Management Practice

7 & 8 Leadership and teams

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MPiE

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Course

Literature for the course:

Eisner, Howard. *Essentials of project and systems engineering management*. John Wiley & Sons, 2008.

Learning objective for this session:

- Understand failure and success based on evidence
- Develop and understand the essential skills and abilities that are necessary to manage and lead people effectively for the benefit of the individual and teams using need-led methods.
- Apply tools to develop your leadership skills and style

Literature for this session:

https://www.nature.com/articles/s41586-019-1725-y

Leadership, failure and trust

- CEOs can improve the quality of strategic decisions that their management teams make by shaping a relational context of **trust** and facilitating **learning from failures**

- Psychological safety (a shared belief held by members of a team that the team is safe for interpersonal risk taking) can support leadership

- A psychological safe climate seems to facilitate learning from failures and it is suggested to be positively associated with unit performance

Source: Abraham Carmeli et a (2012); Edmondson, Amy (1999); Reuven Hirak (2012)

Failure

- About **75% of U.S. venture-backed start-ups fail** according to data from the Harvard Business School
- Failure defined as liquidation of all assets would indicate 30% to 40% of high potential start-ups fail
- Failure defined as not delivering the projected return on investment from VCs suggests that about 95% of start-ups fail
- Majority of companies "failed" if we define failure as not having an exit (acquisition, IPO or otherwise) that was enough to pay back all of their VCs' investment

Source: Shikhar Ghosh Wall Street Journal (2013)

Management and failure

- Roughly 70 businesses are created in the UK every hour, but within five years over half will have collapsed
- **Good management** is a better predictor of a firm's success than R&D spending, IT spending or how skilled their workforce is.
- Almost a third of the differences in productivity between and within countries is based on whether or not firms **consistently monitor and improve their processes, set and revise targets, and incentivise employees through merit-based hiring, firing and promotion procedures.**

Source: Office for National Statistics – Inter-Departmental Business Register

x1000

	Active	Births		Deaths	
	Count	Count	Rate (%)	Count	Rate (%)
2013	2,449	346	14.1	237	9.7
2014	2,551	350	13.7	246	9.7
2015	2,699	383	14.3	282	10.4
2016	2,834	414	14.6	281	9.9
2017	2,926	382	13.1	362	12.4
2018	2,940	381	12.9	336	11.4

Source: Philip Salter, Forbes (2019), Sam Dumitriu, Management matters (2019); BRIEFING PAPER Number 06152, 12 December 2018

Dynamics of failure for start-ups

- What might be the dynamics of failure?

- Success is defined as ventures that achieved initial public offering (IPO) or high-value mergers and acquisitions.

- Failure occurs when they **don’t obtain an exit within five years after their first investment by venture capital firms**.

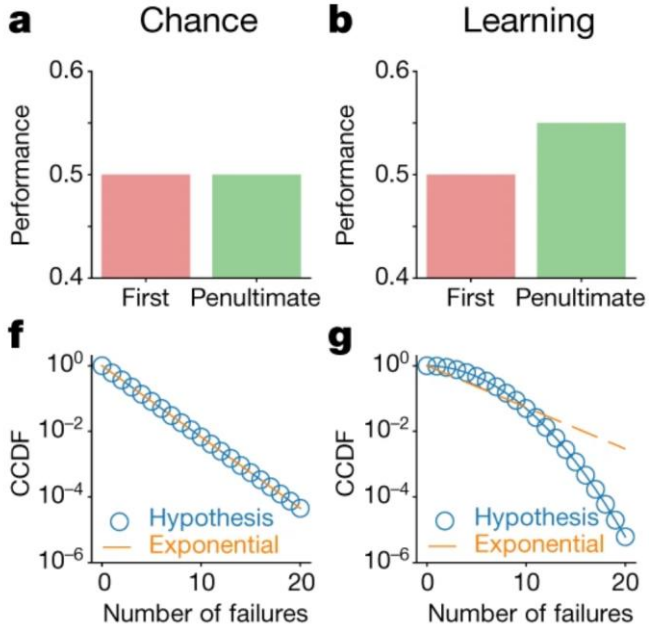
Source: Yin, Y., Wang, Y., Evans, J.A. *et al.* Quantifying the dynamics of failure across science, startups and security. *Nature* (2019)

Learning

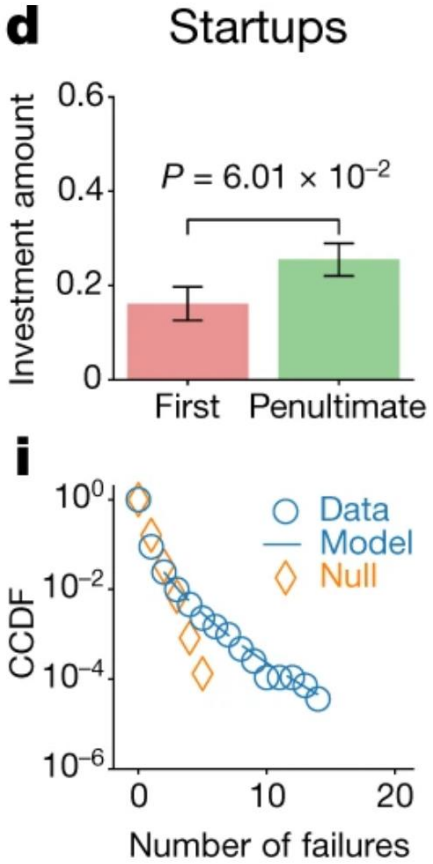
- Two primary mechanisms that could explain how failures may lead to success are **chance and learning**
- If each attempt has a certain likelihood of success, the probability that multiple attempts all lead to **failure to decrease exponentially** with each trial
- The chance model would suggest that success eventually arises from an **accumulation of independent trials**
- Data from start-up investment records from VentureXpert (58,111 start-up companies involving 253,579 innovators, 1970–2016) used to explore this

Source: Sitkin, S. B. Learning through failure: the strategy of small losses (1992) & Huber, G. Organizational learning: the contributing processes and the literatures (1991).

Learning from failure



Chance or learning alone can't explain the empirical patterns that underlie failures, suggesting that more complex dynamics may be at work.

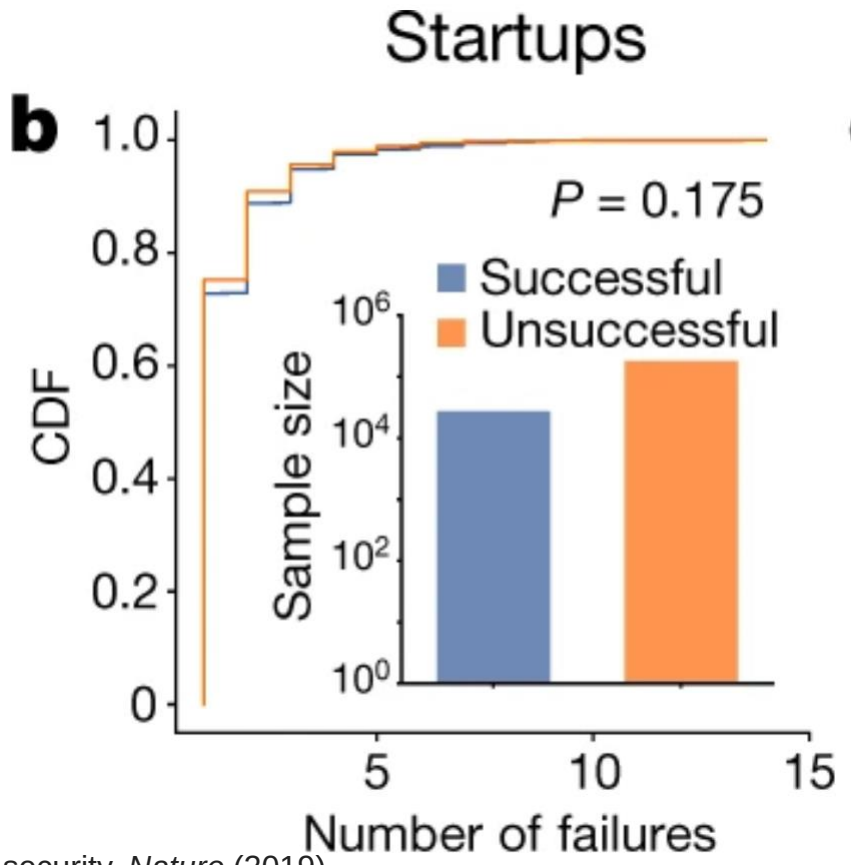


The complementary cumulative distribution function (ccdf) of a random variable is the relative power level against the probability of occurrence

Source: Yin, Y., Wang, Y., Evans, J.A. *et al.* Quantifying the dynamics of failure across science, startups and security. *Nature* (2019)

Successful vs unsuccessful

- The number of failed cases were measured that did not achieve eventual success. It was found that the size of the unsuccessful group is of a **similar order** of magnitude as the successful group.
- The number of consecutive failures before the last attempt for the unsuccessful group follows a statistically **similar distribution** from those that lead to success
- It is suggested that people who ultimately succeeded did not try more or less than their unsuccessful counterpart



Source: Yin, Y., Wang, Y., Evans, J.A. *et al.* Quantifying the dynamics of failure across science, startups and security. *Nature* (2019)

Power-law temporal scaling

- The model predicts that the successful group is characterized by power-law temporal scaling, which is absent for the unsuccessful group. This means that the same principles or processes are at work no matter what the scale of analysis.

- It implies **that the successful and unsuccessful groups may follow fundamentally different failure dynamics** that might be distinguishable at an early stage, with performance improving over time for successful ones.

- A power-law relationship is one where some quantity can be expressed as some power of another. A simple example is

$$Y = \beta x^{\alpha}$$

- *Y* is some response or dependent variable, *x* represents an independent or explanatory variable, β is a normalization constant and α is the scaling exponent

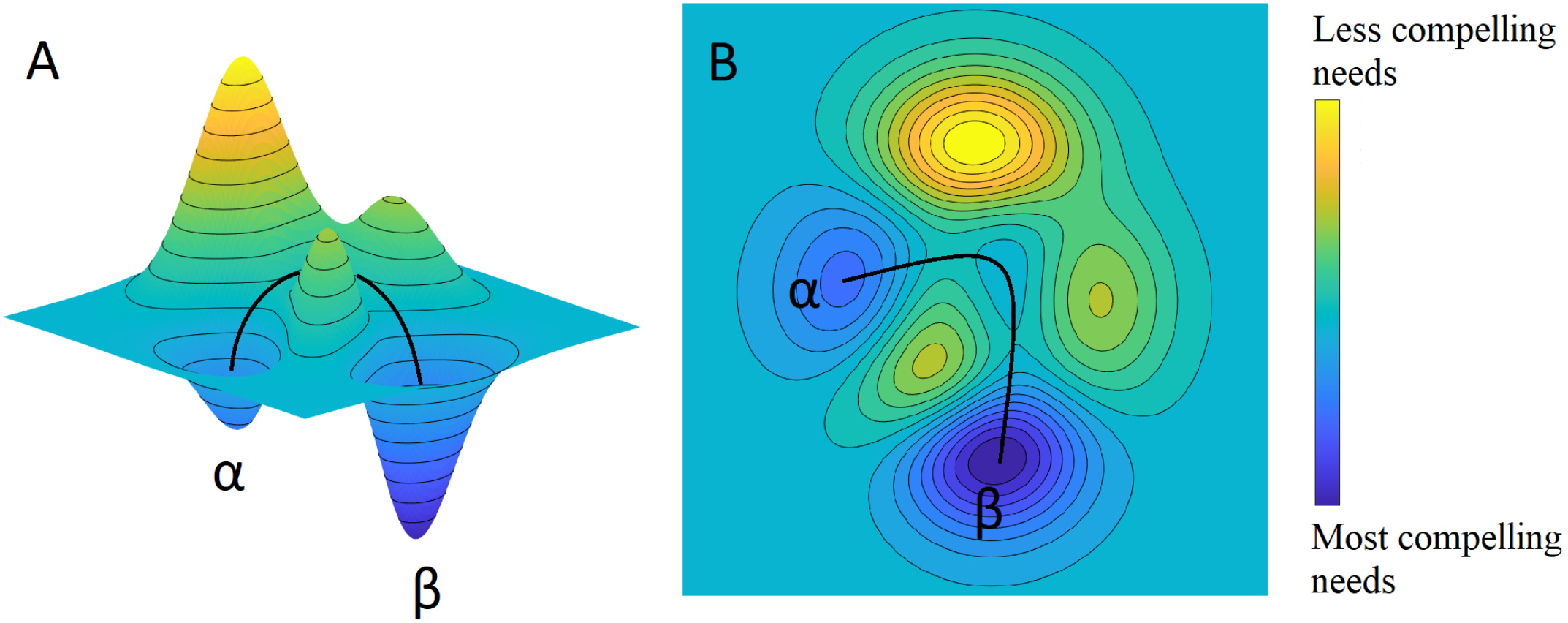
Source: Yin, Y., Wang, Y., Evans, J.A. *et al.* Quantifying the dynamics of failure across science, startups and security. *Nature* (2019); Milne, (1998)

