

Medquest

Team #210

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Theme: Promote an inclusive access to preventive healthcare service through a gamified mobile application that offers 3F: Free, Friendly, Fun!

THANK YOU



3 out of 10 leading causes of death in Indonesia are **preventable** through a **healthy lifestyle**



70% of Indonesians are **not interested** to maintain a healthy lifestyle



Perfect timing for **Digital Health** to flourish with **200 Mn** of smartphone users in Indonesia



Current digital health prevention services are mostly targeting the middle-upper class - **not inclusive**



The Untapped Digital Health Segment

Potential
Trialists



Focus segment of most existing
health-prev apps

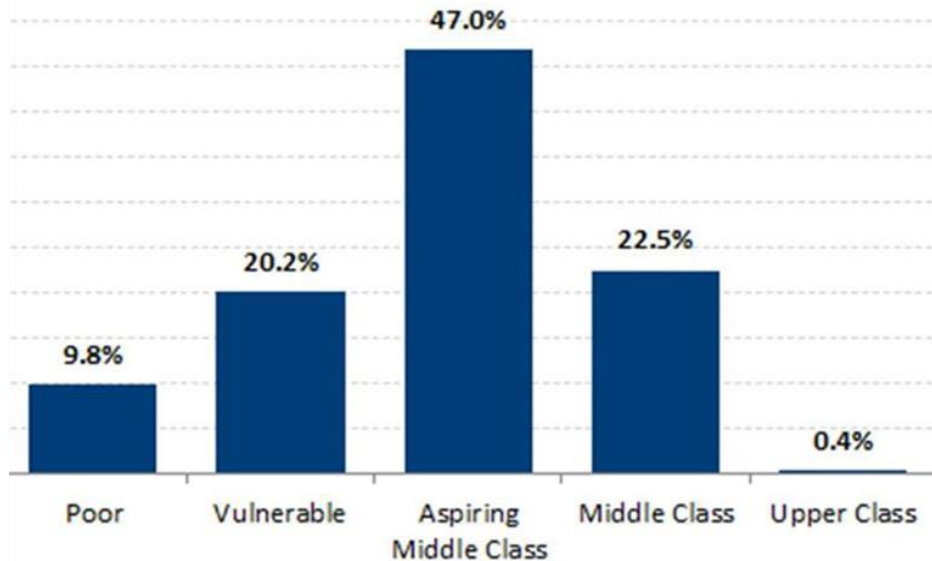


Aware,
Uninterested

Maintainers, Enthusiasts

Unaware, Uninterested

Indonesia SES Outlook



Source: 2021 Indonesia Economic Outlook, Mandiri Sekuritas ; Research wealth and health correlation ; team analysis



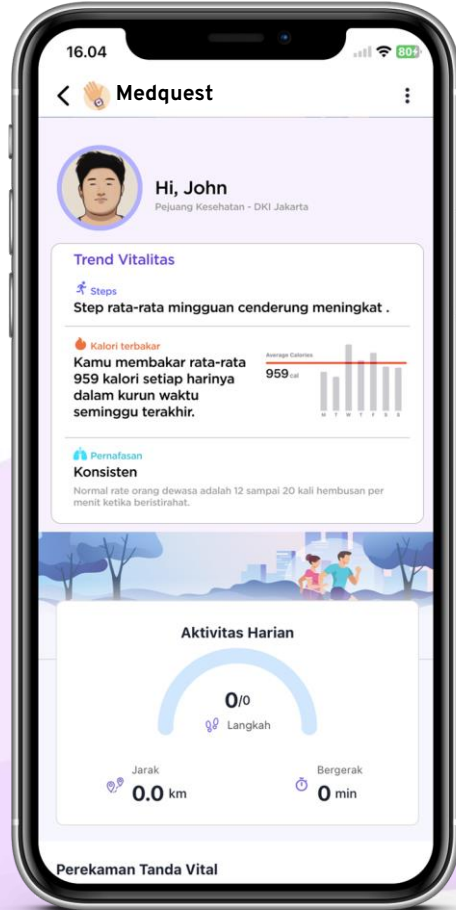
How do we make the Indonesian *Aspiring Middle-class* able to **access** preventive healthcare and **interested** to use it **consistently**?



Medquest

An inclusive
preventive healthcare
service through a
gamified mobile
application that offers
3F:

Free, Friendly,
Fun!



