Asunto

YOUR APARTMENT BUILDING CONCIERGE.

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Generative Report

Process

- We did body-storming and improv brainstorming sessions to generate some ideas for scenarios.
- We generated the Value Flow Diagrams as a group, discussing the benefits of our ideas.
- We divided into teams to create the Value Opportunity Analysis Table and to flesh out the details of the scenarios further, using the personas we generated in our our Discovery Phase.
- We met to discuss the benefits of each idea and decided on a solidified service.

Three Main Ideas

*Our Generative Phase focus on three main concepts directions for Asunto:*

- · Tenant-to-manager and maintenance communication channel
- · Rating and review system for current tenants
- · Tenant's tool to communicate with other tenants

Value and Cash Flow Diagram

Tenant-to-management and maintenance channel Value Diagram

A:
- Rent payment
- Maintenance request management
- Feedback of apartment
- Rating of apartment
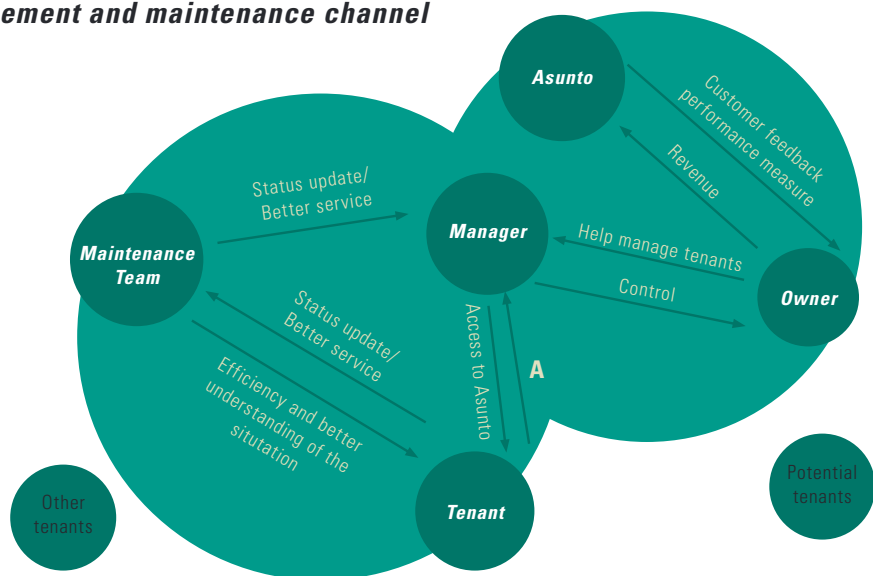
The main source of revenue for Asunto comes from the owner of the apartment management company purchasing a subscription for the cloud-based Asunto service. The owner is in turn provided with customer feedback from the tenants of the buildings and a performance measure for the management staff at each of the buildings. The owner provides the building managers with the Asunto service, which helps to manage tenants and maintenance staff, while in turn the building managers are giving the owner a little more insight into the details of the day-to-day management process.

With a tenant-to-management or maintenance communication channel, the building manager is extending the Asunto service to reach the tenants. The tenants are able to pay rent, file a maintenance request, provide feedback of their apartment, and rate the quality of their apartment all in one place. To file a maintenance request, the tenants are able to directly reach the maintenance team and increase the efficiency of the maintenance process. In turn, the maintenance team are providing the tenants with more transparency of the status of their request, and giving them more control over the scheduling and urgency of the situation.

