo
6.80%	100.90%	15 Des 2049

FR0089
Obligasi FR

Yield	Harga Beli	Jatuh Tempo
6.77%	101.29%	15 Agt 2051

FR0102
Obligasi FR

Yield	Harga Beli	Jatuh Tempo
6.73%	101.85%	15 Jul 2054

3. Saham

IHSG

1982: 100

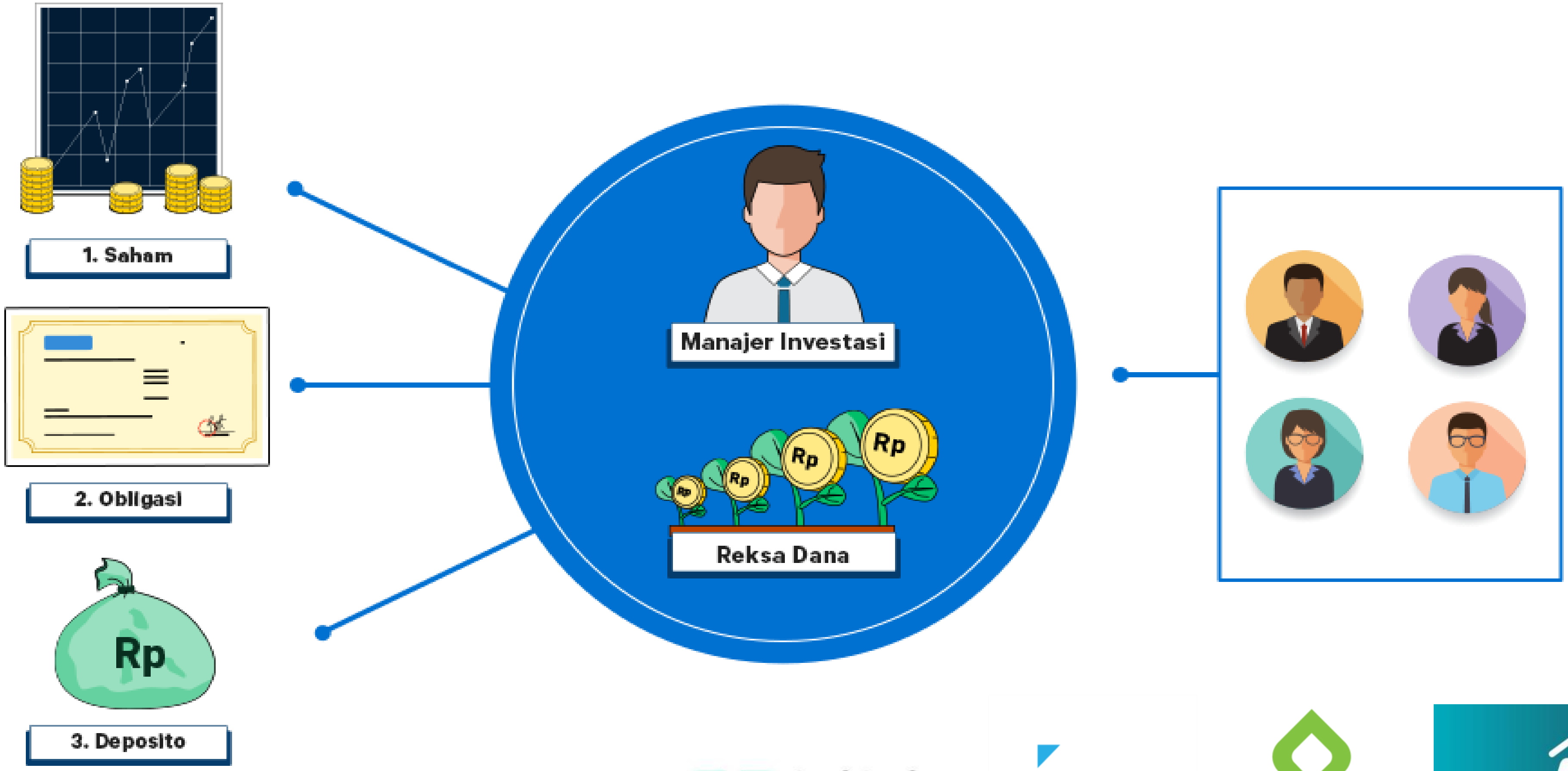
2024: 7616

CAGR: **10.9% p.a.**

SEKURITAS


Yuk
Nabung
Saham
Follow us
Mulai Investasi
Belajar Saham
Perusahaan Sekuritas
Inspirasi Investasi
What's on IDX
Tentang
Yuk Nabung Saham
KONTAK
F.A.Q
PERUSAHAAN SEKURITAS
Berikut list perusahaan sekuritas untuk Yuk Nabung Saham

REKSA DANA



bibit ipot

RDPU

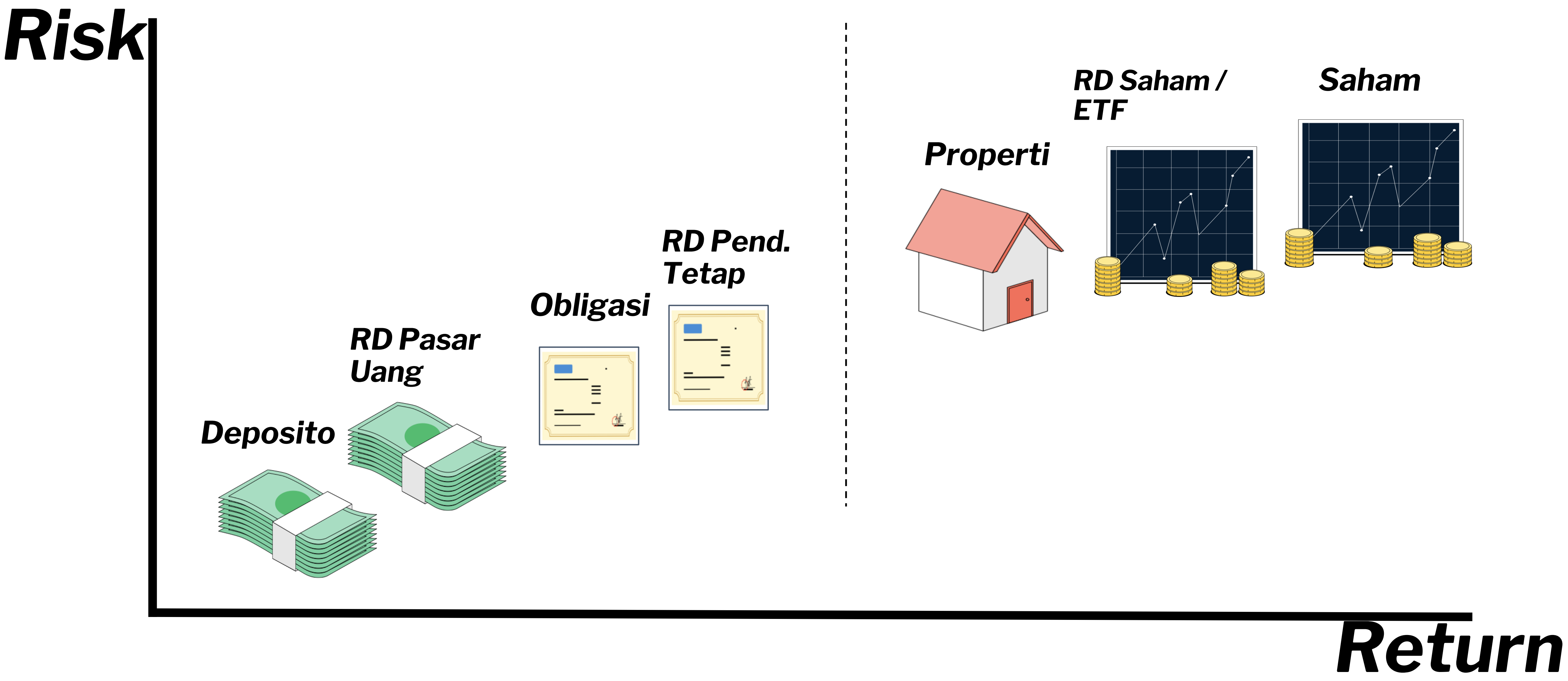
1	Trimegah Kas Syariah	5.13% 1Y Return
2	BRI Seruni Pasar Uang III	5.09% 1Y Return
3	Bahana Likuid Syariah Kelas G	5.02% 1Y Return
4	TRIM Kas 2 Kelas A	4.95% 1Y Return
5	Majoris Pasar Uang Syariah Indonesia	4.95% 1Y Return