Seamless Gamified
Health Tracking



Interactive Health
Monitoring

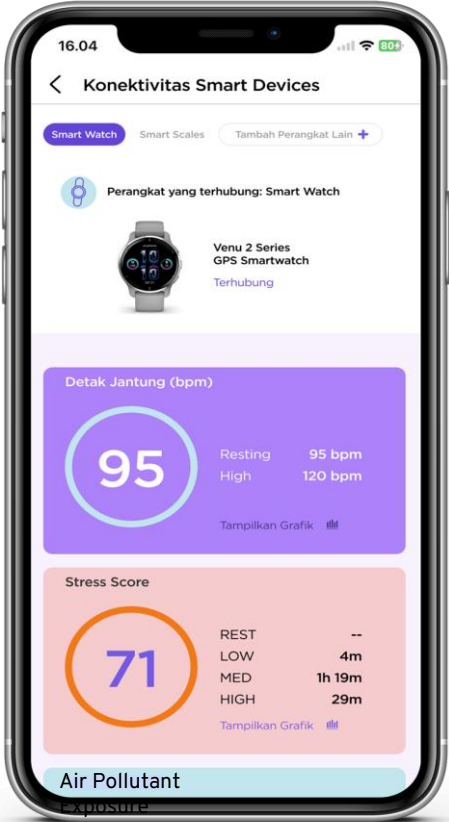


Generative AI-Powered
Nutritionist

Enhanced proposition of Medwell service in Mediverse App by Biofarma

#1 Seamless Gamified Health Tracking

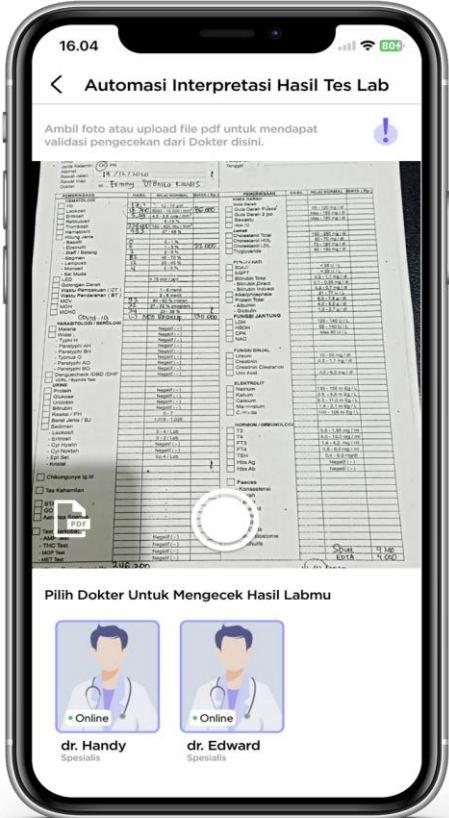
Device & API Connectivity



Automatic Image-to-Text Recognition



Automatic Human-in-the-loop Lab Results Interpretation

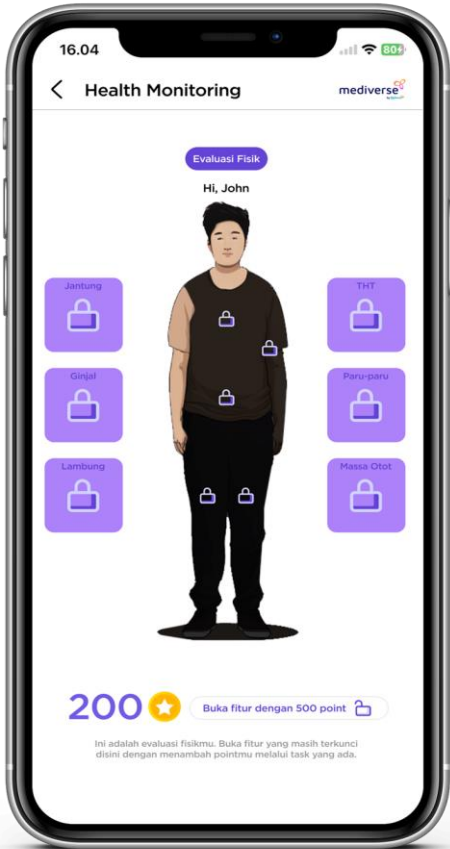
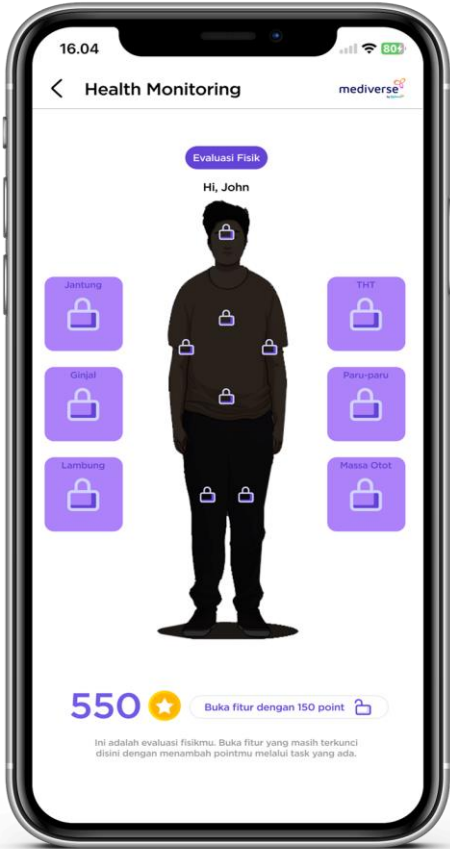


