EXECUTIVE SUMMARY

Background

Apple is the largest technology company in the world by revenue. But Apple's revenue growth is slowing due to the stiff competition from the likes of Samsung and Huawei. How can Apple accelerate revenue growth?

Recommendations

Apple can accelerate growth through different approaches in different markets:

- Mature market (USA): Build Apple's "Internet of Things" (IoT) ecosystem with seamless iOS integration through consumer electronics expansion
- Developing market (India): Focus on Generation Z's (Gen Z) education sector to use Apple products, empower new users with Apple's technology and retain users through Apple's unique ecosystem early

<u>Impact</u>

Retain customer loyalty in USA and grow new user base in India with a potential revenue growth of \$57b

Next Steps

- Mature market: Merger & Acquisition (M&A) team to identify suitable companies to acquire
- Developing market: Sales and pricing team to work with schools / charity foundations to sell / donate iPads

Adopt IoT in USA through M&A

Why IoT in USA?

- USA makes up 40% of global revenue in 2020¹
- IoT devices usage projected to triple from 8.74b in 2020 to 25.4b in 2030 globally²

Xiaomi's IoT success in China:

- Expansion to IoT resulted in exponential growth surpassing \$37b in revenue and sold more than 210m IoT devices in 2020³
- Focused on strategic investments and leveraged on key IoT synergy
- Achieved 40.5% revenue increase IoT and lifestyle product segment in 2021 Q1 YoY⁴

Impact & Next Steps:

- Potential Revenue: \$50b/year at 40% growth
- Acquire consumer electronics companies

³ Harvard Business Review |2021

Attract Gen Z with iPads in India Schools

Why Gen Z in India?

- Large potential consumer base 357m Gen Z (10-24 years)¹
- Fastest growing economy 3rd largest by 2030²
- Brand loyalty starts young with survey³ showing:
 - 59% trust the brands they grew up with
 - 66% will stay loyal to the brand they like

Impact & Next Steps:

- Potential Revenue: \$7b/year for the next 3 years, \$28b/year in subsequent years
- Sales and pricing team to work with schools to sell and charitable foundation to donate iPads

References

IOT

1 Statista | 2021

https://www.statista.com/statistics/382175/guarterly-revenue-of-apple-by-geographical-region/

2 Statista |2020

https://www.statista.com/statistics/1183457/iot-connected-devices-worldwide/

3 Harvard Business Review |2021 https://hbr.org/2021/04/how-xiaomi-became-an-internet-of-things-powerhouse

4 China Internet Watch | 2021

https://www.chinainternetwatch.com/31132/xiaomi-guarterly/

Education

1 United Nations World Population Prospects | 2019

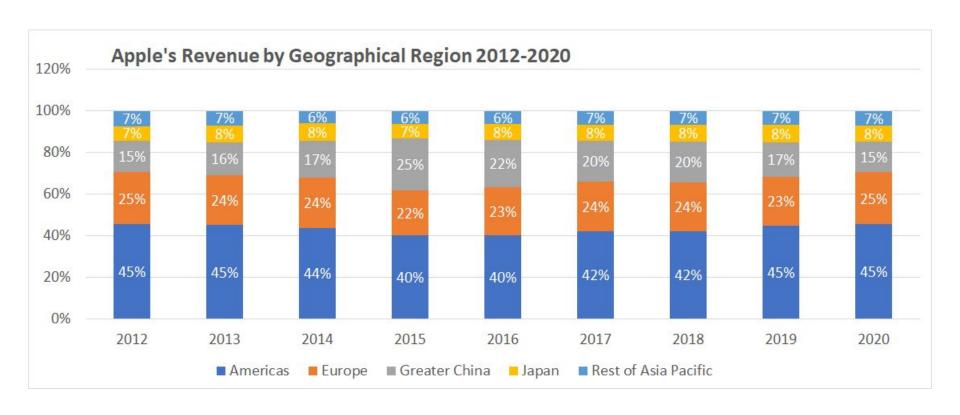
https://population.un.org/wpp/

2 Centre for Economics and Business Research (CEBR) |2020 https://www.business-standard.com/article/economy-policy/india-to-become-5th-largest-economy-in-2025-3rd-largest-by-2030-cerb-120122600277 1.html

