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# Analysis of influential factors of social satisfaction in food industry

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**Abstract.** Social satisfaction has become an important factor to help an enterprise succeed. A new way to measure social satisfaction called social license has been proposed recently. Based on the concept of CSR (Cooperation Social Responsibility), SLO (Social License to Operate) was put forward in the 1990s. However, the concept of SLO was just used in a limited range of industries such as the mining industry. Yet this concept has not been well developed or utilized in cases like site selecting analysis and satisfaction survey. In this study, SLO will be explained and tested in the food industry and a specific survey will be done to analyze the feasibility of this concept as well as crucial factors that influence the assess of social satisfaction. There is ample evidence suggesting that the SLO, as a measurement of social satisfaction, is quite supportive in decision making for food industry companies.

**Key words:** social satisfaction, social license, food industry, community approval

## 1. Introduction

Companies are ceaselessly looking for new sites to implement new projects. While the operation may not just affect the companies' plants, it may also influence their neighbors and local communities. There are benefits and disadvantages, which need to be considered not only by the companies but also their neighbors and local communities. So, experts introduced the concept of social satisfaction to evaluate the quality of the relationship between the companies and their neighbors and local communities. The implementation of social license in citizen's lives can bring a lot of information to the companies, government as well as individuals whose interests are related. In this paper, there will be a review of the concept and a specific survey being done to analyze social satisfaction.

## 2. Literature review

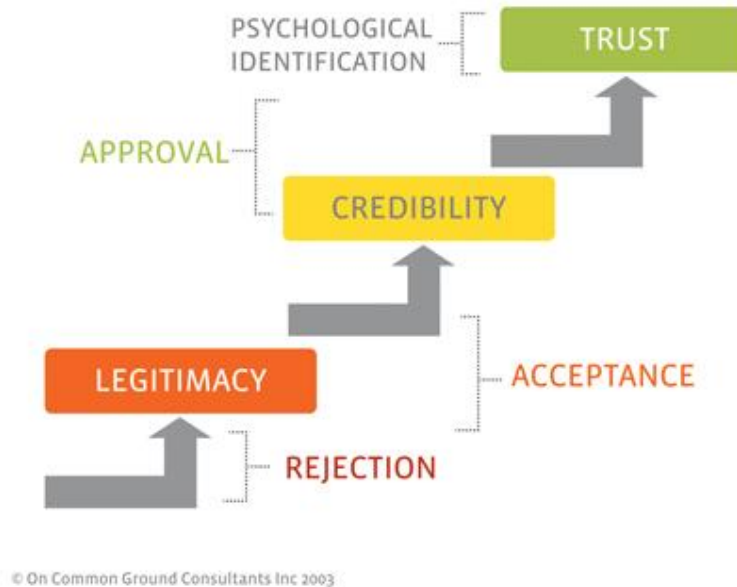
Social satisfaction was a broad topic that could be used in many areas like the service industry, food industry etc. It has different measuring standards ranging from social environment to personal life<sup>[1]</sup>. Recently, there is a new method to evaluate social satisfaction named social license.

Social license, as the "relationship forged with local people or a long-time commitment of engagement"<sup>[2]</sup>, plays an important role to "meet the expectations of society and to avoid activities that societies (or influential elements within them) deem unacceptable."<sup>[3]</sup> This is a relatively new theory which was proposed in late 90s

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in the mining industry and gradually became popular in other industries like food industry. <sup>[4]</sup> This theory defines three components that make up the social license: legitimacy, credibility, and trust.



**Fig. 1 Gaining the Social License**

This figure describes that legitimacy and credibility provided acceptance of a project while credibility and community's trust mean the approval to a project. In other words, a company can establish a valid relationship with communities and enjoy more profits when there exists a high level of trust between them.

