

The de-linking and re-linking process



Two important stages for generating market opportunities:

1) De-linking: describing your unique abilities independent of any (envisioned) product

2) Re-linking: combining your abilities in different ways to create multiple applications and customers

Which markets to play in?

We just discussed the de-linking step in market opportunity and defecation. This is a critical first step. We are trying to understand the technological components in their own right. You know your abilities, your unique abilities in the right decoupled from any product application in the re-linking step. You will then re-link these technological components to these market applications that you will identify and that's the second step that are going to going to explain to you right now.

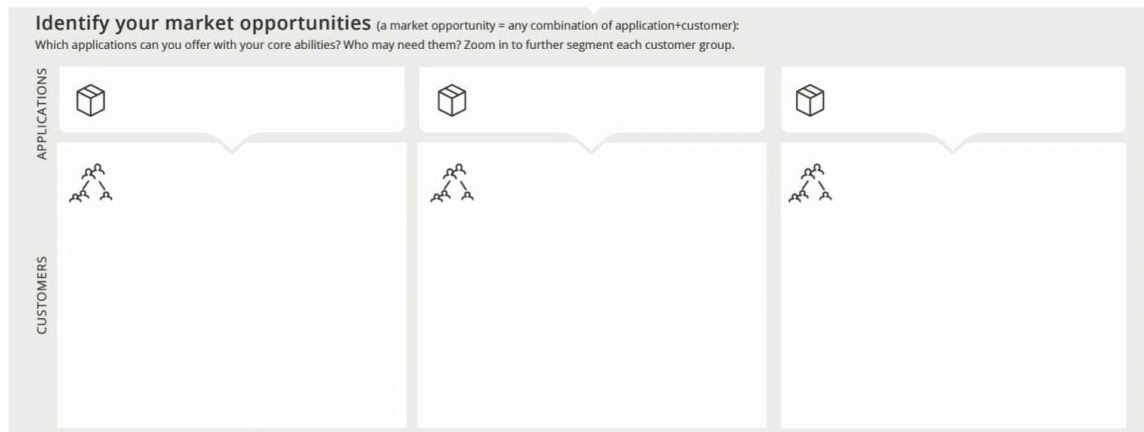
Notes

Summary



0m 04s

Applications and customers



A **market opportunity** is any **combination of application and customers**.
Hence, the discovery process encourages you to think broadly on both ends.

Which markets to play in?

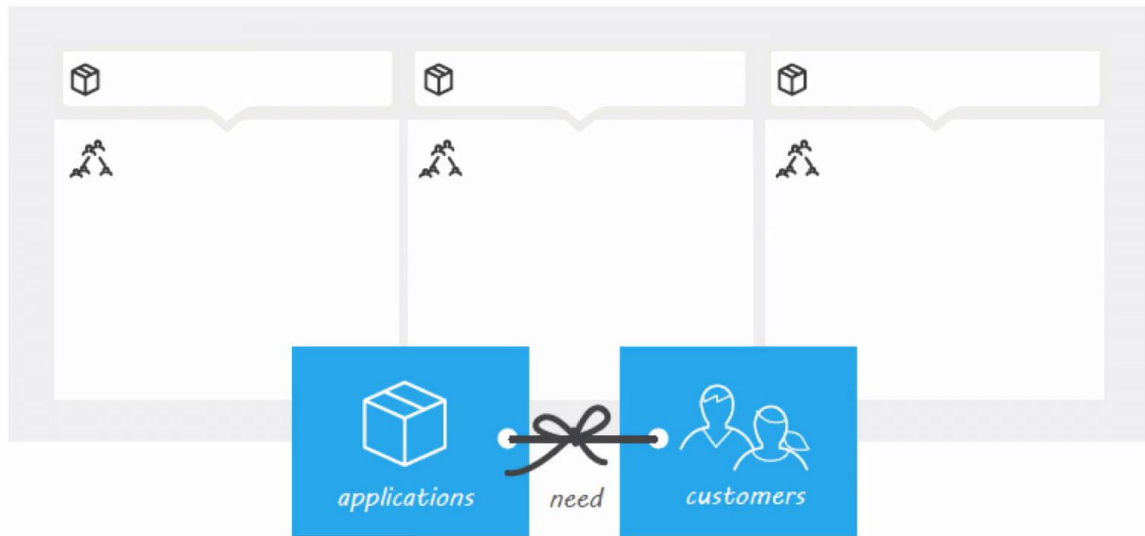
So let's go back to work. She learn that helps you to generate your market opportunities set we know focus on the lower part the upper part as I remember was to describe your core abilities or technological elements, the lower part is dedicated to identifying your market opportunities. And this is a straightforward for what process you see here, applications on the one hand and customers on the other hand, and the market opportunity is basically any combination of application and customer. In order to understand what's in store for you in terms of market opportunities both are actually vital elements to be considered and we encourage you to think broadly about applications and the customers that could use them.

