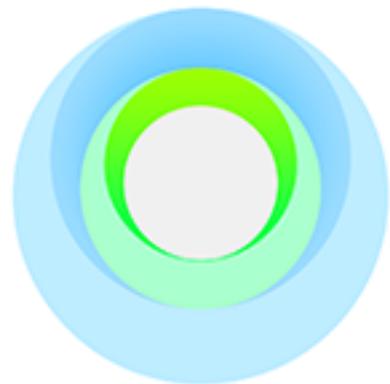


# **Business Modeling Course Report**

## **Soul Smart Space System**



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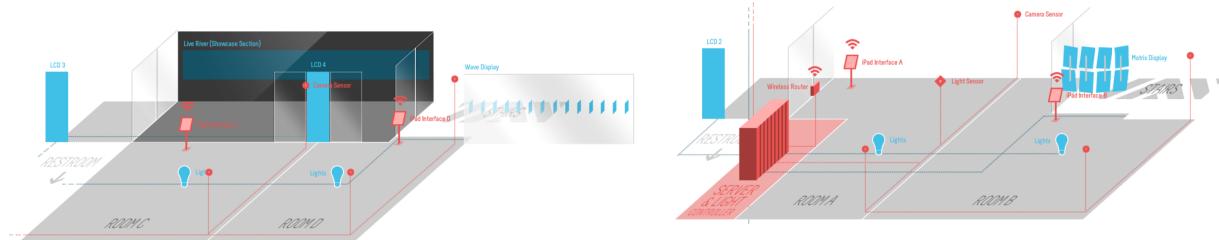
# The Introduction

## Brief



## Soul Smart Space System Control, Command, Configure

Soul System is like the nerve system of the building. The system contains an all-in-one data server, high-performance rendering servers, iPad wall controllers, mobile client application, and complex signal exchangers in order to analyze users' behavior and control the environmental properties of the spaces such as access authority, in-door temperature and lighting completely automatically.



The system is currently deployed at CDI (Center for digital innovation, Tongji University)

In the designing process of software systems, data as the crucial form of I/O, have long been generated directly in the closed loop of human and computer. With the rapid revolution of the internet of things and the swift growth of public data, environmental factors can now serve as a brand new element in the interaction structure.

Soul System provides new ways of interaction for user to control and configure the room facilities(lights, air conditioners, doors) in order to adjust the environment properties such as lighting, in-door temprature and entrance authority.

Meanwhile the digital guidance in space continuously displays real-time information(location, news, events) to people in the working space environment.

Soul has well designed software system, and fully user-oriented functional features, like we allow users to adjust environmental properties based on different scenarios, our mobile applications can be served as powerful remotes, it is basically like carrying the office inside your pocket. The System will fetch data then analyze it, learning users behavior, then automatically fulfill their demands as they continuously using our system.

# The Introduction

## Solving Existing Problems



### 1. Uninformative and Inflexible Control

The existing ways of configuration of working space facilities are relatively separated from each other. There is no such convenient approach for staff inside the building to control the facilities, since most of the interfaces are physical interfaces with humble functions, not to mention if there are certain needs on configuring the environment based on different situations.



### 2. Underlying Energy Waste

The underlying energy waste has become a significant issue recently, especially when it comes to enterprises in China. It wouldn't be hard to dig out the possible cause, for the reason that there has long been a lack of management in facility usage. There are urgent needs on reasonable solutions which dedicated on facility control and configuration, thereby bring positive effects on energy saving.



### 3. Staff, Faculties Resource Consuming

Human resource consuming is the side effect that energy waste brings to the table. For those companies and enterprises who are sensitive to environmental issues, they will certainly occupy several teams preside over energy saving management. Still the methods such as monitoring and patrolling are serious waste of time and staff assets.

# The Introduction

## Our Solutions

Different from other solutions which also targeted on intelligent building and smart working space, which typically use cable control, or wireless BLE. Instead of that, We are using a variety of control gateway clusters, It helps us to create a mass automatic solution, which is stable and precise, for controlling the environmental factors like lightings, indoor temperature, entrances, and other electronic devices through your mobile client.



The Mobile Application, the Wall Controller and the web client dashboard of Soul System

We have developed a robust & strong backend core logic based on central server OS and a series of Web Services. Through which our users are able to customize their using scenarios as well as managing their facilities, looking through their energy usage inside the working space.



