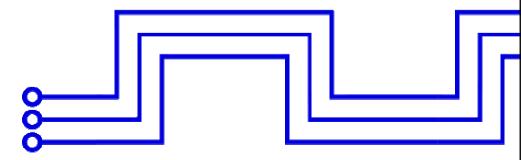




PA181 – Service Systems, Modeling and Execution

Business and Service Models

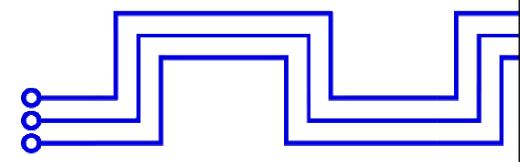






Business Model Canvas for Service Science

- for project in IBM Services -



Two different planets

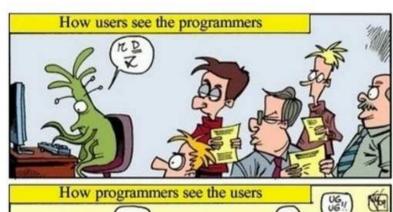
Business people



Software developers



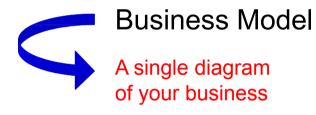








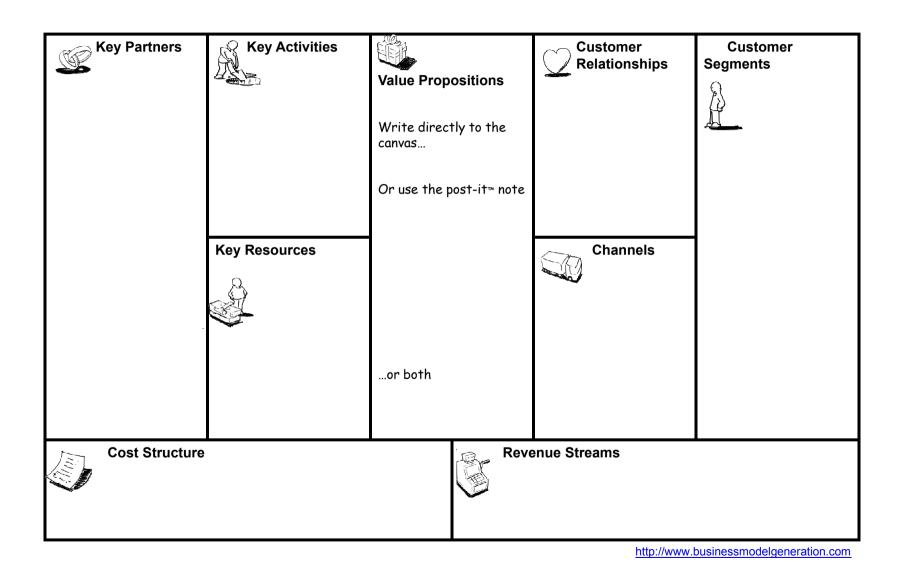
Business Model versus Business Plan



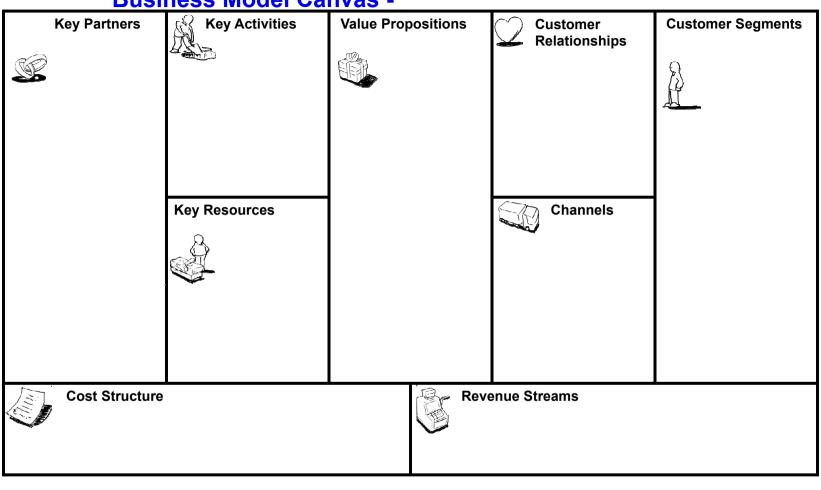
Business Plan

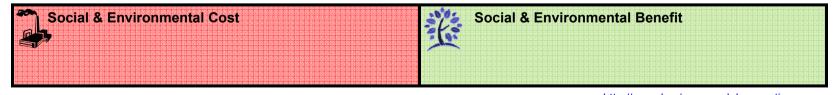
A document investors make you write that they don't read

