

**HOW TO MEASURE THE CUSTOMER SATISFACTION ON INCHEON FREE
ECONOMIC ZONE MODEL CONSULTING**

By

Lee, Sunhye

THESIS

Submitted to
KDI School of Public Policy and Management
in partial fulfillment of the requirements
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MASTER OF PUBLIC POLICY IN ECONOMIC DEVELOPMENT

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Committee in charge:

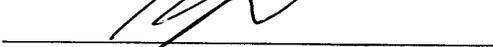
Professor Cho, Yoon C. Supervisor



Professor Kim, Ji-Hong



Professor Jung, Kwon



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ABSTRACT

HOW TO MEASURE THE CUSTOMER SATISFACTION ON INCHEON FREE ECONOMIC ZONE MODEL CONSULTING

By

LEE, SUNHYE

This study measures the satisfaction of Incheon Free Economic Zone (IFEZ) Model Consulting by applying the modified extended expectancy confirmation model which revised by the expectancy disconfirmation model (1980). With the concern of the modified extended expectancy confirmation model, this study researched the relationships among elements of customer satisfaction; expectation, performance, confirmation / disconfirmation and satisfaction including awareness which is an element from the customer behavior. Moreover, This study measured the effect on each elements of Customer Satisfaction (CS) like i) awareness of IFEZ Model Consulting (IMC) affect to expectation of IMC; ii) expectation of IMC affect to perceived performance of IFEZ and confirmation; iii) perceived performance of IFEZ affect to confirmation and satisfaction; and iv) confirmation affect to satisfaction. In order to prove the hypotheses, this study applied statistical analyses such as regression analyses. The results of the research found that IMC's satisfaction can measure the difference from expectation of IMC and performance of IFEZ.

Key word: IFEZ, Development Model, Expectation, Performance, Satisfaction, Expectancy Disconfirmation Theory

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I. INTRODUCTION

Incheon Free Economic Zone (IFEZ) as a special economic zone designated in 2003 and IFEZ Authority developed and operated the designated land and supported the investors and the developers for 10 years. During these 10 years, IFEZ has experienced inducing FDI and managing and operating the projects as a public sector. And also has achieved as a best free economic zone in Korea since 2010, influenced to upgrade city competitiveness of Incheon Metropolitan City to 56th in 2012 (EIU, 2012), selected as a test model city of the ubiquitous-city (u-city) technology implementation in South Korea since 2009 and invited Green Climate Fund (GCF) as a best potential green and eco-friendly city among 6 candidates; Gemen, Mexico, Namibia, Poland, Switzerland, and S. Korea. Based on the experience and achievement, IFEZ Authority developed its own urban development model to give consultation to other countries in the world since 2012. The purpose of this study is to find the difference in expectation of IFEZ Model Consulting (IMC) and perceived performance of IFEZ affect the countries to select IMC and to measure their satisfaction about IMC.

1.1 Objective of the Study

It is generally accepted that the traditional market places emphasize “customer satisfaction” as a way to earn consumer loyalty and attract new customer and also previous researchers have mainly examined the role of cognitive expectations in the post-purchase evaluation process (Phillips and Baumgartner, 2002). Oliver (1996) offered a definition of satisfaction; Satisfaction is the consumer’s fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment.

The focus on this paper is to measure the countries' satisfaction in the IMC with "Expectancy Disconfirmation Theory" (EDT) as a well-known theory in measuring customer's satisfaction. Most of countries have no experience in IMC. How to make customers satisfied product or service without the pre-experience? Consumers enter into a consumption experience with a set of expectations of what they would like to happen (Wirtz *et al.*, 2006), affective expectations reflect people's expectations about how they anticipate to feel in given situation (Wilson *et al.*, 1989) and can predict the effect on product evaluation and customer satisfaction of disparity between expectations and actual or objective product performance (Anderson, 1973). The product performance predictions differ in terms of magnitude of effect placed on expectation and disconfirmation (Anderson, 1973; Oliver, 1977).

Following these prior researchers, this research needs to prove the difference between the expectation of IMC and perceived performance of IFEZ (e.g., Improving country value, working experience as public sector, achievement of foreign direct investment, and etc.) to measuring its customer satisfaction.