Progression

- Prior start-up experience can positively influences skills for coping with liabilities of newness, effectual reasoning and attitudes towards failures
- **Market pull** is one of the main drivers of the economically successful exploitation of R&D-based development in the innovation process
- A leader should know the **value added** by their organisation and manage this efficiently
- Specific tools can be applied to determine the value that is offered

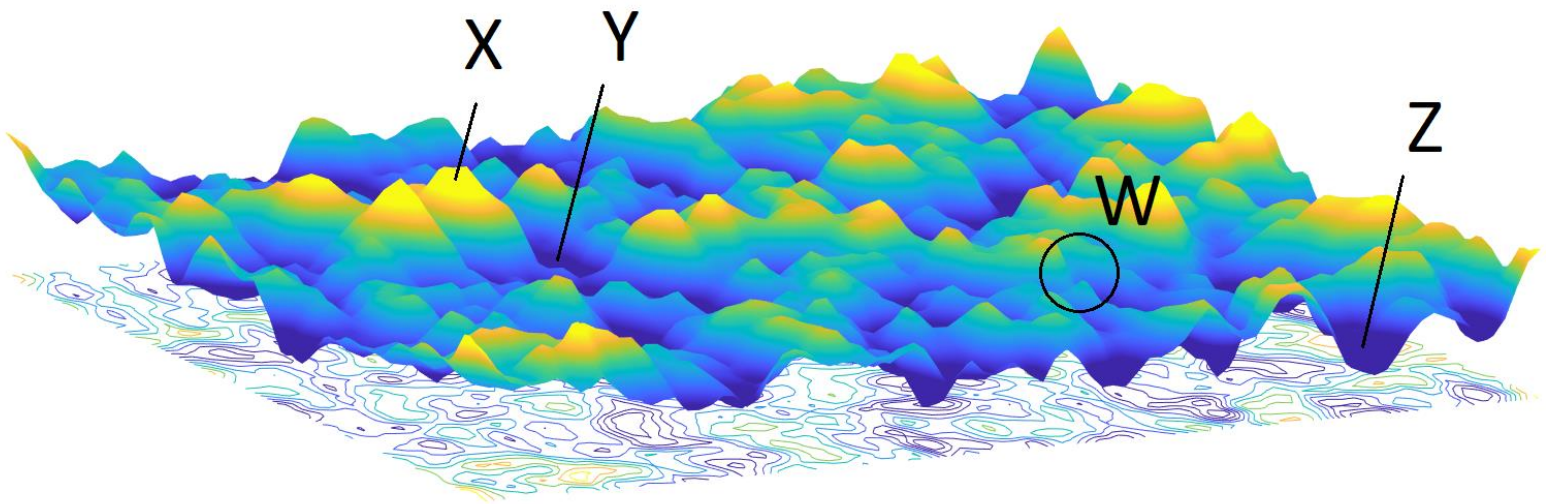
Source: Politis, D. (2008); Tushmann (1988)

Market pull - Finding compelling needs



Tianyou Xu and Jeroen Bergmann, A landscape framework for need-led innovation, under review, 2020

Landscape

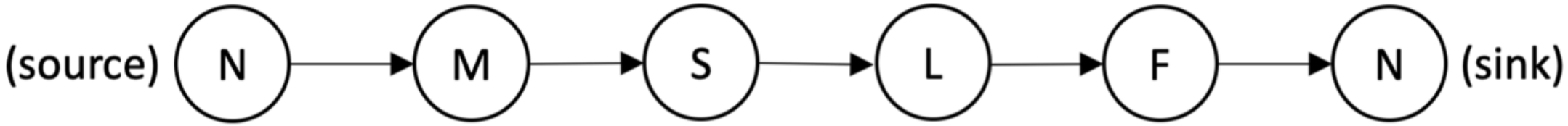


Less compelling needs

Most compelling needs

Tianyou Xu and Jeroen Bergmann, A landscape framework for need-led innovation, under review, 2020

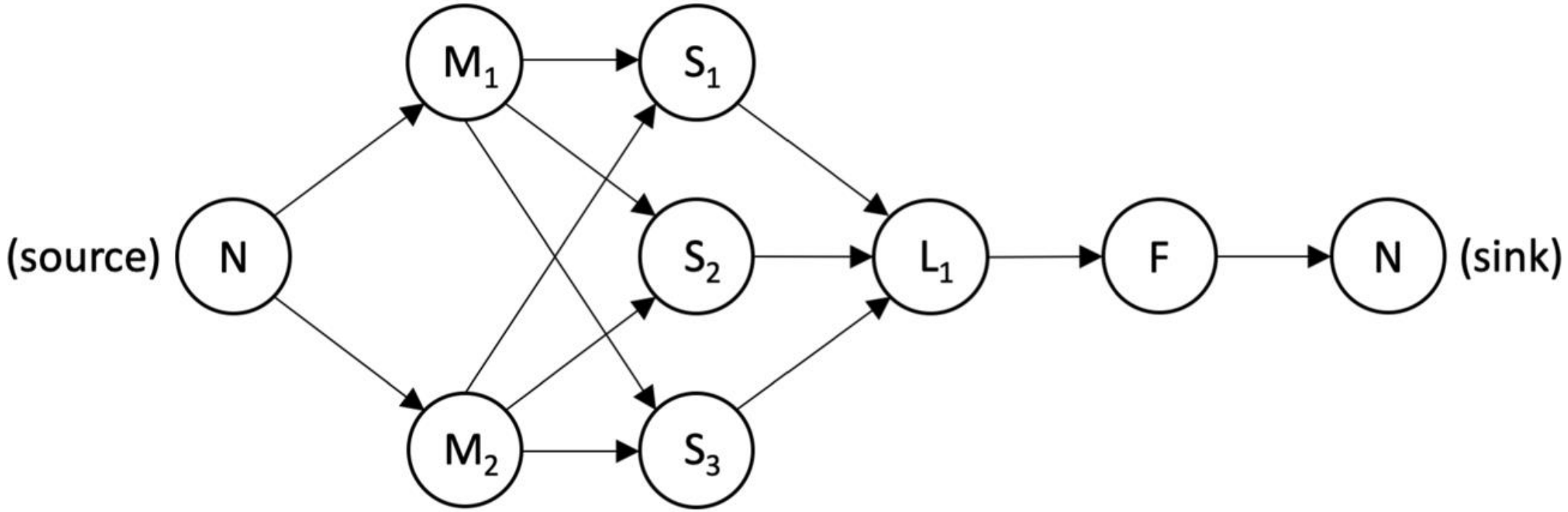
Process



The vertex ***N*** contains a set of needs that flow through stages of market analyses ***M***, stakeholder analyses ***S***, and landscape analyses ***L*** to reach a filtered state ***F*** that yields a set of final needs

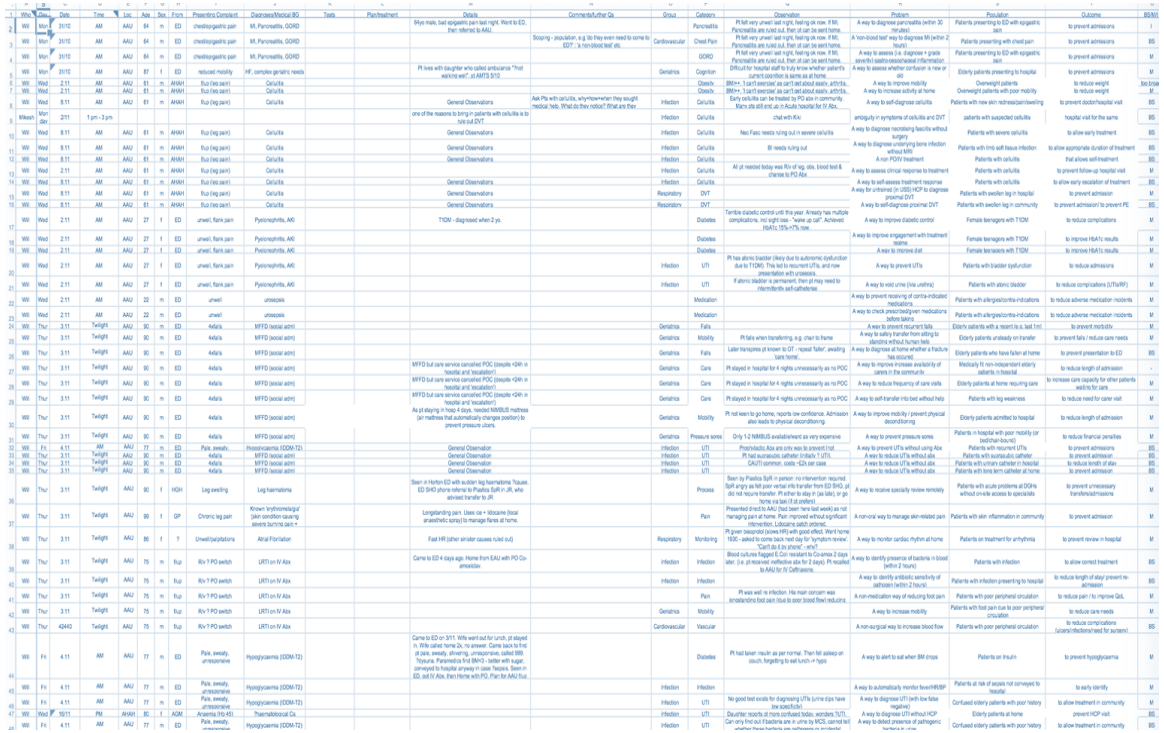
Soliman, E., Mogefors, D. & Bergmann, J.H.M. Problem-driven innovation models for emerging technologies. Health Technol. (2020). https://doi.org/10.1007/s12553-020-00450-5

Process



Soliman, E., Mogefors, D. & Bergmann, J.H.M. Problem-driven innovation models for emerging technologies. Health Technol. (2020). https://doi.org/10.1007/s12553-020-00450-5