Business Model Canvas – Template

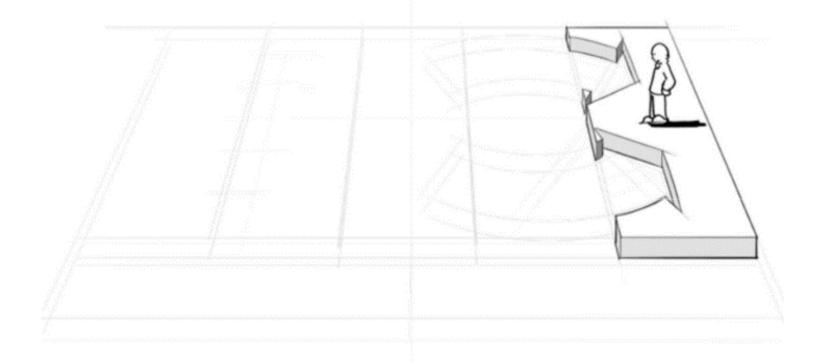


Business Model Canvas -



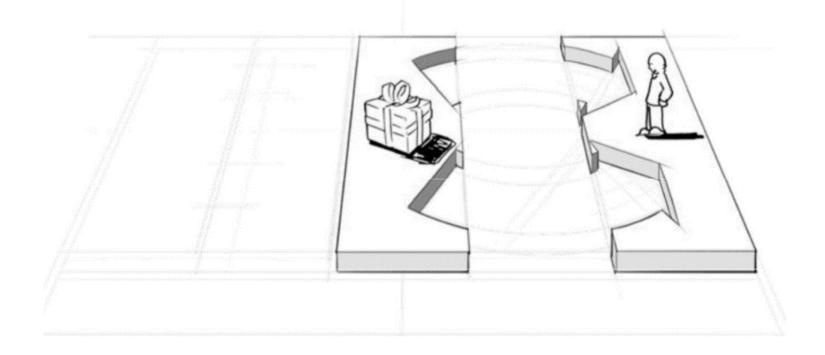


CUSTOMER SEGMENTS



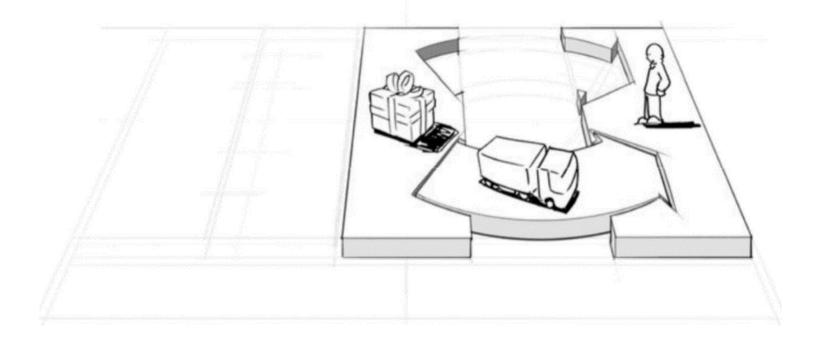


VALUE PROPOSITIONS



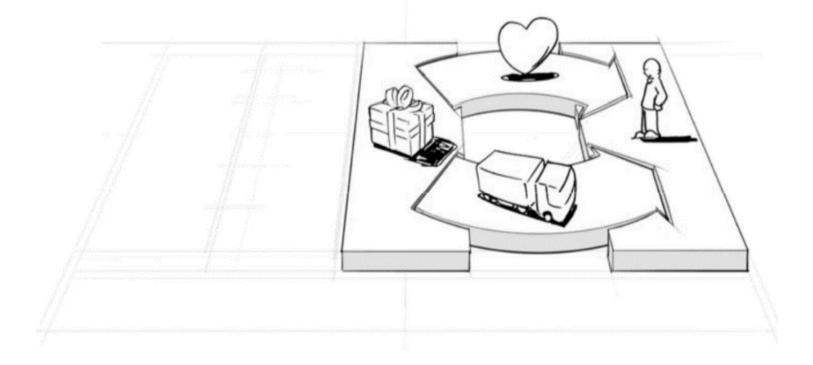


CHANNELS



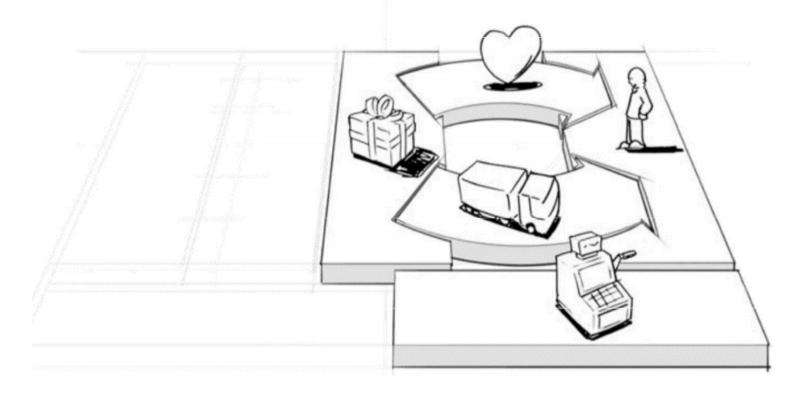


CUSTOMER RELATIONSHIPS



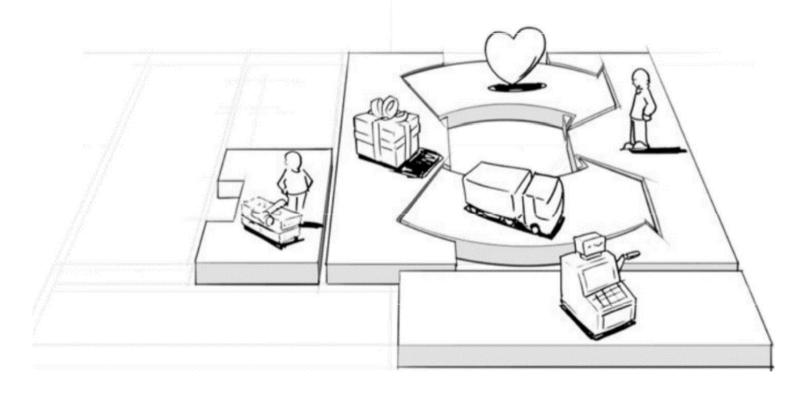


REVENUE STREAMS



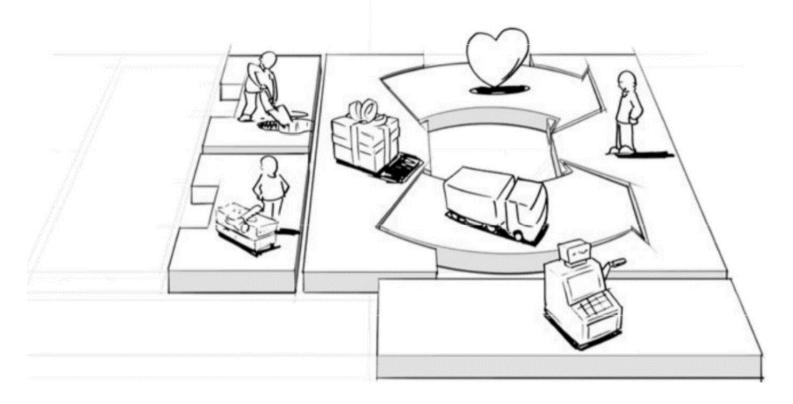


KEY RESOURCES



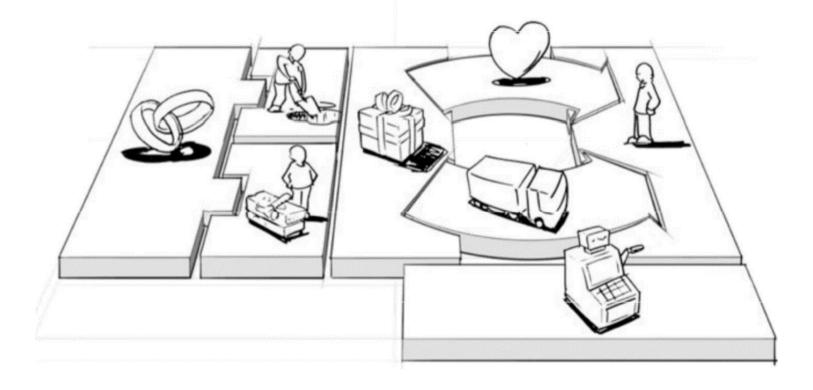


KEY ACTIVITIES



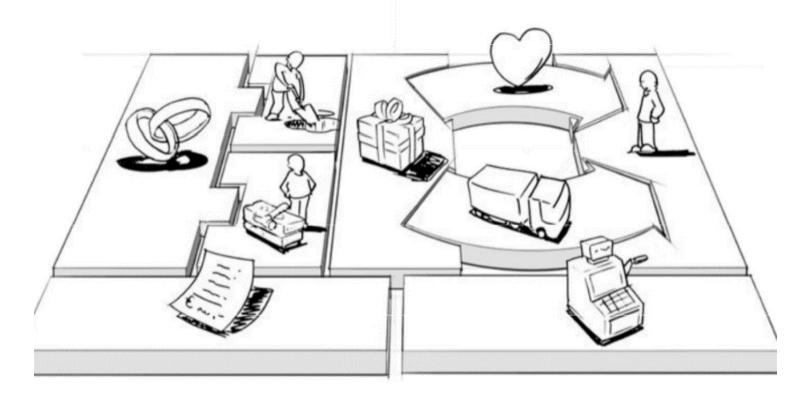


KEY PARTNERS