1.2 Development of Research Questions

This study has conducted both qualitative researches and the following research questions are investigated.

RQ1: Does Awareness of Incheon Free Economic Zone (IFEZ) Model Consulting affects to Expectation of IFEZ Model Consulting (IMC)?

RQ2: Does Expectation of IMC affects to Perceived Performance of IFEZ?

RQ3: Does Expectation of IMC positively confirm IMC?

RQ4: Does Perceived Performance of IFEZ positively confirm IMC?

RQ5: Does Perceived Performance of IFEZ affects to Overall Satisfaction of IMC?

RQ6: Does Confirmation of IMC affect to Overall Satisfaction of IMC?

For examining this research, Expectancy Disconfirmation Theory Model, its Conceptual framework and other related model (Cognitive Dissonance Theory and additive difference model) are studied.

II. LITERATURE REVIEW

Customer Satisfaction (CS) is commonly measured in many ways; perceived product performance and service quality, post-purchase experience, price perception, and so on. Since IMC doesn't have its direct perceived performance, this research will find ①the perceived performance of IFEZ which is its achievement, working experience and development concept & infrastructure and ②country (customer)'s expectation on IMC and lead to measuring the customer satisfaction in the pre-experience situation. As below figure 1, the processes of Customer Satisfaction divided in 4 parts; Pre-consumption, Post-consumption, Customer Satisfaction, and Post-CS and the process is started from the expectation.

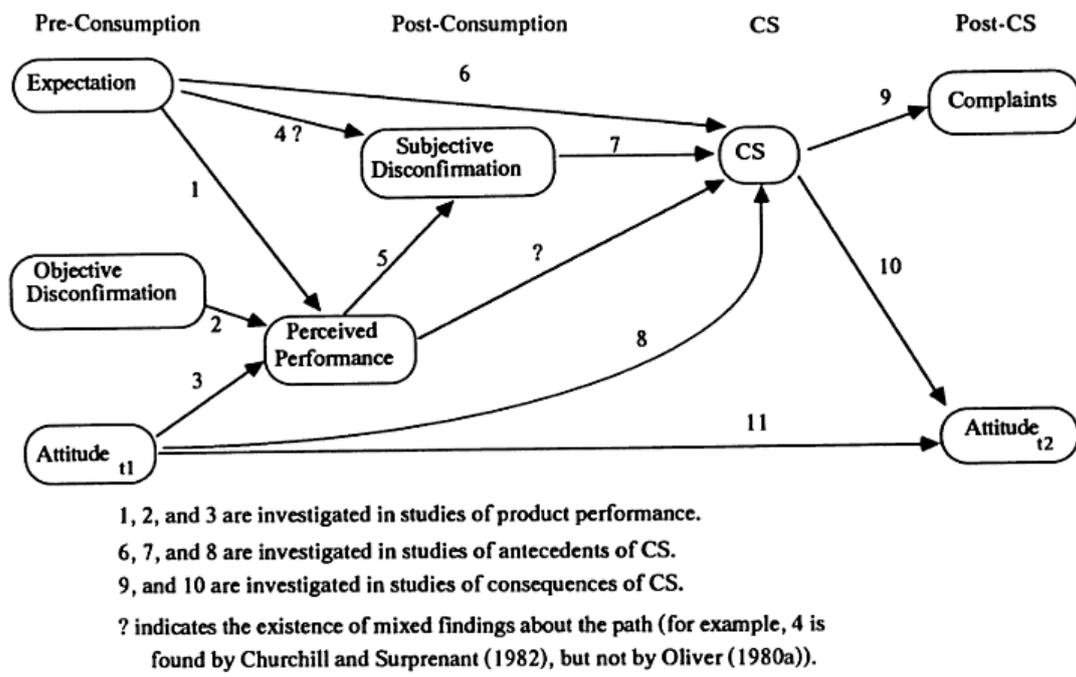


Figure 1. Processes of Customer Satisfaction (CS)

Source: Yi (1990)

The concept of an expectation most likely dates back many thousands of years to years to early species where it could only be felt subconsciously as an anticipation of food, water, sex, and even rain, sunrises, and summer solstices (Oliver, 1997). The first written expression of this concept within the behavioral area is that individuals learn of potential consequences of their actions and subsequently behave to realize (and avoid) these consequences with an early exposition arguing (Tolman, 1932; Oliver, 1997). Thus, an expectation is an “anticipation of future consequences based on prior experience, current circumstances, or other sources of information (Tryon, 1994; Oliver, 1997).”