Tenant's tool to communicate with other tenants/potential tenants
Value Diagram

A:
- Rent payment
- Maintenance request management
- Feedback of apartment
- Rating of apartment
- Feedback of other tenants
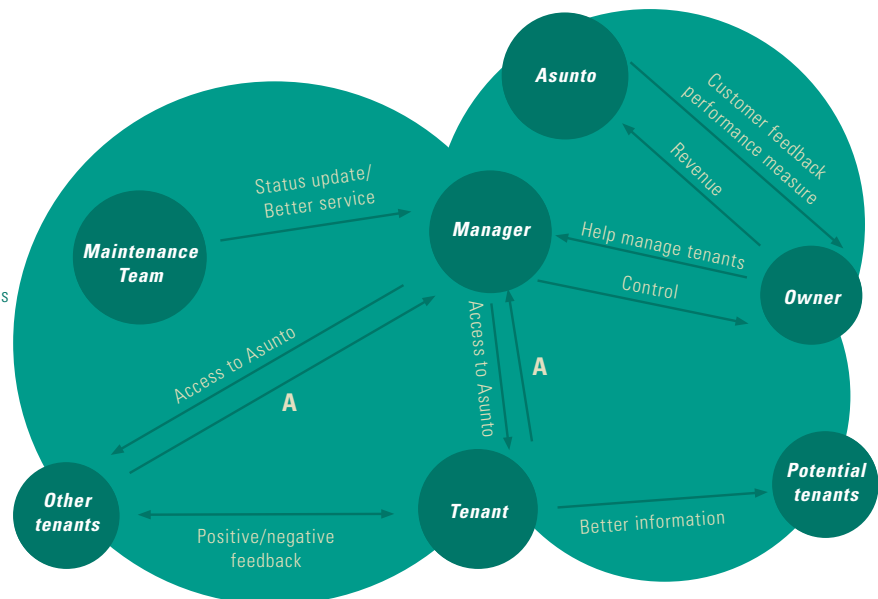
With a tenant's tool to communicate with other tenants and potential tenants, the value flow between owners, managers, maintenance, and tenants are the same. Additionally, however, there is a channel of communication between tenants and their neighbors. This allows a tenant to give positive or negative feedback to his or her neighbors, as outlined later in this report in our scenarios. The additional value this model provides is from the current tenants to the potential tenants who are currently seeking apartments. With the introduction of requiring feedback from the current tenants on a regular basis and putting these reviews in a public location such as a website, potential tenants are receiving the value of a plethora of accurate and up-to-date perspectives from all people who live in the building in which the apartment seeker is interested.

Value Opportunity Analysis

		TENANT-TO-MANAGER/ MAINTENANCE CHANNEL			RATING/REVIEW SYSTEM FOR CURRENT TENANTS			TENANT'S TOOL TO COMMUNICATE WITH OTHER TENANTS		
		Manager/ Owner	Maintenance Person	Tenant	Manager/ Owner	Potential Tenant	Tenant	Manager/ Owner	Neighbors	Tenant
EMOTION	Adventure	0	2	1	0	3	0	0	0	2
	Independence	3	2	3	2	3	3	2	0	3
	Security	3	0	2	3	0	3	3	0	3
	Confidence	3	2	3	2	3	3	3	2	3
	Power	3	2	3	0	3	3	0	0	3
ERGONOMICS	Comfort	3	0	3	3	3	0	3	2	2
	Safety	3	0	3	2	0	0	3	0	3
	Ease of use	3	3	3	3	3	2	3	3	3
IDENTITY	Timeliness	3	3	3	3	3	3	3	3	3
	Sense of place	0	3	3	3	3	3	3	0	3
	Personality	3	3	3	3	0	0	3	0	3
IMPACT	Social	2	2	3	0	3	3	2	0	3
	Environmental	3	1	3	3	0	0	0	3	2
CORE TECH	Reliable	3	3	3	0	3	3	0	3	2
	Enabling	3	3	3	0	3	3	0	3	2
VIRILITY	Transmissible	3	2	3	3	2	3	2	2	2
	Evangelical	1	2	3	3	0	3	1	2	3
	Sustained	3	3	3	3	3	3	3	2	3
		45	36	51	36	38	38	34	25	48
			132			**112**			**107**	

In order to determine how well Asunto would fare in the target market and how to choose from three variation ideas, we did the Value Opportunities Analysis on each idea. For each type of stakeholder, we evaluated the value opportunity class, represent the low, medium, and high level by heat map, and also applied quantitative numbers to different levels. The sum value of each section helped us in making decisions on a service.