#1 Seamless Gamified Health Tracking

Point & Quest Systems



Level Unlocking Game



#2 Interactive Health Monitoring

Interactive Physical
Evaluation

Health Profile Scoring

Smart-Personalized Tips

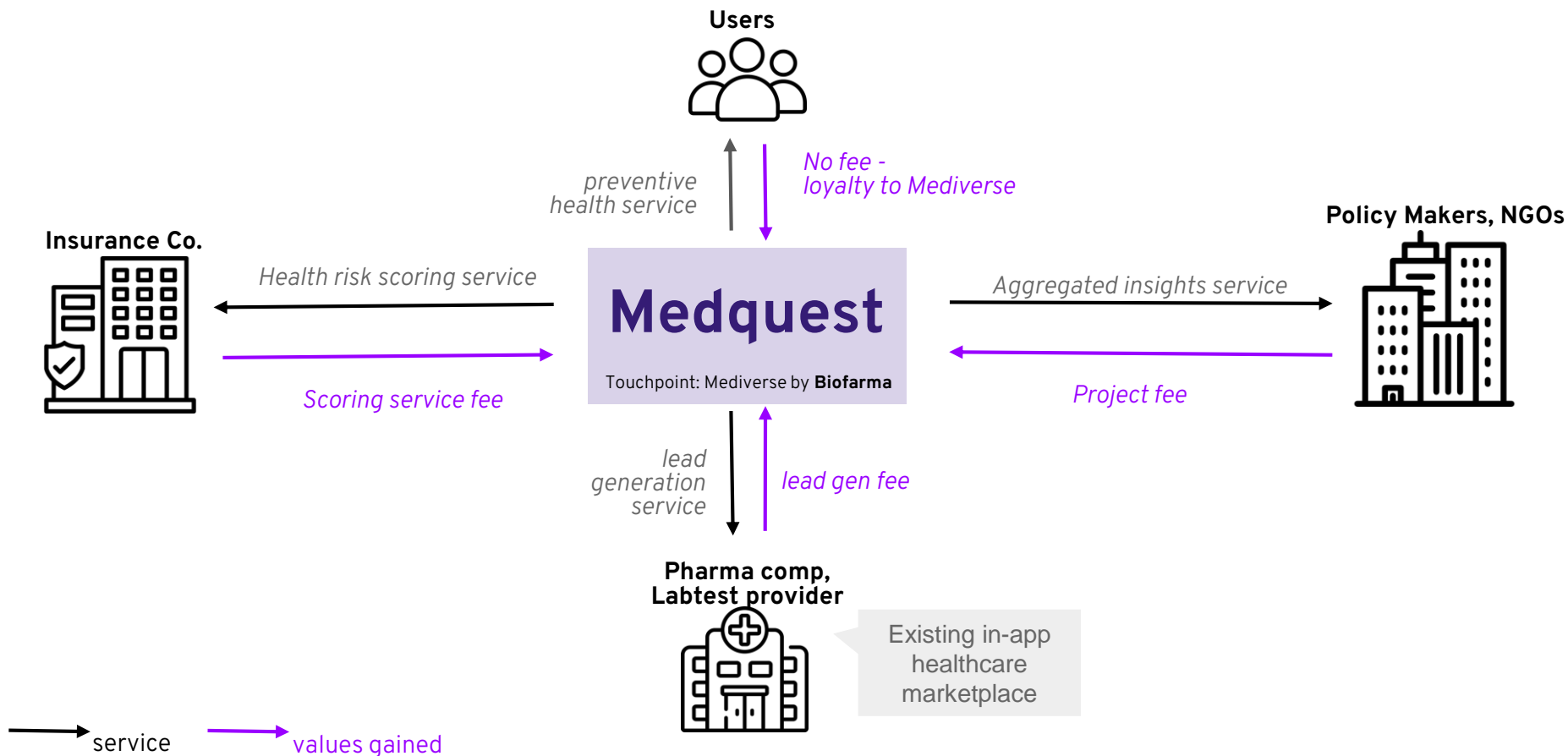


#3

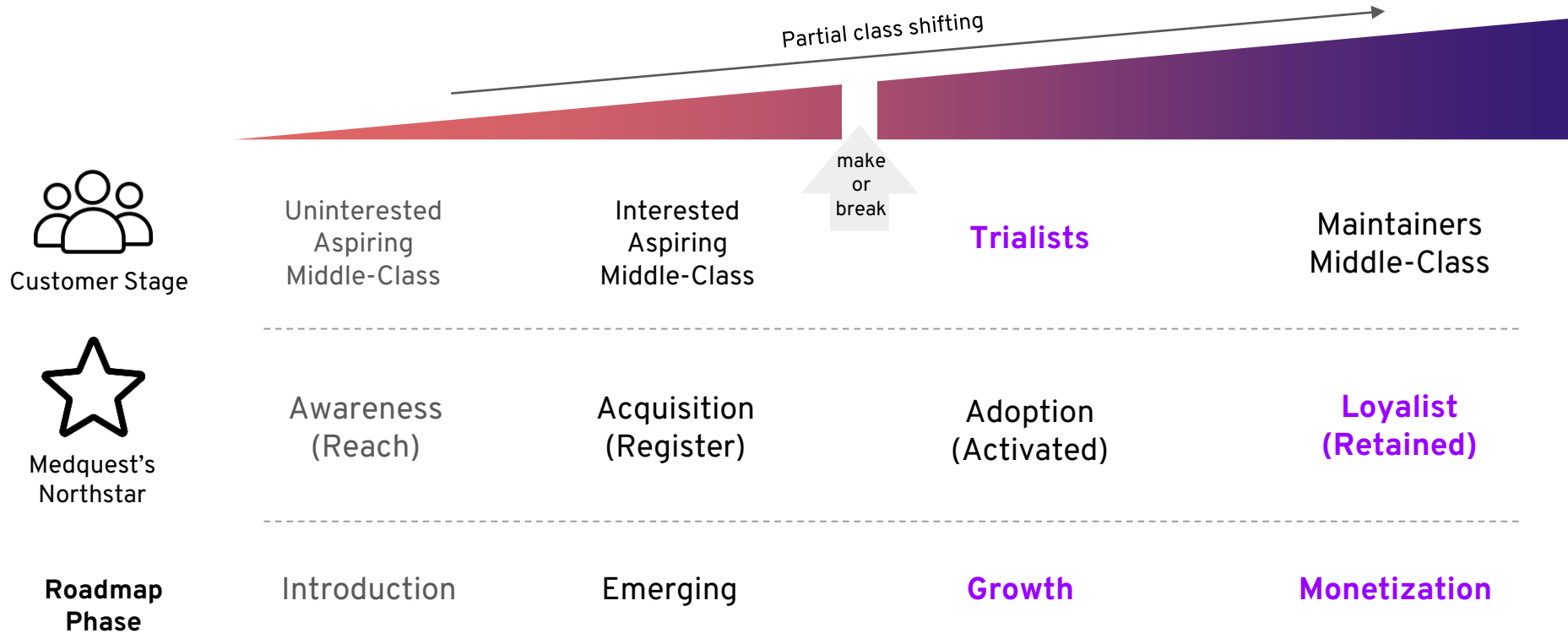
Generative AI-
Powered
Nutritionist



Positioning Medquest as Mediverse's entry-point and retention feature - B2B2C



Medquest as Biofarma's long-term investment



*source: World Bank press release 2020

Go-To-Market Strategy

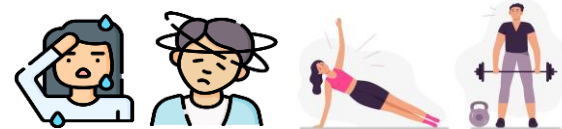
Quick-win

Corporate Enforcement Synergy

O2O Acquisition Partnership

Digital Community Activation

Touchpoint



Target Acquisition

30K

Biofarma's Employees

1 Mn+

BUMN's Employees

KF/IHC Customers

Offline Segments

Illness Fighters

Sport Hobbyists

Operator

Human Capital

Human Capital

Biz Partnership & Field Agents

Hyper-targeting Digital Ads & Community Engagement Programs

1st Iteration
(Pilot)