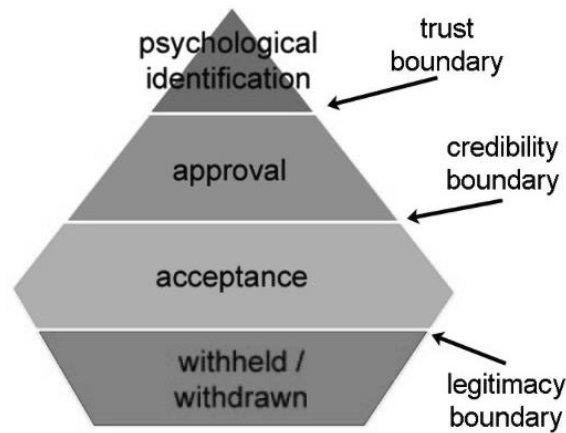
In different levels, there are various factors which would influence these components' effects. Unfortunately, there are still few researches in this area to identify these factors even in the global mining industry, which has been proved "the importance of operating in accordance with a "social license."<sup>[5]</sup> Few analyses also can be seen like *An analysis of factors leading to the establishment of a social license to operate in the mining industry*, so it's common to provide a more complete research on social license and add more variables on the factors that influence these components.

The food industry, which is closer to people's life compared to the mining industry, is one of the industries deeply affected by social license. Factors in this field that could have a significant impact on social license are worthwhile to be *discussed*. <sup>[6]</sup>

### 3. Research Model and Hypothesis

Based on relevant papers and reports, there are two models that are quite useful in this study: "Four Level Three Boundary Conditions Model for the Social License to Operate" and "Levels of Social License with the Four Factors that Determine the Proportions of Stakeholders at Each Level". These two models provide a general stratified condition to distinguish factors and to measure acceptance.

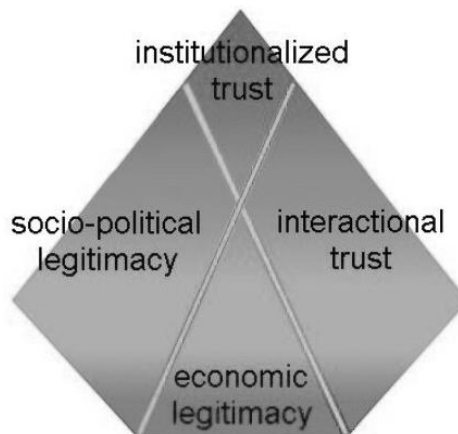
### 3.1 Four Level /Three boundary Conditions Model for the Social License to Operate



**Fig. 2 Four Level Three Boundary Conditions Model for the SLO**

This model is aimed to divide the level of social license. The level below the pyramid is “withheld” or “withdrawn”, which means the project under inspection probably will have damage to the community and the stakeholders. The company may have some legitimate problems that restrict their operation. The second level is acceptance, that the community and stakeholders have already accepted the operation but still have reservations. When the companies accumulate their credibility to a certain level, they will reach the level of approval. If the companies want to be finally psychologically identified, they must gain trust from the communities and the stakeholders<sup>[7]</sup>.

### 3.2 Levels of Social License with the Four Factors that Determine the Proportions of Stakeholders at Each Level



**Figure 3 Levels of SLO with the Four Factors that Determine the Proportions of Stakeholders at Each Level**

This model uses the same shape as the “Four Level /Three boundary Conditions Model”. It is an extension of the previous one, and these two models should be viewed in a combined perspective. With the rise of the level of social license, more factors should be included in order to meet the criteria.

The most primary factor that should be concluded is economic legitimacy, which means whether the company can bring in revenue. The operation must earn benefits for the stakeholders. Then, socio-political legitimacy and interactional trust should be considered if the company wants to acquire a higher level of social license. Socio-political legitimacy implies that the operation should bring well-being to the

community, and it should meet the expectation of the region as well as take their responsibility to the society. While interactional trust is built between the company and the communities. The company should have an active interaction with the communities, such as the managers should answer questions, respond to problems and keep promises. If the company accomplished the factors above, the level of approval could probably be granted. The highest standard to achieve social license is to establish institutionalized trust. The company and the stakeholders' institution should have a relationship that they consider both of their interests mutually<sup>[8]</sup>.

#### **4. Questionnaire design**

The questionnaire was designed to learn the level of acceptance and preference of the residents towards a food town near their home and the influential factors. Interviews were made aiming at figure out the most important factors that the residents consider about the food town. An interview was made to find potential factors that influence social satisfaction for an enterprise.

