

# Asymmetry of Information and Hospitality in the Tourism Industry

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**Abstract.** The asymmetry of information and various principal-agent relations can be found in the tourism industry. They might cause a problem of what we call moral hazard. This study attempts to find out the best way to bring out the highest level of efforts from an agent. It is necessary to monitor the signals given by an agent, and by monitoring as many signals as possible it is possible to have a small margin of error. Most travel agencies depend on only a few signals to judge the hospitality skills of a tour conductor. In order to reduce the number of errors in monitoring, they should increase the number of signals evaluated.

**Keywords:** Tourism, Hospitality, Asymmetry of Information, Principal-agent Relations

## 1. INTRODUCTION

Many firms traditionally conduct seminars and training sessions to improve the hospitality quotient of their employees or their clients. According to Porter (1980, pp. 35-40), three strategies are used to compete with other companies in the market: cost leadership, differentiation, and focus. We can consider efforts to improve hospitality as one measure to gain a competitive market advantage by differentiation.

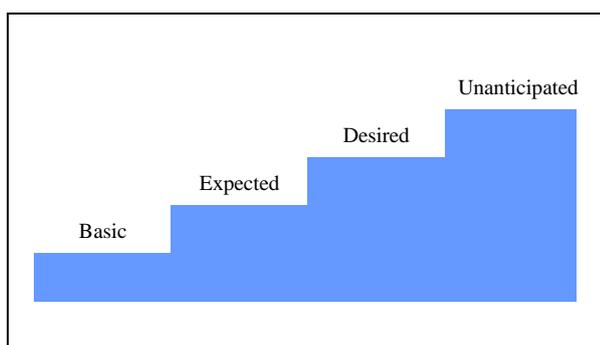


Figure 1: The Hierarchy of Customer Value

Source: Albrecht, K (1992). *The Only Thing That Matters: Bringing the Power of the Customer into the Center of Your Business*, Harper Business, p. 113.

Such behaviors may equip a company's employees to provide better services, which would be beneficial for the

consumers. From the company's point of view, this behavior results from the expectation that the efforts might pay off.

According to Oxford Dictionary, the word "hospitality" means "friendly and generous behavior towards guests."

Hospitality has several distinctive features such as intangibility and nonstorability, which are common with service.

Albrecht (1992, pp. 112-114) divided the customer's perception of value into four levels, "Basic," "Expected," "Desired," and "Unanticipated," which constitute the hierarchy seen in Figure 1. He described these values as below:

*Basic:* the absolutely essential attributes of the customer's experience, either tangible or intangible

*Expected:* the associated attributes of the experience that the customer has come to take for granted as part of general business practice

*Desired:* attributes the customer does not necessarily expect but knows about and appreciates if the experience includes them

*Unanticipated:* "surprise" attributes that add value for the customer beyond his or her typical desires or expectations

Based on his distinction, "Desired" and "Unanticipated," which customers must recognize as they are included in the price, should be encompassed in service, whereas the other two properties should be included in hospitality.

Hospitality is the mainstay of the tourism industry, which always works directly with customers. In such industries, it is quite important to manage service and employee hospitality in order to ensure customer satisfaction. For example, if the hospitality of a tour escort is excellent during a

group tour, the customer will be satisfied with the service, so much so that he/she may become a repeat customer for other travel tours provided by that company.

The principal–agent relationship is an important factor in the tourism industry. The presence of asymmetry of information between the two can inhibit employee efforts to improve hospitality.

In this study, using a case study of the travel industry, I consider measures to foster employee efforts in this regard. Such companies typically have relatively decent working conditions (such as wages) and provide employment to a number of competent tour escorts.

Tour escorts' wages are basically determined on the basis of a tour's duration. However, in reality, this wage system might not necessarily work as an incentive to foster greater efforts toward improving hospitality. Therefore, in this study, I consider the effectiveness of the current wage determination system for tour conductors by applying the wage schedule model proposed by Okuno and Muramatsu (1996).

## 2. ASYMMETRY OF INFORMATION

As stated above, we can observe asymmetry of information in the tourism industry. This causes two problems: adverse selection and moral hazard. I discuss the latter in this paper.