2nd Iteration

Ship: Offline-to-Online
(O2O) Acquisition

Community-based
Acquisition

Medquest

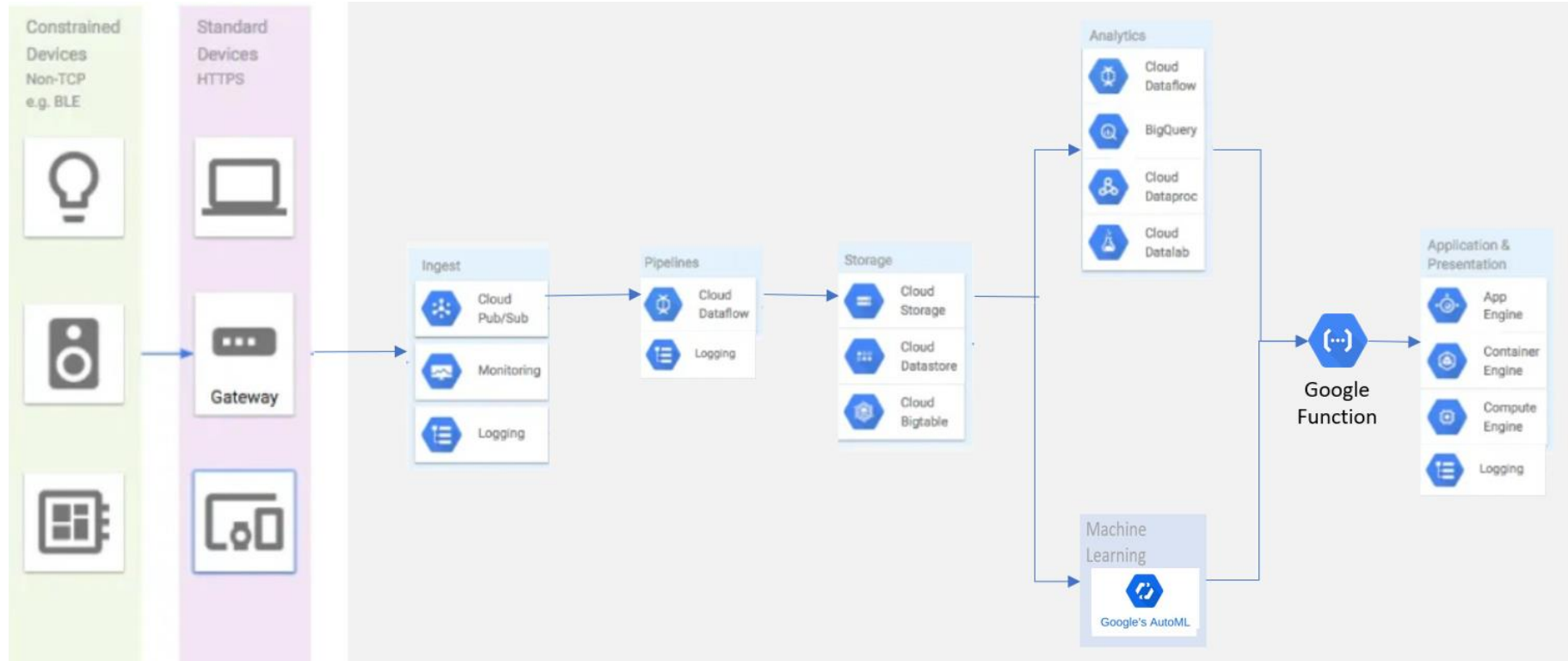
Your healthy bestie!