The questionnaire was made after the interview stage and the qualitative analysis. It is designed based on the four level and three boundary models. The appendix shows the questionnaire applied by this model. Question 1-6 are basic information of respondents. Question 7 is economic benefits that an enterprise brings to the community, which is the "economic legitimacy" factor. Then, question 8 uses "interactional trust" factor that describes the mutual trust and benefits between the enterprise and the community. Question 9 is applied by "institutional trust" factor which also shows their mutual trust and transparency. The last question is the resident's general satisfaction index of the enterprise near their home.

#### **5. Data Collection and Analysis**

##### **5.1 Data Collection**

In the questionnaire, there are 41.98% males and 58.02% females, which gives a relatively fair gender balance. This questionnaire contains all ages of the society. There are 35.92% population aging from 16-28, 28.16% from 29-41, 30.46% from 42-54 and 5.46% over 54. Respondents spread from less economically developed province like Xinjiang to highly economically developed provinces and cities like Beijing and Guangdong. Also there are different types of jobs in the study. 42.59% population are student; 6.79% work in IT industry; 10.49% is marketing or public relations sections; 3.09% in service industry; 1.23% in agricultural forestry or chemical engineering; 2.47% in financial or real estate sector; 0.62% in telecommunications/network; 1.85% in architecture; 4.32% in government/public services; 1.85% in media entertainment; and 24.69% work in others sectors.

A variety of types of working places has been achieved. 40.57% people are from school; 35.19% from state-owned enterprises; 5.56% from government agencies; 1.85% from foreign company; 9.26% from private enterprise; and 7.41% from other types of working places.

The difference in monthly income level is also huge. 51.85% people belong to the income region of 0-3000 yuan per month; 24.69% 3000-5000 Yuan per month; 9.88% 5000-7000 Yuan per month; 3.7% 7000-10000 Yuan per month; 6.79% 10000-20000 Yuan per month; and 3.09% above 20000 Yuan per month.

The degree of education level is convergent. 1.85% people have the educational background of junior high school; 8.02% with educational background of senior high school and secondary school; and 89.51% are from university and above.

There are also questions relating to the economic legitimacy, institutional trust, and interactional trust. In the questions concerned with economic benefits, the average score is in the middle range from 40 to 70. This result means that people treat the following factors about economic legitimacy differently. The score for job opportunity that an enterprise can provide is 50.29 and 67.39 for convenience; other scores are 42.77 for increasing the government's economic revenue; and 54.53 for how the

economic benefits brought from this enterprise. So, people care more about their degree of convenience compared with the increasing governmental economic revenue or the profit brought from this enterprise.

Respondents also give a relatively higher score in the questions about mutual trust between organizations and citizens. They give 53.52 to an enterprise on the decision-making transparency (internal); 64.97 on the information transparency (relating to residents); and 66.3 on the interests providing to residents. These mean that respondents prefer gaining profit from the food town and knowing more information it whether from internal aspects or external aspects so that they would not be cheated.

A total score- 51.43- is given on the evaluation that respondents think about the food town near their home. This means that many people still want the food town to improve themselves.

## **5.2 Data analysis**

### **5.2.1 Correlated relationship**

After calculation and clarification by t-state, there are seven independent variables showing some relationships with the measurement of social satisfaction. They are age, dinner convenience, governmental income, enterprise's benefits, water pollution's distribution, whether the firm benefits public and internal company's decision-making transparency.

First, the respondents' age has a negatively correlated relationship with the measurement of social satisfaction. So, translating the statistic into analysis, the elders are likely to give a lower score in the measurement of social satisfaction. This result is different with the assumption and normal articles. "elders pay more attention in the saving environment, since this issue decides their own health." <sup>[9]</sup> In the assumption, the elder should give a high score in the measurement of social satisfaction. However, the research shows a different situation.

Second, the dinner convenience shows a positively correlated relationship with the measurement of social satisfaction. That means people focusing more on the convenience of having a meal would like to give a high score in the measurement of social satisfaction. This result matches with the assumption: "nowadays, Chinese pay more attention on eating environment and eating quality, since the Chinese salary grows." <sup>[10]</sup> So, this result shows the convenience of eating becomes an important part of the measurement of social satisfaction.