Taking the need forward



Who	Day	Date	Time	Loc	Age	Sex	From	Presenting Complaint	Diagnoses/Medical BG	Tests	Plan/Treatment	Details	Comments/further Qs	Group	Category	Observation	Problem	Population	Outcome	BS/AS
WB	Mon	31/10	AM	AAU	64	m	ED	chest/epigastric pain	MI, Pancreatitis, GORD			64yo male, bad epigastric pain last night. Went to ED, then referred to AAU.			Pancreatitis	Pt felt very unwell last night, feeling ok now. If MI, Pancreatitis are ruled out, then ut can be sent home.	A way to diagnose pancreatitis (within 30 minutes).	Patients presenting to ED with epigastric pain	to prevent admissions	-
WB	Mon	31/10	AM	AAU	64	m	ED	chest/epigastric pain	MI, Pancreatitis, GORD				Scoping – population, e.g. 'do they even need to come to ED?', 'a non-blood test' etc.	Cardiovascular	Chest Pain	Pt felt very unwell last night, feeling ok now. If MI, Pancreatitis are ruled out, then ut can be sent home.	A 'non-blood test' way to diagnose MI (within 2 hours)	Patients presenting with chest pain	to prevent admissions	BS
WB	Mon	31/10	AM	AAU	64	m	ED	chest/epigastric pain	MI, Pancreatitis, GORD						GORD	Pt felt very unwell last night, feeling ok now. If MI, Pancreatitis are ruled out, then ut can be sent home.	A way to assess (i.e. diagnose + grade severity) gastro-oesophageal inflammation	Patients presenting to ED with epigastric pain	to prevent admissions	M
WB	Mon	31/10	AM	AAU	87	f	ED	reduced mobility	HF, complex geriatric needs			Pt lives with daughter who called ambulance "I'not walk'ins well", st AMTS 5/10		Geriatrics	Cognition	Difficult for hospital staff to truly know whether patients current condition is same as at home	A way to assess whether confusion is new or old	Elderly patients presenting to hospital	to prevent admissions	M
WB	Wed	2.11	AM	AAU	61	m	AHAH	flu/ (leg pain)	Cellulitis						Obesity	BMI>+, 'I can't exercise' as can't set about easily, arthritis	A way to improve mobility	Overweight patients	to reduce weight	No bmw
WB	Wed	2.11	AM	AAU	61	m	AHAH	flu/ (leg pain)	Cellulitis						Obesity	BMI>+, 'I can't exercise' as can't set about easily, arthritis	A way to increase activity at home	Overweight patients with poor mobility	to reduce weight	M
WB	Wed	8.11	AM	AAU	61	m	AHAH	flu/ (leg pain)	Cellulitis			General Observations	Ask Pts with cellulitis, why+how+when they sought medical help. What do they notice? What are they	Infection	Cellulitis	Early cellulitis can be treated by PO abx in community. Many pts still end up in Acute hospital for IV Abx.	A way to self-diagnose cellulitis	Patients with new skin redness/pain/swelling	to prevent doctor/hospital visit	BS
Mikeal	Mon day	2/11	1 pm - 3 pm									one of the reasons to bring in patients with cellulitis is to rule out DVT		Infection	Cellulitis	chat with KVo	ambiguity in symptoms of cellulitis and DVT	patients with suspected cellulitis	hospital visit for the same	BS
WB	Wed	8.11	AM	AAU	61	m	AHAH	flu/ (leg pain)	Cellulitis			General Observations		Infection	Cellulitis	Nec Fasc needs ruling out in severe cellulitis	A way to diagnose necrotising fasciitis without surgery	Patients with severe cellulitis	to allow early treatment	BS
WB	Wed	8.11	AM	AAU	61	m	AHAH	flu/ (leg pain)	Cellulitis			General Observations		Infection	Cellulitis	BI needs ruling out	A way to diagnose underlying bone infection without MRI	Patients with Imb soft tissue infection	to allow appropriate duration of treatment	BS
WB	Wed	8.11	AM	AAU	61	m	AHAH	flu/ (leg pain)	Cellulitis			General Observations		Infection	Cellulitis		A non POIV treatment	Patients with cellulitis	that allows self-treatment	BS
WB	Wed	2.11	AM	AAU	61	m	AHAH	flu/ (leg pain)	Cellulitis					Infection	Cellulitis	All pt needed today was RVs of leg, sbs, blood test & chanse to PO Abx	A way to assess clinical response to treatment	Patients with cellulitis	to prevent follow-up hospital visit	M
WB	Wed	8.11	AM	AAU	61	m	AHAH	flu/ (leg pain)	Cellulitis			General Observations		Infection	Cellulitis		A way to self-assess treatment response	Patients with cellulitis	to allow early escalation of treatment	BS
WB	Wed	8.11	AM	AAU	61	m	AHAH	flu/ (leg pain)	Cellulitis			General Observations		Respiratory	DVT		A way for untrained (in USS) HCP to diagnose proximal DVT	Patients with swollen leg in hospital	to prevent admission	M
WB	Wed	8.11	AM	AAU	61	m	AHAH	flu/ (leg pain)	Cellulitis			General Observations		Respiratory	DVT		A way to self-diagnose proximal DVT	Patients with swollen leg in community	to prevent admission/ to prevent PE	BS
WB	Wed	2.11	AM	AAU	27	f	ED	unwell, flank pain	Pyelonephritis, AKI			T1DM - diagnosed when 2 yo.		Infection	Diabetes	Terrible diabetic control until this year. Already has multiple complications, not right now - "wake up call". Achieved HbA1c 15%->7% now.	A way to improve diabetic control	Female teenagers with T1DM	to reduce complications	M
WB	Wed	2.11	AM	AAU	27	f	ED	unwell, flank pain	Pyelonephritis, AKI						Diabetes		A way to improve engagement with treatment regime	Female teenagers with T1DM	to improve HbA1c results	M
WB	Wed	2.11	AM	AAU	27	f	ED	unwell, flank pain	Pyelonephritis, AKI						Diabetes		A way to interview dad	Female teenagers with T1DM	to improve HbA1c results	M
WB	Wed	2.11	AM	AAU	27	f	ED	unwell, flank pain	Pyelonephritis, AKI					Infection	UTI	Pt has atonic bladder (likely due to autonomic dysfunction due to T1DM). This led to recurrent UTIs, and now presentation with urosepsis.	A way to prevent UTIs	Patients with bladder dysfunction	to reduce admissions	M
WB	Wed	2.11	AM	AAU	27	f	ED	unwell, flank pain	Pyelonephritis, AKI			If atonic bladder is permanent, then pt may need to intermittently self-catheterise.		Infection	UTI		A way to void urine (via urethra)	Patients with atonic bladder	to reduce complications (UTIs/RF)	M
WB	Wed	2.11	AM	AAU	22	m	ED	unwell	urosepsis						Medication		A way to prevent receiving of contra-indicated medications	Patients with allergies/contra-indications	to reduce adverse medication incidents	M
WB	Wed	2.11	AM	AAU	22	m	ED	unwell	urosepsis						Medication		A way to check prescribed/given medications before taking	Patients with allergies/contra-indications	to reduce adverse medication incidents	M
WB	Thu	3.11	Twilight	AAU	90	m	ED	4ds/a	MFFD (social adm)					Geriatrics	Falls		A way to prevent recurrent falls	Elderly patients with a recent (e.a. last 1m)	to prevent morbidity	M
WB	Thu	3.11	Twilight	AAU	90	m	ED	4ds/a	MFFD (social adm)					Geriatrics	Mobility	Pt falls when transferring, e.g. chair to frame	A way to safely transfer from sitting to standing without human help	Elderly patients unsteady on transfer	to prevent falls / reduce care needs	M
WB	Thu	3.11	Twilight	AAU	90	m	ED	4ds/a	MFFD (social adm)					Geriatrics	Falls	Later transpires pt known to OT – repeat 'faller', awaiting 'care home'.	A way to diagnose at home whether a fracture has occurred	Elderly patients who have fallen at home	to prevent presentation to ED	BS
WB	Thu	3.11	Twilight	AAU	90	m	ED	4ds/a	MFFD (social adm)			MFFD but care service cancelled POC (despite <24h in hospital and 'escalation')		Geriatrics	Care	Pt stayed in hospital for 4 nights unnecessarily as no POC	A way to improve increase availability of carers in the community/ie.	Medically fit non-independent elderly patients in hospital	to reduce length of admission	-
WB	Thu	3.11	Twilight	AAU	90	m	ED	4ds/a	MFFD (social adm)			MFFD but care service cancelled POC (despite <24h in hospital and 'escalation')		Geriatrics	Care	Pt stayed in hospital for 4 nights unnecessarily as no POC	A way to reduce frequency of care visits	Elderly patients at home requiring care	to increase care capacity for other patients waiting for care.	M
WB	Thu	3.11	Twilight	AAU	90	m	ED	4ds/a	MFFD (social adm)			MFFD but care service cancelled POC (despite <24h in hospital and 'escalation')		Geriatrics	Care	Pt stayed in hospital for 4 nights unnecessarily as no POC	A way to self-transfer into bed without help	Patients with leg weakness	to reduce need for carer visit	M
WB	Thu	3.11	Twilight	AAU	90	m	ED	4ds/a	MFFD (social adm)			As pt staying in hosp 4 days, needed NIMBUS mattress (air mattress that automatically changes position) to prevent pressure ulcers.		Geriatrics	Mobility	Pt not keen to go home, reports low confidence. Admission also leads to physical deconditioning.	A way to improve mobility / prevent physical deconditioning	Elderly patients admitted to hospital	to reduce length of admission	M
WB	Thu	3.11	Twilight	AAU	90	m	ED	4ds/a	MFFD (social adm)					Geriatrics	Pressure sores	Only 1-2 NIMBUS available/ward/ as very expensive	A way to prevent pressure sores	Patients in hospital with poor mobility (or bed/chair-bound)	to reduce financial penalties	M
WB	Fri	4.11	AM	AAU	77	m	ED	Pale, sweaty, unresponsive	Hypoglycaemia (CDM-T2)			General Observation.		Infection	UTI	Prophylactic Abx are only way to prevent (not	A way to prevent UTIs without using Abx	Patients with recurrent UTIs	to prevent admissions	BS
WB	Thu	3.11	Twilight	AAU	90	m	ED	4ds/a	MFFD (social adm)			General Observation.		Infection	UTI	Pt had eucrassilic catheter (initially 7 UTI).	A way to reduce UTIs without abx	Patients with eucrassilic catheter	to prevent admission	BS
WB	Thu	3.11	Twilight	AAU	90	m	ED	4ds/a	MFFD (social adm)			General Observation.		Infection	UTI	CAUTI common. coals –E2k per case.	A way to reduce UTIs without abx	Patients with urinary catheter in hospital	to reduce lenath of stay	BS
WB	Thu	3.11	Twilight	AAU	90	m	ED	4ds/a	MFFD (social adm)			General Observation.		Infection	UTI		A way to reduce UTIs without abx	Patients with long term catheter at home	to prevent admission	BS
WB	Thu	3.11	Twilight	AAU	90	f	HGH	Leg swelling	Leg haematoma			Seen in Horton ED with sudden leg haematoma 7cases. ED SHO phone referral to Plastics. Spiff in JR, who advised transfer to JR.		Process		Seen by Plastics SpR in person: no intervention required. SpR angry as felt poor verbal info transfer from ED SHO, pt did not require transfer. Pt either to stay in (as late), or go home via bed (if at prefer).	A way to receive specialty review remotely	Patients with acute problems at DGHs without on-site access to specialists	to prevent unnecessary transfers/admissions	M
WB	Thu	3.11	Twilight	AAU	99	f	GP	Chronic leg pain	Known 'erythromelalgia' (skin condition causing severe burning pain) +			Longstanding pain. Uses ice + lidocaine (local anaesthetic spray) to manage flares at home.		Pain		Presented direct to AAU (had been here last week) as not managing pain at home. Pain improved without significant intervention. Lidocaine patch ordered.	A non-oral way to manage skin-related pain	Patients with skin inflammation in community	to prevent admission	M
WB	Thu	3.11	Twilight	AAU	86	f	?	Unwell/palpitations	Atrial Fibrillation			Fast HR (other sinister causes ruled out)		Respiratory	Monitoring	Pt given diazepam (cures HR) with good effect. Went home 1930 - asked to come back next day for 'symptom review'. 'Can't do it by phone' - why?	A way to monitor cardiac rhythm at home	Patients on treatment for arrhythmia	to prevent review in hospital	M
WB	Thu	3.11	Twilight	AAU	75	m	flu/p	Rx 7 PO switch	URTI on IV Abx			Came to ED 4 days ago. Home from EAU with PO Co-amoxiclav.		Infection	Infection	Blood cultures flagged E.Coli resistant to Co-amox 2 days later. (i.e. pt received ineffective abx for 2 days). Pt recalled to AAU for IV Ceftriaxone.	A way to identify presence of bacteria in blood (within 2 hours)	Patients with infection	to allow correct treatment	BS
WB	Thu	3.11	Twilight	AAU	75	m	flu/p	Rx 7 PO switch	URTI on IV Abx					Infection	Infection		A way to identify antibiotic sensitivity of pathogen (within 2 hours)	Patients with infection presenting to hospital	to reduce length of stay/ prevent re-admission	BS
WB	Thu	3.11	Twilight	AAU	75	m	flu/p	Rx 7 PO switch	URTI on IV Abx				Pt was wel re infection. His main concern was lumbar/sinitis foot pain (due to poor blood flow) reducing	Pain		Pt was wel re infection. His main concern was lumbar/sinitis foot pain (due to poor blood flow) reducing	A non-medication way of reducing foot pain	Patients with poor peripheral circulation	to reduce pain / to improve QoL	M
WB	Thu	3.11	Twilight	AAU	75	m	flu/p	Rx 7 PO switch	URTI on IV Abx					Geriatrics	Mobility		A way to increase mobility	Patients with foot pain due to poor peripheral circulation	to reduce care needs	M
WB	Thu	42443	Twilight	AAU	75	m	flu/p	Rx 7 PO switch	URTI on IV Abx					Cardiovascular	Vascular		A non-surgical way to increase blood flow	Patients with poor peripheral circulation	to reduce complications (ulcers/infections/need for surgery)	BS
WB	Fri	4.11	AM	AAU	77	m	ED	Pale, sweaty, unresponsive	Hypoglycaemia (CDM-T2)			Came to ED on 3/11. Wife went out for lunch, pt stayed in. Wife called home 2x, no answer. Came back to find pt pale, sweaty, shivering, unresponsive, called 999. 7oysuria. Paramedics find BM=3 - better with sugar, conveyed to hospital anyway in case Twoisia. Seen in ED, got IV Abx, then Home with PO. Plan for AAU f/up.		Diabetes		Pt had taken insulin as per normal. Then fell asleep on couch, forgetting to eat lunch -> hypo	A way to alert to eat when BM cross	Patients on Insulin	to prevent hypoglycaemia	M
WB	Fri	4.11	AM	AAU	77	m	ED	Pale, sweaty, unresponsive	Hypoglycaemia (CDM-T2)					Infection	Infection		A way to automatically monitor fever/HR/BP	Patients at risk of sepsis not conveyed to hospital	to early identify	M
WB	Fri	4.11	AM	AAU	77	m	ED	Pale, sweaty, unresponsive	Hypoglycaemia (CDM-T2)					Infection	UTI	No good test exists for diagnosing UTIs (urine dips have low sens/spec)	A way to diagnose UTI (with low false negative)	Confused elderly patients with poor history	to allow treatment in community	M
WB	Wed	10/11	PM	AHAH	80	f	AGM	Anaemia (Hb 63)	Thalassaemia Ca				Daughter reports (4 more confused today, wonders TUTI.	Infection	UTI	Can only find out if bacteria are in urine by MCS, cannot tell	A way to diagnose UTI without HCP	Elderly patients at home	prevent HCP visit	BS
WB	Fri	4.11	AM	AAU	77	m	ED	Pale, sweaty, unresponsive	Hypoglycaemia (CDM-T2)					Infection	UTI		A way to detect presence of pathogenic bacteria in urine	Confused elderly patients with poor history	to allow treatment in community	BS