Moral hazard is “the form of postcontractual opportunism that arises because actions that have efficiency consequences are not freely observable and so the person taking them may choose to pursue his or her private interests at others' expense (Milgrom and Roberts, 1992, p. 167).

According to Milgrom and Roberts (1992, p.185), in order for a moral hazard problem to arise, three conditions must hold:

- a. There must be some potential divergence of interests between people,
- b. There must be some basis for gainful exchange or other cooperation between the individuals, and
- c. It is difficult to determine accurately whether the terms of the agreement have been followed and to enforce the contract terms.

While the management (principal) expects self-sacrifice on part of its employees, the latter (agent) try to avoid it as much as possible (on account of differing interests). It is difficult for the principal to deal with all operations singlehandedly. Meanwhile, the agent does not have enough capital to establish his/her company. Thus, both parties have reasons to work together. In addition, it is almost impossible for the principal to continue to monitor every behavioral aspect of the agent.

There are a variety of principal–agent relationships in the travel industry. For the client, both tour escorts and travel companies serve as agents, whereas agencies that dispatch tour

escorts are agents to travel companies. Among these parties, tour escorts play an instrumental role with regard to client hospitality. Therefore, I focus on their behavior in this study. There are two types of tour conductors: the first is an employee of the travel company, and the second works for the agency. In this study, I discuss the latter, because there is less likelihood that a moral hazard would arise with the former on account of the probability of losing customers. In addition, dispatched tour escorts account for a large percentage of employees in the tour business today. Travel companies cannot constantly monitor the tour escort's behavior during the tour. Such asymmetry of information may encourage the tour escort to behave unscrupulously.

Okuno and Muramatsu (1996, pp. 102-114) also regarded the relationship between the management and the employee in a business organization as the principal–agent relationship. The principal can monitor the value of the product ( $S(e)$ ) but not the agent's effort level ( $e$ ). The principal pays wages based on the pay schedule, which depends on the signal  $S(e)$ . I assume that “the value of the product” in the tour business stands for the level of service quality companies provide. When the effort level of a tour escort is relatively high, customers will appraise his/her work.

$$W(S(e)) = \alpha + \beta S(e)$$

$\alpha$ : fixed wage

$\beta$ : reactivity of the wage to the signal

The principal attempts to maximize the expected profit (in other words, expected value  $\pi (= E [S(e) - W(S(e))])$ , which is the remainder of the value of the product minus the wages paid). On the other hand, the agent tries to maximize the expected utility  $E [U(W(S(e)) - C(e))]$ , which is determined by the difference between wages and effort cost ( $C(e)$ ).

Figure 2 shows the wage and effort level. Moreover, the agent's utility level is equal to  $U_0$ . Assuming that reactivity of the wage schedule to the effort level  $e$  is relatively low ( $W_1$ ), the agent necessarily selects level  $e_1$ , because choosing other levels provides him less utility than  $e_1$ . Conversely, when the reactivity of the wage schedule to the effort level is relatively high ( $W_2$ ),  $e_2$  will be selected. Therefore, in order to foster a higher effort level for the utility level  $U_0$ , it is necessary to increase the slope of the wage schedule (namely,  $\beta$ , which refers to the reactivity of the wage to the signal).

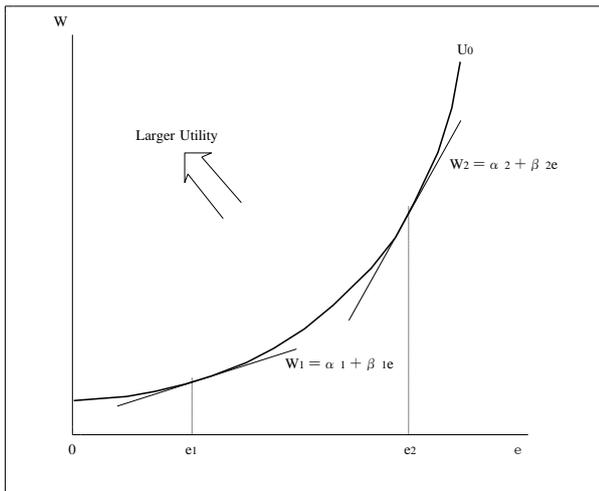


Figure 2 Wage Schedule and The Agent's Effort Level

Source: Okuno, M and Muramatsu, K (1996). "Kigyounai Incentive To Koyou-Keiyaku" [The Corporate Incentives and the Employment Contract], Keizai System No Hikaku Seido Bunseki [Comparative Institutional Analysis of the Economic System], University of Tokyo Press, p.103

If wages do not reflect the effort level at all (or the principal is unable to correctly monitor the efforts of the agent), it is likely that the moral hazard will spread throughout the workplace. Thus, the principal will attempt to monitor the behavior of the agent more accurately to prevent the moral hazard from spreading.