Scenario Based  
Environmental  
Properties



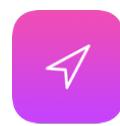
Integrated  
Remote



Access  
Authority



Automation

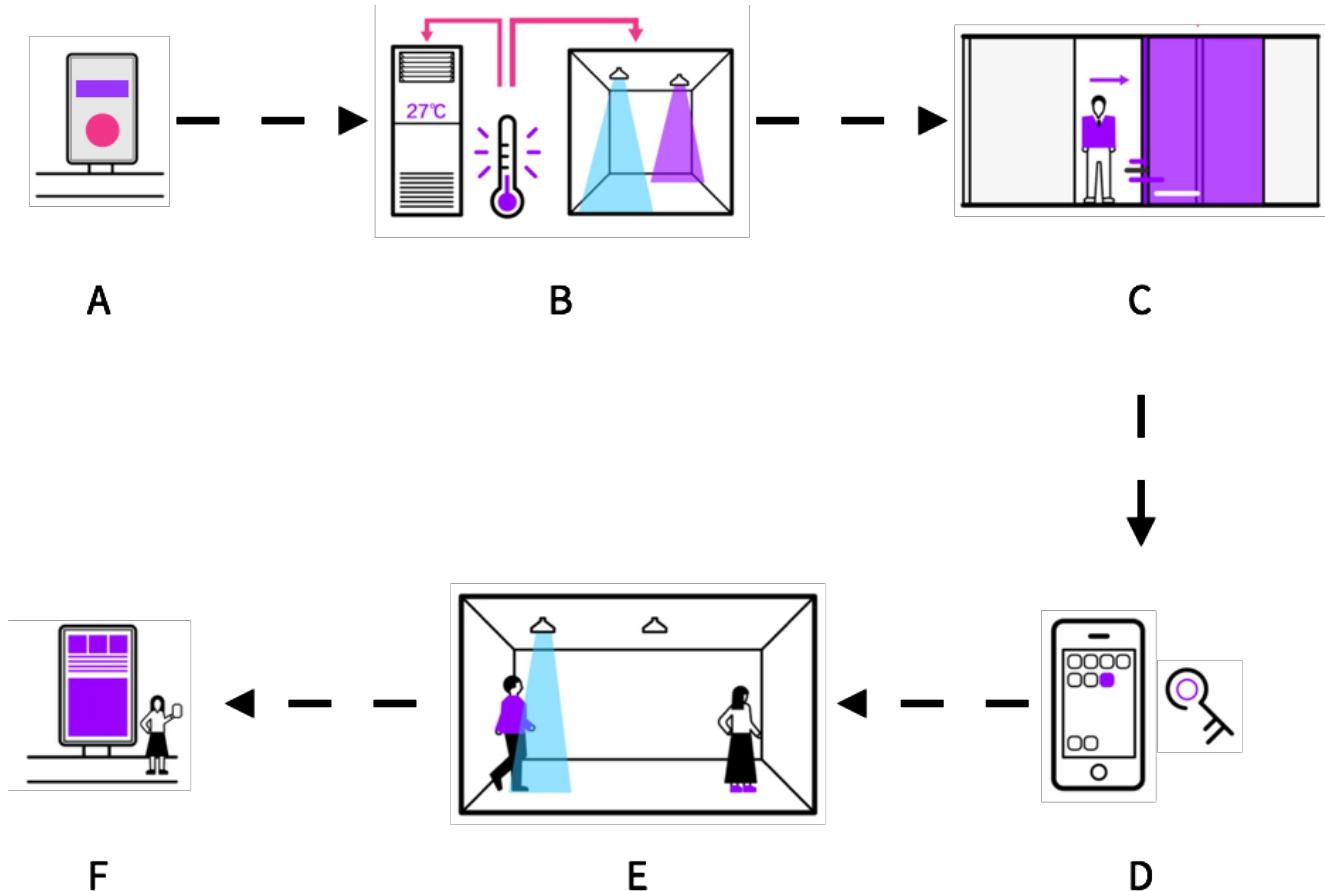


Space  
Information

We have developed a robust & strong backend core logic based on central server OS and a series of Web Services. Through which our users are able to customize their using scenarios as well as managing their facilities, looking through their energy usage inside the working space.

# The Introduction

## Using Scenarios



A diagram demonstrates a typical using scenario of Soul System

From the prospective of users, imagine this following case. There's a meeting scheduled this morning 10am at the meeting room, and then the lightings and indoor temperature of the meeting room has automatically changed as the preset. People who are invited to join this meeting can get access into the room. As the meetings proceeding, someone needs to present a keynote, then he use the mobile controller to adjust the lighting environment from "meeting" to "presentation mode". People outside the boardroom will also get informed when the room is occupying. After the meeting's over, facilities are closed automatically or if there's another upcoming event, the environmental properties, again, will change consequently. As you can see this whole process combines space information, people's action and facility control all together, in an effective way.

# Market Analysis

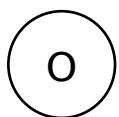
## Market Size

### Current Market Volume

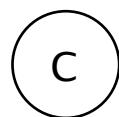
Now the Center For Digital Innovation of Tongji University is our only client and several companies have the intention to buy our product.

### Potential Market Volume

We have 4 kinds of customer in the future:



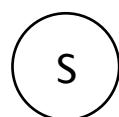
Official buildings for companies



Commercial real estates, such as restaurants, Bars, etc.



Personal villas



Startups who want office space with soul system

We provide customers with:



Whole building solutions



Space&energy optimization advice based on building information & data



Single room solutions



Residential spaces solutions



Smart office renting service

year	customer	service	maximum number of customer
2016	<ul style="list-style-type: none"> <li>· Official buildings for companies</li> <li>· Commercial real estates</li> </ul>	<ul style="list-style-type: none"> <li>· Whole building solutions</li> </ul>	50
2017	<ul style="list-style-type: none"> <li>· Official buildings for companies</li> <li>· Commercial real estates</li> </ul>	<ul style="list-style-type: none"> <li>· Whole building solutions</li> <li>· Space&amp;energy optimization advice</li> <li>· Single room solutions</li> </ul>	250
2018	<ul style="list-style-type: none"> <li>· Official buildings for companies</li> <li>· Commercial real estates</li> <li>· Personal villas</li> <li>· Startups who want office space with soul system</li> </ul>	<ul style="list-style-type: none"> <li>· Whole building solutions</li> <li>· Single room solutions</li> <li>· Space&amp;energy optimization advice</li> <li>· Residential spaces solutions</li> <li>· Smart office renting service</li> </ul>	650

## 2016

In the year of 2016 we will serve for a few, powerful customers to gain experience and reputation, accumulate number of customers as well.

## 2017

In the year of 2017 we continue to improve our technology and service. Meanwhile we will try our best to expand the line of our business and customer group to create more ways to make profit. So we start to provide space & energy optimization advice based on the data we gathered last year and single room solutions based on our optimized technology.

## 2018

In the year of 2018, since we already gain experience from the projects of single room solutions, we have the ability to provide solutions for smaller spaces like residential space. Meanwhile we will go further to expand our customer group-those startups or small companies who want a smart work environment but have no right to decorate any space or can't afford our system-by having our own real estate with soul system and rent them to those small companies.