Notes

Summary



The link that ties both ends is the need



Which markets to play in?

The link between the application and the customer is actually the need and also a certain application has a functionality and this functionality should serve a certain purpose create value with your customer assets.

Notes

Summary



1m 20s

The discovery process

Think OUT OF THE BOX:

- Be open
- Think unconstrained
- Show your creativity
- Think broad



markets to play in?

So this discovery process is actually a very fun activity. It's one of the few instances in the design of your venture of your innovation project. We can think out of the box, truly out of the box and we want you to think truly out of the box and also think broadly think unconstrained think with all your creativity and enjoy that moment you know because this is, this is a fundamental moment as we discussed in the life of your venture in your innovation project. Make sure that that you unconstrained and really reach out and try to understand what's in store for you in terms of market opportunity. I will come back to that and give you some hints and tips of how you can enrich your creativity and think broadly. And I also will share with you what we learned from research on which type of opportunities people can typically see. But this is in essence an activity where say hey I have a design element in my hands. This is the market opportunity that I discovered the market opportunities that I will discover. And let's enjoy this moment.

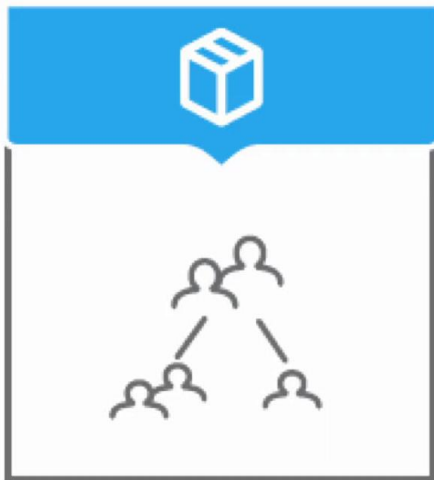
Notes

Summary



1m 33s

Identifying possible applications



Another powerful way to jump-start your imagination is to think about **combining your technology with others...**and thereby add new functionalities.

This may broaden the appeal of your technology to new customer sets.

Which markets to play in?

So the lower part of the worksheet is divided into an application part and a customer part. The application part designates a specific usage a function which you can create with your core technologies and abilities. So it's really linking the upper part of abilities with some functionality that is embedded in these technological elements or your abilities. It can be it based on one of these technological abilities that you identified above or more than one, you know so this can be a combination or can be a single technological function. Think about this flicker example that we discussed in the private sector. You know there was only one functional element in the whole set of technological elements that flicker has detents. So from one of the previous segments you also remember that you could add technological elements to the mix that will increase the scope of functionality that arises from a technology. Think about the example of adding smartness based on hardware and software components to the turned current technological elements. In turn this gives rise to lots of new functionalities and notes of new applications.