Business model canvas

- It is a tool to develop new (or assess existing) business models in a structured manner.
- It aims to make insightful any trade-offs you might have to make.
- It can help with the strategic management of the business and highlight risks and opportunities.
- Teams that used the elements of customer segment, value proposition, key activities / partnerships performed significantly better in an explorative study.

Ladd, T. (2018), "Does the business model canvas drive venture success?", Journal of Research in Marketing and Entrepreneurship, Vol. 20 No. 1, pp. 57-69. https://doi.org/10.1108/JRME-11-2016-0046

Business model canvas

Business model canvas

Key partners

What external partnerships should you invest in?

Mentors?
Lawyers?
Distributors?
Suppliers?

Key activities

What will your business spend the most time doing?

Product development?
Sales? Other?

Key resources

What will it cost for:

Manufacturing?
Intellectual property?
Human resources?

Value proposition

What value do we deliver to the customer?

Which one of our customers' problems are we helping to solve?

What bundles of products and services are we offering to each segment?

Which customer needs are we satisfying?

What is the minimum viable product?

Costumer relationship

What types of interactions will your customers expect to have with you?

Channels

How will customers find out about you?

How will you get products to them?

Costumer segments

Who are your paying customers?

Do you have any non-paying customers?

How large is this group?

Do you have multiple customer segments?

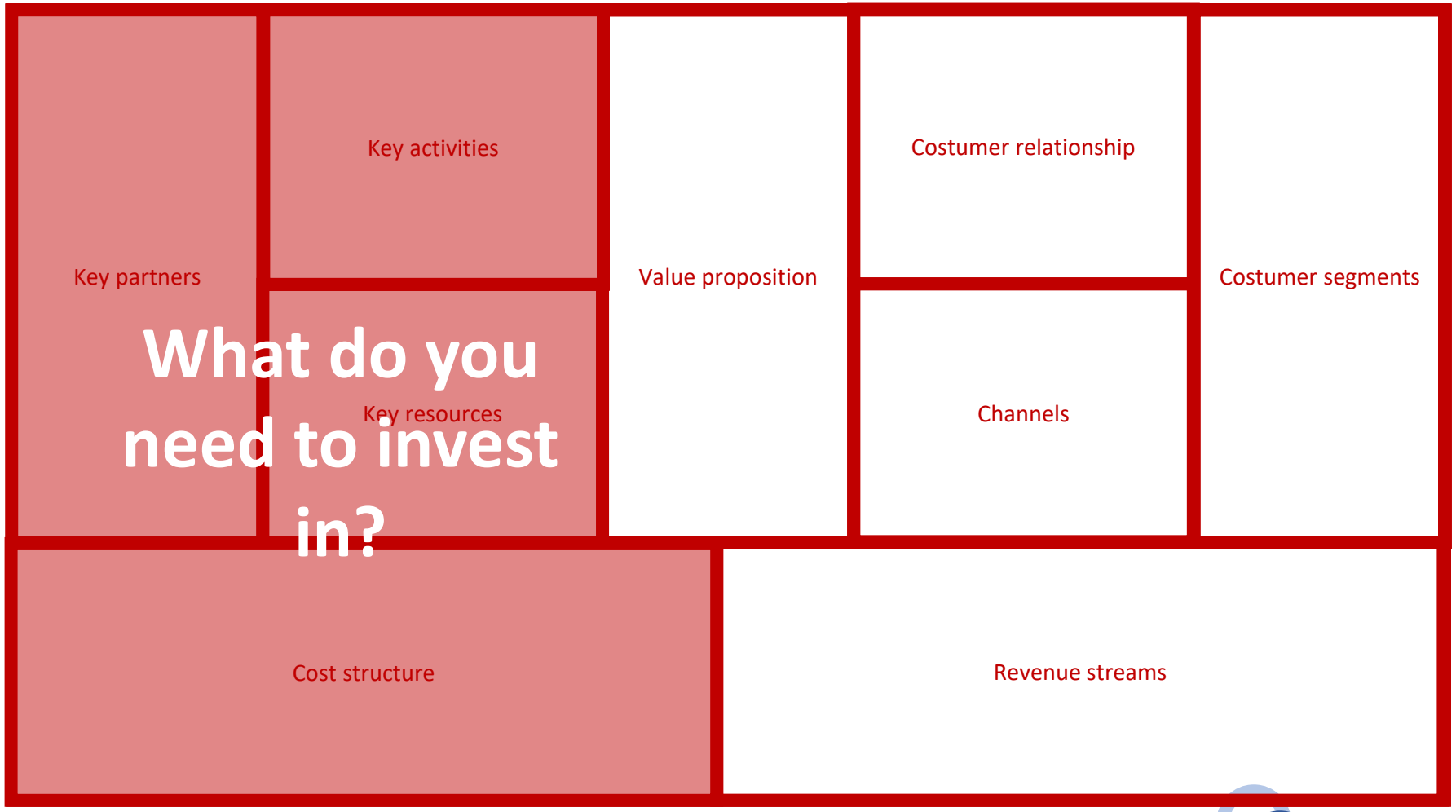
Cost structure

How much time and money will be required to do this?
What are the most important costs inherent to our business model?
Which key resources are most expensive?
Which key activities are most expensive?

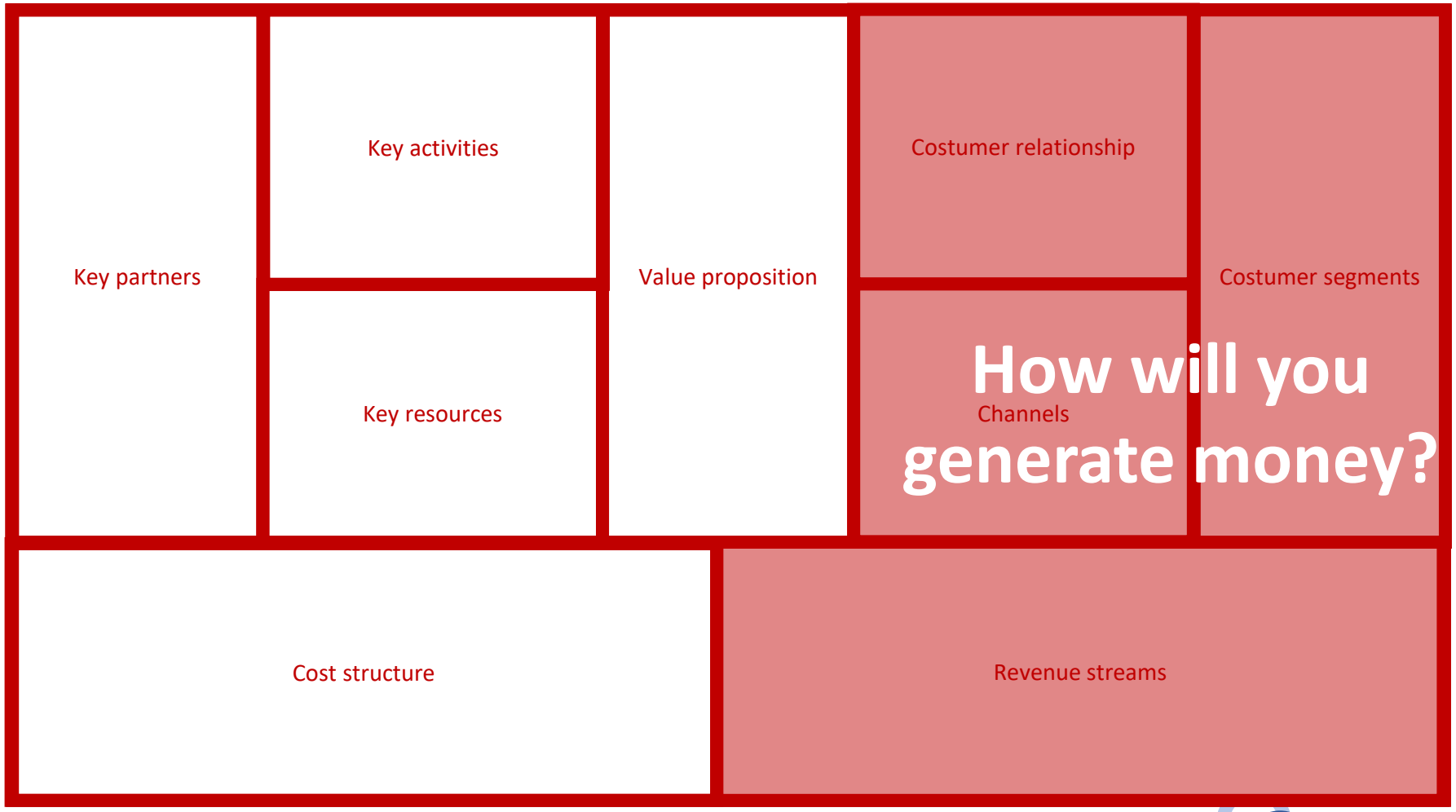
Revenue streams

How might you make money from this?
What value, other than money, are you hoping to create?
For what value are our customers really willing to pay?
For what do they currently pay?
What is the revenue model?
What are the pricing tactics?

