

CASE QUESTION:

How can Apple Watch grow its customer base and achieve an overall annual revenue growth rate of 8 to 10% by 2021, through strategic mitigation of adoption resistance?

KEY ISSUE: Adoption resistance

Adoption resistance remains at the forefront of Apple's obstacles in their pursuit of unhindered growth of sales. Potential buyers can be categorised into 2 groups: those who are hesitant to adopt smartwatches above trusty traditional watches, and those who have adopted other smartwatch brands (such as Android Wear and Xiaomi). For the latter, only competitive marketing will be needed to sway them, whereas the former poses a more significant target demographic for Apple, as they offer a market full of potential to tap into.

Resistance to technological innovation can be attributed to several factors.

Firstly, while Apple has sought its discerning value through partnerships with high-end brands such as Hermès and Nike, as well as the inclusion of powerful health/fitness trackers, the premium pricing of the watch is likely to have discouraged the quick adoption of wearable technology in developing countries, excluded potential buyers with less disposable income, and heightened its image as an exorbitantly-priced alternative to consumers that are able to afford it. To exacerbate this issue, smartwatches are seen as products that, at best case scenario, carry out the same functions as a smartphone, and at worst case, have restricted utility, especially when most of an Apple Watch's functions are tied to an iPhone.

Secondly, information asymmetry fuels hesitancy and doubt in customers, and is rife when individual consumers lack an adequate information base, or are reluctant to access existing information. In the face of recent events, such as the Facebook-Cambridge Analytica data scandal, distrust in data-collecting technologies exacerbates this imbalance. Apple emphasised the built-in sensors of the Watch as a differentiating value during their 2016 launch of the smartwatch, highlighting the ability of a mobile device to consistently gather data and monitor a range of bodily activities - without accounting for consumer misgivings. Although the Apple website notes several ways in which personal data is encrypted and protected through scrambling, the hardware-based security of the watch is often unknown to potential buyers, thus encouraging distrust. Even when data privacy is not in the decision-making forefront of a consumer, the unique and revolutionary health and fitness features of an Apple Watch are often not prevalent enough in the general public to maximise sales. Without the knowledge of a product's utility, resistant consumers are likely to continue perceiving it as having low added value - particularly when trading a traditional commodity for a more expensive and seemingly superfluous commodity - thus restricting sales growth for Apple.

STRATEGY:

For our key issue, we suggest a two-pronged solution to implement into its Series 4:

- 1) that Apple Watch quickly adopts Blockchain to tap into the healthcare industry, and
- 2) that they expand near field communication (NFC) as a true replacement of wallets.

STRATEGY 1: Blockchain - your mobile health log

Blockchain is a decentralised and public digital ledger that records transactions on many computers, such that no record involved can be altered retroactively without altering any blocks afterwards. This

technology is currently dominant in the financial services sector - however, it also holds significant positive potential for the healthcare industry.

By using Blockchain, Apple Watch can securely convey health data from a consumer's watch to the healthcare facilities they are registered in. With coexisting apps that measure health & fitness, such as sleep trackers, breathing rate, and heart rate monitors, the collation of these data points would improve ease of diagnosis for doctors, especially for potentially serious health conditions.

For example, sleep apnea treatment is driven primarily by self diagnosis, and the vast majority of cases go undiagnosed. But with a whole data store, filled with the sleeping patterns of a wearer collected over a much longer period of time, doctors will be able to tap into existing consistent records, with logs that are much more accurate than a patient's own judgement. Additionally, rising obesity rates and pollution levels are known to aggravate sleep apnea - thus, we can realistically predict a rise in need for this feature. Another instance for the usage of blockchain technology comes from asthmatic patients. With the existing blood oxygen sensors in the Apple Watch (which are largely used in conjunction with its fitness features), the extensive data collected on breathing and oxygen levels - both at rest and during exercise - of a wearer could be used medically; whether to supplement an accurate and more efficient diagnosis of a patient, or to monitor a known asthmatic patient's condition.

With the use of blockchain technology, Apple would open up endless possibilities in the healthcare industry, with consistent data logs and precise measurements; allowing doctors to diagnose with better accuracy, and in a much more timely manner.