# Market Analysis

## Market Trends

There are several factors in market that can impact our business.

### Technology

Each time we launch a new version there will be a increase on sales volume. Since our produces and service are strongly tech-based,our cost will decrease because of the more and more advanced technology.

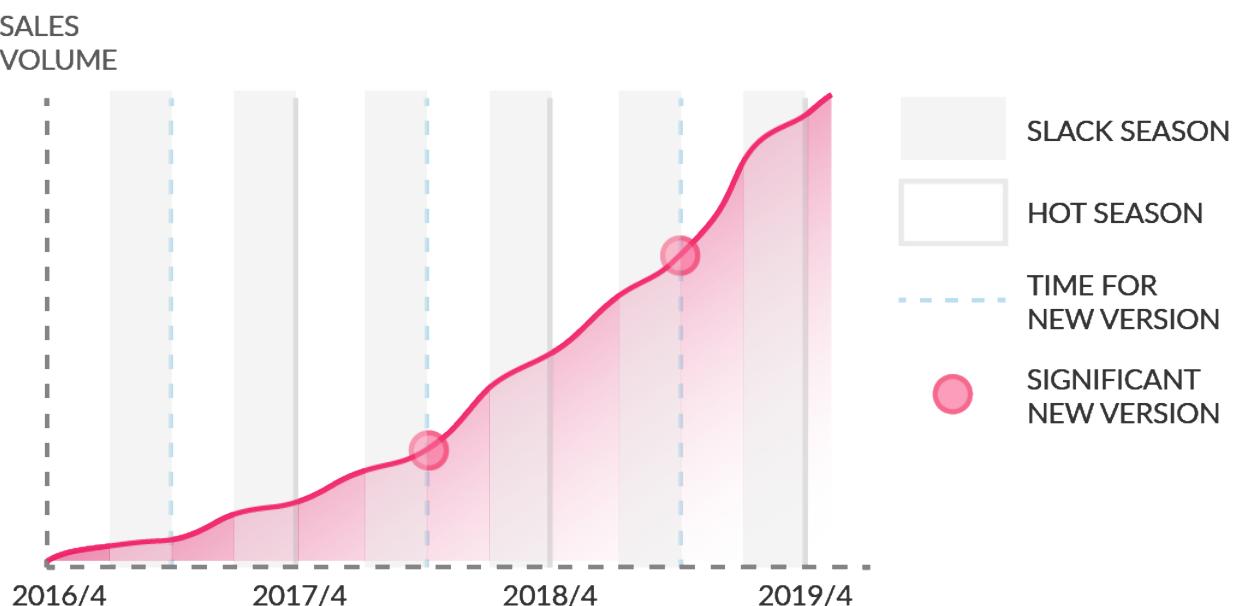
### Seasonality

Our business will be influenced by the building and decorative materials market. Generally winter and summer are slack season while spring and autumn are hot season of our business.

### Economic And Political Climate

On economic aspect,nowadays China is in the process of economic transition so it's a tough economic time.Meanwhile,prices and labor costs are keep going up so that many companies and business entities tend to lay off redundant staff and control costs tightly.

On political aspect, Chinese government promotes vigorously the idea of building green construction based on the concept of sustainable development and ecological urban inn recent years.There are also some policies and regulations were set for measuring and rating the energy use of companies.



The expected sales volume under the influence of market trends

# Market Analysis

## Market Profitability

### Competitive Rivalry

We have 5 direct competitors in the market.



### SIEMENTS-APOGEE

Improving a building's energy efficiency and saving owners money.



### AUTOMATEDLOGIC

Design and develop controls and interfaces that make it easy for building owners and managers to balance efficiency with occupant comfort.



### SCHNEIDER

Discover our wide range of flexible and scalable solutions for any building.



### JOHNSON CONTROLS

Collect and analyze data and then provide insights on how to improve your building's efficiency and productivity.



### SMART BUILDINGS

Complements today's hi-tech buildings by enhancing energy efficiency, data center reliability, comfort and analytics.

And 1 Potential competitor:

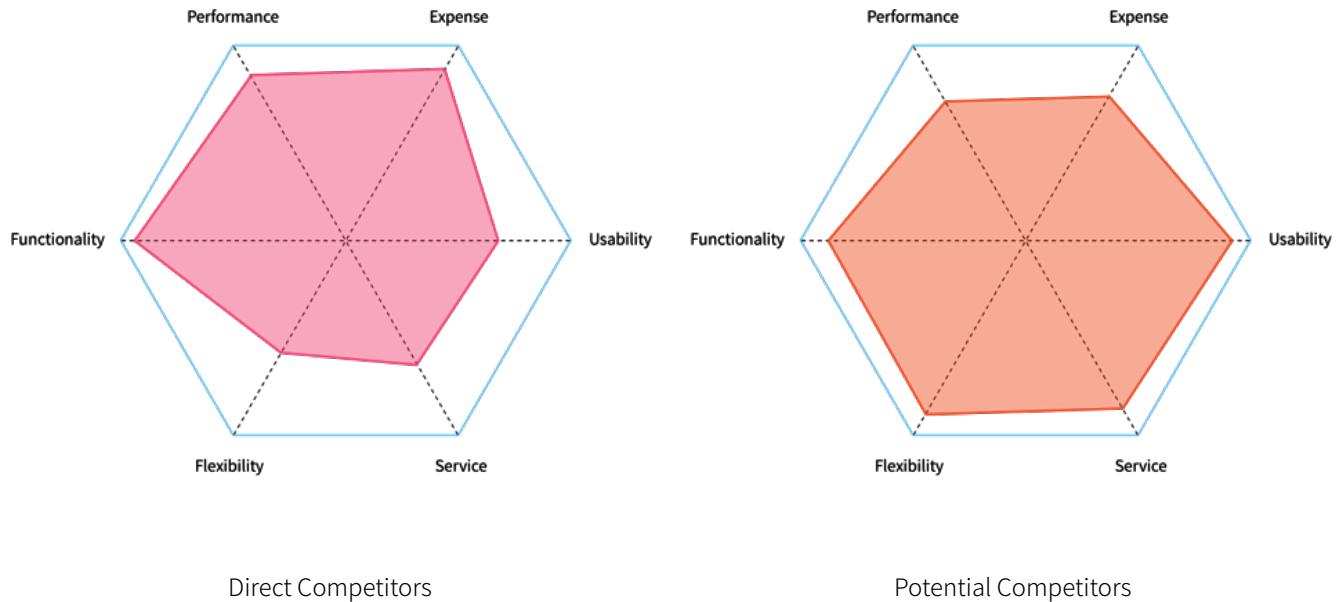


### MYDERAMPLUS

Provide smart workplace for startups.