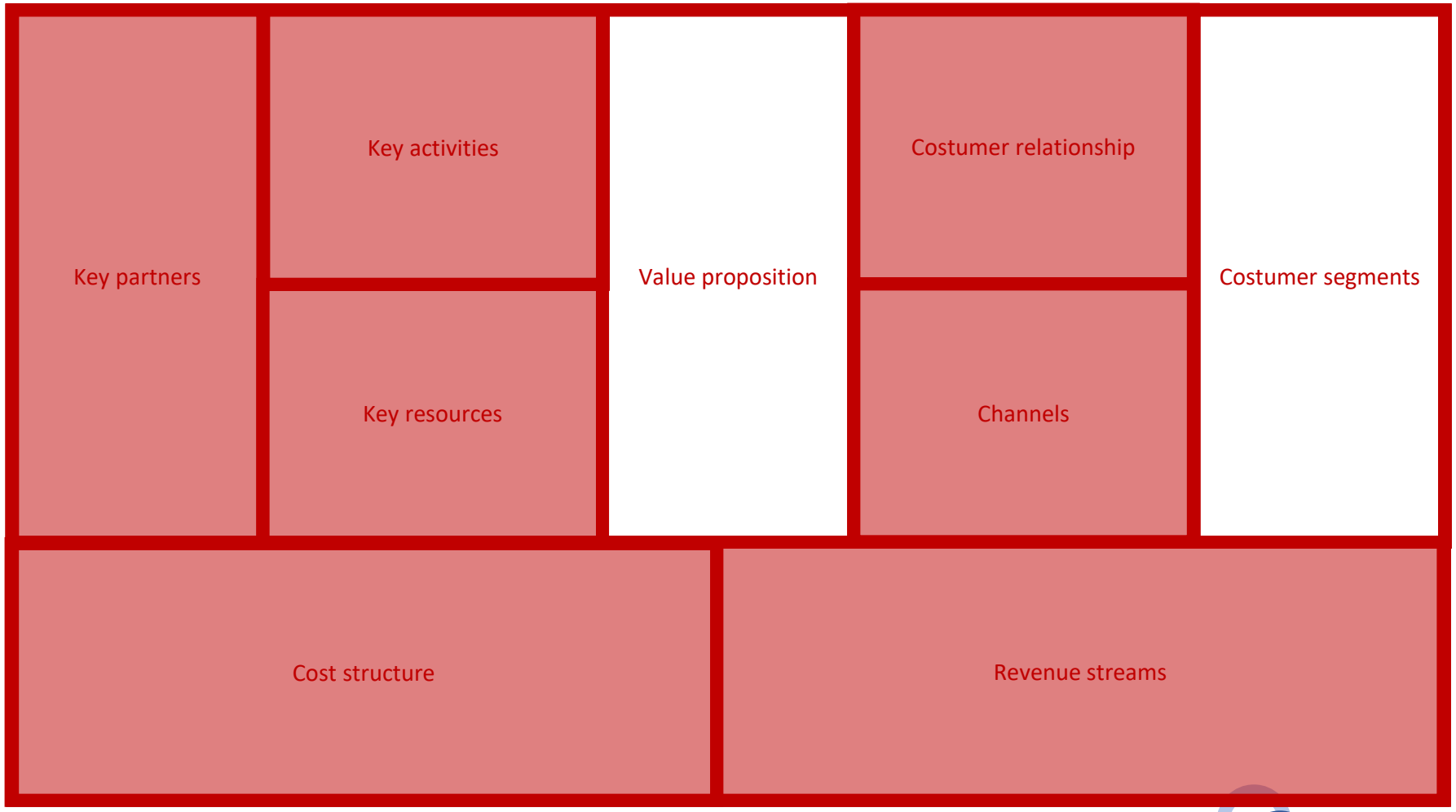
Business model canvas



Business model canvas



Business model canvas



Questions we want to ask

- Process or product?
- Software or services?
- Provider or patient?
- Open or proprietary?
- Content or data?
- Freemium or premium?
- Subscription or license?
- Unregulated or regulated?

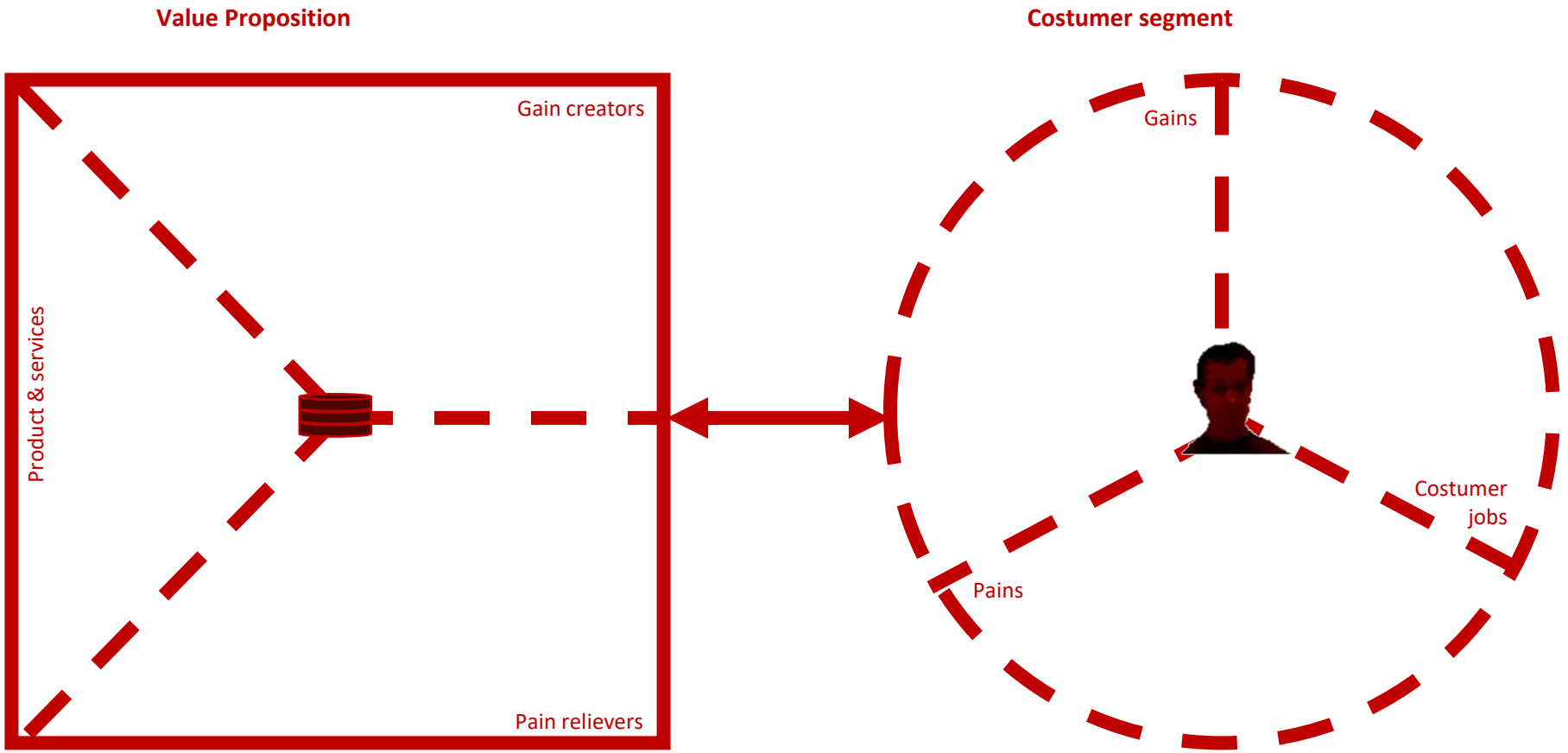
It all starts with the value of solving **a certain need** for **a certain costumer** and thus **adding value**

Introduction Value Canvas

- Tool to help you build with greater detail the two sections of the business model

- Determine how well your offering fits the costumer needs or wants

Overview



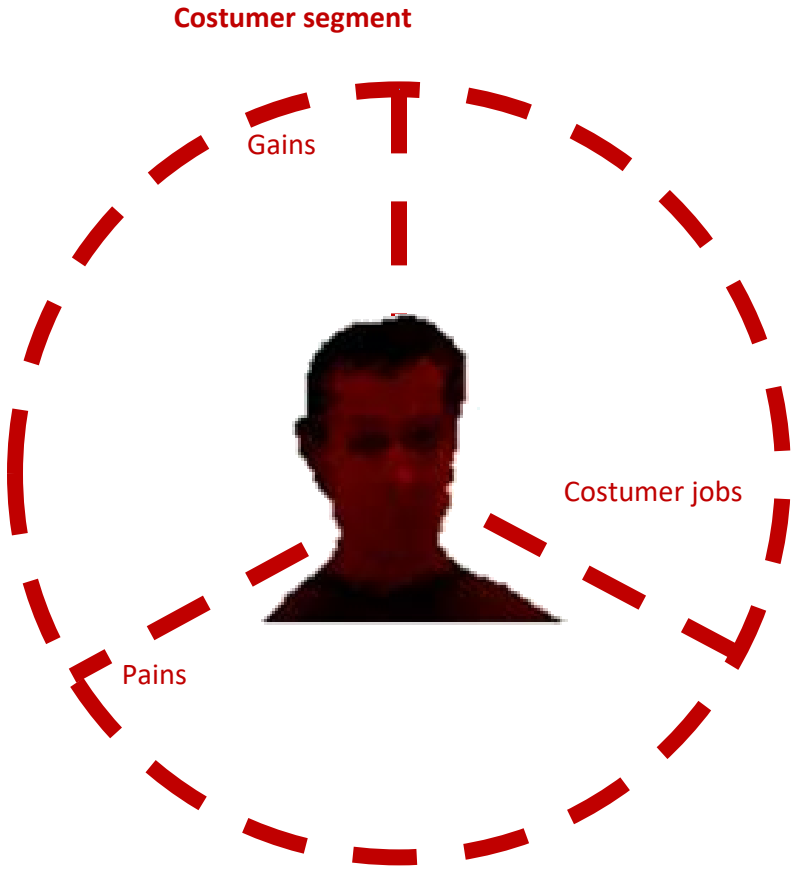
Costumer segment

- Jobs the costumers want to get done in work and life.

- Negative aspects the costumers would like to avoid.

- Positive aspects or benefits the costumers would like to have.

You should be able to observe/measure these aspects.