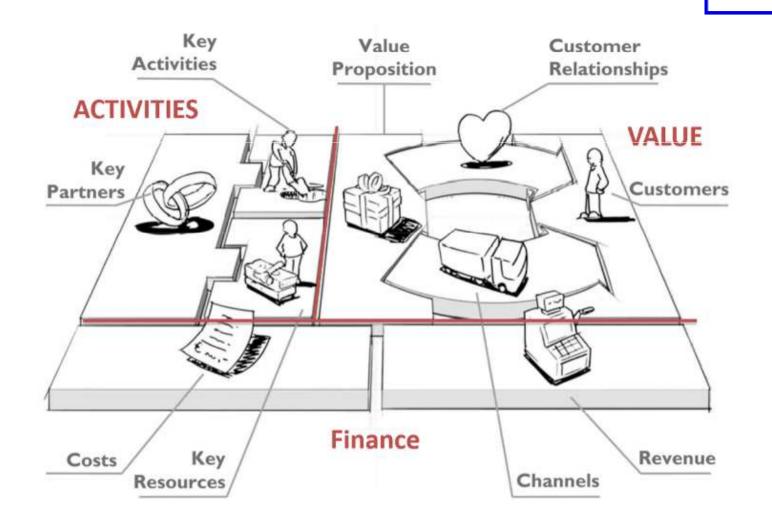




COST STRUCTURE





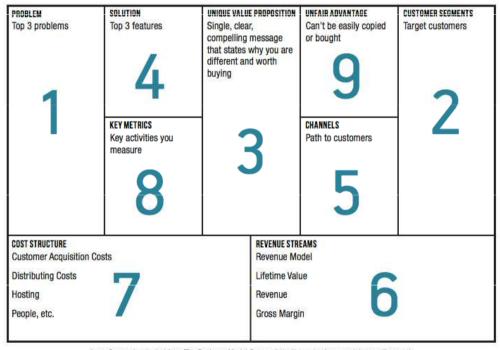




Business Model – Lean Canvas

Problem Top 3 problems	Solution Top 3 features	Unique Value Proposition	Unfair Advantage Can't be easily copied or bought	Customer Segments Target customers	
		Single, clear, compelling message that states why you are different and	Contract to the contract of th		
	Key Metrics Key activities you measure	worth paying attention	Channels Path to customers		
Cost Structure Customer Acquisition Costs Distribution Costs			Revenue Streams Revenue Model Life Time Value		
Hosting People, etc.		Revenue	Revenue Gross Margin		
PRODUCT			MARKET		

The prescribed order



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Problem and Customer Segments

PROBLEM Sharing lots of photos/videos is time- consuming. Parents have no free time. There is lots of external demand on this content.	SOLUTION KEY METRICS	UNIQUE VALU	E PROPOSITION	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS Parents (creators) Family and friends (viewers)
Existing alternatives: Flickr Pro, SmugMug, Apple MobileMe, Facebook					Early adopter: Parents with young kids
COST STRUCTURE			REVENUE STR	EAMS	,