# Market Analysis

## Myderamplus

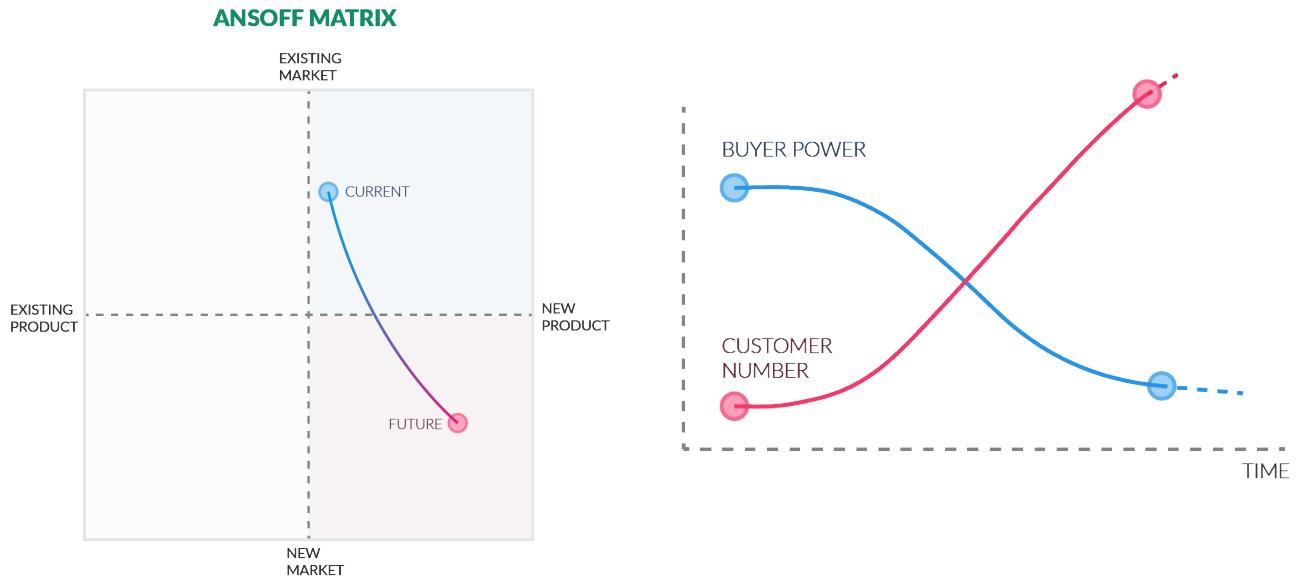


The direct competitors are technology-oriented. They can provide quite professional solutions for customers based on their top technology. They usually need to set up a specially trained team to manage the complicated control system and maintain hardware&software for the whole building- with less regard for the needs and the experience of users in a variety of scenarios.

The potential competitor uses simpler technology but they provide tools that are easy to use for each user so the users have the right of control according to their feelings and needs. Their service are also more reliable, responsive and empathetic. All of these factors ensure the better experience and the better relationship between customers and companies.

Our products and service have the advantages of both of them-we have not only advanced technology but also useful tools and first class service which we can provide with our customers.

# Market Analysis



## Supplier Power

We have many reliable suppliers to choose and compare and this is easier for us to get a lower price of materials we need and to reduce our dependency and the cost of finding substitutive suppliers.

## Threat of New Entry

It is quite difficult for newcomers to entry because of the high cost and high technical requirements. We also have patents for technology so the technical approaches and solutions can not be copied or imitated.

## Buyer Power

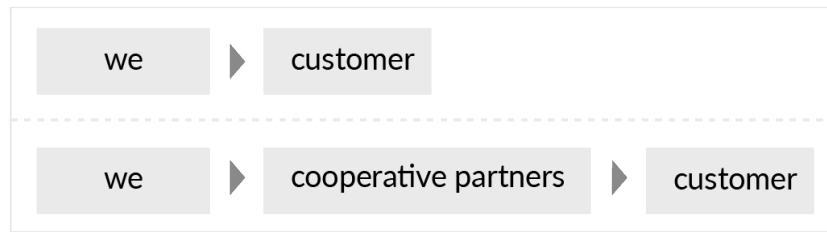
At the very beginning we serve for few powerful customers. We provide better experience than other competitors through our easy-to-use system and reliable, comprehensive service to increase customers' stickiness. In this phase, we want this kind of customers to become representative pilot cases in the industry which will bring us widespread reputation.

Then in the following 3 years we will launch new versions of our app consistently and provide new service for the individuals and customers who need single room solutions. This will lead to a considerable increase on the number of customers. That means we can reduce the buyer power and get more initiative and profit in this phase.

# Market Analysis

## Distribution Channel

Our mainly cooperative partners are building materials sellers, building decoration companies and building recognized agencies.



## Key Success Factors

### Solid Team

Top-notch engineering, High-level design & First-class service.

### Sustainable Development Mode

An integration platform of service, product and data analysis.