As the figure 2, consumers typically go through seven major stages when making decisions (Blackwell *et al.*, 2006). Comparing this consumer decision process in the defining customer behavior with Customer Satisfaction (CS), can find similarity. When customer has expectation (or needs recognition), he / she can find information from perceived performance of alternatives, others’ post-purchase experience or etc. If the information satisfied the customer, he or she purchases the product or service.

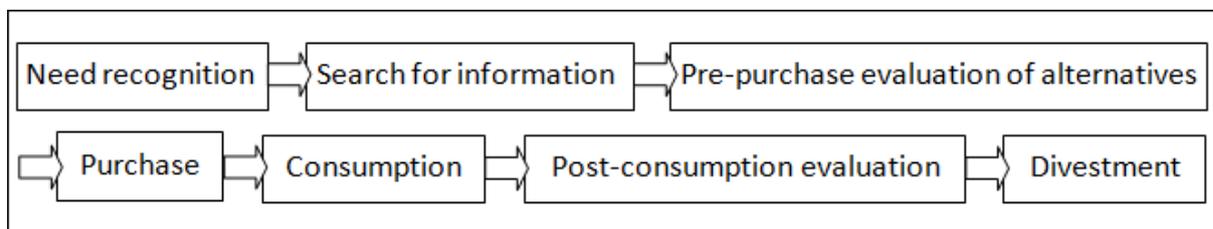


Figure 2. Consumer Decision Process

Source: Blackwell, Miniard & Engel (2006)

Therefore, this study also focuses on before expectation stage for the recognition of IMC to customers.

2.1 Conceptual Framework (Antecedents of Customer Satisfaction)

Previous studies mentioned that demographic or socio-psychological characteristics of consumers have been used as determinants of CS in literatures (Mason and Himes 1973;

Pickle and Bruce 1972; and Westbrook and Newman, 1978; Yi, 1990). According to Pickle and Bruce (1972) studied that consumer satisfaction has been found to increase with ages, and decreases with education (Yi, 1990). Mason and Himes (1973) analyzed total family income and determined reverse relationships between the overall income and level of household satisfaction and also Westbrook and Newman (1978) also pointed out personal ability also has positive relationship with the level of CS (Yi, 1990).

Other studies have focused on post-purchase evaluation of product performance by relating it to cognitive processes such as confirmation or disconfirmation of expectations (Anderson 1973; Oliver 1977; Olshavsky and Miller 1972; Olson and Dover 1979; Yi, 1990). As above, expectation and confirmation / disconfirmation have constantly applied with product or service performance and these elements are key variables for customer satisfaction.

Moreover, other studies also found that raising expectations may enhance consumer ratings of product performance (Anderson 1973; Olshavsky and Miller 1972, Yi 1990). While raising expectations about a product may enhance perceived product performance, it may also increase the magnitude of disconfirmation (Yi 1990). Thus, Yi (1990) pointed out that raising consumer expectations will yield both an increase (due to the increase in perceived product performance) and a decrease in consumer satisfaction (due to the increase in disconfirmation).

2.1.1 Conceptualization of main Concepts in Antecedents

Conceptualization of key concepts in consumer satisfaction studies, in particular, had been raised on diversity concept of “performance” with “expectations” and “disconfirmation” (Yi, 1990; Cho 2001). The summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience (Oliver 1981). In this study will add in the awareness before expectation to prove how awareness effect on expectation.

2.1.1.1 Conceptualization of Awareness

Building awareness can bring attention to a product, service, person, organization, or idea (Kotler, 2003). It can build credibility by communication the message in an editorial context, can help boost sales-force and dealer enthusiasm with stories about a new product before it is launched and also can hold down promotion cost (Kotler, 2003). Assessing consumer's brand awareness has two basic options; make people focusing on what consumers are able to recall from memory and also examining the particular brand before any other brand name (Blackwell *et al.*, 2006). Before a product can enter the consideration, the product must entrance into the awareness, which comprises those products known to the consumer. Because of the characteristic of awareness, it is impossible that converting consumer into a customer until he or she aware about a product or service's existence. (Blackwell *et al.*, 2006).