RDPT

1	ABF Indonesia Bond Index Fund	6.57% 1Y Return
2	Manulife Obligasi Negara Indonesia II Kelas A	5.56% 1Y Return
3	Manulife Obligasi Unggulan Kelas A	4.54% 1Y Return
4	Eastspring Syariah Fixed Income Amanah Kelas A	3.87% 1Y Return
5	BNI-AM Dana Pendapatan Tetap Syariah Ardhani	3.78% 1Y Return

RDS

1	Trimegah FTSE Indonesia Low Volatility Factor Index	3.92% 1Y Return
2	TRIM Kapital Plus	3.54% 1Y Return
3	BNI-AM Indeks IDX30	2.82% 1Y Return
4	BNP Paribas SRI KEHATI	2.46% 1Y Return
5	Sucorinvest Equity Fund	-2.87% 1Y Return

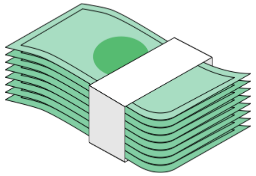

Risk
RD Saham /
ETF
Saham
Properti
RD Pend.
Tetap
Obligasi
RD Pasar
Uang
Deposito
Return

https://blog.bibit.id/blog-1/ihsg-selalu-bangkit-usai-terhantam-market-crash

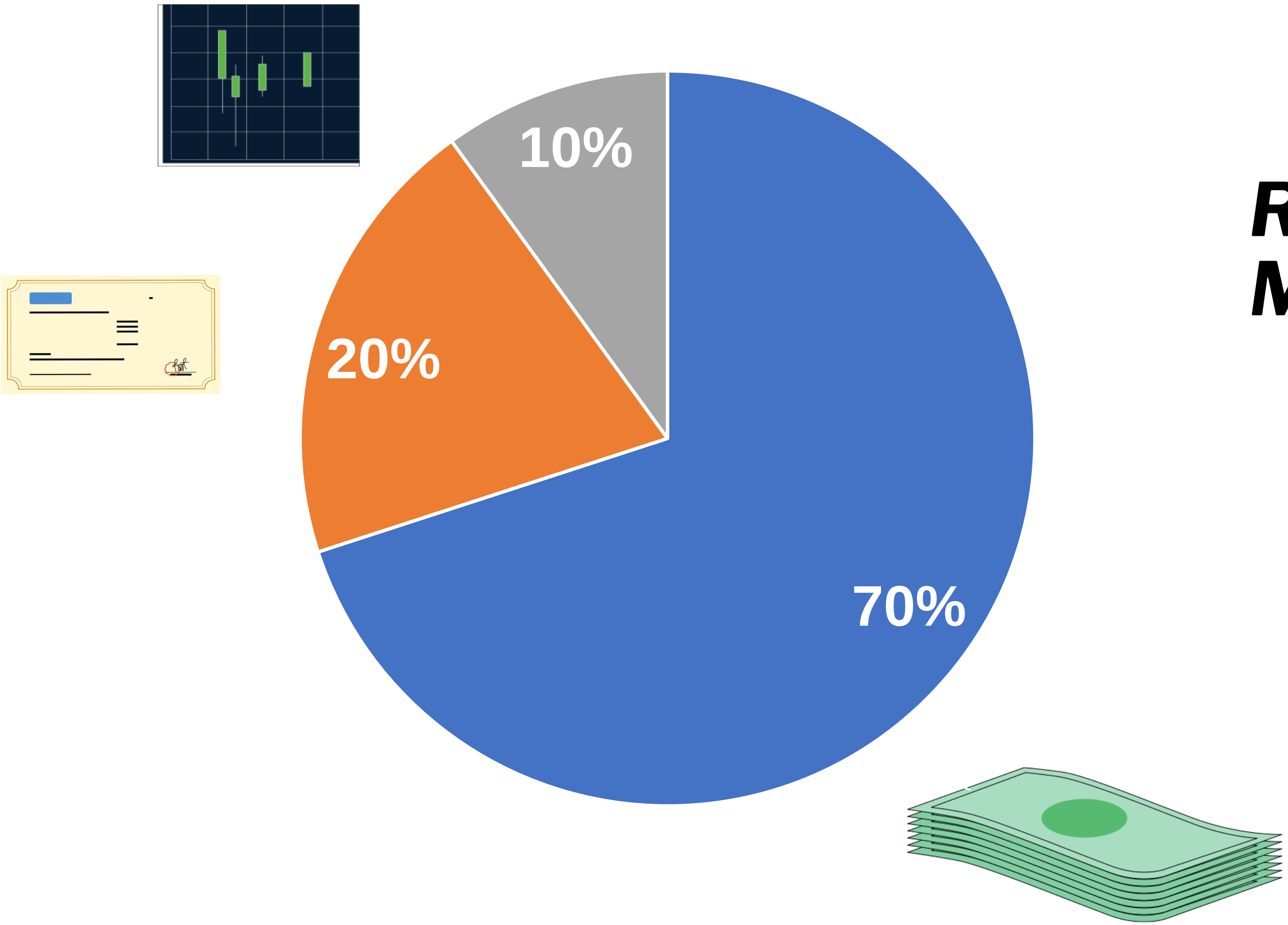
Ultimately,

nothing should be more important to investors than the ability to sleep soundly at night.