### Low Learning Cost & User Friendly

Easy to use for each customer.

### Comprehensive and Long-term Service

Using data analysis to launch optimized scheme continuously; provide Long-term maintenance.

### Extensive Cooperation

We already have a long-term cooperation with Organizations. They can be our potential clients in the future.

### Rich Resources

We have accumulated rich resources which we can cooperate with in many related professional fields.

# Business Model

## Customer Segmentation

Since we are facing with a niche market we also try our best to broaden our business line and customer group to ensure that we have as more as possible ways to make profit.

Different groups of customers and different types of spaces have different needs and solutions. So we divide customers and spaces precisely according to their feature and needs and provide varieties of plans and services in order to make each group of customers to have the most suitable solution.

target customer	needs	features
Companies who have their own office buildings	<ul style="list-style-type: none"><li>• Reduce their cost on energy and the overstaffing</li><li>• Have a tool to control the facilities in their environment according to the scenario and their needs</li><li>• Have some recommended optimal settings&amp;solutions of certain/special scenario to improve work experience and efficiency</li><li>• Have some advice on space planning/ using and energy saving</li></ul>	<ul style="list-style-type: none"><li>• Financially strong</li><li>• Control costs tightly</li><li>• Need smart &amp;efficient environment</li><li>• Centralized management</li></ul>
Commercial real estates, such as restaurants, Bars,etc.		<ul style="list-style-type: none"><li>• Diverse scenarios</li><li>• Control freely</li><li>• Focus on atmosphere creating</li></ul>
Householders of personal villas	<ul style="list-style-type: none"><li>• Have better living experience</li><li>• Save expenses on energy</li></ul>	<ul style="list-style-type: none"><li>• Prefer comfort</li><li>• Prefer convenience</li><li>• Focuses on experience</li></ul>
Startups who want office space with soul system	<ul style="list-style-type: none"><li>• Have a better work space</li></ul>	<ul style="list-style-type: none"><li>• Low-cost</li><li>• Want warm atmosphere</li><li>• Want responsive property service</li></ul>

## Value Proposition

Comparing with the existing direct competitors, we don't have many advantages in technical aspect. So we try to define a way to develop our business which can use our strength to compete with their weakness. We find that those competitors are lack of consideration about scenarios and experience of users.

So, different with the inflexible, tech-oriented system provided by direct competitors, we provide customers qualitative value which are reflected by our user-centered high quality product and service. By using soul system they can get:

- Customized solutions for their building
- Diverse options of different function and price
- The most user-friendly system

## Business Model

- Long-term and responsive maintenance service
- Continuous innovation on both hardware and software
- Comfortable, convenient and efficient working & living experience
- Less costs on energy and labor

In a word, “experience” is the key value that makes customers prefer our system over others.

## Key Partnerships

It is not a good choice for us to run too many ads everywhere because we are not in a mass market. So we need to find cooperative partners in the same industry to help us with our reputation among customers and sales volume. Our cooperation with others is the strategic alliances in order to have a mutual promotion and beneficial.

Our cooperative partners mainly are:

- building materials sellers
- electronic appliances Companies
- building decoration companies
- building recognized agencies

We also set up buyer-supplier relationship with some other companies which are our main suppliers.

## Channels

We have 4 main types of channels to communicate with or reach customers:

### Media

- Outdoor/TV/Web ads
- Reports on High-Tech Website
- Exhibition in Tech Expo
- Own official website

Raising awareness & evaluating

### Pilot Projects

- Premium Customer Effect
- Evaluating

# Business Model

## Multi-Cooperation

Premium Brands of Electronic Appliances  
 Top-notch Interior Design Company  
 Leadership in Energy and Environmental Design (LEED), ASHRAE  
 Evaluating & purchasing

## Own Service

Promotion  
 Own official website  
 Continuous innovation and maintenance  
 Purchasing, delivery & aftersale

channel types		channel phases				
		awareness	evaluation	purchase	delivery	aftersales
media	outdoor/TV/web ads	✓				
	reports on high-tech website	✓	✓			
	exhibition in tech expo	✓	✓			
pilot projects	premium customer effect	✓	✓			
multi-cooperation	electronic appliances brands	✓	✓	✓		
	interior design company	✓	✓	✓		
	building recognized agencies	✓	✓	✓		
own service	promotion	✓				
	own official website	✓	✓	✓	✓	✓
	continuous innovation&maintenance				✓	✓

## Customer Relationships

Since we provide customized solutions and service for each customer so our customer relationship belong to the type of dedicated personal assistance.

# **Business Model**

## **Key Resources**

At the very beginning human resources especially skilled IT professionals will be our key resource because we are a strongly tech based organization.

With the development of our business physical assets especially the real estate will become our key resource too because we are going to start our working space renting business.

## **Key Activities**

In brief,our key activity is to make spaces smart and rent out smart spaces.

## **Revenue Stream**

According to our business line,we have 3 main revenue streams:

- Revenue for selling solutions and service
- Revenue for renting out working space
- Revenue for consulting service

## **Price Mechanism**

The Prices of our solutions and service(including consulting service) are FIXED.That's because:

- We want to provide our customers high-quality and reliable service so we must offer them assurances in every aspect including a stable price.
- Many of our customers are powerful and they cost much on our system so there will be a terrible influence on our customer relationship if we take the dynamic price.
- We provide varieties of optional services and functions in each solutions.It is easier for us to do financial works if each of them has a fixed price.
- Using fixed price is good for our reliable brand image.
- We have relatively small number of customers so it's better to use fixed price to have a steady revenue.

The prices of renting out working spaces are DYNAMIC.That's because the prices of real estate industry are influenced by many factors and they are always changing.

## Values and Visions

Bring everyone the most smart & energy-efficient space.