The stage in the adoption process of new idea, good, service starts with awareness (Kotler, 2003). Kotler (2003) defined that the consumer becomes aware of the new idea, good and service but lacks information about it.

2.1.1.2 Conceptualization of Performance

Yi (1990) reviewed several theories that have been suggested to explain expectation and disconfirmation effects on perceived product performance which differ in predicting the effects of expectations and disconfirmation, and in specifying the conditions under which the effects are likely to occur. Also, Figure 3 summarized the conceptualization of performance by considering expectation and disconfirmation. (Yi, 1990, Cho 2001)

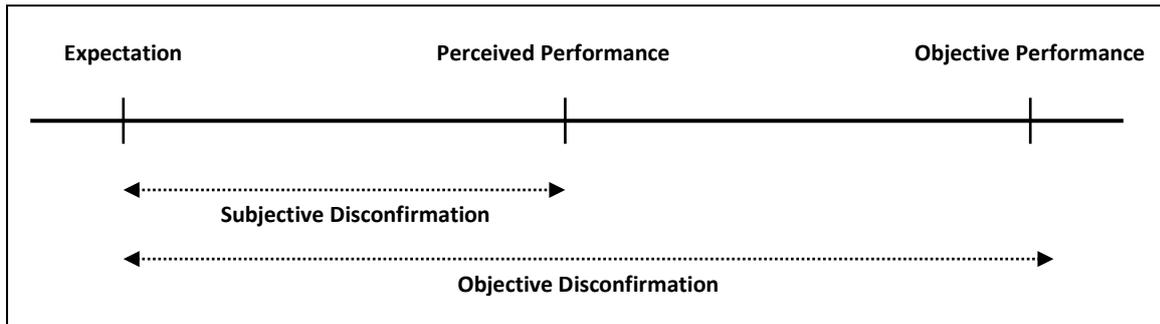


Figure 3. Perceived and Objective Performance (Yi 1990)

2.1.1.3 Conceptualizations of Expectation

Prior researchers investigated a variety of conceptualizations of "expectation" exist in the literature. According to some researchers, they consider expectation as "pre-consumption beliefs about the overall performance of the product, created by manufacturer's claims or product information (Yi, 1990)." The researches included anticipated performance (Anderson 1973; Churchill and Surprenant 1982; Oliver 1977; Westbrook and Reilly 1983; and Yi, 1990) and anticipated satisfaction from the use of a product (Swan and Martin 1981; Yi, 1990).

Many studies accepted that consumer satisfaction / dissatisfaction can be defined as the consumer's response to the evaluation of the perceived discrepancy between prior expectations (or some other norm of performance) and the actual performance of the product as perceived after its consumption (Day 1984).

The previous studies appear more appropriate to measure since expectations refer to possibilities about the product performance conceptually (Yi, 1990).

2.1.1.4 Conceptualization of Confirmation / Disconfirmation

Confirmation is nothing beyond the effect of the expectation level that already exist which means performance of product or service is just as expected (Oliver, 1996). Oliver (1996) also mentioned the notion of a zone of indifference which is also called a latitude of

acceptance in the assimilation-contrast literature, surrounds a range of performance which is acceptable to the consumer because performance in this range essentially fulfills the consumer's needs.

The inferred disconfirmation approach is problematic especially when inferred disconfirmation is calculated as the difference between anticipated satisfaction and perceived satisfaction with the more / less satisfied than expected scale (Yi, 1990). Disconfirmation is an independent variable in predicting or explaining consumer satisfaction, but its definition and measurement involve the dependent variable like satisfaction (Yi, 1990). Some variant of the disconfirmation paradigm which holds satisfaction that is related to the size and direction of the disconfirmation experience, where disconfirmation is related to the person's initial expectations (Churchill and Surprenant 1982). More specifically, an individual's expectations are; (1) confirmed when a product performs as expected, (2) negatively disconfirmed when the product performs more poorly than expected, and (3) positively disconfirmed when the product performs better than expected. Dissatisfaction results when a subject's expectations are negatively disconfirmed (Churchill and Surprenant 1982).