Third, governmental income (the tax) has a negatively correlated relationship with the measurement of social satisfaction. In other words, people giving a high score in the dependent variable want government to get less money. "As the personal and firm's income increase, more and more people want government to complete the tax system" <sup>[11]</sup> The result matches the expectation. The study considers that the governmental income distribution is an important part of the measurement of social satisfaction.

Fourth, the distribution of an enterprise's income has a positively correlated relationship with the measurement of social satisfaction. That means the respondents who distribute more on enterprise's benefits give a high score in the measurement of social satisfaction. That matches with the expectation before: people want a high-quality service, so they gave a high income to the food town to receive a good eating environment.

Fifth, the consideration of whether firm could benefit public has a positively correlated relationship with the measurement of social satisfaction. This result highly fits with the assumption before: "nowadays, more and more people started to focus on firm's public reputation." <sup>[12]</sup> So, people really care what a firm could benefit them.

Sixth, the company's internal decision- making transparency has a positive relationship with the measurement of social satisfaction. That matches with the research before: people want to know more about the food town around their house.

In this way, residents could exactly know whether the food town would affect their life or not.

### **5.2.2 Non-correlated relationship**

After this research, there are so many dependent variables that have no relationships with the measurement of social satisfaction. However, there are some variables assumed having relationship with the independent variable before. They are monthly income, natural gas distribution and carbon emission.

First, monthly income should become a dependent variable which has a correlated relationship with the measurement of social satisfaction. “people who have high salary are eager to have a high-quality environment.”<sup>[13]</sup>. Therefore, in the assumption, people who have a high salary should give a high score in the measurement of social satisfaction. Whereas there is no relationship between these two. By assuming there is no error about the question in the questionnaire, there must be some bias in the respondents.

Second, the type of work should have negative relationship with the measurement of social satisfaction, which means students pay more attention to the social satisfaction. In the yearly report by Word Bank Group, students take an important role in the energy conservation and environment safety, in other words, students should care more about the social satisfaction<sup>[14]</sup>. The reason of the problem should be the limited sample, if a larger sample was used in the research, the relationship could be represented in the result.

## **6. Discussion**

From the results, the regression model tells there are only seven variables that have relationships with the measurement of social satisfaction, which falls far beyond the expectation. It is necessary to find out the possible reason.

Firstly, the interviews were limited in terms of the attribution of interviewees and depth of interview, and the number of the surveyed samples was not big enough. A more extensive sample group will lead to more precise results. So a modified interview and literature review before the questionnaire design will be useful for finding more accurate dependent variable for studies.

Another question is more than half of the dependent variables show no correlated relationship with social satisfaction. The most important reason is that the residents even do not care about the social ethics in the questionnaire. In the western countries, residents value the community so much that they have already formed the strong concept of community's benefit. However, Chinese residents who care less about the community from the past are different. Because of the difference in background, Chinese residents may be influenced thus give a relatively low score on social satisfaction.

Recommendations for further study can be investigating a larger sample size, using a more effective model, finding other important related variables to the social satisfaction, and polishing the questions in questionnaire to test each factor.

## 7. Conclusion

Social license, as a new measurement of social satisfaction, is a more popular and important tool for a company nowadays to avoid being knocked out by other competitors. “To protect a social license, a company needs to play a constructive role in sustainable community development.”<sup>[15]</sup> This study investigates several factors that influence social satisfaction, which provides reliable decision making for food industry companies, including age, type of work, job opportunity, firm revenue, and resident’s profit by company. They all have positive relationships with social satisfaction. As a result, the respondent’s age and governmental income have negatively correlated relationship with the measurement of social satisfaction. Then the following factors have positively correlated relationships with social satisfaction: convenience of consumption, enterprise income, benefits to the public and internal decision-making transparency. People pay more attention to these aspects, a company could earn a higher reputation, less fierce competition, and larger profit while customers could trust this company, improve their satisfaction thus are willing to buy more products. The measurement of social satisfaction and the awareness of the influential factors are vital to the success of a new project or a new entity.

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