Tenant-to-manager and maintenance communication channel — 132 points

The tenant-to-manager and maintenance communication channel benefits the whole community and improves the co-creation of value in many aspects. First, the independence of all parties is increased. The tenant does not have to follow the availability of manager/owner and maintenance people any more, since activities such as rent payment can be done via Asunto. The maintenance person has the freedom and capability to decide whether to take the requests or pass to other workers.

Second, the service will provide users with high power and confidence. The tenant has the ability to manage their life and take care of their own living environment. The maintenance person is able to gain a better understanding of the situation, which makes them solve the problem more efficiently. Both the manager and owner will feel on the top of everything, by receiving updated info from the maintenance person, and will be able to manage the apartment based on his or her own schedule.

Third, due to the nature of a mobile service, the attribute of timeliness and sense of place are quite high. All the users are able to complete tasks, such as paying rent or requesting maintenance and gain feedback instantly via Asunto.

The service is supported by good security mechanism and mobile cloud sync solution. Currently, the core technologies are reliable and enabling enough for the use of transaction and communication.

Rating and review system for current tenants — 112 points

The rating and review system for current tenants adds significant value to potential tenants.

First, the independence and power is heightened. Current tenants can say whatever they want while potentials tenants can view all the information themselves. The tenant's voice is heard and potential tenants are able to make informed decisions by viewing the reviews.

Second, manager/owner will be more confident in understanding the current situation in the apartment. Based on our user research, the reviews on many current apartment review systems are not reliable. Some are like advertisements, and some are posted by angry tenants. By requiring current tenants provide reviews, which could be 5 stars or open-ended, the manager/owner will be able to get everyone's feedback in regular intervals.

Third, the core technology that supports the rating/review service is quite matured and secure. In order to let potential tenants get access to the service anytime anywhere, it's better to provide both mobile and computer clients.

Tenant's tool to communicate with other tenants — 107 points

The tenant's tool to communicate with other tenants is a perfect personal communication channel to appreciate, complain, and report about anything that happens around your apartment.

First, it improves the independence, power, and security attributes for current tenants. Since the posts stay anonymous at all times, the tenant feels that Asunto serves as a private channel to have his own voice.

Second, it increases confidence and security for manager or owner. Since people tend to tell the truth when anonymous, it is extremely helpful for manger or owner to gain a bird's-eye view about what's

happening in the apartment.

Third, the service has big social and environmental impacts on the tenant-tenant communities. Neighbors may receive appreciations if they do anything for the apartment community, and also may receive notifications if they did anything that might disturb neighbors. That anonymous information will help build a more friendly and harmonious community and living space.

However, the core tech support for tenant client is not enabling enough. In order to detect the noise around the apartment, one solution is to make use of sensors on users mobile devices. Mobile devices will self detect and report noise. But this would result in users' phones to run out of battery quickly. Another solution is to set up the whole infrastructure which makes the apartment a smart building. It would be able to detect noise location accurately. But this idea is very expensive to build, and also beyond our scope.

In general, Asunto promotes high independence, confidence, with very high ease of use, and a strong product identity. Compared with the current apartment management tool, Asunto has very high viral capabilities and social impact, because it improves the co-creation of value among different stakeholders.

Decision on a Service

Based off the analysis from both the Value Flow Diagrams as well as the Value Opportunity Analysis, our ideas ended up fitting very well together. Each adds a unique value to the concept of Asunto.

Our initial idea of a tenant-to-manager and maintenance communication channel deals with the relationships between the tenant and the management company. The rating and review system for current tenants to reach potential tenants deals with the external view of the apartment. Finally, the tenant's tool to communicate with other tenants focuses on the relationships between residents in the building. Between these three, there is very little overlap between the ideas, and each provides a lot of unique benefit.

Thus, moving forward, we choose to go with a service that focuses on providing real-time feedback to apartment building managers, maintenance workers, owners, and potential tenants. Currently in the apartment rental space, there are very few, if any, places online where there are trusted, reliable, and plentiful reviews.

