

Group Assignment 2: Systemic Problem & Stakeholder Analyses

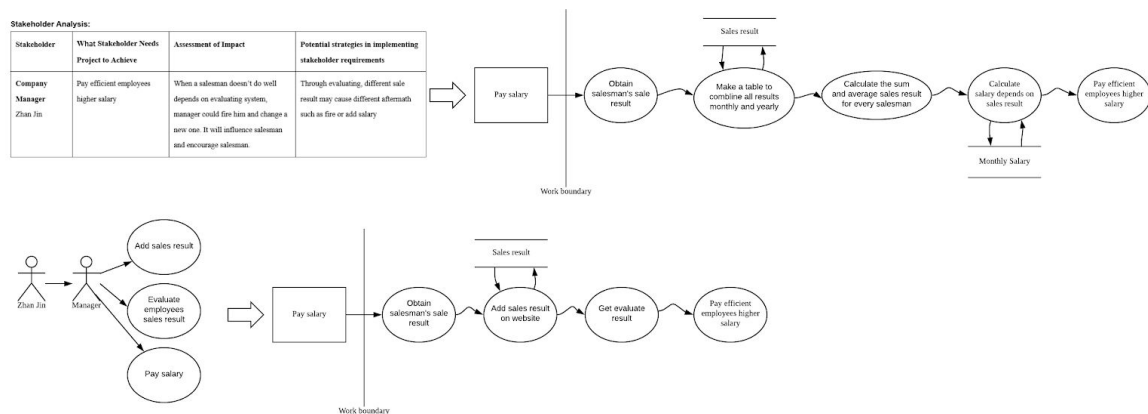
Xujian Zhang
Xinkai Zhang
Luis Ortiz

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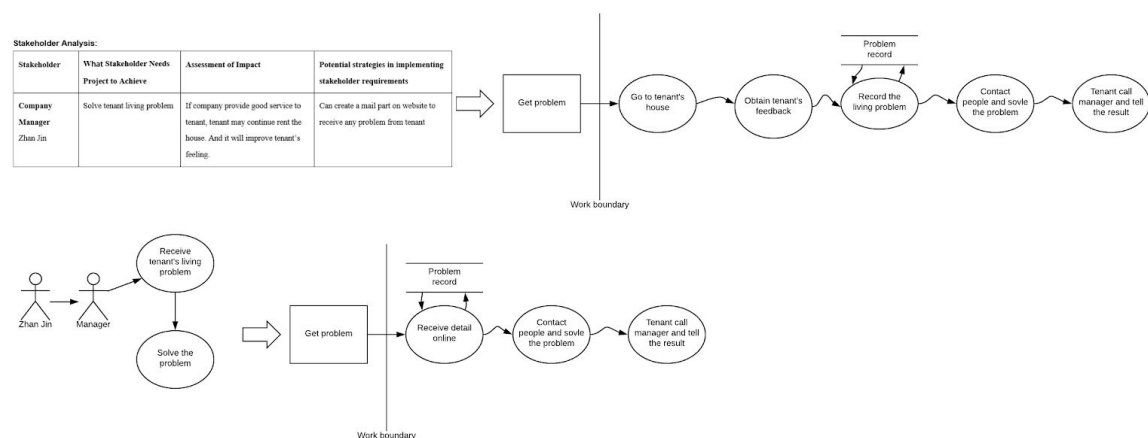
1. Introduction

In group assignment 1, we learned what challenges the company was facing, as well as how they currently operate without an IT system, and how implementing one could benefit or impact each stakeholder. Through our research and interviews we learned how valuable a central website for the company can be, especially when integrated with various subsystems that would cater not only to future customers, but current tenants as well. Because most of the companies competitors do possess their own websites, employee or customer portals, most customers feel more comfortable working with them rather than a small startup company such as Golden Springs. Therefore, this would be our main priority for change as it would immediately benefit all those involved and exponentially increase the company's chances of competing.