Seth Klarman
Value Investor

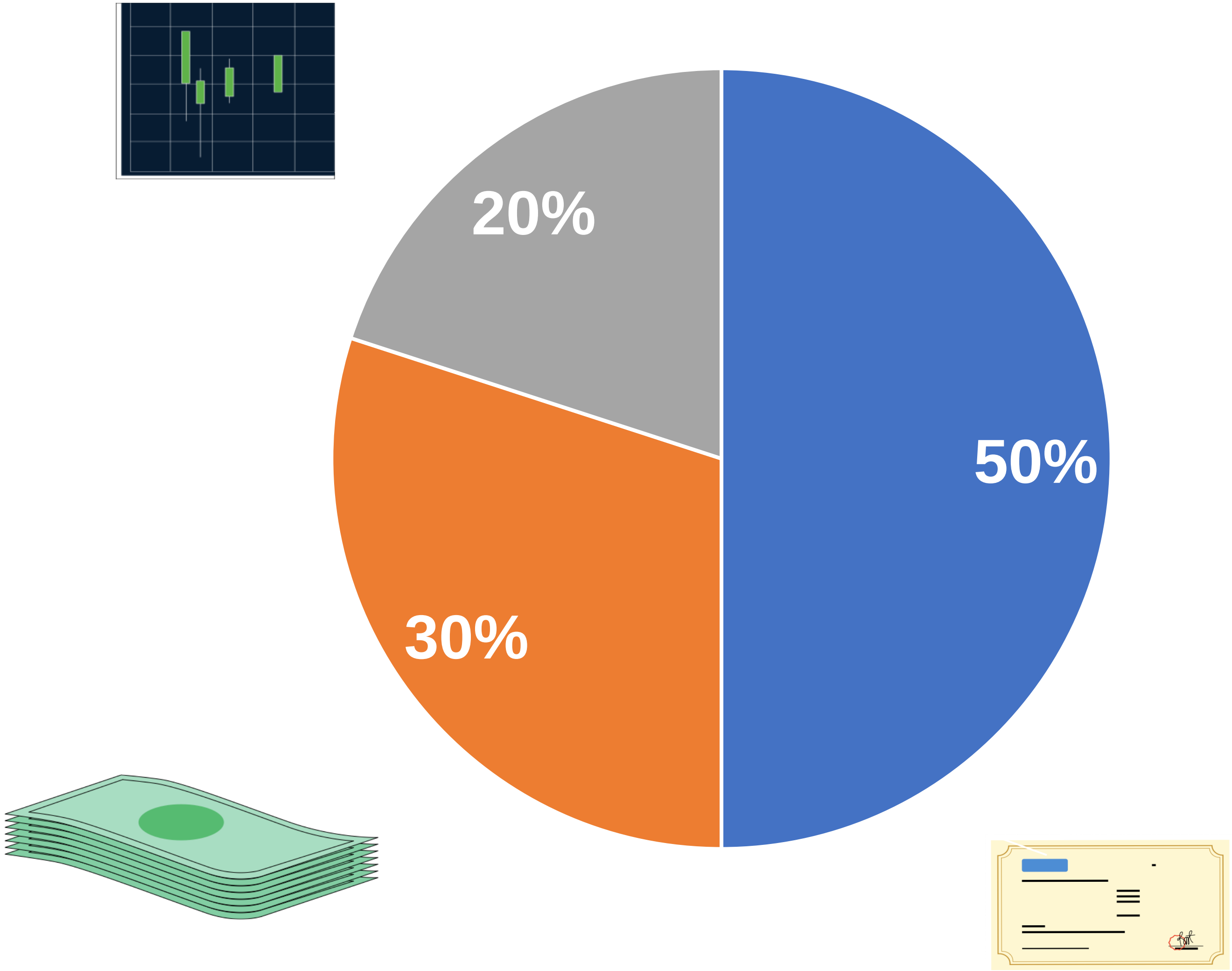
		Return (Avg % CAGR)	Volatility (Max. Drawdown)
Pasar Uang		3-5% p.a.	~0%
Obligasi		5-8% p.a.	~-5%
Ekuitas		10-15% p.a.	-40%