In a survey we conducted during our Discovery phase, one building management office employee commented: "Reviews in almost all cases are a detriment. They clutter the Internet, do not provide REAL information, and tend to be written by people who have issues. Word of mouth, on the other hand is one of the most important ways we attract new customers." This sentiment was echoed across many

different building managers, as well as tenants who were unsatisfied with the quality of reviews and information they had received while researching apartments online.

Our vision for Asunto is a service that gives apartment building tenants a streamlined channel to communicate directly with management and maintenance, while requiring consistent feedback from tenants to provide both managers and potential tenants with tenant satisfaction information.

- *Remote management company owners will be happier with the transparency of the detailed information related to their properties*
- *Building managers will appreciate being able to closely watch the maintenance process without being a required step of the process, as well as being able to hear directly from their tenants*
- *Maintenance will appreciate the centralization and mobility of the maintenance process*
- *Tenants will be able to pay rent, file a maintenance request, and communicate with other tenants more effectively, as well as feel like their opinions are being heard by their building manager*
- *Potential tenants will be able to get an accurate perspective of tenant satisfaction and be able to actually trust the ratings and reviews during the apartment seeking and selection process*
- *Buildings that use Asunto will be more marketable because they will instantly have a strong online presence, reviews that feel real and therefore are trusted, likely have high satisfaction ratings for this reason, and will be a better living experience for tenants*

Personas in Scenarios

TENANTS

Maya Shelling — 21 years old, Student at University of Pittsburgh

Maya is an undergraduate Senior at University of Pittsburgh majoring in Psychology. She just moved out of the dorm into her own studio apartment in Oakland, a mile away from campus. She knows some friends who live in the surrounding area, but is excited to finally have her own space after living with roommates for the last three years.
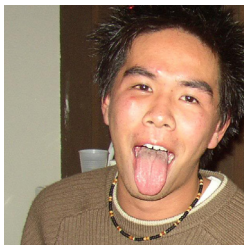
Michael Cheung — Party animal

Michael is a young freelance photographer. Recently graduated from Rhode Island School of Design, he is practicing his trade in downtown Pittsburgh. He recently moved into a new apartment and knows a lot of people in the city.

He likes to throw large parties and therefore got a one bedroom apartment with a huge living area. He is looking forward to St. Patrick's Day, when he is throwing a green-themed party at his apartment.
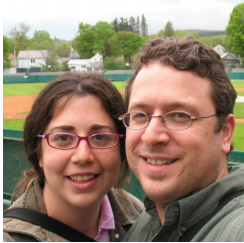
Matt and Tiffany — Young married couple

Matt just moved to Pittsburgh from Atlanta for a new job as a mechanical engineer. They are saving up for a house but are leasing a place in Squirrel Hill this year. Tiffany worked in Atlanta in human resources for an Internet service provider. She has transferred to the Pittsburgh office to be with Matt. They miss Atlanta but are finding Pittsburgh to be a friendly town.

POTENTIAL TENANT

Alex Cho — 23 years old, Software Engineering at CMU

Alex is an graduate student at Carnegie Mellon University studying Software Engineering. He will graduate this May and already got an offer from a Internet Company located in Silicon Valley. He is tech savvy and hooked to his Android phone and customizes mobile applications for himself. He wants to find a good apartment near his company, and the Internet is his main information channel.

MANAGER

Angela Mills — 41 years old, Building Manager

Angela is a divorcée and a Pittsburgh native. She has been a building manager for 6 years, and has 2 teenage kids. As her job she tends to complaints and maintenance requests from tenants and dispatches to maintenance. Angela is not technologically savvy; she recently got a Blackberry for work, but hardly uses it for anything but calls, checking e-mails and playing solitaire.

MAINTENANCE STAFF

Steve and Jason — Maintenance team at Angela's company

Steve and Jason are the maintenance workers for Angela's management company. Jason has been working at the company for 4 years, while Steve just started last year. They work as a team, and Jason drives the company's van. They often go out for beers after work, and get together to watch Steeler's

game. Their weekends are often filled with getting calls coming from Angela with maintenance requests, so they have problems scheduling their weekend activities with their family and friends. Jason has a new baby girl named Cheri, and because his wife is a busy nurse and works weekends, it's hard to find someone to babysit during those times when he gets called in instantly.