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Unique Value Proposition

Some Tips on how to craft a UVP

- Be different, but make sure your difference matters
- Target early adopters
- · Focus on finished story benefits
- Example resume building service
- A feature "professionally designed templates"
- Benefit "eye catching resume that stands out"
- Finished story benefit "landing your dream job"
- Pick your words carefully and own them
- Performance BMW
- Design Audi
- Prestige Mercedes
- Picking a few key words that you consistently use also drives your search engine optimization (SEO) ranking

Answer what, who and why

Study other good UVP's

- Unique Value Proposition
- Why you are different and worth buying/getting attention



Unique Value Proposition

SOLUTION	UNIQUE VALUE PROPOSITION The Fastest Way to Share Your Photos and Videos	UNFAIR ADVANTAGE	Parents (creators) Family and friends (viewers)
KEY METRICS		CHANNELS	-
	High-level concept: Photo and video sharing without the uploading		Early adopter: Parents with young kids
l	REVENUE STR	EAMS	1
		The Fastest Way to Share Your Photos and Videos KEY METRICS High-level concept: Photo and video sharing without the uploading	The Fastest Way to Share Your Photos and Videos KEY METRICS CHANNELS High-level concept: Photo and video sharing without the

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Solution

PROBLEM Sharing lots of photos/videos is time-consuming. Parents have no free time. There is lots of external demand on this content. Existing alternatives:	SOLUTION Instant, no-upload sharing iPhoto/folder integration Better notification tools KEY METRICS	UNIQUE VALU The Fastest Share Your Videos High-level of	Way to Photos and	UNFAIR ADVANTAGE CHANNELS	CUSTOMER SEGMENTS Parents (creators) Family and friends (viewers)
Flickr Pro, SmugMug, Apple MobileMe, Facebook		Photo and v sharing with uploading			Parents with young kids
COST STRUCTURE			REVENUE STR	EAMS	

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Channels

Freer versus Paid

Inbound versus outbound

- Examples inbound channels
- Blogs
- SEO
- Ebooks
- White papers
- Examples of outbound channels
- Print/TV ads
- Trade shows
- Cold calling

Direct versus automated

Direct versus indirect

Retention before referral



Channels

PROBLEM Sharing lots of photos/videos is time-consuming. Parents have no free time.	SOLUTION Instant, no-upload sharing iPhoto/folder integration	I UNIQUE VALUE PROPOSITION The Fastest Way to Share Your Photos and Videos	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS Parents (creators) Family and friends (viewers)
There is lots of external demand on	Better notification tools			
this content. Existing alternatives: Flickr Pro, SmugMug, Apple MobileMe, Facebook	KEY METRICS	High-level concept: Photo and video sharing without the uploading	CHANNELS Friends Daycare Birthday parties AdWords Facebook Word of mouth	Early adopter: Parents with young kids
COST STRUCTURE		REVENUE STR	REAMS	

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Revenue Streams and Cost Structure

Revenue Streams

If you intend to charge for your product you should charge from day one.

- Price is part of the product
- Price defines your customers
- Getting paid is the first form of validation

Cost structure

It's hard to calculate into the future. Instead, focus on the present

- What will it cost you to interview 30 50 customers?
- What will it cost you to build and launch your MVP?
- What will your ongoing burn rate look like in terms of both fixed and variable costs?