The Conservative



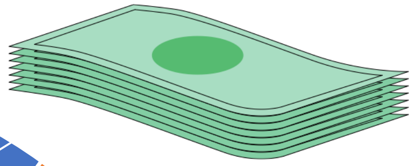
Return: ~6%
Max. Drawdown: -5%

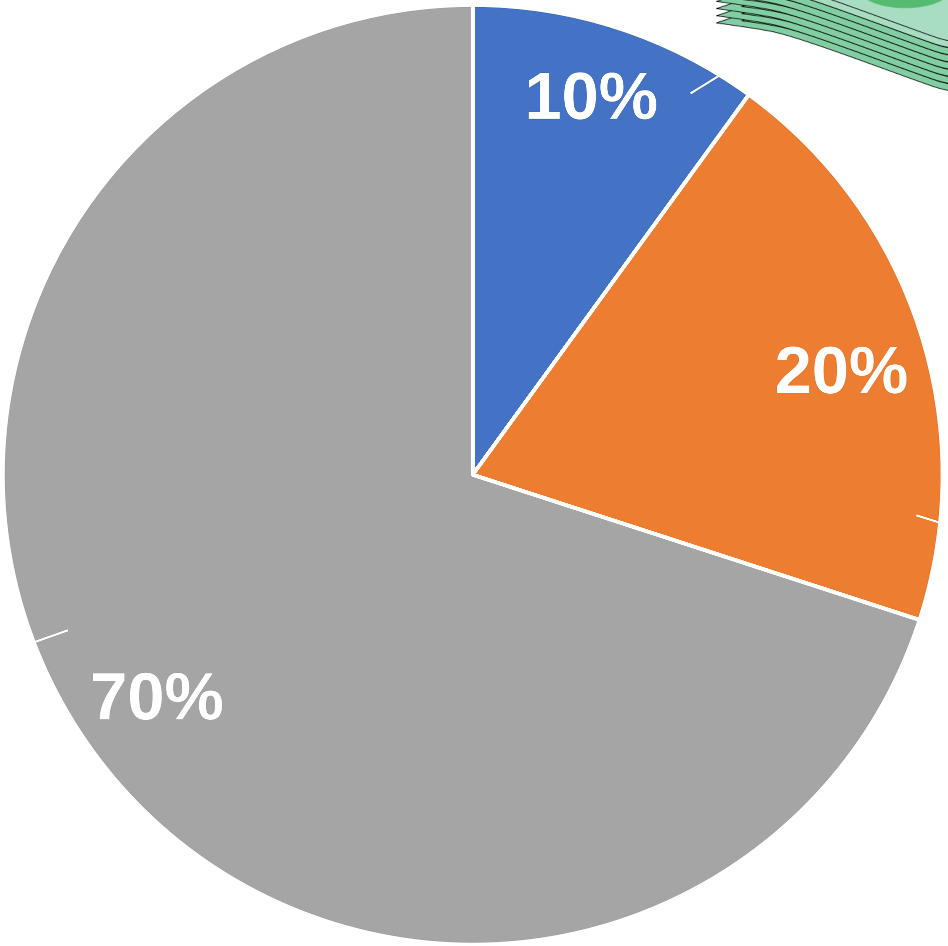
The Moderate

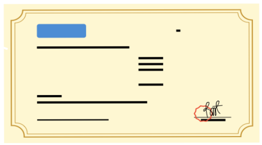


Return: ~7%
Max. Drawdown: -9%

The Aggressive 







Return: ~10%
Max. Drawdown: -28%

Investing

The Effect of Inflation

Rp100.000

dalam 30 tahun

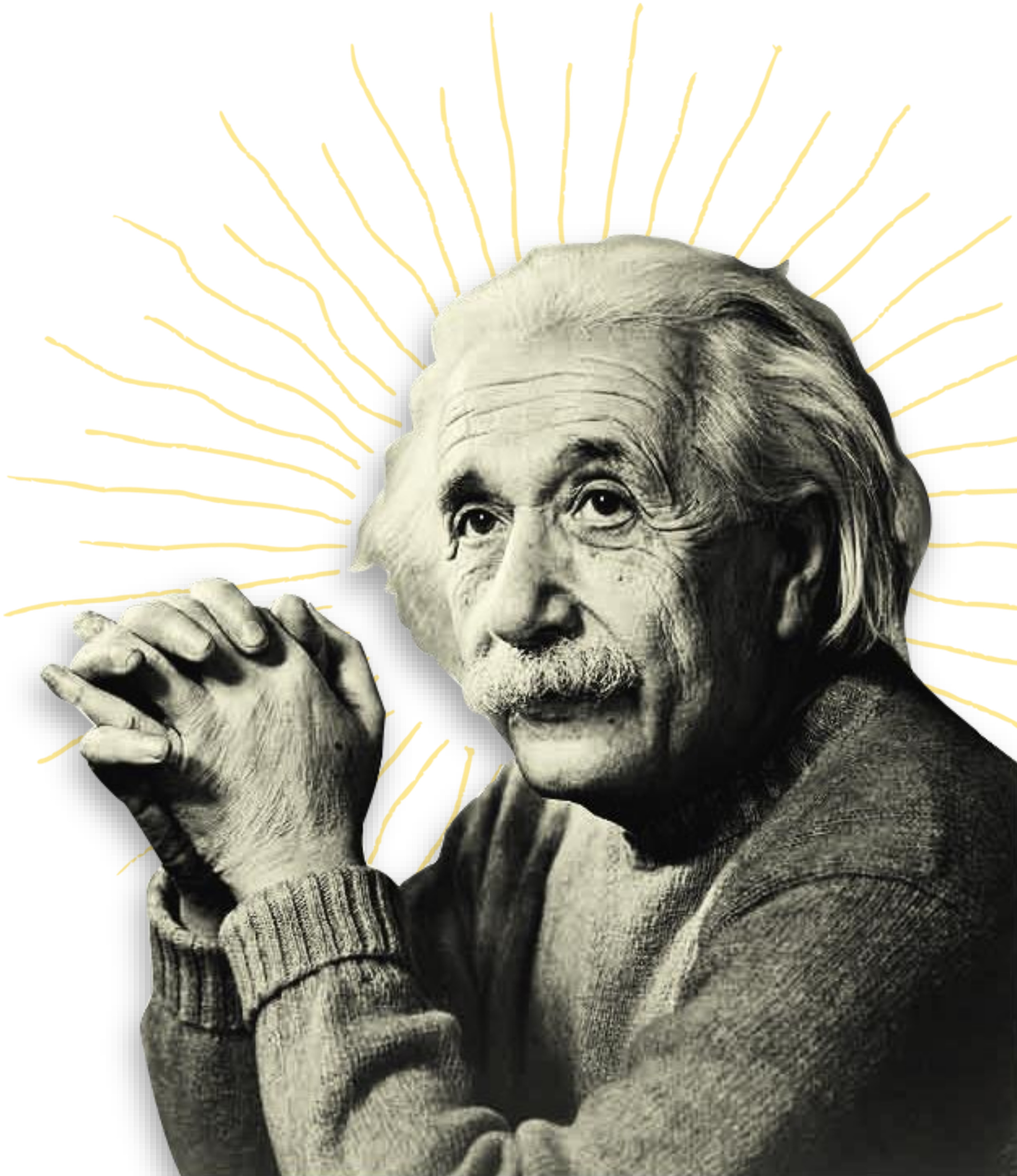
Rp10.000

-90%

"

Compound Interest
is the eight wonder
of the world.
He who understands it,
earns it. He who doesn’t,
pays it.

- Albert Einstein



The Power of Compounding.

Bob

Return 1% p.a.