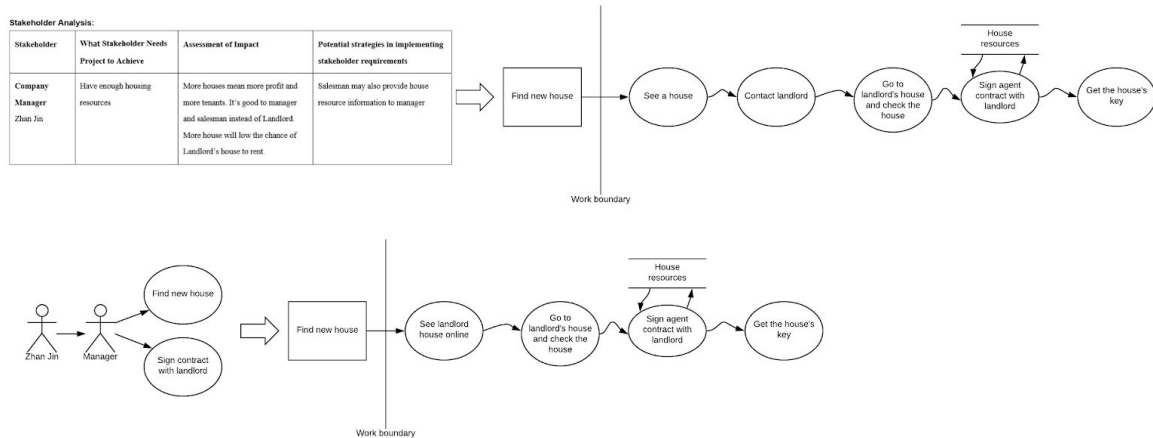
2. Analyze Work-System Purposes and Processes To Identify Business Use-Cases



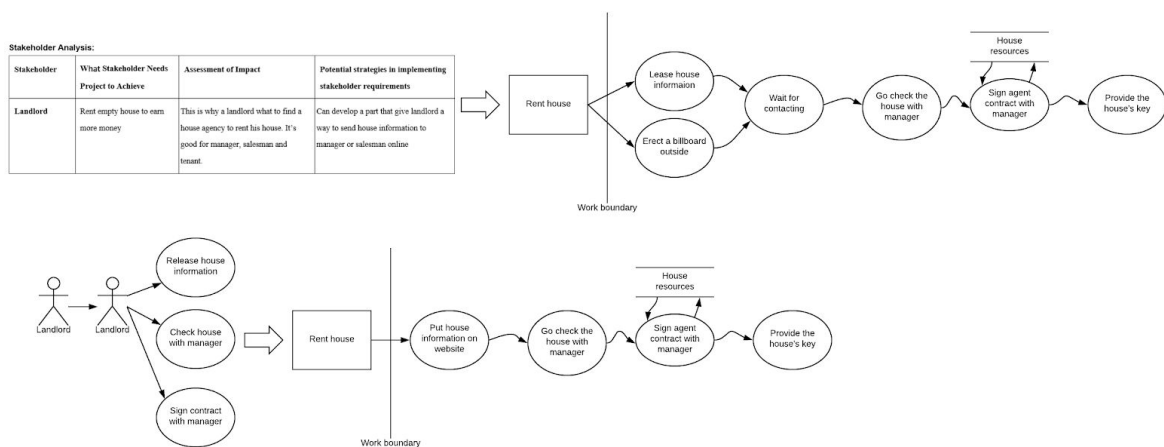
Before designing the website, the manager should calculate all the things such as monthly sales result, yearly result and salary for every salesman by himself on paper. After designing the website, at first, the manager could save a lot of time for calculating. The website will provide final results after the manager uploads sales result data. Second, the manager won't lose data when he uploads these data online instead of writing them on paper.



