PERCEPTION OF SERVICE RECOVERY IN DEVELOPING AN EFFECTIVE FLIGHT DELAY MANAGEMENT TOWARD A MARKET-ORIENTED AIR TRANSPORT SYSTEM (CASE STUDY: LION AIR IN SOEKARNO-HATTA INTERNATIONAL AIRPORT)

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Abstract
Airline industry is fairly vulnerable to service failure, such as flight delay. Hence, a numerous research regarding service recovery have been carried out. The objective of this study is to understand how customers perceive the existing service recovery of Lion Air as the case study using justice theory, then unify it with the management of the airline and other stakeholders in the air transport industry in order to develop a comprehensive service recovery management. The methodology of this research is using triangulation method in data collection and data analysis which amalgamate quantitative and qualitative method. By understanding customers’ perception of service recovery and combine it with further understanding of management of Lion Air and other stakeholders, it is discovered that the customers have not treated fairly, in the term of justice theory, during a flight delay due to the several issues in internal management of Lion Air and the inter-organizational cooperation. Thus, it is advised that Lion Air along with other stakeholders must be more market-oriented or customer-centric in order to develop an effective service recovery management.

Keywords: service recovery, flight delay, justice theory, market-orientation

INTRODUCTION
Service failure in an airline such as flight delay is inevitable. It is mainly because it requires several actors to perform on a flight operation. This multi-coordination makes it is highly probable for a flight to get delayed (Wu, 2005). In addition, other disruptions such as aircraft system malfunction, poor weather condition, and congested airport could be the contributing factors as well. For this reason, it is important for an airline to implement remedial measures or service recovery to redress the situation of the delayed passengers.

For an archipelago country as Indonesia, air transport is one of the most important mode of transportation. Moreover, since the airline deregulation in 2000, there have been established numerous airline companies which offer a competitively affordable price, or so-called LCC airlines (Low-Cost Carrier). Since then, the demand of air transportation passengers is rising over 200% in the past decade (bps.go.id 2014). One of the major LCC airline in Indonesia is Lion Air which dominates the domestic market in the nation. However, as stated above, various factors can contribute to the flight delay of the airline, especially in a congested main airport, such as Soekarno-Hatta International Airport.
Considering from the poor On-Time performance which only constitute nearly 70% (Flightstats.com 2015), Lion Air must have been conducting effective service recovery strategies. On the contrary, the ugly truth in the field says otherwise. Most of the time, it is reported that the flight delay is not followed by a proper and effective service recovery strategies which generates customer dissatisfaction (The Wall Street Journal 2015). Therefore, it is important to measure what significant attributes of service recovery, from perspective of customers, which can contribute to customer satisfaction that ultimately will lead to business profitability and better air transport system. As supported by Chang & Yeh (2002), Lion Air must realize that price competition alone in LCC industry can not survive in the long run. Sooner or later, customers will choose a service which may be higher in price, but can satisfy their needs along the service delivery.

Previous study regarding service recovery have linked the study with justice theory in psychology (Wen & Chi, 2013). According to Blodgett, et al. (1997), using justice theory dimensions will assist a service organization to construct effective and comprehensive service recovery strategies. However, air transport industry is an intricate industry which encompass various stakeholders. Therefore, not only from the standpoint of customers, but it is also crucial to analyze the implementation of service recovery from the standpoint of the airline operator itself and public transport authority (i.e. Ministry of Transportation) as the regulator. As adopted from Enquist, et al. (2011), it requires a good cooperation within an organization and synergized stakeholders in the industry to be able to successfully create value to customers, i.e. the reliable air transport system, which in this case is to develop and implement effective service recovery in the flight delay management. They also emphasized that in the industry, customers and becoming a market-oriented organization is necessary.

Thus, this research attempts to understand perceptions of customers and other stakeholders of service recovery of Lion Air in Soekarno-Hatta International Airport through the standpoint of justice theory and market orientation. This objective is expected to gain some benefits which can be implemented in Lion Air service in developing a comprehensive service recovery framework in the flight delay management.