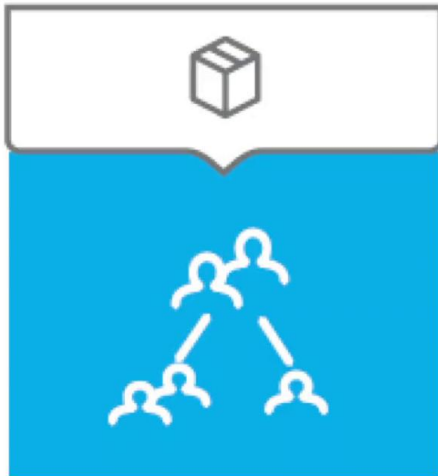
Notes

Summary



2m 37s

Identifying possible customers



As you uncover potential applications, you should also consider who may have the need for them.

These will create your possible sets of customers.

Remember that a market opportunity is any combination of application and customers

Which markets to play in?

The final element in your work sheet one is the identification of possible customers. We designate this with these icons showing individuals. It could also be companies B2C B2B markets. But this box down there that links to the application box is focused on your customers. So as you uncover potential applications you should also consider who may have the need for those applications. And this will create your possible sets of customers. Remember at that point the market opportunity is any combination of application of customers and I will come back to this in a minute.

Notes

Summary



3m 52s

Back to Augury



MACHINES TALK, WE LISTEN.

So as an illustration of the re-linking step. Let's now turn back to Saar in Gaul. The founders of Augury you remember that they had the slogan machines talk. We listen so they can have all kinds of interesting applications in the predictive maintenance market domains.

Notes

Summary



4m 32s

1

WORKSHEET 1

Generating Market Opportunities

NAME Augury DATE

List the venture's core abilities or technological elements
Characterize them based on their functions and properties. Describe them in a general manner, independent from your (envisioned) product.

ABILITIES	Listening Hardware	Algorithm	User Interface	
	Records vibrations and ultrasonic	Detects changes	Easy and intuitive	
	Small	Real time analysis	Suits iPhone and Android platforms	
	Portable	Designed for big data	Generates tailored reports & statistics	
	High sampling rate	Based on machine learning	Online management platform	
		Builds malfunction 'dictionary'		

Identify your market opportunities (a market opportunity = any combination of application+customer):
Which applications can you offer with your core abilities? Who may need them? Zoom in to further segment each customer group.

APPLICATIONS	Predictive maintenance for commercial machines	Predictive maintenance for consumer appliances	Predictive maintenance for medical purposes
CUSTOMERS	Commercial Buildings HVAC Elevators Factories Manufacturing machines Infrastructure equipment Freight firms Cooling containers Refrigerated trucks		

Place the market opportunities you would like to evaluate in the Market Opportunity Set.

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Let's look again at their worksheet1 so they had identified three main technological components. First listening hardware with a couple of features that are listed below the algorithm that is behind their whole technology with a couple of features and then the user interface. And when they think about applications they identify a whole range and very different application domain. So it was for commercial machines for consumer appliances and for medical purposes. So all three domains are have some need for predictive maintenance and associated with all three domains. Are certain sets of customers which are in effect as we will see fairly different and create a wonderful opportunity set for Augury. The associated customer segments actually show you another level of breath in terms of market opportunities that will arise from this bottom part of the worksheet 1 here they identified on a top level commercial buildings factories and freight firms all in the predictive maintenance for commercial machines area. And if you just start looking at the left side the commercial buildings market can actually be subdivided into HVAC heating ventilation, air conditioning domain and the elevator domain.

Notes

Summary



4m 51s

1 WORKSHEET 1 Generating Market Opportunities

NAME Augury

DATE _____

List the venture's core abilities or technological elements

Characterize them based on their functions and properties. Describe them in a general manner, independent from your (envisioned) product.

ABILITIES



Listening Hardware

Records vibrations and ultrasonic
Small
Portable
High sampling rate



Algorithm

Detects changes
Real time analysis
Designed for big data
Based on machine learning
Builds malfunction 'dictionary'



User Interface

Easy and intuitive
Suits iPhone and Android platforms
Generates tailored reports & statistics
Online management platform



Identify your market opportunities (a market opportunity = any combination of application+customer):

Which applications can you offer with your core abilities? Who may need them? Zoom in to further segment each customer group.