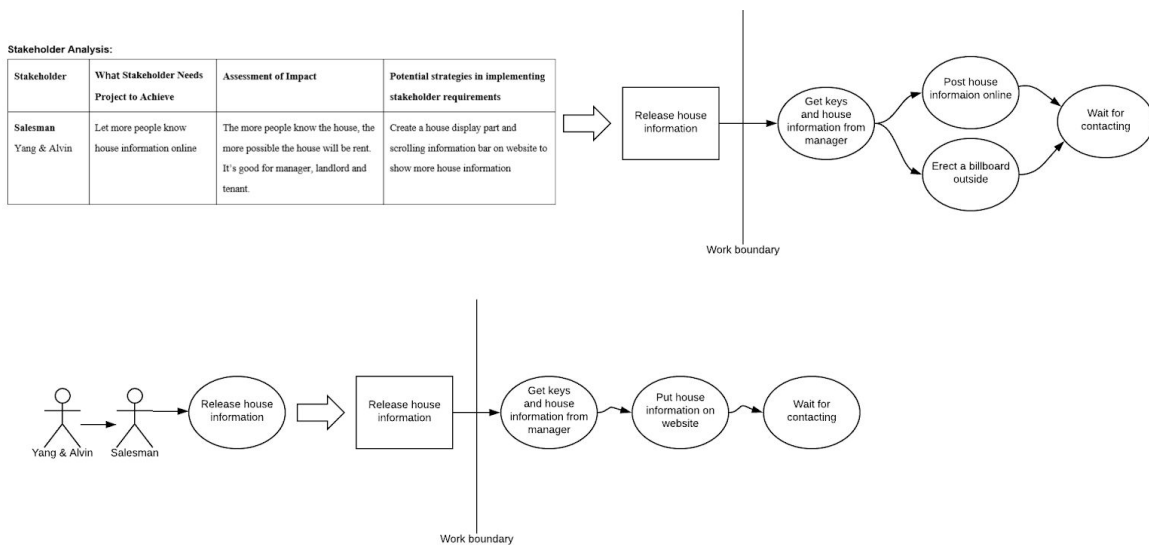
Before designing the website, the manager would waste time making appointments with tenants, going to their house and investigating what happened. The process is long and it will influence tenant's feelings. After designing the website, the manager could check the house status and problem online! Then he can contact who he needs to in order to solve the problem immediately.



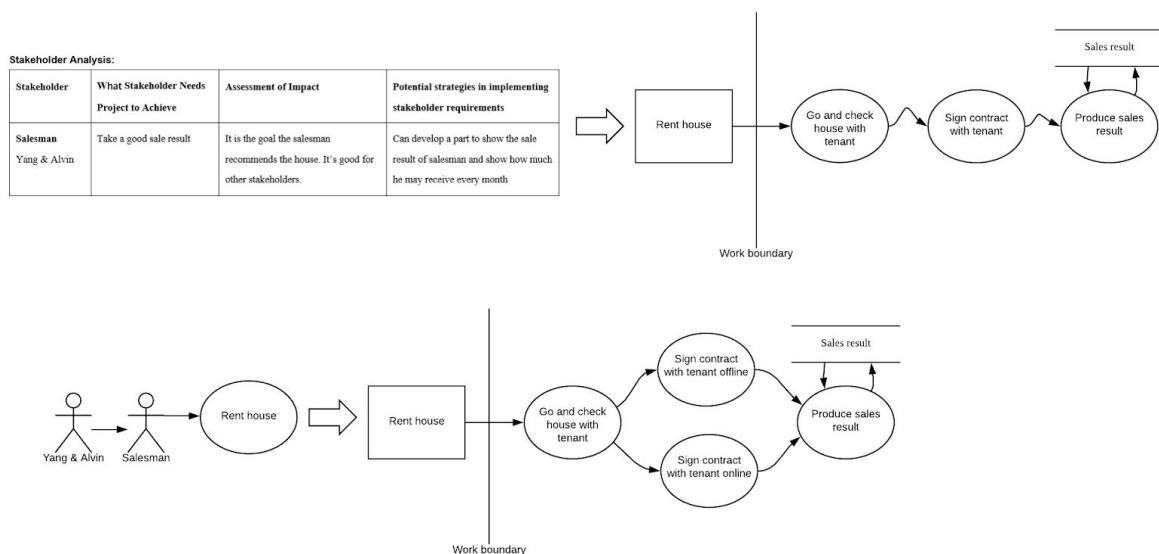
Before designing the website, the manager should go out and find any house which is acceptable to rent and then contact the landlord. After designing the website, landlords will have a way to release their vacant property information. Then the manger could check these houses online and increase his efficiency of working and have a chance to see more houses than before.