OWNER

Norman Jobs — the owner of the real estate company

Norman Jobs has been in the real estate business ever since he was 20. He came to the United States from South Africa in the mid 1970's and has a rags to riches story. Currently he owns five different apartment chains in three states across US. He is recently widowed, but has a 20-year-old daughter who he wants to handle his business one day. He would not admit to being tech-savvy but he cannot unhook himself from his Blackberry and iPad. He is a strong believer that technology will help his business in future and is always looking for opportunities to increase his companies' web presence and make management more efficient.

Scenarios

Pay Rent Scenario

Maya Shelling (Tenant)

- She is always busy with classes, assignments, meetings, and fun. It is a bit hard for her to remember the date to pay rent each month. In the past, she has gotten paper notifications slipped under her door notifying her of her late payment, and a $50 penalty.

- After she began to use Asunto, this problem was solved. The system sends her messages three days before the payment deadline. By default, the message will be sent to Maya every day until she pays the rent and chooses "Don't remind me again" instead of "OK".

- In order to pay rent, she fills out a satisfaction rating score (either a simple one question poll, or if she wants to provide more feedback, she can rate the building experience on many different factors and provide more specific feedback). This score helps the manager as well as

prospective tenants in getting real, up-to-date perspectives on tenant satisfaction, as opposed to just hearing from angry former tenants on Internet forums. Maya appreciates the care and attentiveness of the management company, and likes to help other people moving in.

· Maya can make the payment using Asunto. It can be done on both mobile and computer. If she likes, she can still pay rent using a physical check. Maya likes that she can track the payment process. She is notified when the payment is confirmed.

Asunto

· Asunto receives and deposits tenants' money, and it alerts the tenant via e-mail or SMS or both. It acts as a receipt collector and keeps records in the system.

· Asunto records Maya's satisfaction rating anonymously and reports it back to Angela, and factors it into the aggregated satisfaction rating score available publicly on the building's website.

Angela Mills (Manager)

· Because Asunto collects and deposits most tenants' rent, Angela doesn't need to keep bunch of checks. She can track all tenants' payment status, and the late penalty will be added to tenant's rent automatically.

Provide Feedback to Owner Scenario

Norman Jobs (Owner)

· Norman owns the real estate company, and the company has many apartments in different cities. Managers in different cities provide monthly reports to him. He mainly uses the financial report to judge whether their manager are doing a good job, but he doesn't know what really happens in these apartments. He has little chance to get in touch with his tenants.

· After his company starts to use Asunto, everything changes. All communication between tenants and managers/maintenance teams are recorded. Norman thinks highly of this information. He wants to make his tenants satisfied and happy, and to make long term revenue instead of some short term profits.

· Norman uses these records as a reference when he decides to promote some managers. Managers know about transparency of Asunto, and hence aim to provide better service to please their owner instead of just making money.

Maintenance Request Scenario

Maya Shelling (Tenant)

- One day, on her way out the door while she was heading to class, Maya notices that the bulb above her front door is burnt out. She is in a hurry and needs to leave for school immediately, but she decides to use Asunto, takes a picture of the broken light and adds a comment "Change the bulbs". She also decides to set today's date for "due date" as she needs instant action.
- When on the bus, she checks the process of her maintenance request. She finds that her request has been taken by Jason, a maintenance worker. Jason's contact information is also available for her reference. Before she returns home for the day, she gets the message that the bulb was fixed. Satisfied, she rates the work quality a high score.

Asunto

- When Asunto receives tenants' request, it automatically assigns the request to the closest worker based on urgency, with no need to request through building manager. This increases the efficiency of communication.

