

Smart Home Limited

Context

This is the second exercise that extends *the Introduction* lecture. This scenario will be referred multiple times in further parts of the training, and you will be able to observe how your understanding of the company changes.

Who are you?

You are the executive board. Your company consist of people who add the 'smart' prefix to various home appliances. You do not own production lines, instead, you outsource assembling to various contractors.

Products

Image	Description	Price
	Smart Mirror: A touch enabled mirror that can display weather forecast, calendar and news feed. Installation procedure requires mounting the mirror by the wall, opening a configuration webpage, and then linking to your accounts in various services.	\$2,000
	Smart Watches: wearable android device, display, heart rate monitor, body fat monitor, temperature monitor, accelerometers, must be charged every two days.	\$349
	Smart Mattress: Dozens of sensors monitor your body temperature, your weight, and how you sleep. It requires a companion smartphone app.	\$499
	Smart toothbrush: Using a number of accelerometers, and a bluetooth connection, this device monitors how you brush your teeth. The phone application can display hints and remind you about regularly visiting doctors.	\$299

Finances

- You're profitable, with a last year revenue around \$5M, stable net margins around 20% and 37% YtY growth rate.
- You have a healthy cash flow and reserves of \$6M. So far you have been very frugal about marketing and promotion.
- 80% of your income comes from the two cheaper products - smartwatches and smart toothbrushes. The latter one was recognised this year by consumers and it looks like it is booming.
- You are concerned about your company growth. Next year it will be something about 12% only.

Your P & L	2013	2014	2015	2016	2017 (forecast)
Current market (\$K)	7,380	12,765	21,392	27,774	35,700
<i>watch</i>	6,980	10,470	17,450	20,940	23,732
<i>toothbrush</i>		1,495	2,243	4,485	8,970
<i>mirror</i>	400	800	1,200	1,600	2,000
<i>mattress</i>			499	749	998
Your share of the current market					
<i>watch</i>	50%	50%	50%	50%	50%
<i>toothbrush</i>		100%	100%	100%	50%
<i>mirror</i>	100%	100%	100%	100%	100%
<i>mattress</i>			100%	100%	100%
Total revenue	3,890	7,530	12,667	17,304	19,349
<i>watch</i>	3,490	5,235	8,725	10,470	11,866
<i>toothbrush</i>		1,495	2,243	4,485	4,485
<i>mirror</i>	400	800	1,200	1,600	2,000
<i>mattress</i>			499	749	998
Manufacturing costs	2,334	4,518	7,600	10,382	11,609
<i>watch</i>	2,094	3,141	5,235	6,282	7,119.6

Your P & L	2013	2014	2015	2016	2017 (forecast)
<i>toothbrush</i>	0	897	1,346	2,691	2,691
<i>mirror</i>	240	480	720	960	1,200
<i>mattress</i>	0	0	299	449	599
Gross profit	1,556	3,012	5,067	6,921	7,740
<i>watch</i>	1,396	2,094	3,490	4,188	4,746
<i>toothbrush</i>		598	897	1,794	1,794
<i>mirror</i>	160	320	480	640	800
<i>mattress</i>			200	299	399
Gross margin	40%	40%	40%	40%	40%
<i>watch</i>	40%	40%	40%	40%	40%
<i>toothbrush</i>		40%	40%	40%	40%
<i>mirror</i>	40%	40%	40%	40%	40%
<i>mattress</i>			40%	40%	40%
SG&A	800	1,800	2,800	3,600	3,600
Net profit	756	1,212	2,267	3,321	4,140
Net margin	19%	16%	18%	19%	21%
Growth YtY		94%	68%	37%	12%

Competition

- There is one Swiss company, Tizzo, that is experimenting with smartwatches, too. They were originally making regular watches, but are trying to embrace high-tech. They started doing smartwatches before you, but they do not understand the nature of digital products.
- You have seen that a big company I&I, is recruiting engineers with very specific skill sets. It looks like they are going to produce their own toothbrushes very soon. They certainly have really big marketing budgets.

Operations

You have a small team of designers, a marketing person and a very small customer support team. Designers prepare blueprints, and then you coordinate suppliers and manufacturing process in China. Chinese partners send gadgets directly to resellers.