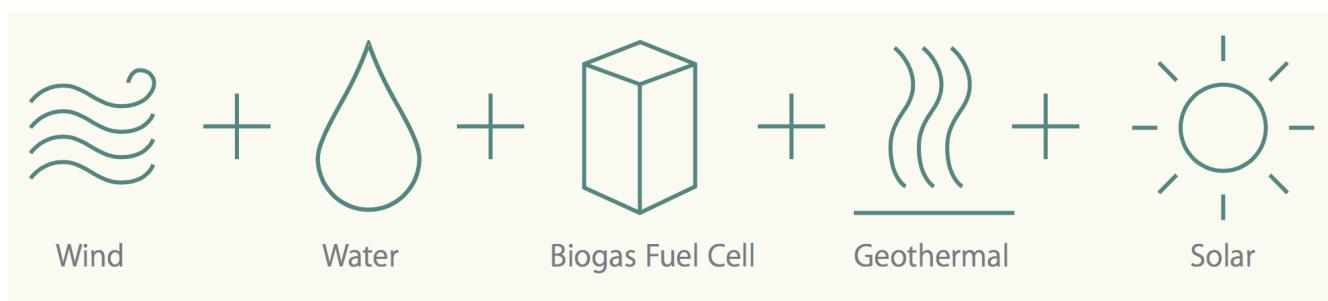
The mission of our business is to bring everyone the most smart & energy-efficient space. This is based on the characteristics of our product.

### Intelligent Management



With the controlling of SOUL SYSTEM, We will made the use of space most reasonable. The light, temperature, humidity, access authority and so on, will adjust to the environment of space and users according to the data bank of the space. It's not only saving a lot of resource of maintenance, but also make our space more comfortable and flexible.

### Environmental Friendly



The intelligent controlling of space use will eliminate the underlying energy waste. Base on our data bank in the future, we will give the most energy-efficient plan to our customers. This will be a great development to rational energy use and energy saving.

## Financials

### Selling Strategy

	<b>BASIC</b>	<b>PREMIUM</b>	<b>ADVANCE</b>
From	<b>¥120,000</b>	From <b>¥250,000</b>	From <b>¥400,000</b>
<b>Customized Web Client</b>	✓	✓	✓
<b>Customized Mobile Client</b>	—	✓	✓
<b>Facilities Supported</b>	35	120	500
<b>Facilities(Overflow) Unit Price</b>	¥8,000	¥8,000	¥5,500
<b>Authority Accounts</b>	20	∞	∞
<b>Customer Data Migration</b>	—	—	✓
<b>Energy-HUB Plan</b>	—	—	✓
<b>Maintenance &amp; Repair (Once)</b>	¥8,000	¥4,000	¥0

We provide several tiers to our customers, so that we make sure that no matter who our buyers are, from small organizations to big enterprises, they will find the most suitable solutions for themselves. Each Tier of Plan covers different extent of services, For instance like there's a tremendous change on the number of facilities supported, you get 20 authority accounts in the basic plan, but theres no such limitation if you chose Premium or Advance. There are also additional services like Customer data migration and Energy-HUB Plan in our top-grade plans.

We made our estimations on number of sales based on the above compare plans. At the early stage, our major sells, or put it in another way, customers' choices would be premium plan, since it clearly shows high cost performance. As our number of customers scales up, the diversity of customer will become notable over time. Furthermore, the positive effect that representative customers bring to the company will be enormous, which will definitely boost the number of sales.

Despite the pricing plan itself, what we concern most when we making our selling strategy is, the potential growth of customers. We believe that there's an inseparable bond between tiers of product and customer group, especially when it comes to a product that shows various layers in functional features, like Soul System.

## Financials

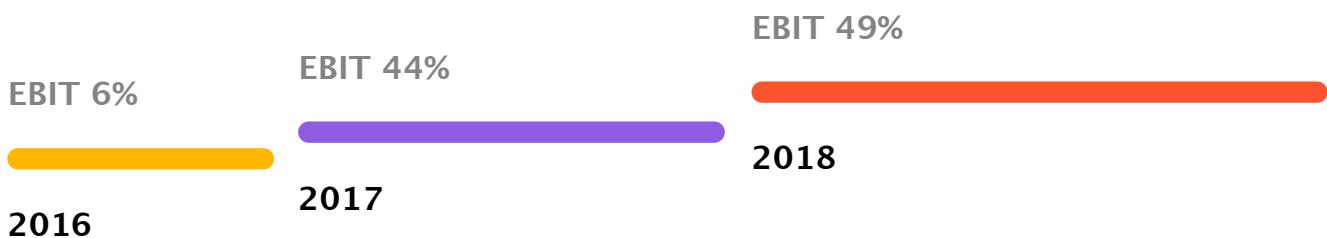
### The Start-up Funding

To start our business fresh, we calculated the amount of money we need from the very beginning, which can be also regarded as our early stage investing. Hardwares like servers, work stations and other supplies would be major cost at early stage, moreover, we made a salary storage of two years (this part was not covered in the total personnel cost) in case of emergency.

Entries	Amounts	Unit Price	Total Price
Registration	-	500,000	¥ 500,000.00
Field Rent	24	12,000	¥ 288,000.00
Interiors	-	80,000	¥ 80,000.00
Servers	1	180,000	¥ 180,000.00
Work Stations & PCs	20	12,000	¥ 240,000.00
Salaries	24	80,000	¥ 1,920,000.00
Office Supplies	-	80,000	¥ 80,000.00
Maintenance	24	10,000	¥ 240,000.00
			¥ 3,528,000.00

A diagram demonstrates a typical using scenario of Soul System

### Financial Scope in Next Three Years



It would not make any sense if we calculate our financial status out of nothing, so before we step right into putting numbers on our financial report, we first made a developing milestone of our company on a three years' basis. We then estimated our sales & costs, P&Ls correspondingly.