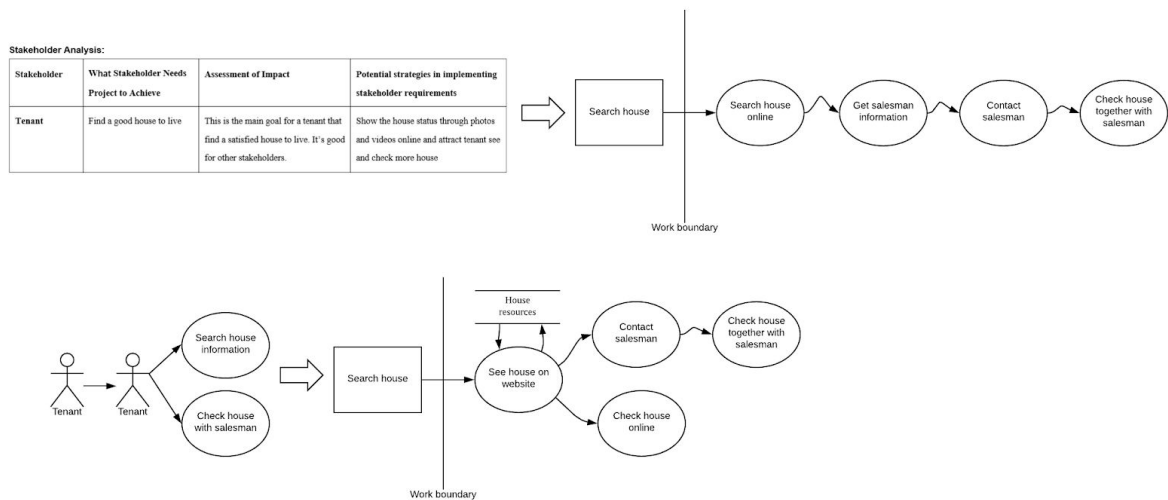
Before designing the website, if a landlord wanted to release the property information, he would send the information to some website with all of the information. After designing the website, the landlord will have a direct way to show the empty house to housing agencies. Which will increase the chances of renting the empty house.



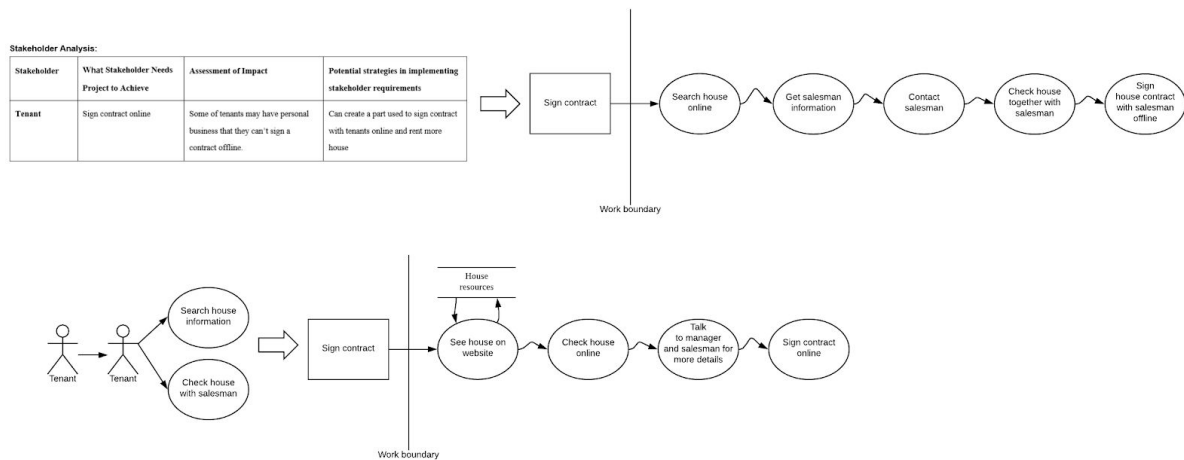
Before designing the website, the salesman would release the property information to other websites and erect a billboard outside. This method is very low efficiency. After designing the website, the salesman will have another way to post the house information and the website will be more efficient in finding a tenant because all of resources will belong to the company.



Before designing the website, the salesman would sign a contract with a tenant after checking the house offline. This may waste a lot of time because not all possible tenants are satisfied with the houses and the salesman would need to bring many tenants to view the house repeatedly. After designing the website, the customer could check and sign contracts online. This would help salesman save a lot of time and give them a chance to receive a better sales result.