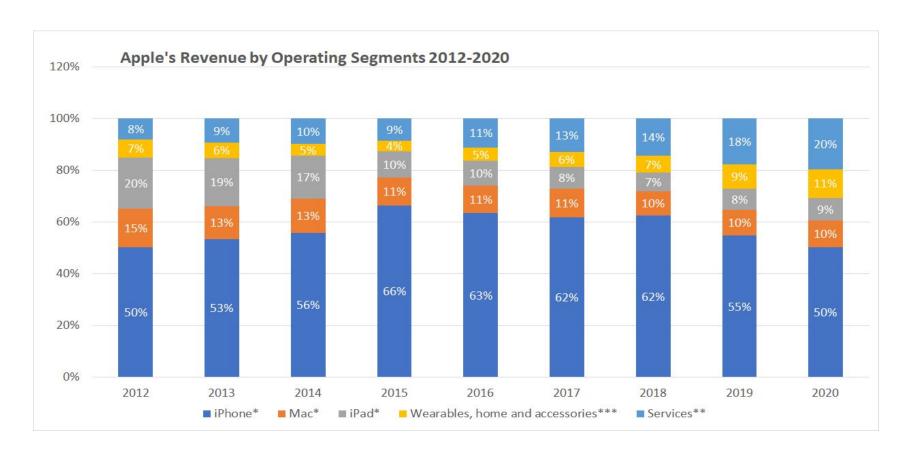
3 IBM Global Survey | 2017 (Survey done on 15,600 Gen Zers between the ages of 13 and 21) https://www.ibm.com/downloads/cas/M2W7GWV6

Appendix - Revenue data

Apple's revenue by geographical region



Apple's revenue by operating segments



Apple's revenue by region (in billion US\$)

Year	Americas	Europe	Greater	Japan	Rest of
			China		Asia Pacific
2012 Total	71.1	39.3	23.8	10.9	11.5
2013 Total	77.1	41.0	27.0	13.8	12.0
2014 Total	80.1	44.3	31.9	15.3	11.3
2015 Total	93.9	50.3	58.7	15.7	15.1
2016 Total	86.6	50.0	48.5	16.9	13.7
2017 Total	96.6	54.9	44.8	17.7	15.2
2018 Total	112.1	62.4	51.9	21.7	17.4
2019 Total	116.9	60.3	43.7	21.5	17.8
2020 Total	124.5	68.6	40.3	21.4	19.6
Grand Total	858.9	471.2	370.5	155.1	133.5

Appendix - IoT

Xiaomi in China vs. Apple in USA

Strategic coalescence

 Process through which a firm intimately connect with demand and supply-side stakeholders, bolsters tangible benefits for all, and triggers exponential market growth

4 Key Areas

- Coalescence with consumers
- 2. Coalescing operations around the core value proposition
- 3. Leveraging coalescing synergies
- 4. Coalescence with partners

USA IoT potential revenue

Xiaomi 40.5% revenue growth 2020 YoY on its IoT and lifestyle product segment. (Chinainternetwatch, 2021)

Using Back of the Envelope:

Americas year 2020 total Apple revenue US\$ 124.5b

If IoT will bring:

40% incremental revenue, est value US\$ 49.8b

Apple can connect directly with consumers through its established brand loyalty

- Apple has a well established brand name and have loyal fans for its product around the world. (NASDAQ, 2020)
- Given previous success with creating a seamless ecosystem with the iphones, this should be directly communicated to consumers as a selling point for the new consumer products. (Standagency, 2020)
- This allows Apple to communicate with the consumers through their established brand boosting revenue.