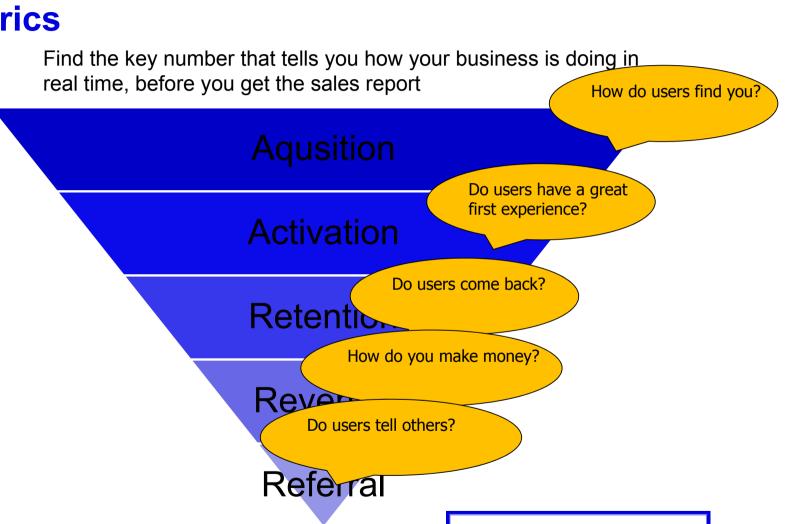
Revenue Streams and Cost Structure

PROBLEM Sharing lots of photos/videos is time-consuming. Parents have no free time. There is lots of	Instant, no-upload sharing iPhoto/folder integration Better notification tools	UNIQUE VALUE PROPOSITION The Fastest Way to Share Your Photos and Videos	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS Parents (creators) Family and friends (viewers)	
external demand on this content. Existing alternatives: Flickr Pro, SmugMug, Apple MobileMe, Facebook.	KEY METRICS	High-level concept: Photo and video sharing without the uploading	CHANNELS Friends Daycare Birthday parties AdWords Facebook Word of mouth	Early adopter: Parents with young kids	
COST STRUCTURE Hosting costs - Heroku People costs - 40 hrs *	D: 8.5 M	REVENUE STR 30-day free 30-day free Ereak-Even Point: 2,000 customers	EAMS trial then \$49/yr		

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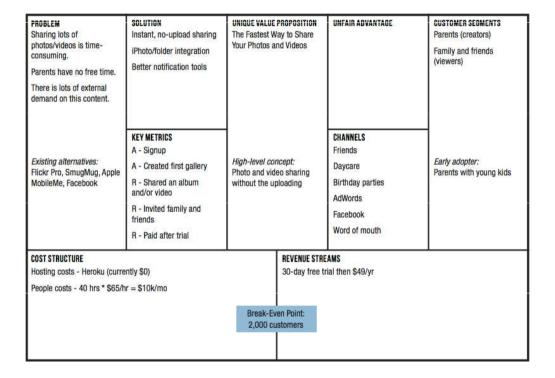


Key Metrics





Key Metrics





Unfair Advantage

A real unfair advantage is something that cannot be easily copied or bought

How can/will you make yourself different and make your difference matter

Some examples

- Insider information
- The right "expert" endorsements
- A dream team
- Personal authority
- Large network effects
- Community
- Existing customers
- SEO ranking



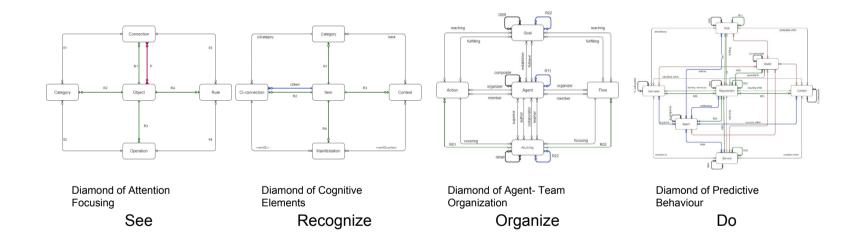
Unfair Advantage

Sharing lots of photos/videos is time-consuming. Parents have no free time. There is lots of external demand on this content. Existing alternatives: Flickr Pro, SmugMug, Apple MobileMe, Facebook Facebook COST STRUCTURE Hosting costs - 40 hrs * \$65/hr = \$10k/mo Instant, no-upload sharing instant, no-upload sharing iiPhoto/folder integration Share Your Photos and Videos Community Parents (creators) Family and friends (viewers) CHANNELS Friends Daycare Birthday parties AdWords Facebook R - Paid after trial Parents (creators) Family and friends (viewers) Family and friends (viewers) Family and friends (viewers) CHANNELS Friends Daycare Birthday parties AdWords Facebook Word of mouth REVENUE STREAMS 30-day free trial then \$49/yr	PROBLEM	SOLUTION	UNIQUE VALUE	PROPOSITION	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS
consuming. Parents have no free time. Better notification tools KEY METRICS A - Signup Existing alternatives: Flickr Pro, SmugMug, Apple MobileMe, Facebook Facebook R - Invited family and friends Friends CHANNELS Friends Daycare Birthday parties AdWords Facebook Word of mouth Early adopter: Parents with young kids Facebook Word of mouth REVENUE STREAMS 30-day free trial then \$49/yr	Sharing lots of	Instant, no-upload	The Fastest	Way to	Community	Parents (creators)
iPhoto/folder integration Better notification tools There is lots of external demand on this content. Existing alternatives: Flickr Pro, SmugMug, Apple MobileMe, Facebook R - Invited family and friends R - Paid after trial EVENUE STRUCTURE Hosting costs - Heroku (currently \$0) Integration Wiveus Videus (viewers) (AANNELS Friends Daycare Birthday parties AdWords Facebook Word of mouth REVENUE STREAMS 30-day free trial then \$49/yr	photos/videos is time-	sharing	Share Your	Photos and		Family and friends
Parents have no free time. There is lots of external demand on this content. Existing alternatives: Flickr Pro, SmugMug, Apple MobileMe, Facebook R - Invited family and friends R - Paid after trial COST STRUCTURE Hosting costs - Heroku (currently \$0) Hetter notification tools CHANNELS Friends Daycare Birthday parties AdWords Facebook Word of mouth REVENUE STREAMS 30-day free trial then \$49/yr	consuming.	iDhoto/folder	Videos			
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COST STRUCTURE Hosting costs - Heroku (currently \$0) REVENUE STREAMS 30-day free trial then \$49/yr					Word of mouth	
Hosting costs - Heroku (currently \$0) 30-day free trial then \$49/yr		R - Paid after trial				
	COST STRUCTURE			REVENUE STREAMS		
People costs - 40 hrs * \$65/hr = \$10k/mo	Hosting costs - Heroku (currently \$0)			30-day free trial then \$49/yr		
	People costs - 40 hrs * \$65/hr = \$10k/mo					
Break-Even Point:			en Point:			
2,000 customers						