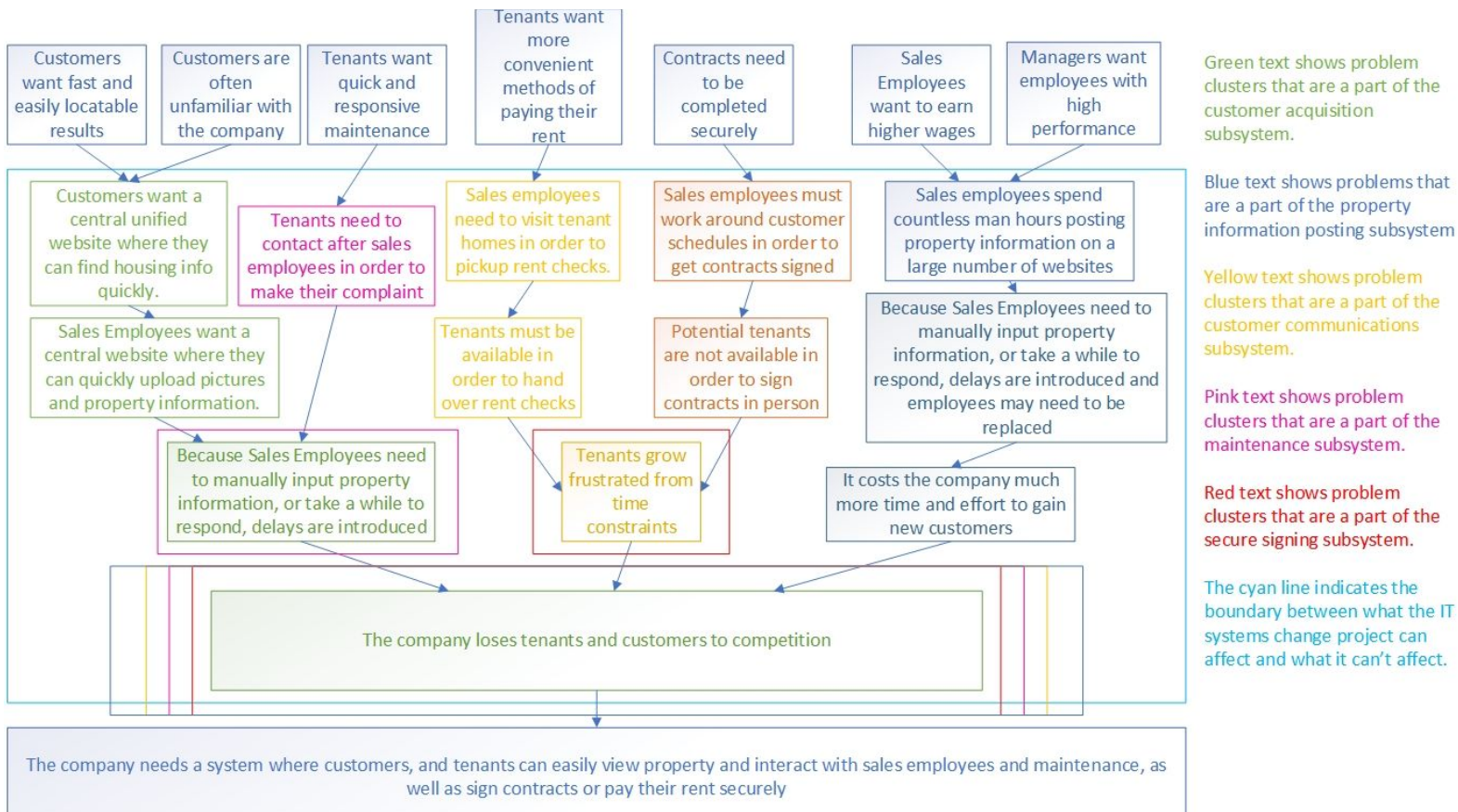


Before designing the website, tenants would need to check a lot of websites to see different houses. And it may take a lot of time because as a customer it is hard to know if the house landlord or house agency is stable and professional. After designing the website, it will provide the tenants another way to check houses from a professional house agency.



Before designing the website, the tenant could only sign contracts offline. If the tenant was unable to sign their contract offline, the company may miss the chance to rent the house. After designing the website, the customer could check the house directly and sign their contract online! This gives the tenant more chances to find and live in a nice affordable home.

3. Systemic Problem Analysis



Formal Problem Statement: Green “Cluster” of Problems #1:

Element	Description
The problem of ...	It takes a lot of time to upload property information online. Because there isn't a central website that enables customers to view property information and also enables sales employees to quickly upload pictures and house information.
Affects ...	Customer acquisition subsystem [Actors:] Customers, Sales employees
The impact of which is ...	Customer cannot find the house information and sales employees will not have a good sales performance.
A successful solution would be ...	Build a central website that can allow customers to acquire property information and contact sales employees directly through the website.