APPENDIX

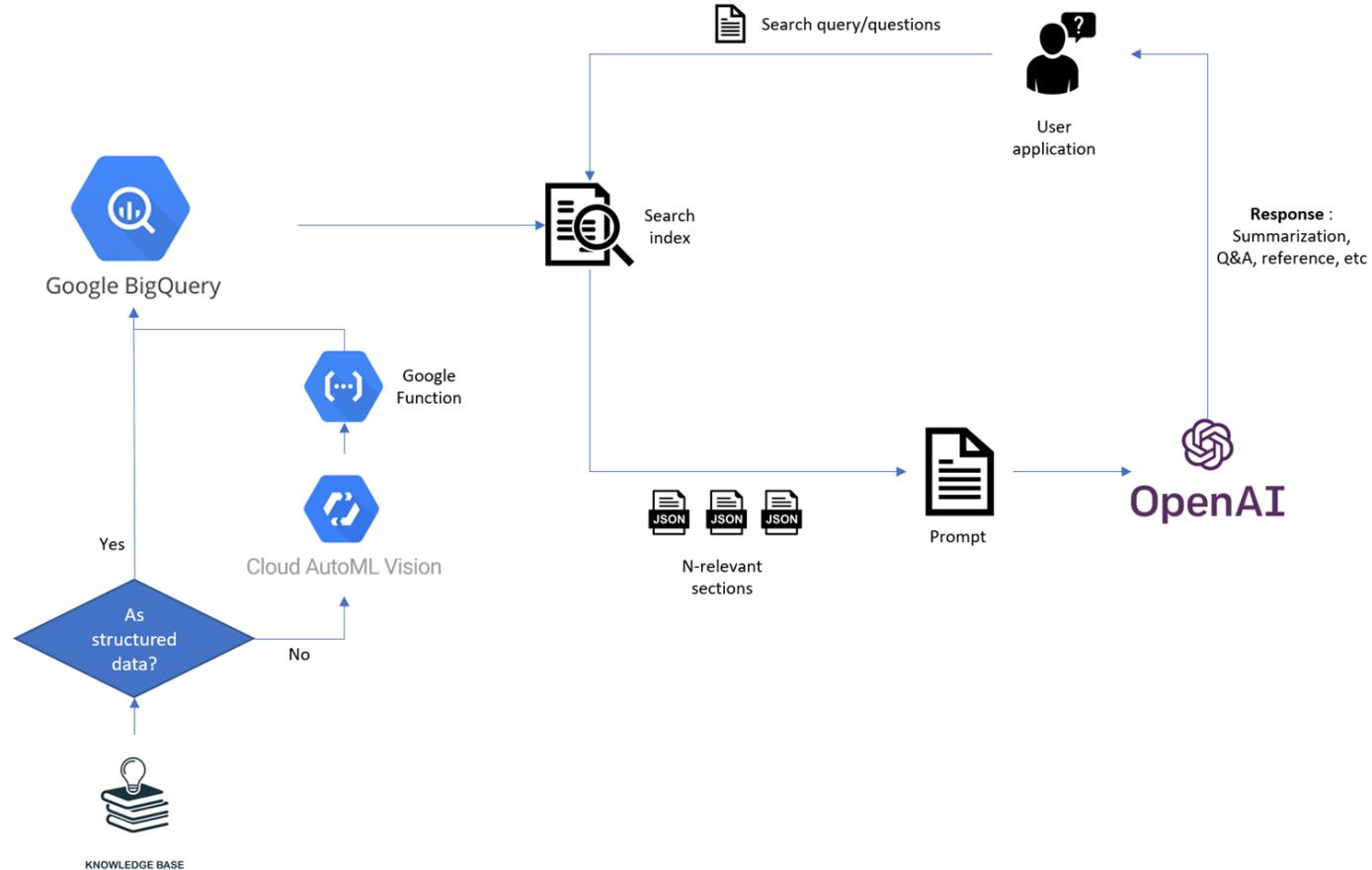
Reference

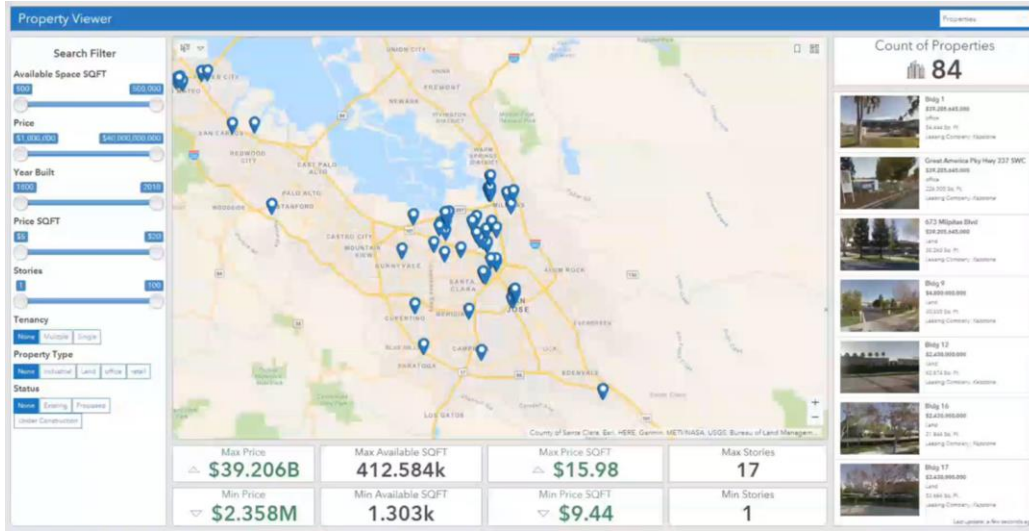
- Link that show the retention rate is very high → <https://andrewchen.com/new-data-shows-why-losing-80-of-your-mobile-users-is-normal-and-that-the-best-apps-do-much-better/>
- We try to utilize 7 from 11 factors that driving health app use based on research from [https://www.researchgate.net/publication/310391773 A qualitative study of user perceptions of mobile health apps](https://www.researchgate.net/publication/310391773_A_qualitative_study_of_user_perceptions_of_mobile_health_apps)
- Evidence that the health app market is there and is still growing → <https://www.statista.com/statistics/1334033/indonesia-health-and-fitness-app-downloads/>
<https://www.insights10.com/report/indonesia-home-healthcare-market-analysis/>
- Evidence that the service or project fee to provide alternative data is needed in the future, and it's possible to be done → <https://www.linkedin.com/pulse/consolidation-expansion-future-alternative-data-insurance-saha/>
<https://www.moneycontrol.com/news/business/economy/facial-analysis-and-health-score-for-buying-insurance-this-company-is-offering-a-cibil-like-solution-6646661.html>
- Evidence that the aspiring middle class will be converted to middle class, and this is happening is all ASEAN country too, so this project is potentially developed further in the future → <https://www.worldbank.org/en/news/press-release/2020/01/30/expanding-middle-class-key-for-indonesia-future> <https://www.usasean.org/why-asean/growth>
- Evidence total number of BUMN employee → bumn.go.id

General Software architecture for Seamless Gamified Health Tracking & Interactive Health Monitoring



General Software Architecture for Generative AI-Powered Nutritionist





As One of the Future Roadmap..