### 3. REDUCING MONITORING ERRORS

However, in reality the principal cannot always accurately monitor the effort level of the agent. Owing to the presence of asymmetric information in the agent's behavior, the signal always contains the error. According to Okuno and Muramatsu (1996, pp. 102-114), the monitoring error can be construed in the following two ways:

- Errors when monitoring the productivity (measurement error)
- Disturbance in the signal (productivity) by external factors

In the former case, while the signal indicates the agent's productivity correctly, the principal interprets it erroneously. In the latter case, although the principal monitors the signal correctly, the signal fluctuates depending on factors other than effort level.

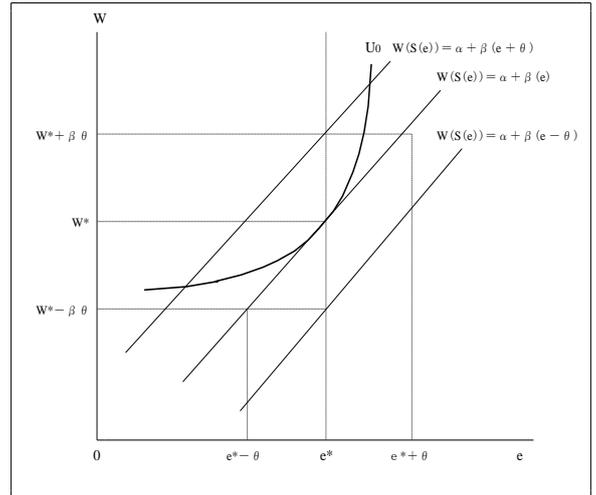


Figure 3 Wage Schedule and The Agent's Effort Level

Source: Okuno, M and Muramatsu, K (1996). "Kigyounai Incentive To Koyou-Keiyaku" [The Corporate Incentives and the Employment Contract], Keizai System No Hikaku Seido Bunseki [Comparative Institutional Analysis of the Economic System], University of Tokyo Press, p.105

Because of these errors, wage schedule  $W$  including an error  $\epsilon$  in the signal  $S(e) = \alpha + \beta S(e + \epsilon)$  varies as shown in Figure 3. The actual effort level of the agent is  $e^*$ , but the wage of the agent fluctuates because of these errors. If the principal receives a signal of  $e^* - \theta$ , the wage will be  $W^* - \beta\theta$ . When the signal is  $e^* + \theta$ , the wage will be  $W^* + \beta\theta$ . The larger the error is, the lower the motivation of the employee will become.

Conversely, if we can reduce the error, the effort level may be accurately evaluated (Figure 4). Minimizing this error is the key to raising the effort level of the employee.

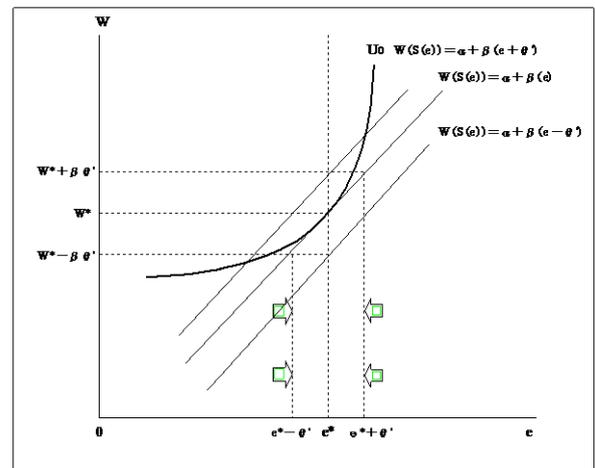


Figure 4 Wage Schedule and The Agent's Effort Level

Source: Based on Okuno and Muramatsu (1996), p.105

I also discuss the wage determination system of dispatched tour escorts. Many tour escorts are ranked by agencies on the basis of the number of days on tour, and daily allowance is paid in accordance with this rank.