The customer acquisition problem cluster that is identified by green text shows issues that the company faces when attempting to gain new customers. This problem cluster mainly exists due to the fact that the company is very small for the time being, and being that it does not offer a central portal to its customers, it is behind the curb when it comes to customer service as opposed to other larger companies, or companies that do offer this service.

Formal Problem Statement: Pink “Cluster” of Problems #2:

Element	Description
The problem of ...	Tenants cannot contact after sales employees in order to make their complaints. Because there isn't a system for customers where they can log in and make their complaint.
Affects ...	Maintenance subsystem [Actors:] Customer, After sales employees
The impact of which is ...	Tenants cannot find a way to make their complaint or request maintenance online.
A successful solution would be ...	Build an after sales maintenance subsystem, in order to allow tenants to make their complaint or request maintenance online through a resident portal.

The pink text identifies problems that are a part of the maintenance problem cluster and exist because the company has no quick response method of conducting maintenance. This problem cluster exists because the company mainly does not have any resident portal that can allow tenants to make a complaint or request a maintenance.

Formal Problem Statement: Yellow “Cluster” of Problems #3:

Element	Description
The problem of ...	Tenants are unable to pay their rent online. Because there isn't a system that enables customers to pay the rent online.
Affects ...	Customer communications subsystem [Actors:] Customer, Sales employees
The impact of which is ...	Tenants cannot find a way to pay their rent online instead of handing over monthly checks.
A successful solution would be ...	Build an after sales customer communications subsystem, in order to allow tenants to pay rent online through resident portal.

The customer communications problem cluster that is identified by yellow text shows issues that the company faces when attempting to communicate with customers as well as tenants. This problem cluster exists because the company mainly utilizes either in person or over the phone methods in order to communicate, receive, or deliver any information regarding the properties it is advertising, renting, or selling.

Formal Problem Statement: Red “Cluster” of Problems #4:

Element	Description
The problem of ...	Tenants grow frustrated from time constraints. Because potential tenants need to sign contracts in person.
Affects ...	Secure signing subsystem [Actor:] Customer, Sales employees
The impact of which is ...	Potential tenants refuse to sign contracts which results in the loss of company revenue.
A successful solution would be ...	Allow potential tenants sign contracts online.

The red text identifies problems that are a part of the secure signing problem cluster that exists due to the issue that employees and potential customers must work around one another’s schedules in order to sign contracts and paperwork.

Formal Problem Statement: Blue “Cluster” of Problems #5:

Element	Description
The problem of ...	Salesmen spend lots of time posting property information on different websites and can be delayed in their response.
Affects ...	Information posting subsystem [Actors:] Customers, Sales employees
The impact of which is ...	Company wastes time, money, and effort on gaining new customers and training new employees.
A successful solution would be ...	Build a central website that will allow sales employees to post property information online, and allow customers to connect sales employees directly through the website.

The blue text identifies problems that are a part of the property information posting problem cluster that exists due to the fact that salesman are currently required to post housing information throughout various websites and hope that they will be seen which can end up being inefficient and lead to an employee being let go meaning they will need to be replaced as well.

Fortunately, all of these problems can theoretically be solved or mitigated with the integration and use of a central website that customers, tenants, and employees can utilize in order to accomplish each of their individual goals as is indicated by the cyan line surrounding these problem clusters.

4. Conclusions and Priorities For Change

As the result of our systemic problem and stakeholder analyses, we have determined that there are eight goals that our stakeholder wants. For the company manager (Zhan Jin), he would like to pay efficient employees higher salary, solve tenant living problems and have enough housing resources. For the landlords, they want to rent their empty houses to earn more money. The salesman (Yang & Alvin) want to let more people know property information online and achieve good sales performances. At last, tenants want to find a good house to live in and sign contracts more efficiently online. In order to achieve these goals, we listed out five major systemic problems that the company has and analyzed those problems. The first major problem would be taking a large amount of time to upload property information online. The second problem would be tenants cannot contact after sales employees in order to make their complaints. The third problem would be tenants are unable to pay their rent online. The fourth problem would be tenants grow frustrated from time constraints due to in person only interactions. And the last problem would be that the company spends lots of time posting property information on different websites and sales employees could be delayed in their responses. We hope to eliminate or mitigate all of these issues with the implementation of a website that not only the company will benefit from but also the customer.