## Financials

### Milestones

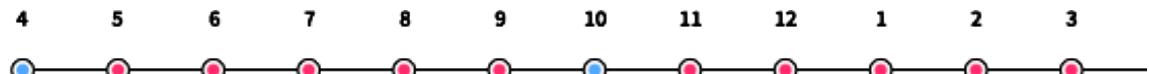
We devided our overall schedule into six directions, including the estimated number of customers, our extent line of business, our main coorporating partners, the estimated sales volume, our employees and stages of fundings. Once the milestone had been confirmed, we then make the calculation on financials.

	4	5	6	7	8	9	10	11	12	1	2	3
<b>Number of Customers</b>										<b>10-15</b>		<b>35-50</b>
<b>Line of Business</b>										<b>Provide whole building solutions for big companies&amp;commercial real estates</b>		
<b>Cooperations</b>										<b>Cooperate with media&amp;advertising agencies</b>		<b>Cooperate with building materials sellers</b>
<b>Sales Volume</b>												<b>¥8M</b>
<b>Number of Employee</b>	<b>15</b>	<b>20</b>	QA team and maintainers recruiting&training		<b>25</b>	professional marketing team recruiting		<b>35</b>	Enlarge the R&D team			
<b>Funding</b>			<b>Angel Investment</b>	<b>¥3,600,000</b>								

Company Developing Miletones from 2016.4 to 2017.3

Take the first year for instance, by the end of 2016, we expect to have 35 - 50 customers. Meanwhile we are going to build connections and cooperate with media & advertising agencies as well as building materials retailers, since their are the major entrance for us to step into the market. We expect to have a sales volume of 8 millions by the end of 2016(50% premium plan sales, 37.5% basic plan sales and 12.5% advance plan sales ). As our number of customers increasing, we will expand our staff to 35 people, including the recruitment of the QA and marketing team, along with the expansion of R&D department.

We would iterate and update our system every six month, which means on April and October of each year, a major upgrading will be delivered to our customers.



**Number of Customers**      **70-90**      **200-250**

**Line of Business**      Provide energy and space management consulting service      Provide single room solutions

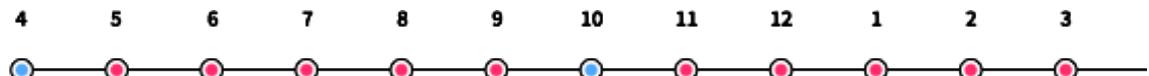
**Cooperations**      Cooperate with building decoration companies      Cooperate with building recognized agencies

**Sales Volume**      **¥35M**

**Number of Employee**      **70**  
Enlarge the R&D team  
Set up data analysis & consultant team      **80**  
Set up real estate management team

**Funding**      Round-A Investment **¥12,000,000**

Company Developing Milestones from 2017.4 to 2018.3



**Number of Customers**      **300-400**      **600-650**

**Line of Business**      Provide residential spaces solutions      Whole building decoration&renting      Provide space design and decoration service

**Cooperations**

**Sales Volume**      **¥85M**

**Number of Employee**      **95**  
Set up space&decoration design&construction team      **120**  
Optimize departments Rebuild organizational structure

Company Developing Milestones from 2018.4 to 2019.3

## Financials

### Statistics – Sales (Estimated Based on Our Milestones)

Year	2016	2017	2018
<b>Price</b>			
Basic	¥ 120,000.00	¥ 126,000.00	¥ 132,300.00
Premium	¥ 250,000.00	¥ 262,500.00	¥ 330,750.00
Advance	¥ 400,000.00	¥ 420,000.00	¥ 441,000.00
Single Room Solution	¥ 50,000.00	¥ 52,500.00	¥ 55,125.00
Residential Solution	¥ 35,000.00	¥ 36,750.00	¥ 38,587.50
<b>variable Cost</b>			
Basic	60,000	60,000	60,000
Premium	67,000	67,000	67,000
Advance	105,000	105,000	105,000
Single Room Solution	-	24,000	24,000
Residential Solution	-	-	20,000
<b>Price Increasing Rate</b>		5%	5%
<b>Cost Saving Rate</b>		5%	3%
<b>variable Cost</b>	<b>2,765,000</b>	<b>10,270,000</b>	<b>20,800,000</b>
Basic	900,000	3,000,000	5,400,000
Premium	1,340,000	5,695,000	11,725,000
Advance	525,000	1,575,000	3,675,000
Single Room Solution	-	1,680,000	4,800,000
Residential Solution	-	-	3,000,000
<b>Sales Units</b>			
Basic	15	50	90
Premium	20	85	175
Advance	5	15	35
Single Room Solution	-	70	200
Residential Solution	-	-	150
<b>Revenue</b>	<b>¥ 8,800,000.00</b>	<b>¥ 34,912,500.00</b>	<b>¥ 85,223,250.00</b>
Product A	¥ 1,800,000.00	¥ 6,300,000.00	¥ 11,907,000.00
Product B	¥ 5,000,000.00	¥ 22,312,500.00	¥ 57,881,250.00
Product C	¥ 2,000,000.00	¥ 6,300,000.00	¥ 15,435,000.00
Single Room Solution	¥ 0.00	¥ 3,675,000.00	¥ 11,025,000.00
Residential Solution	¥ 0.00	¥ 0.00	¥ 5,788,125.00

## Financials

### Statistics – Costs (Estimated Based on Our Milestones)

#### Variable Costs

	Basic	Premium	Advance	Single Room Solution	Residential Solution
Hardware Controllers	52,000	52,000	80,000	20,000	12,000
Construction Team Payment	8,000	15,000	25,000	4,000	8,000
<b>Total</b>	<b>60,000</b>	<b>67,000</b>	<b>105,000</b>	<b>24,000</b>	<b>20,000</b>