Costumer segment

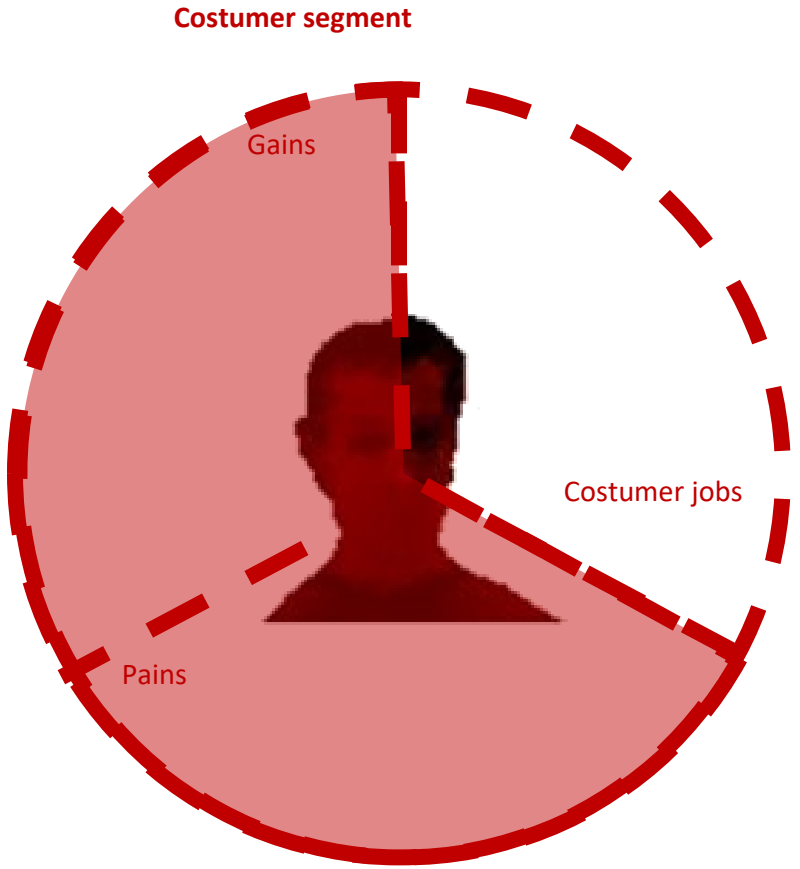
- Let’s start

Costumer jobs

- Tasks that the costumer wants to complete.
- Problems that they are trying to solve.
- **Needs** that they are trying to address.

Fill in the costumer's needs and rank them.

[Functional, emotional, perceived needs]

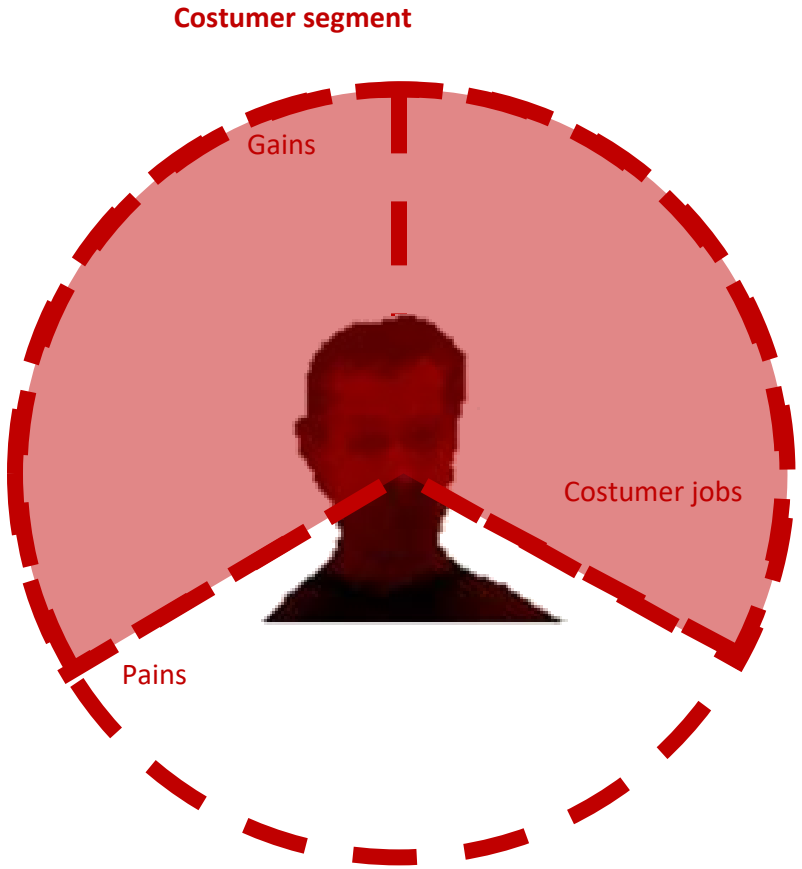


Pains

- Pains before the job starts.
- Pains during the job.
- Pains after the job is finished.

Fill in the costumer's pains and rank them.

[cost, emotional, time effects]

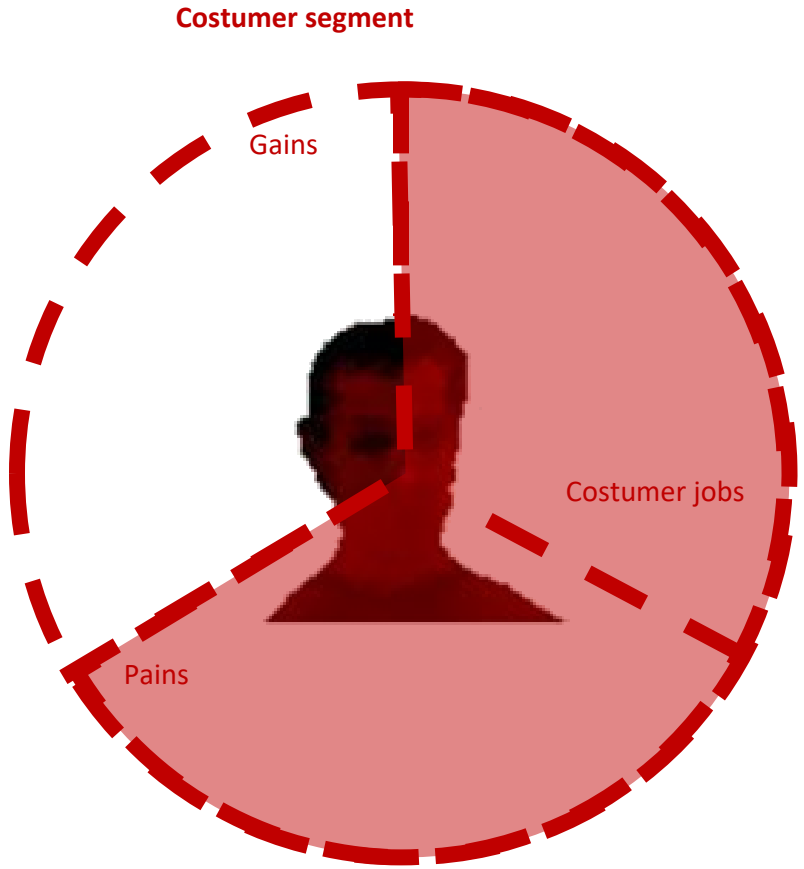


Gains

- Benefits your costumer expect.
- Benefits your costumer require.
- Benefits your costumer desire.

Fill in the costumer's benefits and rank them.

[cost, emotional, time]



Costumer segment

- Completed the costumer segment.

- You can also answer:
- Who are your paying customers?
- How large is this group?
- Do you have multiple customer segments?
- …

Value proposition

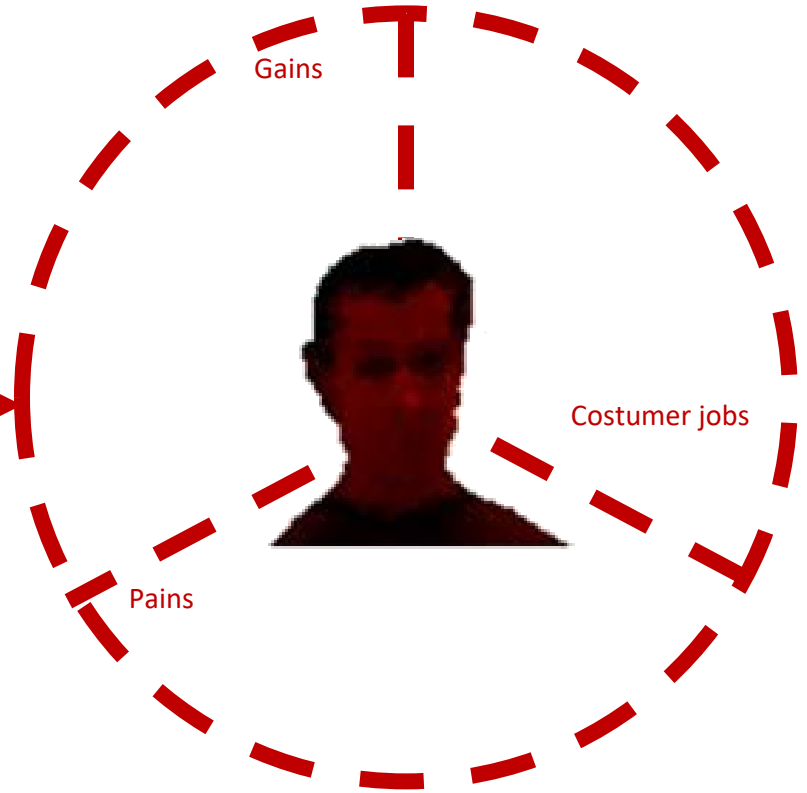
Value proposition

Value Proposition

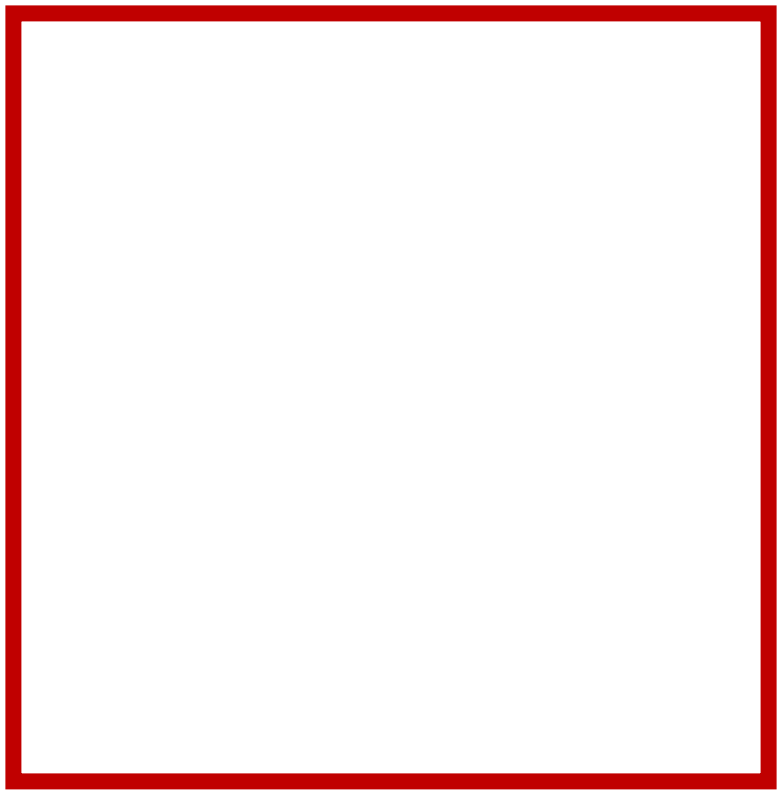
Designed to address:

- Highest ranking jobs
- Highest ranking pains
- Highest ranking gains

Costumer segment



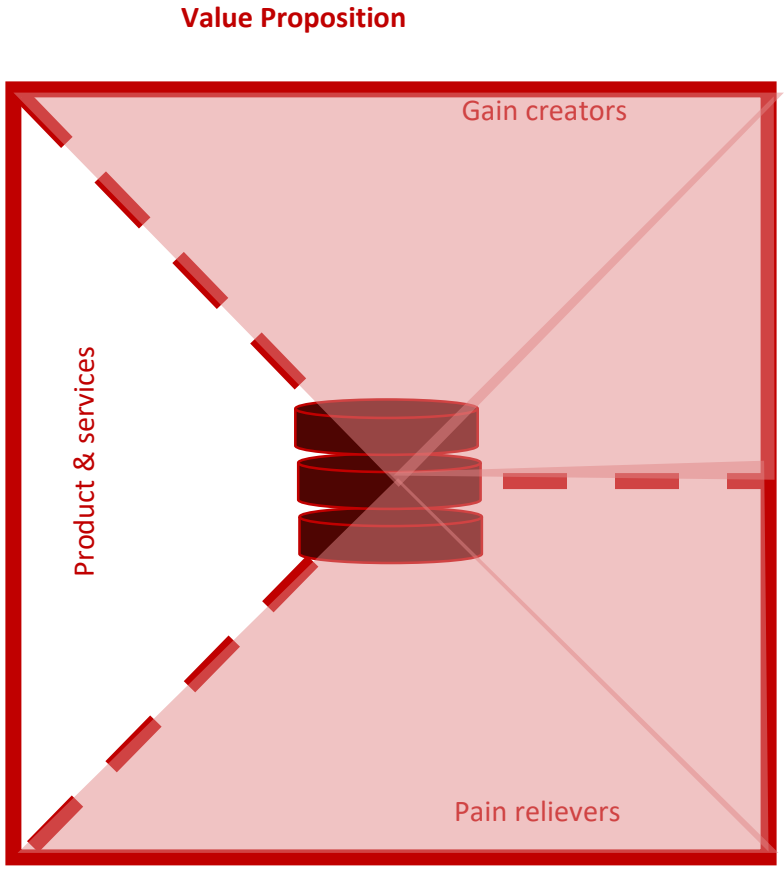
Value proposition



Designed around:

- Product and services needed for your value proposition.
- How you elevate costumer’s pains.
- How you create positive gains.