THEORETICAL FRAMEWORK

Service recovery

As stated by Grönroos (2000), in service delivery process, employees may make mistakes, certain customer may cause problem that can affect other customers (e.g. waiting for late passengers can cause a flight delay), system malfunction, etc. Therefore, it is necessary for a service company to support the system with marked and significant efforts, that is a service recovery, to rectify situations in a form of apology, compensation, etc. However, Michel, et al. (2009) found that service recovery are more likely to fail because of the gap among employees, customers, and the internal process. Hence, they suggested that in order to develop an effective service recovery, these five following points may help to close the gap between customer and company: 1) synergize of a “service logic”, which to equip the company with service maps (to identify possible failure points) and cross-functional teams (to solve problems synergistically); 2) synergize with strategy-driven recovery, to develop certain strategy (procedural and/or customized) according to the business nature; 3) synergize with seamless data intelligence, to facilitate the customers with media which can
be tools to conduct two-ways communication; 4) synergize with recovery rewards, to unify the employees so they can achieve the same objectives of the company (Michel, et al., 2009); 5) synergize with the empowerment of T-shaped employees, an individual who has a strong functions expertise, but also can think and perform across various functions.

**Justice Theory**
According to Blodgett, et al. (1997), using justice theory dimensions will assist the service organization to construct effective and comprehensive service recovery strategies. Justice theory consist of three types of justice, that is distributive justice, procedural justice and interactional justice. Distributive justice refers to the perception of customers of the outcome of a service recovery whether it is deserved, necessary or fair (Tax & Brown, 1998). The outcome of service recovery is according to what customers receive after the failure from the company (Ha & Jang, 2009). Procedural Justice, as explained by Thibaut and Walker (1975) (cited in Blodgett, et al., 1997) refers to the customers' perception toward procedures, policies, and criteria used by decision makers in arranging the outcome of the negotiation of service recovery. While interactional justice implies the attitude and manner the company’s staffs display during handling and solving customers’ complaints such as courtesy and honesty (Bies and Moag, 1986) (cited in Blodgett, et al., 1997).

**Customer Satisfaction**
As explained by Oliver (1997) (cited in Kabir & Carlsson, 2010), customer satisfaction is considered as a judgement toward a product or service which provides pleasing consumption. Grönroos (2000) also supported that customers who are “very satisfied” are more likely to trust the company and increase their intention to repurchase and spread the positive word of mouth behavior.

**MarketOrientation**
Stating by Enquist, et al. (2005, p. 34), “in a value-creating stakeholder network, customers and market-orientation become necessary”. In the network, various stakeholders are involved, such as Public Transport Authority (PTA), operator along with its subcontractors, principal and customers. As suggested by Enquist, et al (2005), these stakeholders are needed to become market-oriented, that is to implement three market orientation activities: intelligence generation, intelligence dissemination, and responsiveness (Kohli and Jaworski, 1990). Intelligence generation is the activities to determine both current and future customer’s needs as well as analyzing several external factors which may affect their needs and preferences. Then, the intelligence is disseminated, that is to coordinate across inter-functional regarding the generated intelligence. Whilst responsiveness is the response actions toward the intelligence which has generated and disseminated.

**METHODOLOGY**
**Research Design**
A triangulation method has been chosen to understand and to analyze the issues of service recovery in this research. As explained in Robert Wood Johnson Foundation (2008), triangulation method involves employing multiple data sources and analysis in order to
produce an understanding. Hence, an amalgamation of quantitative and qualitative method was implemented. Furthermore, this research adopted case study method which questioning “how or why did something happen?” (Yin, 2012), in this case is with regard to service recovery during flight delay phenomenon in Lion Air.

Data Collection
For the quantitative method, an online questionnaire was launched and distributed to participants who the author believes are eligible to the research criteria. The eligible participants are only those who experience flight delay within 2-3 years and to those who waited in the departure gate (i.e. not tarmac delay). This type of sampling is considered as purposive sampling. The questionnaire comprises of several sets of questions with five sets of Likert Scale as the answers (i.e. Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree). The valid responses are 383 respondents out of 600 distributed questionnaires. The questionnaires were distributed within the time range of two months, from April to May.

While for the qualitative method, a more profound approach was applied. Over 30 respondents were obliged to answer open-ended questions with regard to their experience during flight delay with Lion Air. Besides, the author also conducts written interview via email with several involved stakeholders in the industry, such as officer in Ministry of Transportation, Chief of Assurance of Lion Air, and an aviation consultant. Apart from that, this research also conducts netnography, which surveying people and observe their behavior (Kozlnets, 2010) from facebook community, news from Ministry of Transportation, travel blog, etc.

Data Analysis
The quantitative data were analyzed using software IBM SPSS Statistics 20 to conduct descriptive statistics and inferential statistics. For the descriptive statistics, Frequency Analysis was performed. While, for the inferential statistics, Factor Analysis (to classify service recovery attributes), Correlation Analysis (to rank the importance of the attributes) and Multiple Regression Analysis (to measure the relationship between variables) were conducted. Whilst, for the qualitative data, a comparison between theories, results of interview and secondary data were executed by identifying certain phrases which often emerge in the data. For reliability test, a Cronbach’s Alpha test was performed to ensure whether the data are reliable to further analyze.