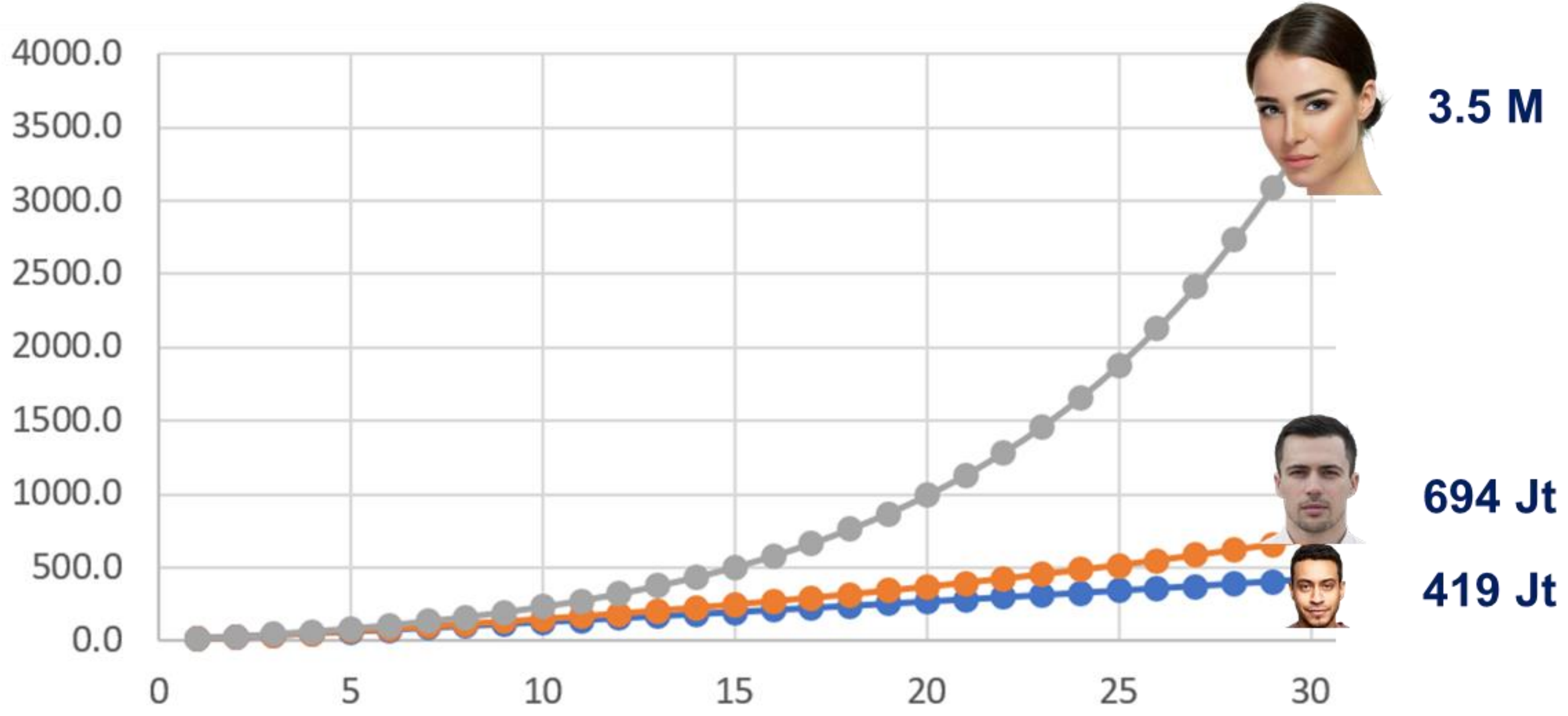
Anthony

Return 4% p.a.

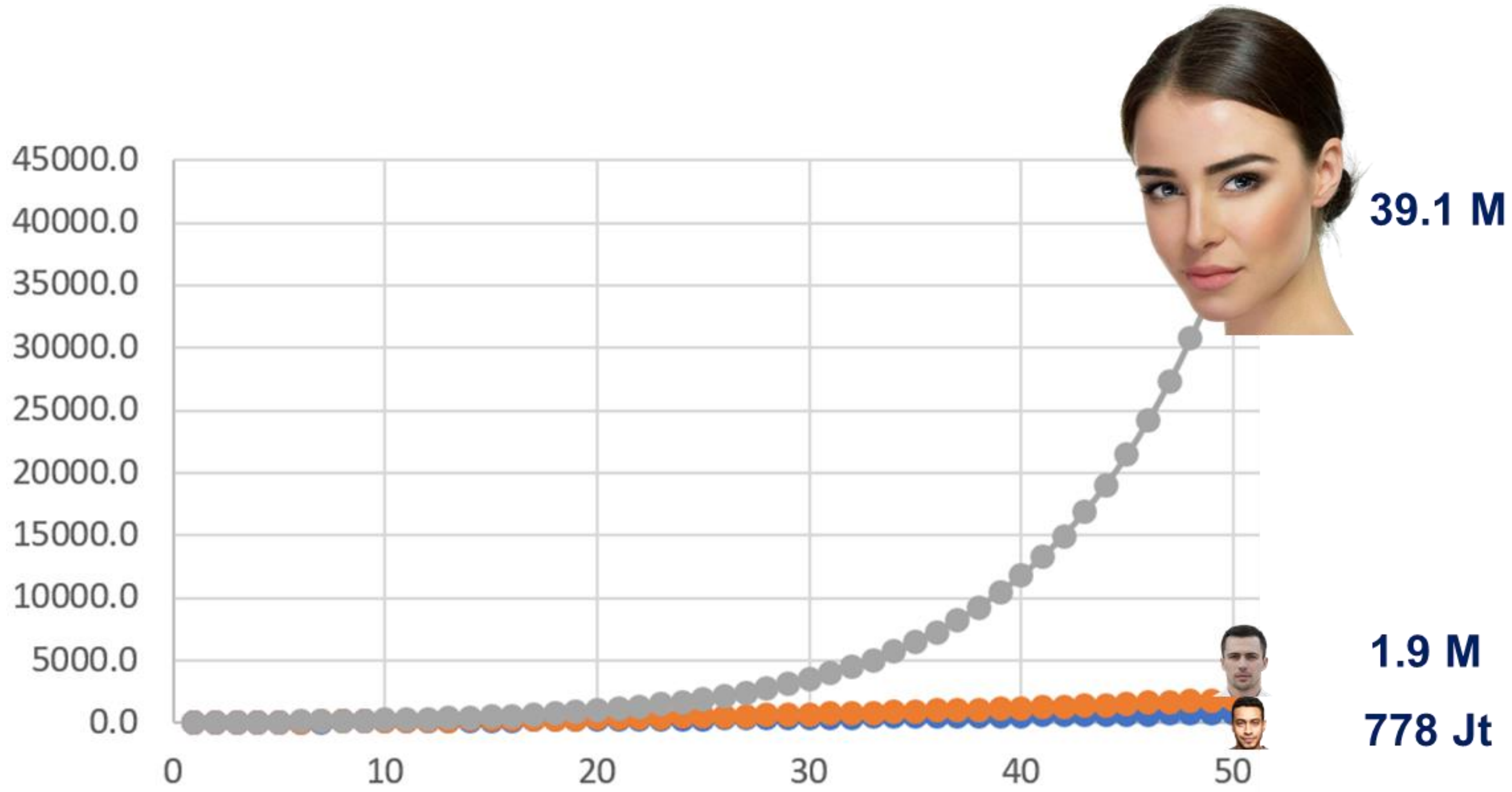
Jennifer

Return 12% p.a.

Nabung rutin 1 juta per bulan selama 30 tahun.



4000.0
3500.0
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
0
5
10
15
20
25
30
3.5 M
694 Jt
419 Jt


45000.0
40000.0
35000.0
30000.0
25000.0
20000.0
15000.0
10000.0
5000.0
0.0
0
10
20
30
40
50
39.1 M
1.9 M
778 Jt

Lifestyle

Saving

Belanja Lebih Sedikit

- **Anda bisa bahagia dengan lebih sedikit**
- **Delayed Gratification**

"The goal is to be rich not to look rich."