Assume that the wage paid to a tour conductor for work completed in one year is  $W$ . The number of tour days in the year is  $D$ , and the allowance per diem is  $P$ . I illustrate the relation between them as follows:

$$W = P \times D \dots \textcircled{1}$$

Tour daily allowance (in JPY) is determined primarily by rank based on the number of days on tour (approximately every 100 days) as follows:

$$\begin{aligned} P &= 6000 + 500 \times (D/100) \\ &= 6000 + 5D \dots \textcircled{2} \end{aligned}$$

Formula  $\textcircled{2}$  illustrates that the basic allowance per diem is JPY 6,000, and it rises every 100 days. Substituting equation  $\textcircled{2}$  in  $\textcircled{1}$ , the following equation is obtained.

$$W = 6000D + 5D^2 \dots \textcircled{3}$$

It should be noted that the wage model shows the first year of the tour conductor's wage schedule. The tour conductor's wage schedule for the second year, as per the model, can be obtained by replacing the allowance per diem of the first year (the first term on the right-hand side of the equation) with that of the second year (JPY 7,000). The allowance for the third year can be calculated likewise.

It is also prudent to consider that the pace of increase in the wage is gradual. Then, the coefficient of the second term should be assigned the value 2.5 (i.e., JPY 500 per diem per 200 days). The wage model for the second and fifth years is given by equation  $\textcircled{4}$  and  $\textcircled{5}$  respectively.

$$W = 7000D + 2.5D^2 \dots \textcircled{4}$$

$$W = 8500D + 2.5D^2 \dots \textcircled{5}$$

These equations are illustrated in Figure 5 (I assume that the number of tour days is 200 in each year).

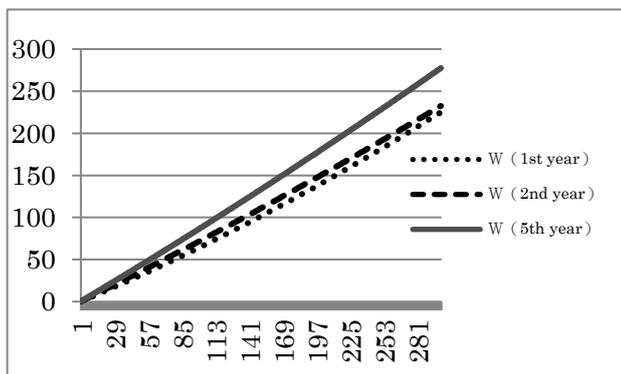


Figure 5 Wage Schedule and Tour Days

Source: Produced by author

Figure 5 shows that the higher the years of experience, the steeper the slope of the curve. The number of days on tour each year ( $D$ ) is determined by the people in charge of assigning the tour conductors. Such assignments are normally determined by these personnel at a discretionary basis.

As long as the personnel can properly evaluate the efforts of the tour escorts, hardworking or experienced tour conductors will be assigned preferentially, and the value of  $D$  will be larger. On the contrary, inexperienced tour conductors, who do not deliver as promised, will not find much work.

Thus, as long as the assignments are made properly (reflecting the escorts' effort levels accurately), the actual wage schedule of tour escorts will roughly approximate the curves replacing the horizontal axis of Figure 6 with the effort level  $e$ .

If the calculations are correct, the more experienced the tour conductor becomes, the stronger the incentive for improving the quality of service. If the assigning personnel read the signal inaccurately, their assignment will not correctly reflect the effort level of the tour escort. Thus, the key to foster improved efforts on the part of the tour escort lies in the monitoring accuracy.

#### a. Questionnaire Survey

A number of travel agencies have adopted the questionnaire survey method for monitoring depending on the signals received from their clients. In this survey, tour escorts distribute the questionnaire form when the tour finishes and collect the completed surveys on the spot. Although the contents of the questionnaire vary by travel companies and tours, they generally ask clients to evaluate the hotel room, meals, and quality of the tour escort's service and hospitality.