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Model of 4-diamonds



- 1. Stanicek, Z: SSME Manuscript, http://is.muni.cz/el/1433/jaro2013/PV202/um/SSMEstar_manuscript.pdf (2009)
- 2. WALLETZKY, L., L. CARRUBBO a M. GE, 2019. Exploring complex service design: Understanding the Diamonds of Context. In: Naples Forum on Service. 2019 Salerno.
- 3. WALLETZKÝ, L., L. CARUBBO a M. GE, 2019. Modelling Service Design and Complexity for Multi-contextual Applications in Smart Cities. In: 23rd International Conference on System Theory, Control and Computing. Bucharest: ICSTCC, s. 101-106.



Smart Service Canvas

Actors Goals Are there any sub-goals that need

Resources

Institutional arrangement

Co-creation

- What goal is fulfilled by a service?
- to be taken into the account? Are they part of the main goal GBS?
- · Who is the establisher of the goal? Who is the follower?

Requirements

- · What requirements are important for service design?
- What goals are they born from?
- · Are all requirements in the same context?

Agents

- · What groups of stakeholders are involved into service?
- · Are there any special groups of agents that must be mentioned?
- What is their role in the GBS/ Actions/ Flows?

Value co-creation

- How the value is co-created?
- · How does each agent contribute on the value co-creation?
- · How the service is linked to other services?
- · What is its role in the value cocreation chain?

Contexts

- · In what contexts is the service able to provide a value? Which context is the main one?
- · Are there any contexts influenced by the service? How?
- · Is the service sustainable in all COLLENS:

Endowment

- · What resources are necessary to create and maintain the service?
- · What are the necessary inputs from other services?

Use-cases

- · Are there any practical applications of the similar service?
- How they are designed?
- What aspects can we use?

Value proposition

- How is the value proposition formulated?
- · Who are addressing and addressed agents?
- How is their response evaluated?

Actions

- What necessary actions must be done to create/ maintain/ cooperate on the service?
- Are there any actions that take part in other context? And how?

Flows

- What flows are affected/newly defined by the service?
- · In what contexts do they appear and how?

Activities

- · What activities do the actions and flow contain?
- · What roles do they play in other contexts?

Measures (KPI)

- · What are defined indicators to monitor quality and the level of value provided?
- · How is the innovation level monitored?
- Are the effects of the service monitored in all contexts?