Besides the techno-centric health benefits, which would attract older generations of wearers (amongst other consumers with health conditions), the partnership of Apple with notable healthcare facilities - both global (e.g. WHO) and local (e.g. nearby healthcare facilities) - will effectively tackle the information asymmetry and user distrust, which has since fueled some of the adoption resistance faced by Apple. This strategy not only creates a differentiating feature that will not be seen as redundant, but cooperation with trustworthy entities such as hospitals will likely result in positive and reliable marketing for the company.

To date, no other smart watch company has yet to implement this technology. Therefore, if Apple taps into this market, it can also emerge as a leader and compensate for its late market entry in the smartwatch industry.

STRATEGY 2: Near Field Communication (NFC) - a revolutionary online wallet

Convenience is a selling point for the Apple Watch, with the corporation's emphasis on Apple Pay - but why not take this one step further? Near Field Communication is used across a range of different facilities - from tapping on to public transport, or entering your workplace with an access card - to the point where a normal wallet is often accompanied by an unnecessarily large stack of cards.

Instead of limiting NFC technology to a single platform (Apple Pay), Apple Watch can be transformed into a true alternative for a wallet by syncing mobile apps with the wearable device. This can be used to substitute a whole range of physical burdens - workplace access cards, FlyBuys reward cards, gym membership tags, OneCard for Countdown discounts, and your AT Hop Card - amongst many other uses. In doing so, the Apple Watch becomes an undeniable convenience and a perfect substitute for the wallet, thereby increasing product utility and constructively dealing with the negative perception of smartwatches as superfluous. Both of our technological solutions serve as the meaningful product differentiation Apple Watch needs, not only over its watch competitors, but also to those consumers who are hesitant to adopt new technology.

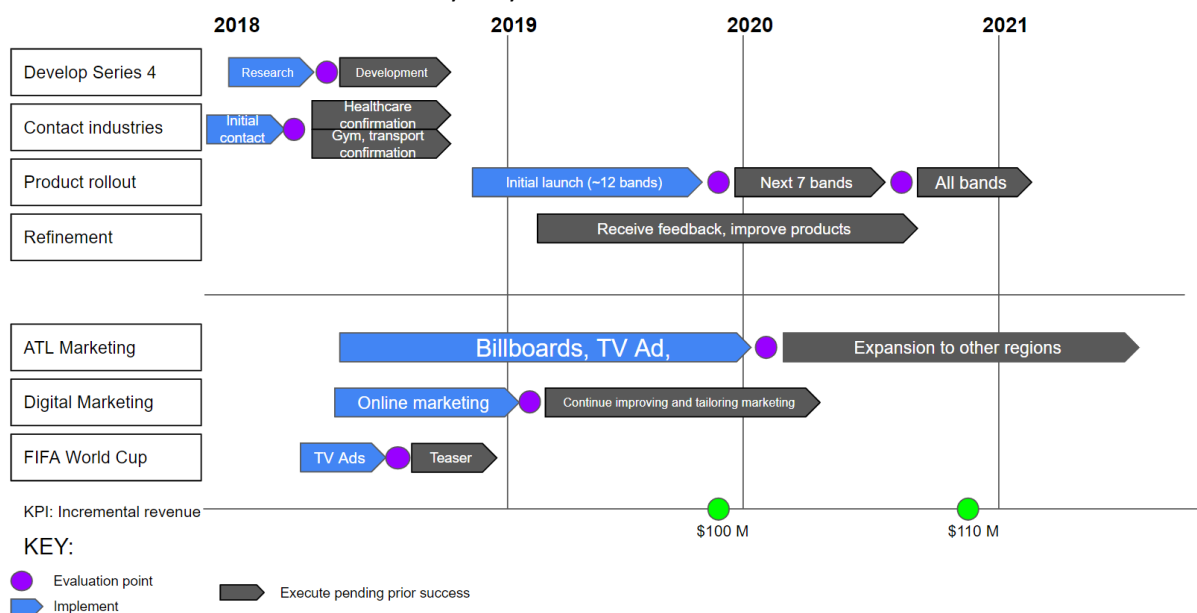
IMPLEMENTATION:

In order for NFC and Blockchain technology to work, Apple needs to cooperate with healthcare sectors, fitness/retail companies, and transport agencies to streamline and integrate our technology with their data structure. We would recommend introducing our strategies into developed regions (such as North America and Europe) to begin with, as the customer base for premium priced goods are likely to be much more quickly adopted in countries where consumers have more disposable income, before launching similar technology in other countries.