APPLICATIONS



Predictive maintenance for commercial machines



Commercial Buildings

Factories

HVAC Elevators

Manufacturing machines Infrastructure equipment

Freight firms

Cooling containers Refrigerated trucks



Predictive maintenance for consumer appliances



Vehicle manufacturers

Household tools

Cars Motorcycles

White appliances Heating & cooling



Predictive maintenance for medical purposes



Place the market opportunities you would like to evaluate in the Market Opportunity Set.

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Just think about predictive maintenance for these types of spending. You know everyone who has been stuck in an elevator knows exactly what I'm talking about right now. That second element here are the fecker factories. This is quite an interesting domain as well. The flourless sub-segment this fecker domain engine, manufacturing machines and infrastructure equipment. Again, if you can have predictive maintenance for this machine this means less downtime. You can send in you keep send a team there before the machine actually is out of service. So there's a lot of cost savings associated with this as well. And then freight firms similar story cooling containers, refrigerated trucks at some Sub-segments. The second big domain that they focus on is predictive maintenance for consumer appliances and the divide between the climate effect trust and the sub-segments cars and motorcycles and household tools with the sub-segments white appliances heating and cooling. And again predictive maintenance in all of these domains could help a lot in terms of saving costs. increase reliability et cetera. You know so lots of value created potentially created as well.

Notes

Summary



6m 13s

List the venture's core abilities or technological elements

Characterize them based on their functions and properties. Describe them in a general manner, independent from your (envisioned) product.

ABILITIES



Listening Hardware

Records vibrations and ultrasonic
Small
Portable
High sampling rate



Algorithm

Detects changes
Real time analysis
Designed for big data
Based on machine learning
Builds malfunction 'dictionary'



User Interface

Easy and intuitive
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Generates tailored reports & statistics
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APPLICATIONS



Predictive maintenance for commercial machines



Commercial Buildings
HVAC Elevators

Factories

Manufacturing machines
Infrastructure equipment
Freight firms
Cooling containers
Refrigerated trucks



Predictive maintenance for consumer appliances



Household tools
White appliances
Heating & cooling

Vehicle manufacturers
Cars
Motorcycles



Predictive maintenance for medical purposes



Artery diagnostics
Lung diagnostics

CUSTOMERS



Place the market opportunities you would like to evaluate in the Market Opportunity Set.

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And finally they also saw applications in the medical domain artery diagnostic, Lunda Nasik which is in fact, very different to the two other domains for predictive maintenance of commercial machines and consumer appliances. But overall if you look at this opportunity set that is beginning to emerge at the lower part of this worksheet, and this is truly amazing. This is giving you a rich, rich set of growth options for Plan B et cetera. So having this at your disposal is already a fascinating element. The next step will be of course to understand which markets will be more important than others.

Notes

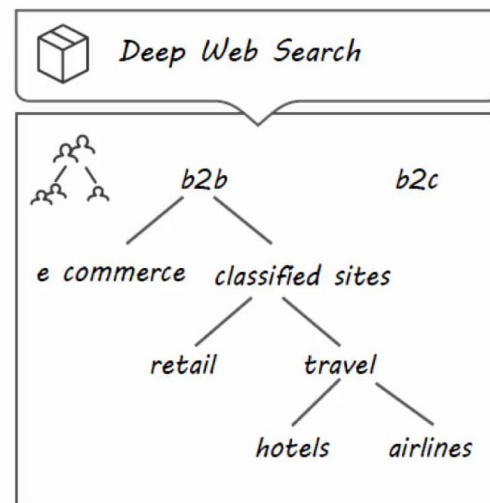
Summary



Zoom in and out on possible customers

Zoom-in on potential customer segments to identify sub-segments

Zoom-out to identify a broader set of users that may open your mind to other segments



Which markets to play in?