Product and services

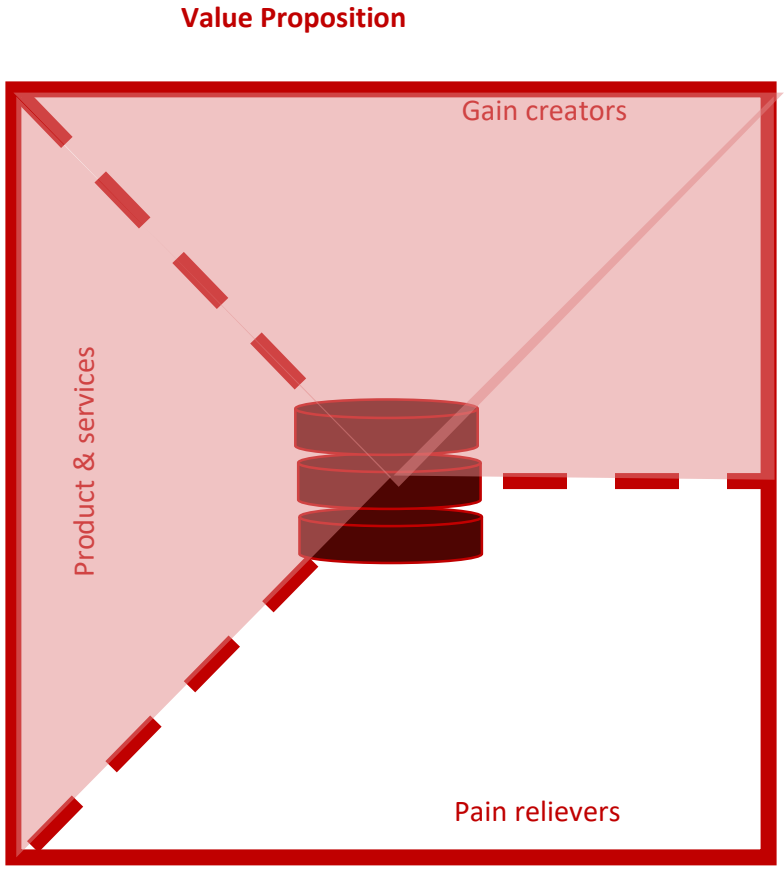


Product & services offered

- To get the job done
- To address the pains
- To optimise the gains

Define your product and services (solution)

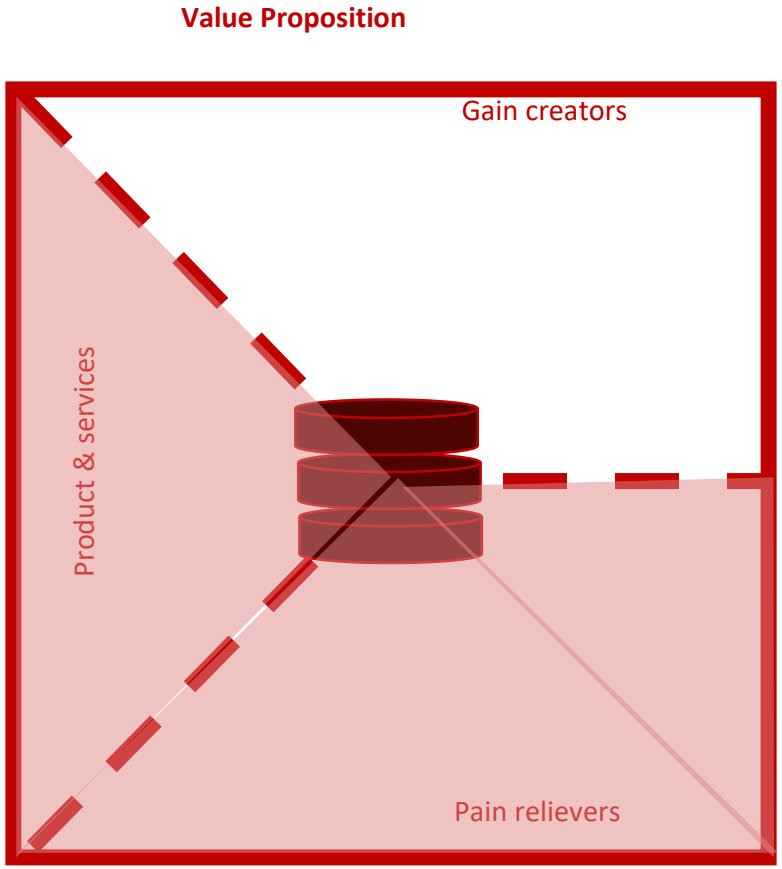
Pain relievers



- Clearly state how your product will eliminate or reduce pains.
- Should be able to counter pains in costumer segment.

Define your pain relievers

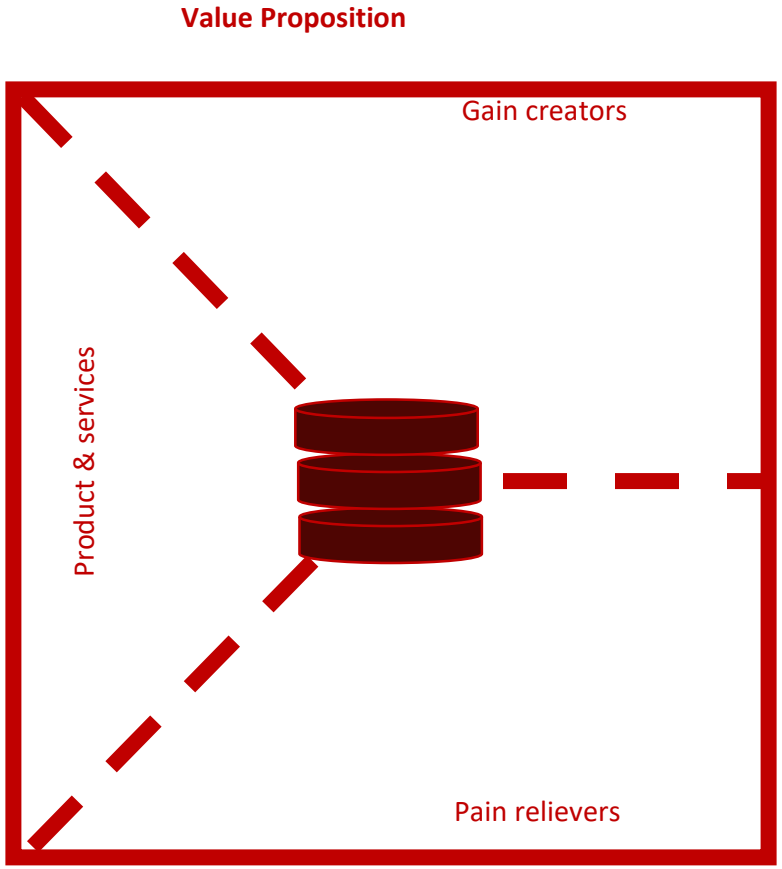
Gain creators



- Clearly state how your product will create gains.
- Should be able to link to gains in costumer segment.