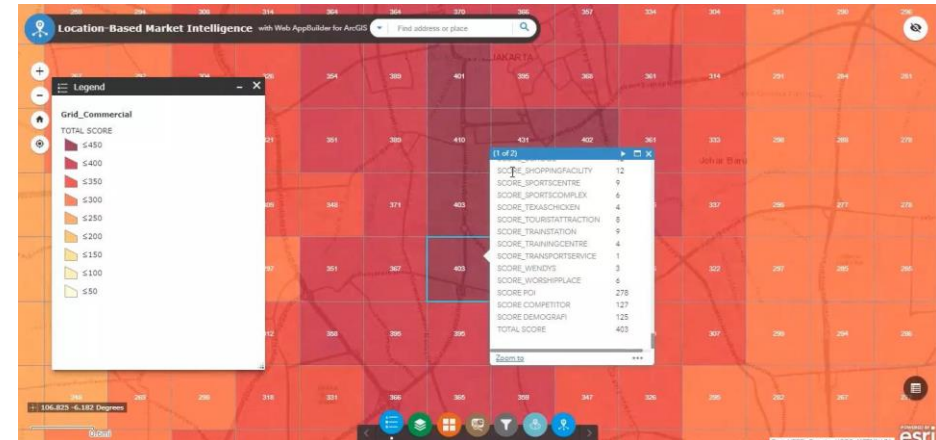
We also want to provide map for **user** who want to know which health facility they should visit, we could combine customer data from our apps with supply chain data such as :

- medicine availability
- doctor availability
- room availability

And here is the sample of aggregated insight service output (mentioned in slide 10)

With data that we have, we could overlay map of **health score** with :

- availability coverage of insurance → with target user : **insurance** company
- socio economic condition → for **government** who has authorities to make policies
- data health facility → for user (like property developer) who could build new **health facility** or other **infrastructure**



How Could It Possible? First, the Data Itself is Available

(or at least we have benchmark from other country that it's possible to collect data like this)

A. Health facility & security :

1. Current Health Expenditure (% of GDP)
 2. Hospital Beds per 1000 People
 3. Nurse and Midwives per 1000 People
 4. UHC Service Coverage Index
 5. Global Health Security Index
 6. Early Detection & Reporting for Epidemic of Potential International Concern
 7. Rapid Response to and Mitigation of the Spread of an Epidemic
 8. Sufficient and Robust Health Sector to Treat the Sick and Protect Health Workers
 9. Commitments to Improving National Capacity, Financing, and Adherence to Norms
 10. Overall Risk Environment and Country Vulnerability to Biological Threats
- etc

B. Climate and geographical condition

1. Air quality
 2. Humidity
 3. Length of transmission season (if analyze dengue)
- etc

C. Socio economic condition

1. Life expectancy (year)
 2. Poverty
 3. Unemployment rate
 4. GINI index
 5. GDP per capita
 6. Population
- Etc

D. Historical case → number of case and fatality rate per disease, etc

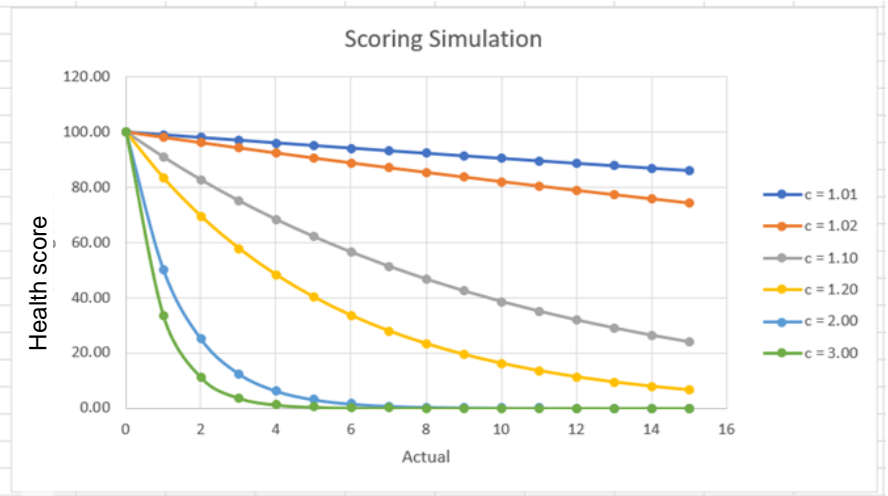
E. Supply chain data → medicine availability, doctor availability, room availability, etc

How to Calculate the Health Score?