We will come back to that in week 3 But before we go down that path I want to show you another example and what we have just seen with a Augury in the lower part of work sheet One is that the customer segments the factories can be further Sub-divided into sub-segments. And there's one tip that we can give you and how to identify even more segments is that you mentally say OK we have a swimming in and swimming out process that is associated with opportunity and deification and let's look at this again with another example. This is the example of Nova. This is a company that actually develops visual scanning software that mimics human behavior and reads content like pricing images descriptions and ratings. So one of the technological applications is deep web search and in that domain they can say OK we have B2B customers business to business customers and B2C customers business to consumers relationships. So you can further segment this and say we're B2B business to business linkage means e-commerce or classified sites. Then you can further segment the classified sites into retail. On the one hand or travel. And then you can go further down the tree and say travel can be further subdivided into hotels and flights.

Notes

Summary



8m 11s

Mine your knowledge



1 markets to play in?

So beyond this zooming in and assuming all process that can jumpstart your imagination. There are a few other tips that we want to give you to identify an appealing and exciting customer of set market opportunities that ultimately just as appealing as the one from a Augury that we have just seen. So in terms of boosting your discovery skills, one first tip that we have for you is mining your own knowledge. Why is this so important. What we know from our own research is that people tend to identify those opportunities that are related to the prior knowledge of customer needs of certain market segments et cetera. So this means you are predisposed to identify opportunities that are related to your prior knowledge. What is important to remember in line in association with your prior knowledge corridor is that not all the knowledge that you have is of course on the top of your mind. And also you need to mind your knowledge in a way trying to understand what type of customer needs I came across in the past that are related to the functionalities embedded in my technological elements.

Notes

Summary



9m 35s

Boost your discovery skills

Mine your knowledge

Access external sources

Plow lists of industries



ich markets to play in?

So really mind your knowledge, take your time lean back try to understand the types of customer sets types of industries et cetera that you came across during your life so far that might provide a hunch or an idea of where your technology can provide. So is this concept that I just explained the prior knowledge corridor concept also means that we are blind to many things out there now. And by implication, this also means by turning to other people we can actually enrich our market opportunity set significantly because they will know about market opportunities customer needs that you may not even have heard about. And also in that sense we encourage you to really go out there talk to people try to solicit information about customer needs that they might know about based on new technological functionality that you would have never thought of. So accessing external sources is a key element in order to help your creativity. It is also useful to go through a systematic list of industries or markets, you know there are tons of those on the Internet, just Google them and try to see you know systematically in these lists where your technology can be applied. You know these are industry lists.

Notes

Summary



10m 41s

Boost your discovery skills

Mine your knowledge

Access external sources

Plow lists of industries

Perform a patent search



... markets to play in?

You go through them and say hey maybe we can apply our technology in this domain we just never thought of it or about it. Let's get in touch with some folks in those domains and try to understand that customer need that we assume exists there actually exists. And finally what is also interesting is that you can look at patents that are related to your technological element and see what type of application areas are named in there. These are just for tips but there are many other ways of enhancing your creativity. I think the bottom line and what we urge you to do is take your time for this step.

Notes

Summary



12m 02s

Summary



This discovery process is extremely important. Be open and discover as many, and as varied, market opportunities as you possibly can!

Having 3-5 market opportunities in your Market Opportunity Set is typically a good starting point.

Which markets to play in?

So this discovery process is highly important as it shapes what you can do and what the type of value is that you're going to extract from your venture from your innovation project. So be open and be imaginative, be creative and identify as many and as varied opportunities as you possibly can. When I say as varied think really about for instance what Augury has done to look at very different industries because this creates strategic choice this creates variety for your venture. And these markets might have very different levels of attractiveness and we will come back to that later on. And so typically having three to five market opportunities is there's a good rule of thumb that I've seen actually teams that were able to push that much, much beyond that number up to 60 different market opportunities and that's it. So if you're on a creative roller coaster try identify lots of opportunities lots of varied once enjoyed that moment because this really is the opportunity set that is at your fingertips for venture creation.

Notes

Summary



12m 39s



Take your time,
this is a very important step for
your venture or innovation
project!

Which markets to play in?

So please take your time. This is a very important step forward for your project next week. I cannot share with you some ways to create an opportunity set based on what we have discovered and how to place this actually in the market opportunity navigator.

Notes

Summary



13m 43s