The rollout of the new Apple Watch Series 4, with Blockchain and NFC technology, should be first implemented in a small array of the available Apple Watches {for the full list of bands/cases, please refer to APPENDIX [2]}. For instance, the technology can first be launched in the middle-priced category, to account for a middle ground of our consumer demographics. Upon the passage of a quarter, short-term market research can then be conducted on the success of sales. If a positive adoption is seen, a rollout across one or more price categories can be carried out with certainty. Apple can then adjust the product prices accordingly before a complete launch.

Although there are likely to be challenges in proposing partnerships with many public and private entities, we believe each industry has their own incentives to cooperate. For healthcare providers, the Apple Watch may become a revolutionary new piece of information technology - directly reducing the time taken for diagnosis and prescription. As the consumer base grows due to the clear added value of convenience, retail, fitness and transport agencies will also likely see a rise in users, due to an increase in accessibility, and having a derived demand from the demand of Apple Watches. Thus, in the implementation of our strategies, we may need to increase our workforce by hiring additional employees to negotiate with agencies with a range of different companies and organisations - both in the healthcare and retail sector. We should then also hire more employees to handle social media marketing (e.g. on Instagram, Spotify, Tiktok) and create ads to bridge the information asymmetry by advertising the new features of the Series 4.

The diagram below shows our **4-year-implementation timeline**. Note that all marketing elements, including “FIFA World Cup”, are covered in the APPENDIX [3]. Our Key Performance Indicator (KPI) is the incremental revenue earned on a yearly basis.



FINANCES:

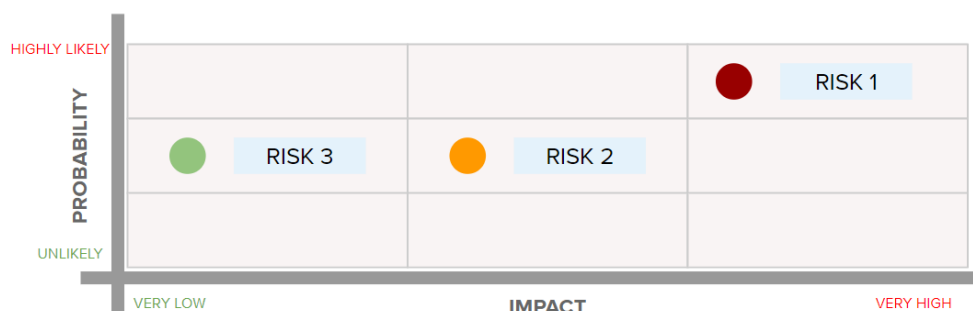
	2018	2019	2020	2021
Revenue:				
Additional Sales	\$ -	\$ 90,000,000.00	\$ 100,000,000.00	\$ 110,000,000.00
Total Additional Revenues:	\$ -	\$ 90,000,000.00	\$ 100,000,000.00	\$ 110,000,000.00
Expenses				
Blockchain R&D	\$ 300,000.00			
Blockchain maintenance		\$ 50,000.00	\$ 80,000.00	\$ 100,000.00
NFC R&D	\$ 600,000.00			
NFC Maintenance		\$ 90,000.00	\$ 70,000.00	\$ 60,000.00
Additional workers	\$ 5,000,000.00	\$ 10,000,000.00	\$ 14,000,000.00	\$ 20,000,000.00
Marketing	\$ 2,000,000.00	\$ 15,000,000.00	\$ 25,000,000.00	\$ 25,000,000.00
Total Costs:	\$ 7,900,000.00	\$ 25,140,000.00	\$ 39,150,000.00	\$ 45,160,000.00
Additional Net Profit	-\$ 7,900,000.00	\$ 64,860,000.00	\$ 60,850,000.00	\$ 64,840,000.00

- All figures are in \$USD
- Expenses and revenue are termed “additional”, meaning they are the marginal cost and marginal revenue that are incurred from implementing both arms of our strategy
- In 2018 there are negative profits, however, since Apple currently sees high profit margins from its other products [4], it can cross-subsidise profits into funding as a form of internal investment.
- Apple Watches are already manufactured with NFC chips, so there are no new costs associated with production and shipping of these chips.
- The main cost driver are marketing costs; the justification behind is explored in APPENDIX [3]

KEY ASSUMPTIONS:

- 1) NFC maintenance cost diminishes over time due to being a built-in feature
- 2) Blockchain maintenance cost grows over time due to increase in distributed ledgers
- 3) Prices follow a steady inflation rate of 2%

RISK MITIGATION:



Risk Assessment Matrix

RISK 1: Popularity of Apple Watch declines after a period of time

To mitigate: Update product line on regular basis based on consumer demand and introduce seasonal marketing campaigns. This could look like releasing a new colour or design of a band, or partnering with a retail store to provide a discount when an Apple Watch is purchased.