Steve and Jason (Maintenance Worker)

- Steve is the closest worker to Maya's apartment at that moment and is given this job. But Steve is already working on another task, so he passes on this job.
- The job gets passed to Jason, and he keeps it. He goes to Maya's apartment and replaces the bulb. He logs it into Asunto through his phone, and Maya gets the update immediately.
- Later when Maya rates Jason's job, the feedback is sent to the system and Jason can see his overall feedback too. All these transactions are recorded in database.

Angela Mills (Manager)

- The whole repair process is finished without Angela's notice!
- Angela saves a lot of time in processing and assigning requests. She checks logs of maintenance in real time to ensure things are running smoothly.
- She also uses users' feedback to evaluate the maintenance team.

Potential Tenant Scenario

Maya Shelling (Tenant)

- Maya rates the apartment and give comments each month while paying rent. Because the rating system is powered by Asunto, and it is totally anonymous, managers only have access to anonymous feedback. This prompts Maya to give a more honest feedback and she is happy to do so to help the manager improving their jobs.

Alex Cho (Potential Tenant)

- Alex is moving soon and wants to find a good apartment.
- He finds current apartment rating websites to be fake and unreliable. There are always negative reviews and even when he finds some good ones, they seem made up.
- Asunto requires all tenants to submit feedback periodically. All reviews are given by current tenants anonymously. The quantity and quality of these reviews and ratings are high.
- Apartments on Asunto's rating website are also using Asunto's software/service. Alex knows that Asunto delivers convenient tenant living experience. He prefers to choose apartments using Asunto and selects apartments to check!

Moving in and Getting Information

Matt and Tiffany (Tenants)

- Matt and Tiffany decide to move into a new apartment. They are unfamiliar with the building and the surrounding area and need to buy new furniture too.
- The apartment manager tells them to create an account online and install Asunto on their smartphones. Asunto provides an electronic copy of the leasing contract, the contact information of the management team and maintenance team. Asunto also provides information about the surrounding area, like where the nearest supermarket is, where the nearest IKEA is, and how to go there.
- Sometimes, they also get messages from the management team. Like heavy snow warning, maintenance notification, holiday greetings, or even a birthday greeting.
- They feel really comfortable with this service as it is like having a local guide for help.

Complaints to Other Tenants Scenario

Maya Shelling (Tenant)

- Maya has a noisy neighbor, Michael Cheung. Each time when Maya comes back home from school, she is really tired and want to go to sleep as soon as possible. But Michael Cheung loves to blare loud rock music at all hours of the night, and Maya can't stand it. She wants the noise to stop, but she feels uncomfortable knocking on his door.
- Maya found out it is easy to give Michael a warning using Asunto. She has two choices:
- The first one is to send a message to Michael directly. The loud tenant gets instant notification they're bothering someone; they might change their behavior. Asunto has to know where the loud tenant is; maybe if many people complain, one person knows the definite location.

- The second one is to send a message directly to the management team and let them handle it. This makes the complaint more "official". There might be "good tenant" rewards and "bad tenant" penalties.
- Maya decides to send the noisy neighbour an anonymous warning using Asunto before taking further action.

Michael Cheung (Tenant)

- Michael Cheung receives a text message from Asunto complaining about the noise from an anonymous tenant. He is also told that if he continues, he will probably receive a phone call from the management team or police.

Ask Permission from Other Tenants Scenario

Michael Cheung (Tenant)

- Michael really likes to party. But he has received anonymous warnings in the past for his noise levels. He does not want to get in trouble and decides to ask permission from his neighbors to hold a party. Asunto can do it for him. Michael broadcast his request to his nearby neighbors.

Maya Shelling (Tenant)

- Maya is a nice and understanding girl. When she finds out that Michael wants to hold a party between 8:00pm – 10:00pm, she thinks it is okay and gives the permission as he has been keeping his noise level in check ever since she last complained.

Lost and Found Scenario

Maya Shelling (Tenant)

- Maya lost her laundry basket in the apartment building. She decides to find it using Asunto. The last she remembered, she left her laundry basket in the laundry room and when she returned it was gone. She broadcasts a message to her neighbors. Michael sees the message, and realizes he has mistakenly taken hers. He replies with an apology and returns her basket to Maya.