Marketing Strategy

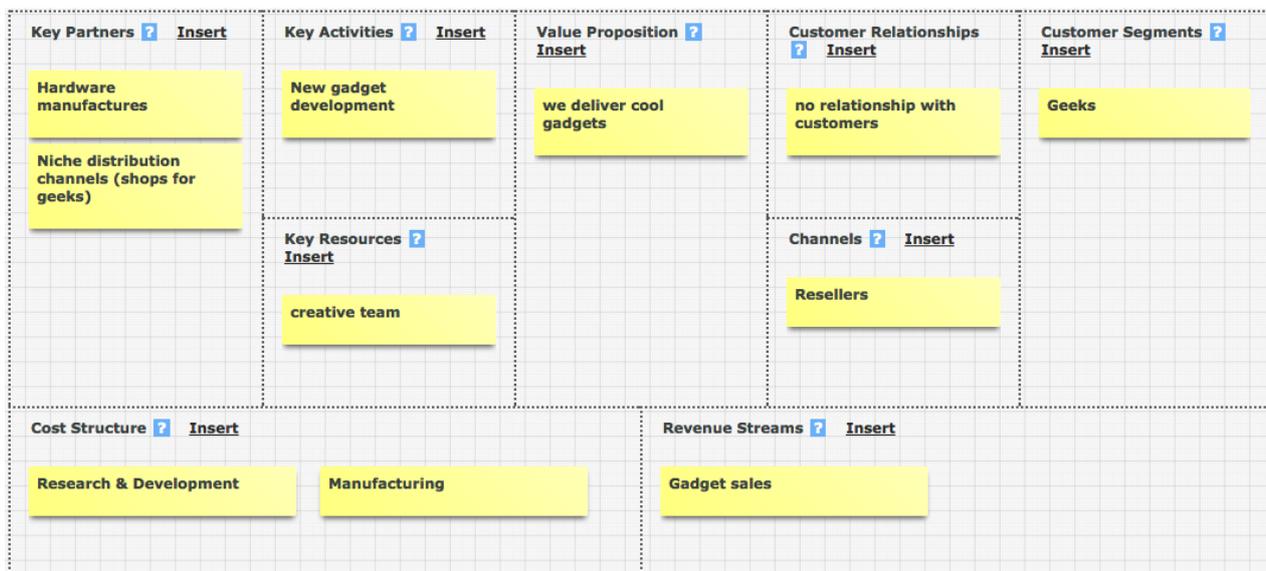
None, whatsoever. You have always considered yourself to be a niche company producing niche gadgets for geeks. So far, it was enough to attend all high-tech conferences and just stand there, sales were just happening. You run some social websites, but you think you could shut them down and it would not affect your business. You also happen to launch some campaigns from time to time, but they look like a waste of money to you.

You have tried to sell your products to ordinary, non-geeky people, but without much success. They do not see value in them.

Growth Strategy

From the very beginning of your company, your strategy could be summarised as “reinvent home appliances”. So far, it was enough to keep the company running, but this year you are a bit concerned of mentioned earlier competition and slowly stagnating sales of smartwatches. Also, your team seems to be out of ideas for new, ‘*smart*’ appliances.

The Business Model Canvas



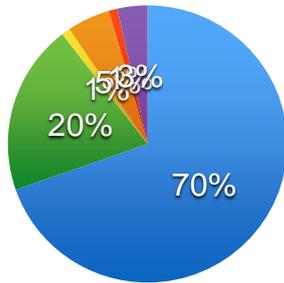
Your Task

Ensure the company has a future. You may consider following options:

1. Do more expensive home appliances (like a smart fridge), which should result in bigger revenue.
2. Do more basic home appliances, like smart power socket that allows to control plain home appliances. They will be cheap, but you may sell volumes.
3. Milk the company. Either sell it, or fire the design team and continue manufacturing as long as there is demand. Take the profit.
4. Launch big marketing campaign to attract non-geeky users.
5. Move the design team to a country where labour is cheaper.
6. Try to find a manufacturer that will be able to assemble all your gadgets from the beginning to the end.
7. Any other option you may think of.

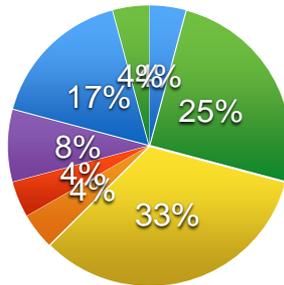
Appendix I - manufacturing cost break up

Smart mirror



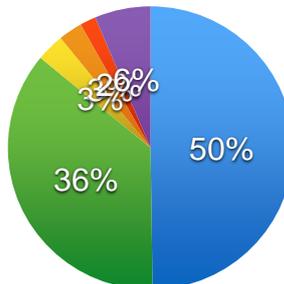
- Large Monitor
- Two way mirror
- Frame
- Transport
- Manufacturing
- Raspberry PI

Smart watch



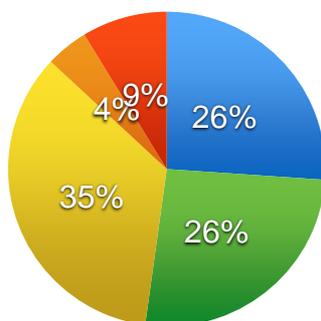
- Screen
- SoC
- Fat Level Monitor
- Accelerometers
- Strap, Bezel & Case
- HR
- Manufacturing
- Transport

Smart mattress



- Mattress
- Accelerometers
- Raspberry Pi
- Temperature monitoring
- Manufacturing
- Transport

Smart toothbrush



- Toothbrush
- System on Chip
- Accelerometers
- Manufacturing
- Transport