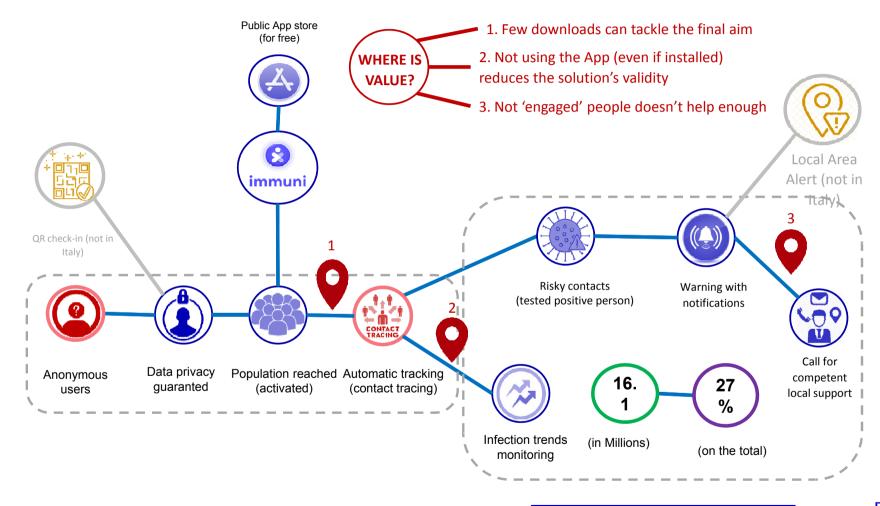


Case Study

- The application of immuni (ITALY)
- First, the value of current application is analyzed
- Second, the design of "an ideal application" is suggested with the examples of the value



Application Immuni





Goals

- 1. To monitor a spread of covid-19.
- 2. To prevent covid-19 infection.
- 3. To help people to get oriented.
- 4. To protect non-infected people
- 5. To enable normal life

CHECKED

Contexts

- 1. Medical the key is to prevent the congestion of hospitals
- Social people need to understand why the must be isolated

PARTIALLY-CHECKED

Actions

 Send warning – this actions happens if the user is infected. The users who were in contact with him/her will be warned.

> PARTIALLY-CHECKED

Requirements

- 1. To inform about the contacts
- 2. To provide information about current situation

PARTIALLY-CHECKED

Endowment

Information about test results

PARTIALLY-CHECKED

Flows

- 1. To monitor surrounding
- 2. To receive positive test information

PARTIALLY-CHECKED

Agents

- 1. Inhabitants
- Medical institutions
- 3. Sanitary stations

PARTIALLY-CHECKED

Use-cases

1. Are All Covid -19 applications

CHECKED

Activities

- 1. Detect all close devices
- 2. Send information to sanitary station
- 3. Receive information about positive contacts

PARTIALLY-CHECKED

Value co-creation

MISSED

Value proposition

- 1. To be informed about the possible infection
- 2. To know what to do

PARTIALLY-CHECKED

Measures (MPI)

- 1. No of installations
- 2. No. of informed users

PARTIALLY-CHECKED



Goals

- 1. To monitor a spread of covid-19.
- 2. To prevent covid-19 infection.
- 3. To help people to get oriented.
- 4. To protect non-infected people
- 5. To enable normal life

CHECKED

Contexts

- 1. Medical the key is to prevent the congestion of hospitals
- Social people need to understand why the must be isolated
- 3. Economic pate the pate of the conomy to the conomic pate of the con

Actions

- Send warning this actions happens if the user is infected. The users who were in contact with him/her will be warned.
- 2. Get the status get the current health status from register
- Connect to register connect to the register of test and vaccination ARTIALLY-

CHECHECKED

Requirements

- 1. To inform about the contacts
- 2. To provide information about current situation
- 3. To link to register of tests and vaccination



Endowment

- Information about test results
- 2. Information about the vaccinations
- 3. Control of private data

CHECKED

Flows

- 1. To monitor surrounding
- 2. To receive positive test information
- 3. To monitor the validity of test and vaccination

PARTICILET

Agents

- Inhabitants
- 2. Medical institutions
- 3. Sanitary stations
- Business entities will use the app to confirm the person health status



Use-cases

1. Are All Covid -19 applications

CHECKED

Activities

- 1. Detect all close devices
- 2. Send information to sanitary station
- 3. Receive information about positive contacts
- 4. Get the information about new test or vaccination



Value co-creation

- The interaction based on information sharing (the confirmation about healthy status)
- 2. The control on the vaccination and testing

CHECKED

Value proposition

- 1. To be informed about the possible infection
- 2. To know what to do
- 3. To get proper date and place for tests and vaccination

PARTECKED CHECKED

Measures (MPI)

- 1. No of installations
- 2. No. of informed users
- 3. No. of tests linked with app
- 4. No of vaccinations linked with app
- 5. No. of questions

CHECKED CHECKED





Conclusion

- Business model vs Business plan
- Business model Canvas
- Business model Lean Canvas
- Smart Service Canvas