Apple could expand into the IoT sector while focusing on its core value proposition

- The three fundamental value propositions of Apple's brand leverages on the "Think Different" motto; reliable tech devices for mass markets; and in 2019, Apple also started to emphasize more and more about privacy to differentiate from other tech giants. (fourweekmba, 2020)
- This value proposition is even applicable if Apple ventures into IoT. Per a research paper by MDPI, security and privacy are the biggest challenge to the IoT. (Lo'ai Tawalbeh, 2020)
- Apple has always been known for respecting privacy which is a selling point for tech in recent years. (Geekwire, 2019)
- With Apple's expertise in this area, they could apply it to the new sector and gain consumer trust allowing for a successful penetration in the market.

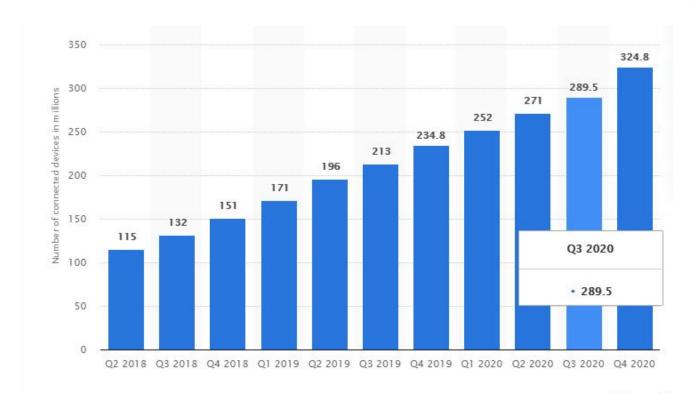
Apple could adapt Xiaomi's strategy in leveraging the loT synergy

- Expanding into IoT sector would allow iPhones to be used for a greater variety of purpose increasing the synergy.
- However, we recognise the lack of expertise in this area.
- Hence, we suggest to acquire a well known brand with similar values for Apple to expand in this sector.

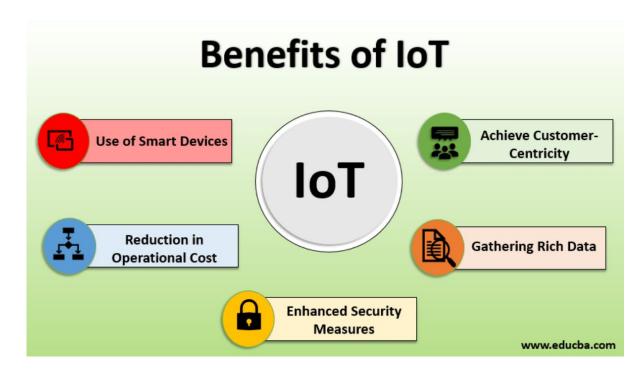
Connecting with potential partners

- Here lessons could be learnt from Xiaomi when selecting partners to expand into the loT sector.
 - Leveraging on personal networks
 - Acquire a small stake in partner companies
 - Investing in startups and working together with them to provide value to the startup in return for the expertise

Xiaomi's IoT connected devices over the years



Top 5 benefits of IoT



Xiaomi's worldwide revenue from 2010-2020 in RMB



Appendix - Education

India education potential revenue (iPads)

iPad price: US\$400

Market penetration: Over 3 years

Market penetration success rate: 60%

Gen Z population in India: 357m¹

% of population in Tier 1 cities: 25%²

Potential revenue: \$400 * 357m * 25% * 60% / 3 = \$7b/year over next 3 years

Subsequent years

5 - 9 years old : 115m1

Potential revenue:\$400 * 115m * 25% / 5 * 60% = \$1b/year

¹ United Nations World Population Prospects 2019

² https://worldpopulationreview.com/countries/cities/india

India education potential revenue (iPhone)

iPhone price: US\$1,000

Gen Z population in India: 357 million¹

Market Penetration Success rate: 60%

59% trust the brands they grew up with, assuming 50% of gen Z will use iPhone (including existing and new users switching in from other brands)