While such a questionnaire survey provides travel companies with valuable information and helps them assess customer satisfaction, its results also tend to include some bias because customers do not necessarily fill out the forms objectively. The results can vary depending on their emotions.

#### b. Interview

Travel companies sometimes conduct interviews directly with the customers after the tour finishes. While such interviews give them a direct channel to the customer's voice, the opinions may not always be credible. Some customers tell the truth about the tour and others don't.

#### c. Thank You Letters or Complaints from Customers

After the tour ends, travel companies might receive feedback regarding the tour by phone, e-mail, or letters from the customers. Typically, this feedback takes the form of thank you letters or complaints. They may also contain important implications for improving the quality of services and hospitality and provide valuable feedback about the itinerary management.

## 4. DIVERSIFICATION OF SIGNALS

When determining wages by promotion, companies can

reduce the monitoring error by collecting more signals and judging them comprehensively. Many travel companies now depend only on partial signals, as mentioned above. Moreover, the monitoring result may not necessarily be reflected in future wages.

Thus, in order to reduce the monitoring error, more signals will be required. Adding new signals to the current number of signals will complement the monitoring accuracy. I present several alternative signals below:

- a. The ratio of repeat customers to the total number of tour participants in each tour managed by conductors
- b. Claim occurrence rates
- c. Evaluation of escorts by supervisors and colleagues
- d. Evaluation of escorts by relevant organizations (hotels, bus companies, etc.)
- e. Number of nominations received from customers and travel companies

Note the importance of devising more appropriate signals in order to properly evaluate the efforts of tour conductors. In attempting the diversification of such signals, we may be able to prevent overestimation (or underestimation) and minimize monitoring errors. The smaller the errors, the more accurate the reflection of the agent's effort level on his or her wage. Additionally, the difference in wages for the same effort level would also reduce. If the effort level is properly reflected in the wage, the motivation and hospitality of the tour escorts is likely to improve.

## 5. CONCLUSION

The efforts of many dispatched tour escorts are being ranked, and their allowance per diem is paid in accordance with these ranks. These ranks are reliant on the number of tour days. A comprehensive judgment of the abovementioned signals can improve the hospitality of highly motivated tour escorts.

Accordingly, we need to review the current ranking determination system of the dispatched tour escorts. Notably, tour conductors who excel at their work would obviously expect their rank to reflect their skills, regardless of the tour number of days completed by them. Furthermore, such a review should ideally be conducted as frequently as possible.

The current wage system is biased toward less experienced escorts, as it raises their allowance in the short term. By considering a wage model that corresponds to the tour escort's years of experience, I underscore the logic of encouraging experienced tour conductors to improve their efforts at hospitality (compared to their inexperienced counterparts). Nonetheless, there is room for improvement even with regard to facilitating improved efforts from newcomers.

In addition, it is important for travel companies and dispatch agencies to cooperate closely with each other. Travel

companies should convey the received signals to the dispatch company. If the signals are reflected properly in the tour escort's assignment and rank, his/her efforts will be rewarded appropriately.

In this study, I examined the effectiveness of the current wage determination system based on the wage schedule model proposed by Okuno and Muramatsu (1996, pp. 102-114). In terms of the model, I illustrated the significance of two things in order to foster a higher effort level. One is to enhance the reactivity of the wage schedule to the effort level and another is to reduce monitoring errors.

However, nowadays, models incorporating altruistic motives and reciprocity are popular. Future studies may analyze the problem studied in this paper using such an altruistic model.

## REFERENCES

- Porter, M, E (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, The Free Press, pp. 35-40.
- Albrecht, K (1992). *The Only Thing That Matters: Bringing the Power of the Customer into the Center of Your Business*, Harper Business, pp. 112-114.
- Milgrom, P and Roberts, J (1992). *Economics, Organization & Management*, Prentice Hall, Inc, pp.166-194.
- Okuno, M and Muramatsu, K (1996). "Kigyounai Incentive To Koyou-Keiyaku" [The Corporate Incentives and the Employment Contract], Keizai System No Hikaku Seido Bunseki [Comparative Institutional Analysis of the Economic System], University of Tokyo Press.