Menjadi kaya itu penting,
kelihatan kaya tidak penting

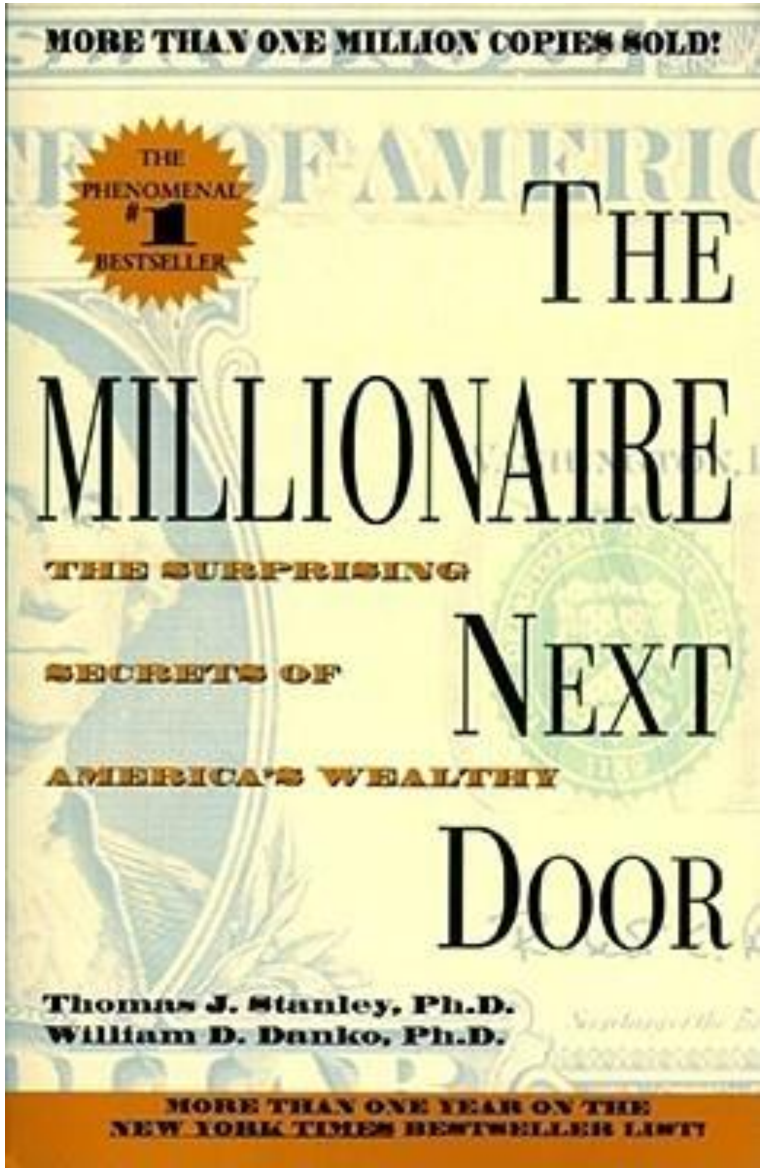
Lo Kheng Hong
Investor Saham Indonesia

Kehidupan Orang Kaya yang Kita Bayangkan

Sport Car

Jam Tangan
Mahal

Hiburan
Mewah


MORE THAN ONE MILLION COPIES SOLD!
THE PHENOMENAL #1 BESTSELLER
THE MILLIONAIRE NEXT DOOR
THE SURPRISING SECRETS OF AMERICA'S WEALTHY
Thomas J. Stanley, Ph.D.
William D. Danko, Ph.D.
MORE THAN ONE YEAR ON THE NEW YORK TIMES BESTSELLER LIST!

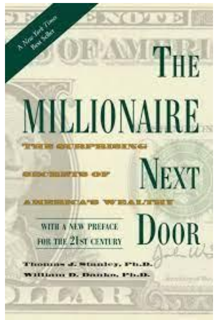
Kehidupan Orang Kaya Sesungguhnya

Mobil Jepang

Jam Tangan
Jepang

Hiburan
(dengan teman & keluarga)

Sumber: Hasil survei para “millionaires” di US



Your Relationship with Money?