RESULTS AND DISCUSSIONS
Perceived Service Recovery of Customers and Customer Satisfaction
A Factor Analysis was conducted in classifying service recovery attributes based on the submitted responses of respondents. The attributes were divided into three factors, that is immediate recovery phase, failure handling phase, and post recovery phase as shown in Table 1 below. While the last column shows the justice theory in each factor may encompassed.
Subsequently, the factors were analyzed by employing Multiple Regression Analysis to measure the relationship between the factors and customer satisfaction as depicted in Equation (1).

**Table 1** Classification of Service Recovery Attributes from Factor Analysis

<table>
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<th>Factors</th>
<th>Attributes</th>
<th>Factor Label</th>
<th>Justice Theory</th>
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| 1       | 1. Staff was transparent in explaining the reason of the delay  
2. Staff announced the new departure schedule  
3. Staff apologized sincerely to passengers  
4. Accuracy of the info of delay duration  
5. Staff was present in the departure gate when delay occurred | Immediate Recovery Phase | Interactional and Procedural Justice |
|         | 2. Staff promptly responded to service failure, and complaint, etc  
3. Staff handled the service failure and complaint professionally | Failure Handling Phase | Interactional and Procedural Justice |
|         | 1. I received an adequate outcome  
2. The problem/complaint was resolved in a fast manner | Post Recovery Phase | Distributive Justice |

The model has $R^2$ square $= .39$. The most significant phase lies in *Post Recovery Phase* where distributive justice is assessed by the customers. It is followed by *Failure Handling Phase* where procedural and interactional justice are assessed by customers. While *Immediate Recovery Phase* does not significantly contribute to customer satisfaction.

$$Y = 0.053X_1 + 0.264X_2 + 0.354X_3$$ (1)

where:

- $Y$ = Customer satisfaction on service recovery
- $X_1$ = Variable “Immediate recovery phase”
- $X_2$ = Variable “Failure handling phase”
- $X_3$ = Variable “Post recovery phase”

In other words, judging by the justice theory, the major contributor to customer satisfaction is distributive justice, followed by procedural justice and interactional justice. Besides, a correlation analysis for each attribute was also conducted. The order of top five of the importance of recovery efforts during flight delay which contribute to customer satisfaction is listed below.

1. Problem/complaint or service failure is resolved in timeliness manner.
2. Adequate outcome (compensations, answers, etc).
3. Prompt response from the staffs in handling the problem/complaint/question.
4. Capable staffs who understand in handling and solving the problem/complaint.
5. Professional staffs in handling the problem/complaint.

However, according to the customer survey, it is found that these five attributes have not been properly executed by Lion Air whilst handling passengers during flight delay. 75% of the respondents claimed that they are dissatisfied with service recovery of Lion Air.

Service Recovery Management Toward A Market-Oriented Air Transport System

Lion Air as a private company which run a low-cost carrier is certainly focuses on to reduce the operational cost and to gain profit. However, a business which competes solely based on the price is not sustainable in a long term. Hence, it is necessary for the company to be more market-oriented and to understand what is important and urgently needed by customers during a flight delay. However, as explained earlier, air transport is a complex industry which makes a flight operation is the liability of several actors in the industry. Therefore, it is important for all concerning actors to implement three following activities in order to become more market-oriented as illustrated in Figure 1 below.

![Figure 1: Scheme of A Market-Oriented Air Transport System](image)

1) Intelligence generation.
An integrated customer data generation between Ministry of Transportation and airlines, such as Lion Air as the operator should also taken into account since customer feedbacks may help the regulator to rearrange and adjust the regulation. In addition, extra objective views from other transportation communities and representative of the customers also necessary (e.g. Yayasan Lembaga Konsumen Indonesia, Badan Perlindungan Konsumen Nasional, and Masyarakat Transportasi Indonesia). Comparing policies regarding service recovery with air transport policy in other countries can also be considered as generating intelligence.

2) Dissemination
Dissemination within one organization is not sufficient. Regulator and operator are certainly needed to cooperate. Questions such as: Do certain needs of customer are possible as the ground in arranging new regulation?; Does certain regulation applicable, in the term of operational and service?; What possible challenge the airline might encounter in applying certain regulation?; and so forth, are necessary to be discussed in inter-organizational manner.
3) Responsiveness
Responsiveness is to act upon the disseminated market intelligence. However, most of the time, it may not be easy for the regulator and operator to turn customers’ needs into realization. Several challenges may impede along the process, such as lack of the quality and quantity of airport’s facilities (especially in Soekarno Hatta International Airport), and so forth. The congested airport with the current capacity of runway and terminal is a major challenge for Lion Air to keep or even to improve their On-Time Performance. Therefore, effective service recovery strategies are urgently obligatory. In the same time, Ministry of Transportation must strictly monitor the implementation of the regulations as well to penalize airlines which operate against the regulations. As what market orientation focuses on, going extra mile in focusing on customers needs can win customers loyalty which ultimately lead the stakeholdersto achieve their own benefits and values.