#### Fix Costs

	2016	2017	2018
<b>R&amp;D and Product development Fix Cost</b>	<b>¥ 3,590,000.00</b>	¥ 6,180,100.00	¥ 11,855,993.00
-R&D Material, tools	¥ 420,000.00	¥ 200,000.00	¥ 200,000.00
-Personel cost	¥ 2,800,000.00	¥ 5,544,000.00	¥ 10,977,120.00
-Other personnel cost	¥ 100,000.00	¥ 198,000.00	¥ 392,040.00
-Travelling Cost	¥ 20,000.00	¥ 39,600.00	¥ 78,408.00
-Insurance expense	¥ 20,000.00	¥ 21,000.00	¥ 22,050.00
-Office and IT supplies	¥ 80,000.00	¥ 20,000.00	¥ 21,000.00
-Depreciation	¥ 50,000.00	¥ 52,500.00	¥ 55,125.00
-Rental	¥ 100,000.00	¥ 105,000.00	¥ 110,250.00
<b>Sales &amp; marketing Fix Cost</b>	<b>¥ 1,120,000.00</b>	¥ 1,942,400.00	¥ 3,567,882.00
-Personel cost	¥ 780,000.00	¥ 1,544,400.00	¥ 3,057,912.00
-Other personnel cost	¥ 50,000.00	¥ 52,500.00	¥ 55,125.00
-Travelling Cost	¥ 50,000.00	¥ 99,000.00	¥ 196,020.00
-Consulting	¥ 50,000.00	¥ 52,500.00	¥ 55,125.00
-Marketing fee	¥ 100,000.00	¥ 105,000.00	¥ 110,250.00
-Repair and maintenance	¥ 50,000.00	¥ 52,500.00	¥ 55,125.00
-Insurance expense	¥ 10,000.00	¥ 10,500.00	¥ 11,025.00
-Office and IT supplies	¥ 10,000.00	¥ 5,000.00	¥ 5,250.00
-Depreciation	¥ 20,000.00	¥ 21,000.00	¥ 22,050.00
<b>Administration Fix Cost</b>	<b>¥ 808,000.00</b>	¥ 1,278,140.00	¥ 2,203,822.20
-Personel cost	¥ 468,000.00	¥ 926,640.00	¥ 1,834,747.20
-Other personnel cost	¥ 50,000.00	¥ 52,500.00	¥ 55,125.00
-Travelling Cost	¥ 20,000.00	¥ 21,000.00	¥ 22,050.00
-Consulting	¥ 50,000.00	¥ 52,500.00	¥ 55,125.00
-Taxes, public charges	¥ 100,000.00	¥ 105,000.00	¥ 110,250.00
-Repair and maintenance	¥ 20,000.00	¥ 21,000.00	¥ 22,050.00
-Insurance expense	¥ 10,000.00	¥ 10,500.00	¥ 11,025.00
-Office and IT supplies	¥ 10,000.00	¥ 5,000.00	¥ 5,250.00
-Freight	¥ 10,000.00	¥ 10,500.00	¥ 11,025.00
-Rental	¥ 50,000.00	¥ 52,500.00	¥ 55,125.00
-Bank Charges	¥ 10,000.00	¥ 10,500.00	¥ 11,025.00
-Vehicle fleet	¥ 5,000.00	¥ 5,250.00	¥ 5,512.50
- Other income /expense	¥ 5,000.00	¥ 5,250.00	¥ 5,512.50
<b>Other Fix cost</b>	<b>¥ 15,000.00</b>	¥ 29,700.00	¥ 58,806.00
-Gain/Loss from exchange differences	¥ 5,000.00	¥ 9,900.00	¥ 19,602.00
-Other income/Expenses - external (third parties)	¥ 5,000.00	¥ 9,900.00	¥ 19,602.00
-Other income/Expenses -associated companies	¥ 5,000.00	¥ 9,900.00	¥ 19,602.00
-Losses from the disposal of assets	¥ 0.00	¥ 0.00	¥ 0.00
-Write-offs and bad debt allowances	¥ 0.00	¥ 0.00	¥ 0.00

## Financials

### Statistics – P&Ls (Estimated Based on Our Milestones)

	2016	2017	2018
Sales units	50	250	650
Revenue	8,800,000	34,912,500	75,576,375
Variable Cost	2,765,000	10,270,000	20,800,000
Gross Margin	6,035,000	24,642,500	54,776,375
GM%	69%	71%	72%
Fix cost R&D	3,590,000	6,180,100	11,855,933
Fix cost Sales, Service & Marketing	1,120,000	1,942,400	3,567,882
Fix cost Admin	808,000	1,278,140	2,203,822
Other fix cost	15,000	29,700	58,806
<b>Fix Cost</b>	<b>5,533,000</b>	<b>9,430,340</b>	<b>17,686,443</b>
Fix Cost%	62.9%	27.0%	23.4%
<b>EBIT</b>	<b>502,000</b>	<b>15,212,160</b>	<b>37,089,932</b>
EBIT%	6%	44%	49%

# Team

## Group members



We are a vigorous team, four excellent members with different culture and different knowledge backgrounds.

### Lv Lingjie (Eva)



Majoring in Interaction Design, she is good at research and analysis. She works on the market analysis, including the investigation for competitors, the steps of future activities, and the financial status of business development.

### Ilmari Mutanen



As a hardware engineer, he is good at hardware technology and manufacture. He is in charge of product supply network, such as manufacture, product supply to customers, product maintenance.

### Li Yanfei



Her major, product service system design, gives her good sense of users and market. She is responsible for management, such as business developing strategies and market promotion strategies.

### Liu Dachang (Ocean)



His major is Interaction Design, specializing in software engineering. He is the product manager of our project, charging in product development, business models, as well as pricing and financial plans.

**Thank you!**

**Group Member**

Ilmari Mutanen 1670047

Li Yanfei 1533265

Liu Dachang 1533307

Lv Lingjie 1533322