1. Calculate **gap** between data of health parameter (that we get from **device**) and **ideal** condition
2. If the gap is bigger, then the component of health score is becoming worse
3. Use formula $\rightarrow 100 * c^{-x}$

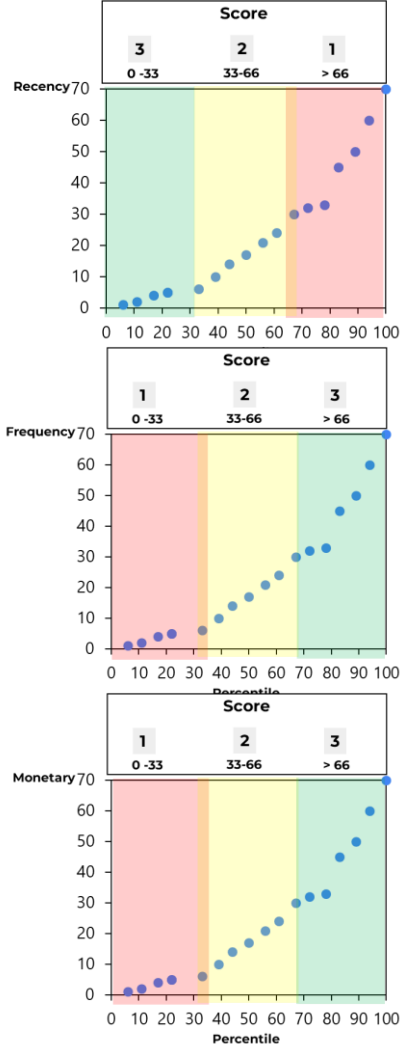
Where **C** = constant (The **bigger** the constant, the **faster** health score will **decrease**)
x = result from no. 1 process

actual	c					
	1.01	1.02	1.10	1.20	2.00	3.00
0	100.00	100.00	100.00	100.00	100.00	100.00
1	99.01	98.04	90.91	83.33	50.00	33.33
2	98.03	96.12	82.64	69.44	25.00	11.11
3	97.06	94.23	75.13	57.87	12.50	3.70
4	96.10	92.38	68.30	48.23	6.25	1.23
5	95.15	90.57	62.09	40.19	3.13	0.41
6	94.20	88.80	56.45	33.49	1.56	0.14
7	93.27	87.06	51.32	27.91	0.78	0.05
8	92.35	85.35	46.65	23.26	0.39	0.02
9	91.43	83.68	42.41	19.38	0.20	0.01
10	90.53	82.03	38.55	16.15	0.10	0.00
11	89.63	80.43	35.05	13.46	0.05	0.00
12	88.74	78.85	31.86	11.22	0.02	0.00
13	87.87	77.30	28.97	9.35	0.01	0.00
14	87.00	75.79	26.33	7.79	0.01	0.00
15	86.13	74.30	23.94	6.49	0.00	0.00



1. Then for all health parameter, we could follow **RFM** (Recency, Frequency, Monetary) segmentation methodology to get **user segmentation**, starting **from the healthiest to the sickest**

Illustration How to Create RFM Segmentation



Recency Score	Frequency Score	Monetary Score	Total Score
3	3	3	9
		2	8
		1	7
	2	3	8
		2	7
		1	6
	1	3	7
		2	6
		1	6
2	3	3	8
		2	7
		1	6
	2	3	7
		2	6
		1	5
	1	3	6
		2	5
		1	4
1	3	3	7
		2	6
		1	5
	2	3	6
		2	5
		1	4
	1	3	5
		2	4
		1	3

Segment Name	Total Score Formula	Description	Actionable Tip
Champion	9	Do transaction recently, buy often and spend the most!	Reward them, can be early adopters for new products. Will promote your brand.
Loyal	8	Bring good money for us, responsive to promotion	Upsell higher value products. Ask for reviews. Engage them.
Potential Loyalist	7	Recent customers, but spent a good amount and bought more than once	Offer membership/loyalty programs and recommend other products.
Average	6	In average recency, frequency, and monetary values	Built a good relationship with them
Recent Customer	6-7 (recency days score 3)	Bought most recently, but not often	Provide on-boarding support, give them early success, start building relationship
Cannot Loose Them	6-7 (recency days score 1)	Made biggest purchases, and often. But haven't returned for a long time	Win them back don't lose them to be dropped outlets, bring with relevant promotion
About To Sleep	4 and 5	Below average recency, frequency, and monetary values. Will lose them if not reactivated	Share valuable resources. Recommend popular products/renewals at discount. Reconnect with them.
Lost Customer	3	Lowest recency, frequency and monetary values	Revive interest with a reach-out campaign, ignore otherwise.