2022 RIGEN SIAP JADI SULTAN !!


2022 RIGEN SIAP JADI SULTAN !!
To exit full screen, press Esc
GESER
4:29 / 21:44

Point of View tentang Uang

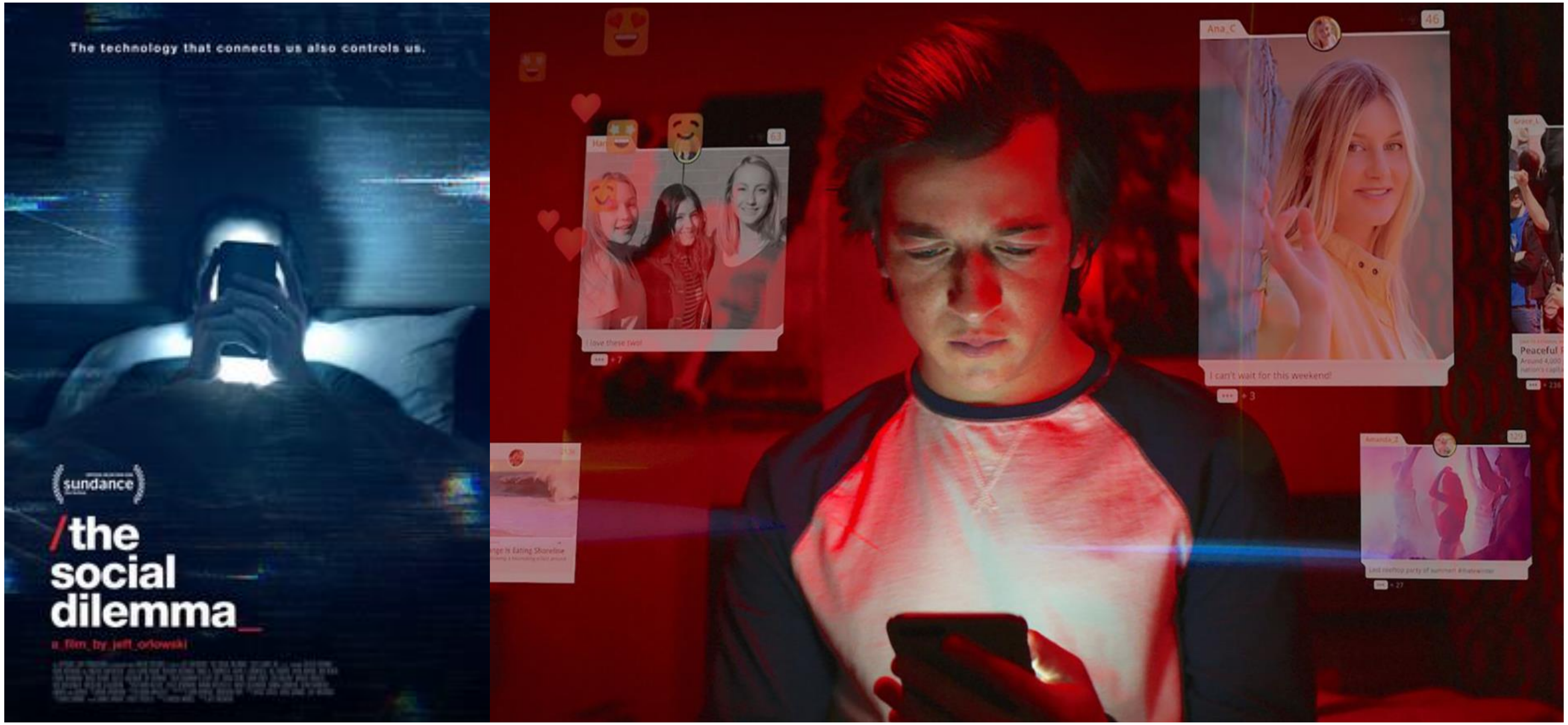
1. Kasih tahu kalau saya sukses

2. Balas dendam

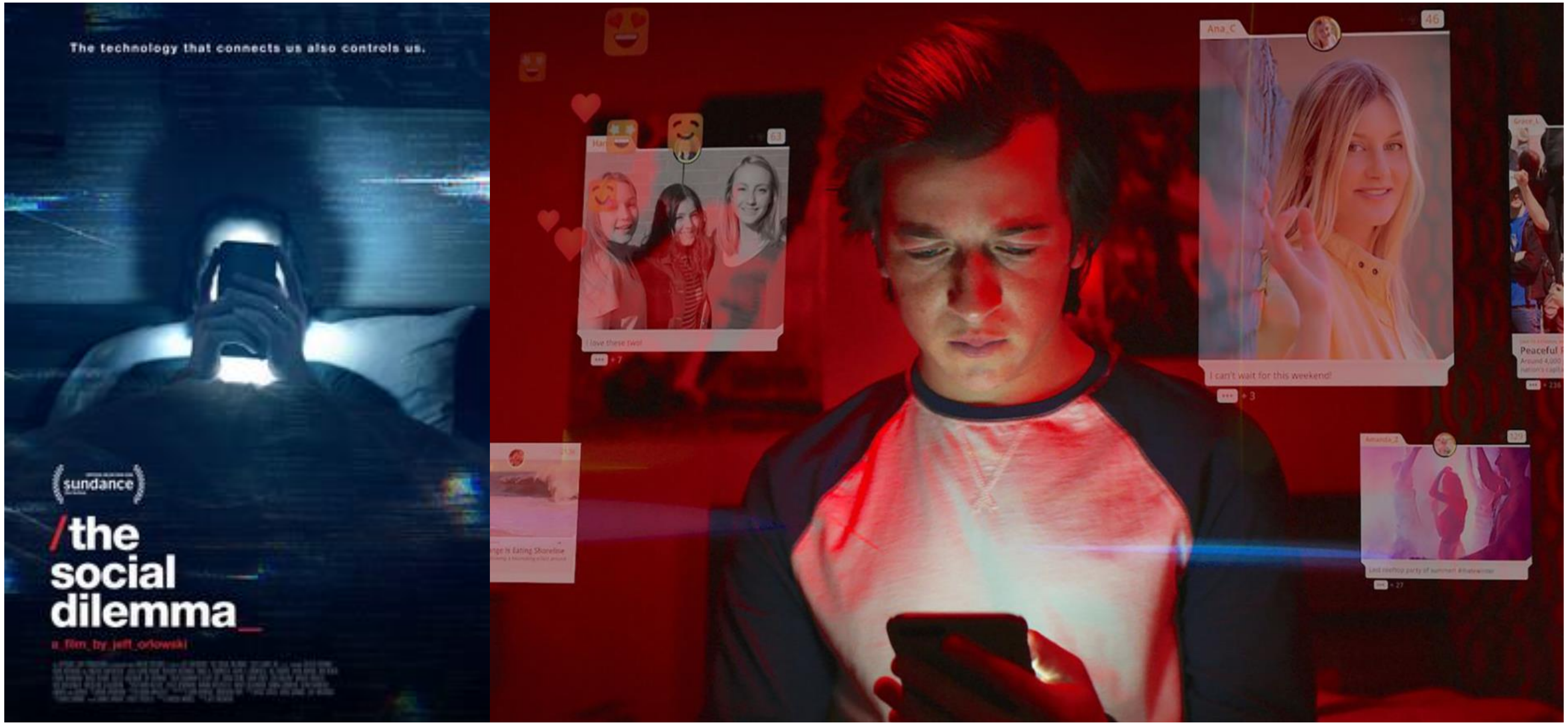
3. Pamer status sosial

Point of View tentang Uang

1. Kasih tahu kalau saya sukses
2. Balas dendam
3. Pamer status sosial
4. Membeli waktu (freedom)



The documentary examines how social media's design nurtures addiction to **maximize profit** and its ability to manipulate people's views, emotions, and behavior and spread conspiracy theories and disinformation.



1. The engagement goal: to increase usage and to make sure users continue scrolling.
2. The growth goal: to ensure users are coming back and inviting friends that invite even more friends.
3. The advertisement goal: to make sure that while the above two goals are happening, the companies are also making as much money as possible from advertisements.

The Algorithm -> #1
Targeted Advertising (selling data) -> #3

FILTER BUBBLES

The Algorithm -> Engagement -> ENGAGING BUT FALSE STORY!

EXTREME RECOMMENDATION ENGINES

Google

SOCIAL MEDIA ALGORITHMS SHOW YOU
MORE OF WHAT YOU'VE ALREADY INDICATED YOU LIKE.

THE WAY WE USE THOSE APPS TENDS TO
KEEP US SURROUNDED BY INFORMATION WE'RE
PRIMED TO BELIEVE AND AGREE WITH.

AND BECAUSE **ENGAGEMENT** IS THE MOST IMPORTANT THING,
AND WE TEND TO ENGAGE WITH WHAT
MOST **OUTRAGES, ANGERS,** AND **SHOCKS US.**

THE LONGER WE HANG OUT ON SOME SOCIAL MEDIA APPS
AND **ENGAGE WITH OUTRAGEOUS** CONTENT THE MORE
LIKELY THOSE APPS ARE TO PUSH OUTRAGEOUS CONTENT TO US.

2023: Menuju KEHANCURAN DUNIA!! -...

1.5M views • 1 day ago

Deddy Corbuzier

resesi #bahaya #podcast.

2023: Menuju KEHANCURAN DUNIA

3.4M views • 11 days ago

Raymond Chin

Gw bukan mau takut2in, tapi banyak yang ga si...

2023 Menuju 'Gelap Gulita' Dunia, Jokowi...

1M views • 6 days ago

CNBC Indonesia

Berita Lainnya: Menerawang Indonesia Saat Dunia Jatuh ke Jurang **Resesi 2023** Link:...