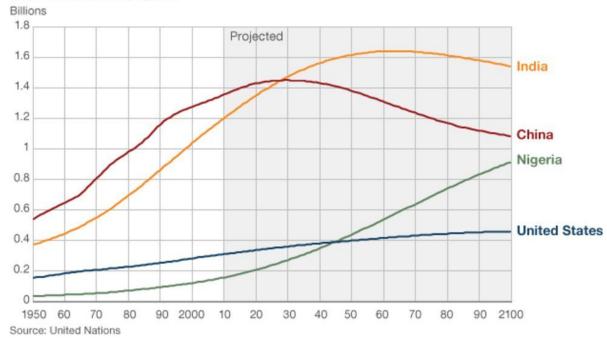
Assuming Gen Z change a phone in every 4 years

Potential revenue: \$1,000 * 357m * 50% * 60% / 4 = \$27b/year

Population growth

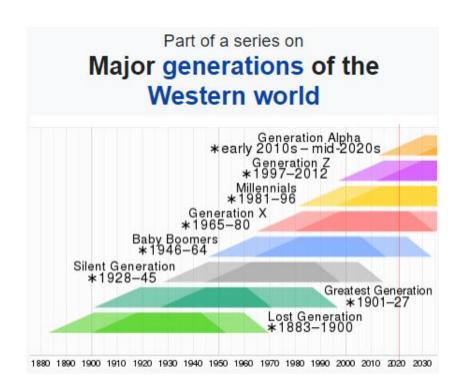
Population growth in China, India, Nigeria and USA

1950-2100, actual and projected



https://www.bbc.com/news/world-asia-22907307

Generation Z definition



India tiered cities

What are tier-1, tier-2 and tier-3 cities?

Indian cities are classified as X (tier-1), Y (tier-2) and Z (tier-3) categories by the government, based on the population density.

There are eight metropolitan tier-1 cities – Delhi, Mumbai, Bangalore, Chennai, Hyderabad, Kolkata, Ahmedabad and Pune. On the other hand, 104 cities are categorised as tier-2, while the remaining cities fall under the tier-3 category.

India GDP and ranking

Overtaking the UK in 2025, Germany in 2027 and Japan in 2030

India	2005	2010	2019	2020	2021	2025	2030	2035
GDP, local currency bn (constant prices)	54,952	81,925	145,660	130,673	142,433	188,169	260,055	348,714
GDP, USD bn (constant prices)	1,028	1,915	2,753	2,453	2,628	3,366	4,909	6,954
GDP, USD bn (current prices)	834	1,708	2,869	2,593	2,839	3,916	6,278	9,780
Rank	13	9	5	6	6	5	3	3

The world's largest 10 economies in 2030

Rank	Country	Proj. GDP (2030, PPP)	GDP (2017, PPP)	% change
IXMIIIX.	Country	1103. 051 (2000, 111)	GB1 (2017,1117)	70 Change
#1	China	\$64.2 trillion	\$23.2 trillion	+177%
#2	India	\$46.3 trillion	\$9.5 trillion	+387%
#3	United States	\$31.0 trillion	\$19.4 trillion	+60%
#4	Indonesia	\$10.1 trillion	\$3.2 trillion	+216%
#5	Turkey	\$9.1 trillion	\$2.2 trillion	+314%
#6	Brazil	\$8.6 trillion	\$3.2 trillion	+169%
#7	Egypt	\$8.2 trillion	\$1.2 trillion	+583%
#8	Russia	\$7.9 trillion	\$4.0 trillion	+98%
#9	Japan	\$7.2 trillion	\$5.4 trillion	+33%
#10	Germany	\$6.9 trillion	\$4.2 trillion	+64%

Source IMF (2017 data), Standard Chartered (2030 Projections)

https://www.visualcapitalist.com/worlds-largest-10-economies-2030/

Customer loyalty statistics

95% of loyalty program members want to engage with their brand's program through <u>new and emerging technologies</u>

93% of consumers are more likely to make repeat purchases at companies with excellent customer service

77% of consumers say they stayed loyal to specific brands for 10 years or more

65% of the probability to sell to an <u>existing customer</u>

55.3% of consumers stay loyal to a brand because they love the product

India's mobile vendor market share