Define your gain creators

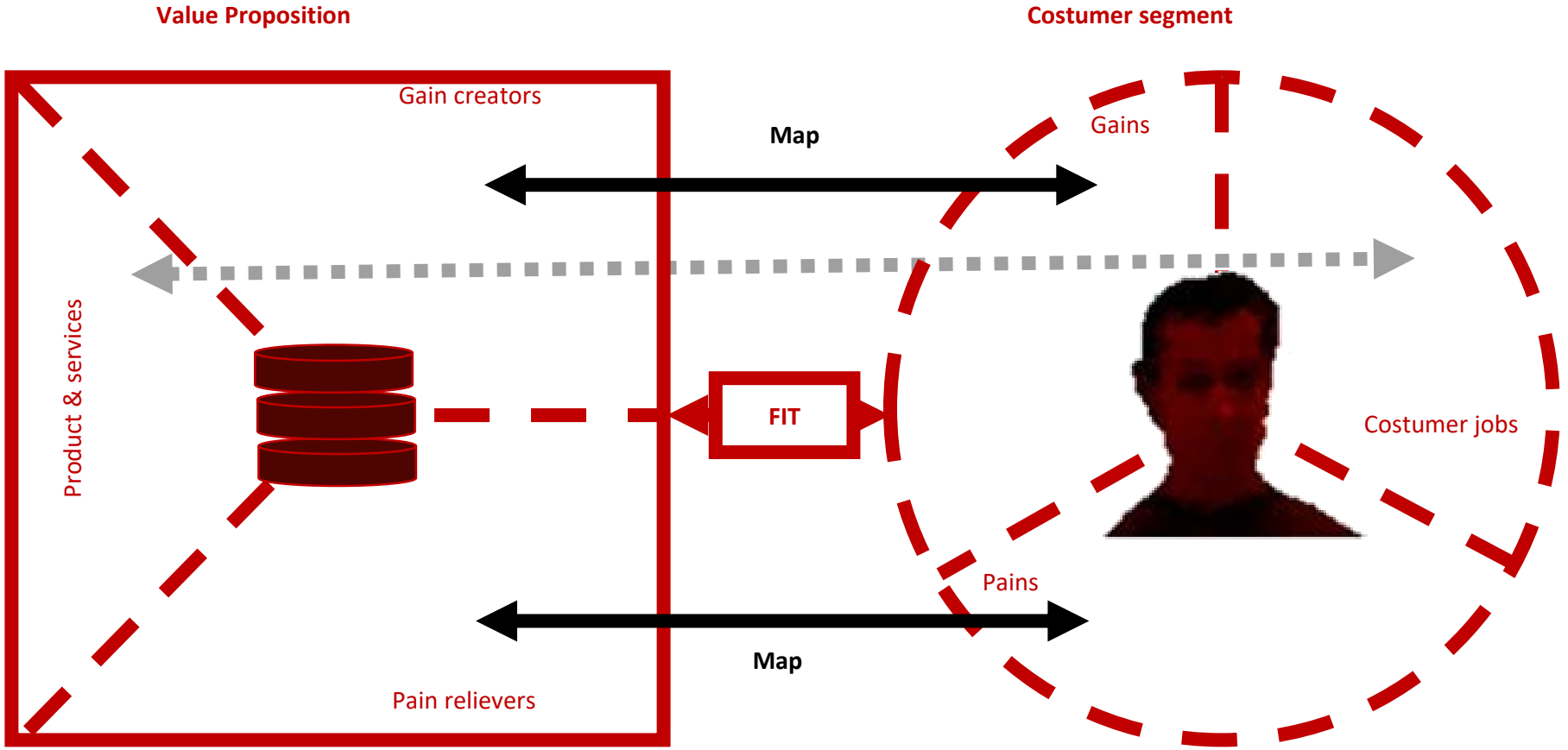
Value proposition



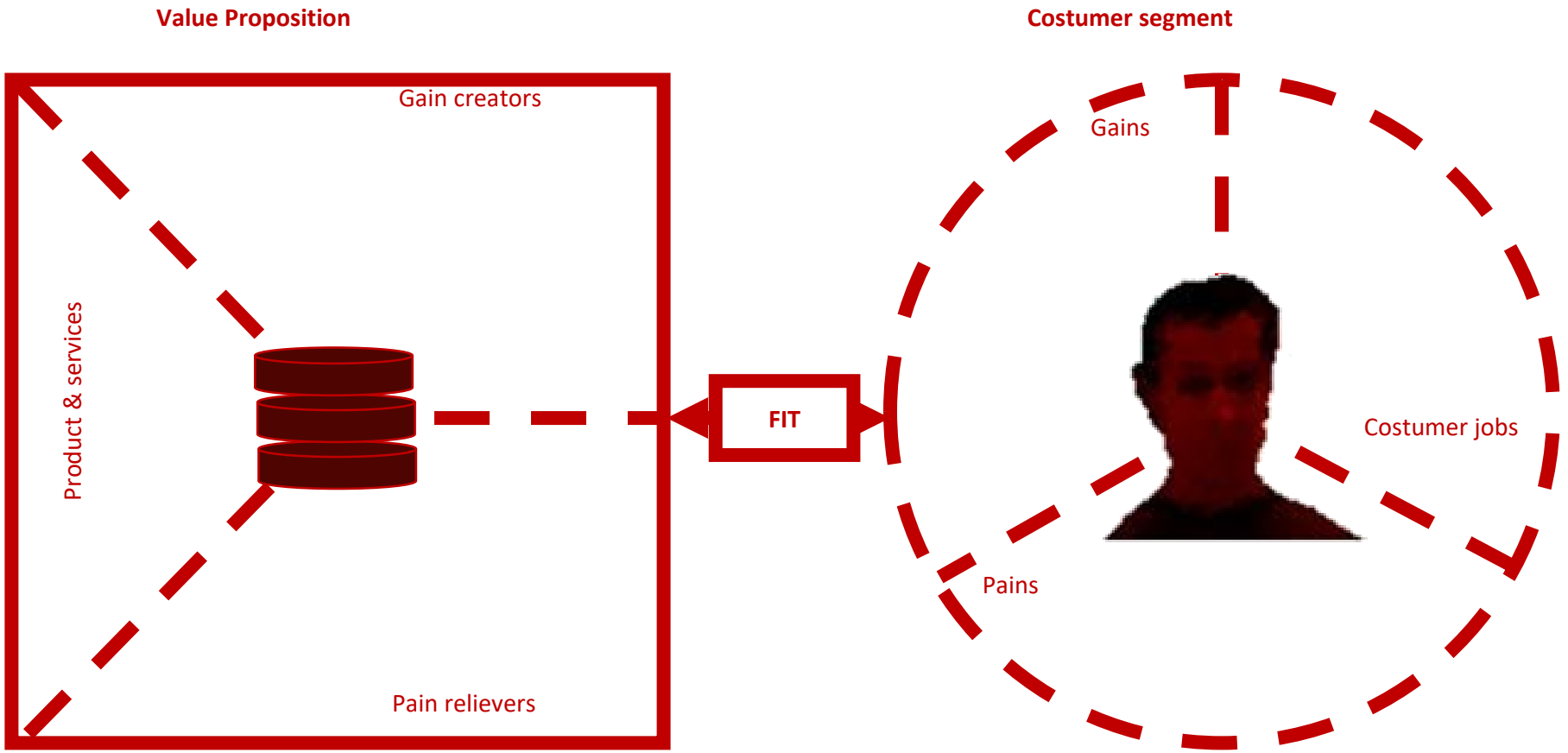
- Completed the value proposition.

- You should also be able to answer:
- What bundles of products and services are you offering to **each** segment?
- What is the minimum viable product (**MVP**)?
- …

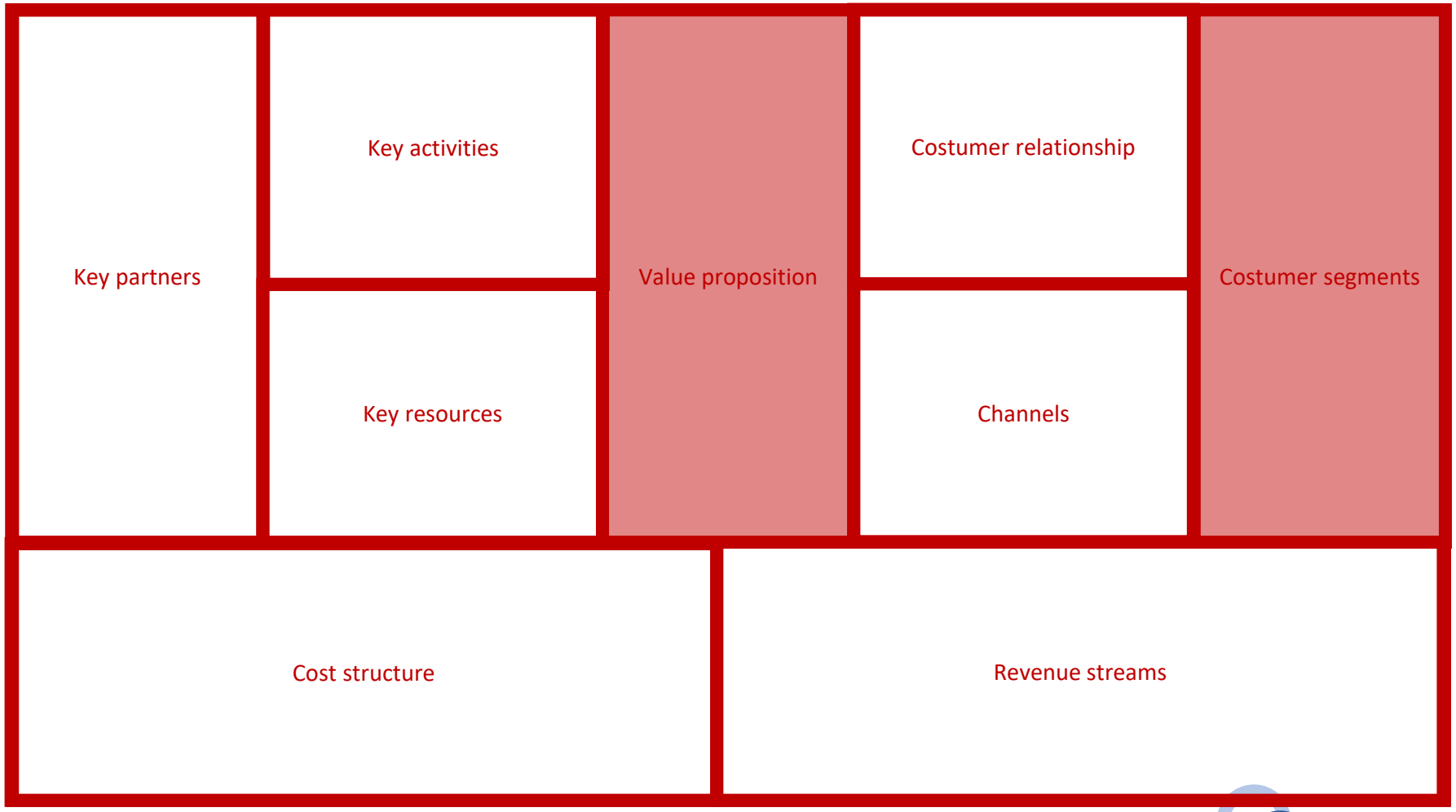
Value proposition mapping



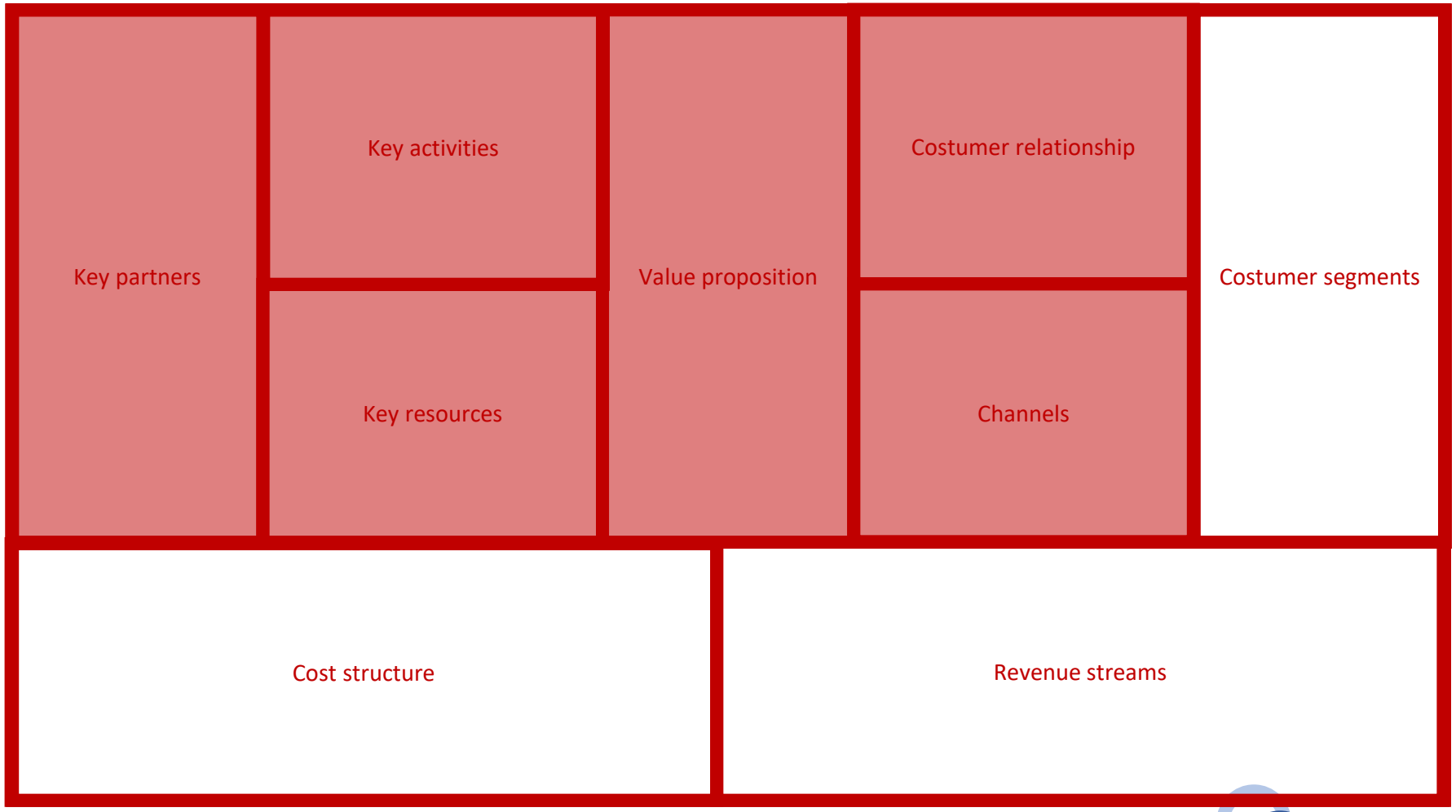
Obtained market fit



Place it back into the business model canvas



Business model canvas - managers



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MPiE

Questions?

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