New

10 Tahap Financial Journey

1. **FINANCIAL DEPENDENCE**	pendapatan < pengeluaran
2. **FINANCIAL SURVIVAL**	pendapatan = pengeluaran
3. **FINANCIAL SOLVENCY**	pendapatan = pengeluaran + bayar hutang
4. **FINANCIAL STABILITY**	punya dana darurat
5. **DEBT FREEDOM**	hutang dan cicilan lunas
6. **FREEDOM FROM EMPLOYER**	dana pensiun 3-5x pengeluaran tahunan
7. **FINANCIAL SECURITY**	dana pensiun 10x pengeluaran tahunan
8. **FINANCIAL INDEPENDENCE**	dana pensiun 25x pengeluaran tahunan
9. **FINANCIAL FREEDOM**	dana pensiun 25x pengeluaran gaya hidup
10. **FINANCIAL ABUNDANCE**	dana pensiun 3x level financial freedom

1. FINANCIAL DEPENDENCE

PENDAPATAN < PENGELUARAN

"besar pasak daripada tiang"


HABIS GAJIAN
GAJIAN HABIS

2. FINANCIAL SURVIVAL

PENDAPATAN = PENGELUARAN

- **masih punya hutang**

#ObrolinAja

@wilov_id

3. FINANCIAL SOLVENCY

PENDAPATAN > PENGELUARAN

- mulai melunasi hutang

4. FINANCIAL STABILITY

PUNYA DANA DARURAT

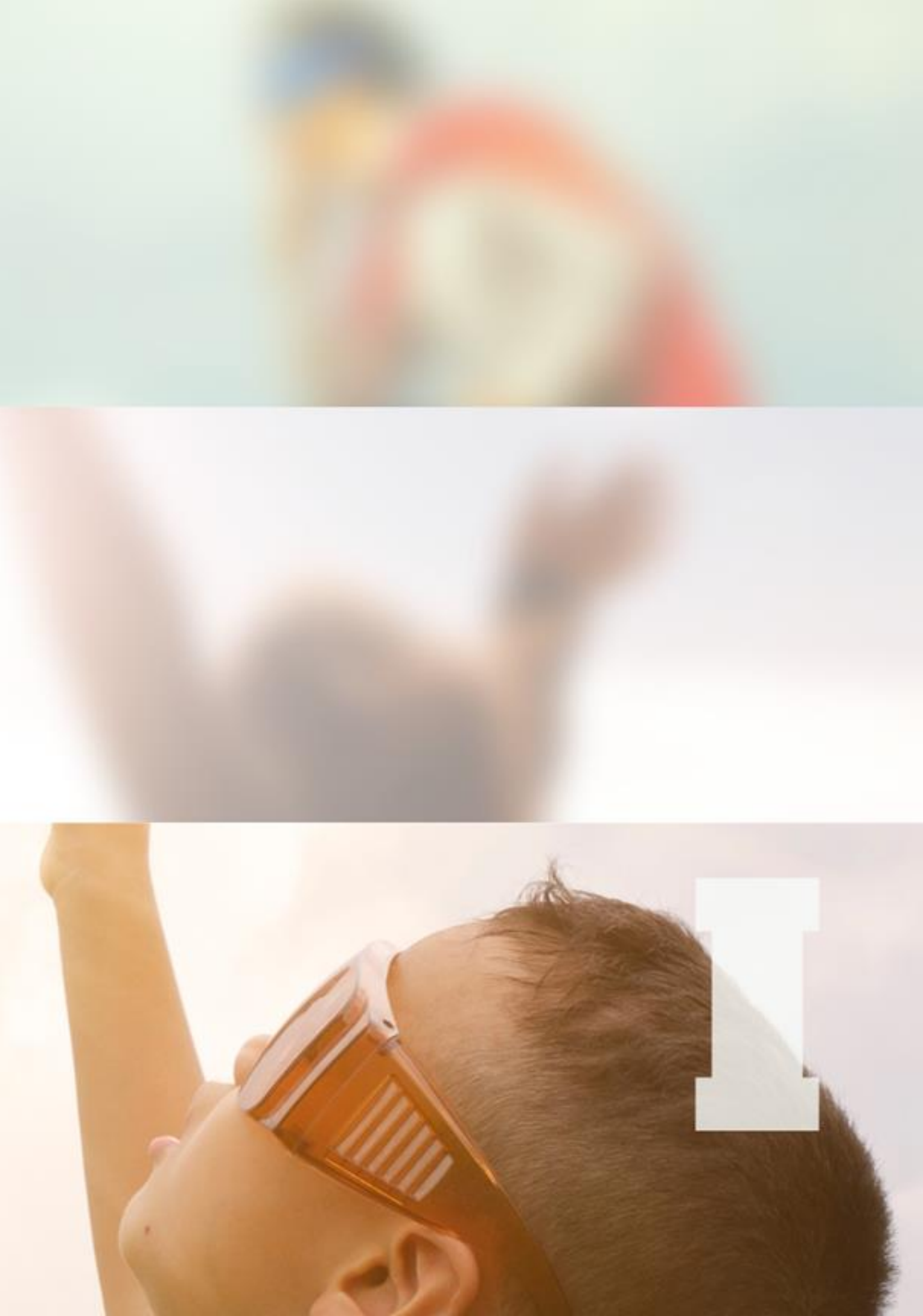
- 3 - 12 bulan biaya hidup

Emergency Fund

- **Single** : **3 bulan** Biaya Hidup
- **Menikah** : **6 bulan** Biaya Hidup
- **Punya Anak** : **12 bulan** Biaya Hidup

Biaya hidup = 10 juta

- **Single** : **Rp. 30.000.000**
- **Menikah** : **Rp. 60.000.000**
- **Punya Anak** : **Rp. 120.000.000**



4. **Financial Stability**
3. **Financial Solvency**
2. **Financial Survival**
1. **Financial Dependence**

5. DEBT FREEDOM

SEMUA HUTANG & CICILAN LUNAS

- **pengecualian untuk KPR**

6. FREEDOM FROM EMPLOYER

PUNYA DANA PENSIUN

- 3-5x biaya hidup tahunan


GAJI BULAN LALU BELUM HABIS
SUDAH MAU GAJIAN LAGI
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7. FINANCIAL SECURITY

PUNYA DANA PENSIUN

- **10x biaya hidup tahunan**

7. Financial Security
6. Freedom From Employer
5. Debt Freedom

II

4. Financial Stability
3. Financial Solvency
2. Financial Survival
1. Financial Dependence

I

8. FINANCIAL INDEPENDENCE

PUNYA DANA PENSIUN

- 25x biaya hidup tahunan

9. FINANCIAL FREEDOM

PUNYA DANA PENSIUN

- 25x (biaya hidup + gaya hidup) tahunan

10. FINANCIAL ABUNDANCE

PUNYA DANA PENSIUN

- 100x (biaya hidup + gaya hidup) tahunan


ke atm ambil duit
struknya diambil
duitnya dibuang
kita mah gitu orangnya

10. Financial Abundance
9. Financial Freedom
8. Financial Independence

7. Financial Security
6. Freedom From Employer
5. Debt Freedom

4. Financial Stability
3. Financial Solvency
2. Financial Survival
1. Financial Dependence