RISK 2: Competitors copying our NFC idea

To mitigate: Apple should focus on building a steady customer base in the US & Europe first before expanding, and then leverage the network effects this would bring. As more people use Apple Watch

as a replacement for traditional wallets/health-monitoring devices (and also as a result of being a pioneer for this type of software), the higher its value becomes, and so more people continue to use Apple Watch instead of competitor products.

RISK 3: Public unaware of new features

To mitigate: Upon the first launch of this initiative, Apple should also increase marketing across a range of platforms. For the younger demographics, social media (e.g. Instagram, Facebook, Twitter, Tiktok) should be utilised for marketing, whilst pursuing collaborations with fitness influencers, that can release ads explaining the new features. Partnership with other entities, such as the local hospitals, or larger retail companies will be effective in targeting the older generations.

CONCLUSION:

Our strategies maximise awareness of Apple Watches’ utility and make it an everyday necessity - whether it be for monitoring your health, or as a more convenient “wallet”. Both of these strategies effectively diminish much of the adoption resistance the company currently faces from consumers, whilst ensuring long-term sustainable growth of Apple Watch sales. By implementing these two strategies, Apple Watch will be able to increase its annual growth rate to 8 to 10%.

APPENDIX:

[1] *Why not lower the price of Apple Watch?* Although reducing price to be competitive may gain a greater consumer surplus, Apple’s pricing strategy has always aimed at a premium market. In doing this, Apple is able to maintain high profit margins.

Category	Band	Case	38 mm	42 mm
			Price (CAD\$)	Price (CAD\$)
Low Priced (Sport)	White	Silver Aluminum	449	519
	Blue	Silver Aluminum	449	519
	Green	Silver Aluminum	449	519
	Pink	Silver Aluminum	449	519
	Black	Black Aluminum	449	519
Mid-Priced (Stainless Steel)	White Sport	Stainless Steel	699	779
	Black Sport	Stainless Steel	699	779
	Classic Buckle	Stainless Steel	849	919
	Milanes Loop	Stainless Steel	849	919
	Black Leather Loop	Stainless Steel	NA	919
	Blue Leather Loop	Stainless Steel	NA	919
	Stone Leather Loop	Stainless Steel	NA	919
	Light Brown Leather Loop	Stainless Steel	NA	919
	Black Modern Buckle	Stainless Steel	749	NA
	Midnight Modern Buckle	Stainless Steel	749	NA
	Soft Pink Modern Buckle	Stainless Steel	749	NA
	Brown Modern Buckle	Stainless Steel	749	NA
	Stainless Steel Link	Stainless Steel	949	1,299
	Space Black Stainless Steel Link	Stainless Steel	1,049	1,459
High Priced	White Sport	Rose Gold	10,000	15,500
	Black Sport	Yellow Gold	10,000	15,500
	Black Classic Buckle	Yellow Gold	NA	19,000
	Blue Classic Buckle	Yellow Gold	NA	19,000
	Rose Grey Modern Buckle	Rose Gold	22,000	NA
	Bright Red Modern Buckle	Yellow Gold	22,000	NA

[2]

[3] Alternative Strategy: Marketing

In addition to using social media, billboards and TV campaigns, we suggest that Apple Watch advertise their new product in relation to the 2018 FIFA World Cup held in Russia. Although Russia does not fit the target zone, the quadrennial nature of the event, and the resulting global attention presents an opportunity. Marketing can be done with football-theme ads, involving celebrity football players such as Cristiano Ronaldo, Neymar Jr. and Lionel Messi, and could also mimic the ambiguity of the “1984 Macintosh Commercial”, in a teaser trailer form, to maximise publicity.

[4] <https://www.businessofapps.com/data/apple-statistics/>