Synergized Flight Delay Management Within Internal Management
Apart from the inter-organizational cooperation, in order to provide an effective service recovery effort to customers, Lion Air must make revolutionary change from the internal management. Therefore, these following points adopted from Michel, et al. (2009) have to be taken into consideration in developing a comprehensive service recovery management.

1) Synergize of a “service logic”
Service maps and cross-functional teams are the crucial tools which have to be firstly taken into consideration. A service map should illustrate the service experienced by customers orderly through time, structures, and process to identify possible failure points. Lion Air admits that a delay management is currently under development. It is advised, however, a delay management should classify into two phase, that is pre-schedule and post-schedule. In pre-schedule, the airline may trace the service and management from the time a route is granted by Ministry of Transportation to the moment passengers are waiting for their initial flight departure schedule. By tracing these steps, it is expected the airline can spot which activities that may cause a flight delay occurred (i.e. mechanical, management delay, etc) and how to overcome them. Whilst, for the post-schedule, the airline can develop a service map that illustrate the procedural activities after a flight is announced to be delayed. By developing this service map, it is also expected the airline can identify in which activities failure in service recovery may occur and how to resolve them. Figure 2 is one possible approach in developing a service recovery map according to the service recovery phase which has extracted from the Factor Analysis earlier. The service map may be included in Standard Operating Procedure of the airline.

2) Synergize with strategy-driven recovery
It is advised that a more procedural strategy in service recovery should develop rather than customizing individually as supported by Schmener (1986) (for instance: to distribute compensation according to the regulations of Ministry of Transportation). A customized approach may also be considered, yet, better be applied in certain situation, such as when passengers are asking for re-routing which may involve extra time and effort from the frontline staffs.
Figure 2 Example of Service Recovery Map
3) Synergize with seamless data intelligence
   It is reported that Lion Air’s Customer Service is difficult to reach most of the time. The company must facilitate the customers with media which can be tools to conduct two-ways communication without any difficulties. On-spot complaint or via telephone or email or company’s website are a good start to improving the service. A customersatisfaction survey is also advised to be regularly conducted in order to track the improvement of the service of the airline.

4) Synergize with recovery rewards
   Lion Air admits that areward management still has not been implemented yet in the management. It is highly recommended that a reward must be exist in the system. Reward can be a tool for the company to unify the employees and ultimately assist them to display organizational citizenship behavior to customers (Michel, et al., 2009). Simple acts from management, such as giving appreciation and complimentary letters are also suggested by Bamford & Xystouri (2005). These acts can be considered cost-effective yet can be powerful to motivate employees in delivering a professional service to customers.

5) Synergize with the empowerment of T-shaped employees
   Lion Air has trained its employees through “Service Excellent Training”. However, it is necessary for the company to educate and empower the employees to become more “T-shaped” and possess a service mindset, that is an individual who has a strong functions expertise, but also can think and perform through various functions. Hence, a prompt and fair decision while handling customers’ complaints on the spot can be generated and performed.

CONCLUSIONS

Considering from the view of the justice theory from customers’ perspectives, the most influential justice which contribute to customer satisfaction in service recovery is the distributive justice in post service recovery phase and followed by procedural justice in failure handling phase which mirror several past types of research. In other words, customers demand an efficient and effective procedure in claiming/receiving compensations when a flight delay occurred. Therefore, it is necessary for Lion Air to make revolutionary changes from the internal management of Lion Air. This revolution can be assisted by employing the five points from previous research, which are: synergize of a “service logic”, synergize with strategy-driven recovery, synergize with seamless data intelligence, synergize with recovery rewards, and synergize with the empowerment of T-shaped employees.

In addition, a synergized inter-organizational cooperation in the industry is vital. What is more important that the stakeholders, such as Ministry of Transportation as the regulator, airline operators, costumers protection community (YLKI, etc), and other air transport institutions, must become more market-oriented, that is to generate intelligence from customers in a regular basis, to disseminate the generated intelligence across inter-functional and inter-organizational, and to act upon them. Thus, it can be concluded that in order to develop a comprehensive and effective service recovery in a flight delay management, all stakeholders in the industry must function synergistically.
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