2.1.2 Relationship between Expectation and Performance

Many studies generally mentioned that expectations have a positive effect on performance (Spreng et al., 1996; Yi, 1990; Spreng & Page, Jr, 2003).

Based on cognitive dissonance theory, it could be argued that there would be a similar positive relationship between what one wants to receive and one's perception of performance (Spreng & Page, Jr, 2003). Dissonance theory states that when there is a discrepancy between two cognitions, this discrepancy is psychologically uncomfortable, and the person will change one of the cognitions so that the discrepancy will be reduced (Festinger, 1957; Spreng & Page, Jr, 2003).

2.1.3 Relationship between Expectation and Confirmation

Expectation and Confirmation relationship is more likely flat or as same as each other. Therefore, define its relationship from the relationship of expectation and disconfirmation. Expectation and disconfirmation are unrelated and have additive effects (Oliver, 1980; Yi, 1990). However, there seems to be a relationship between the two, because of the fact that disconfirmation is the discrepancy between the perceived performance and expectation (Yi, 1990; Cho, 2001). If expectations are high, perceived performance and expectation are more likely to be disconfirmed (Yi, 1990).

2.1.4 Relationship between Performance, Expectation, and Satisfaction

New concept on product performance and consumer satisfaction was showed by Swan and Combs (1976). One category, expressive performance, would be associated with satisfactory items while in the second category, instrumental performance would be associated with dissatisfactory items. (Swan and Combs, 1976).

Both satisfaction and service quality literatures have emphasized the idea that consumers make a comparison between the performance of the product or service and some standard (Spreng & Mackoy, 1996). In a conceptual model that attempts to integrate service quality and satisfaction, similarly argues that while the antecedent of quality perceptions is the disconfirmation of ideals, the antecedents of satisfaction are disconfirmation of predictive expectations (regarding quality and non-quality dimensions), and perceived quality. (Oliver, 1993; Spreng & Mackoy, 1996)

It is predicted that instrumental performance is a necessary, but not sufficient, condition for satisfaction (Swan and Coombs, 1976). Dissatisfactory items will involve primarily failures of instrumental performance to meet expectations (Swan and Coombs, 1976). The

relationships between expectations and performance resulting in satisfaction or dissatisfaction, as predicted in Swan and Coombs (1976) study, are summarized in Table 1.

Table 1. Relationships between Performance, the Fulfillment of Expectation, and Satisfaction

Instrumental Performance	Expressive Performance	Resulting Satisfaction or Dissatisfaction
Expectations fulfilled	Expectations fulfilled	Satisfaction
Expectations fulfilled	Expectations not fulfilled	Dissatisfaction
Expectations not fulfilled	Expectations fulfilled	Dissatisfaction
Expectations not fulfilled	Expectations not fulfilled	Dissatisfaction

Source : Swan and Coombs (1976)

2.2 Theoretical Background

As mentioned above, this research applied “Expectancy Disconfirmation Theory” (EDT) model to measuring customer’s satisfaction. Before applying the model in the research, need to review the model.

Mano and Oliver (1993) replicated that attributed experiences appeared to be the underlying causes for the affects reported in consumption in the context of the nature of product evaluation. The two dimensions of positive-negative affect and arousal is sectioned into eight octants (see Mano and Oliver 1993) which are represented by two or three indicators (Oliver, 1994). Attribute experiences appeared to be the underlying causes for the affects reported in consumption (Oliver, 1994, p16). Positive and negative affect are a function of the arousal inherent in the service experience (Oliver, 1994; Mano and Oliver, 1993).

Disconfirmation is generally defined as the discrepancy between two concepts, such as the discrepancy between a pre-purchase standard (such as expectation) and actual performance (Spreng & Page, 2003). Several researchers studied and used the concept of

disconfirmation and how expectation effect on satisfaction (Oliver, R. L., 1980; Yi, 1990; Mano, H. & Oliver, R. L., 1993; Spreng et al., 1996; Spreng et al., 2003; Elkhani, N. & Bakri, A, 2012).

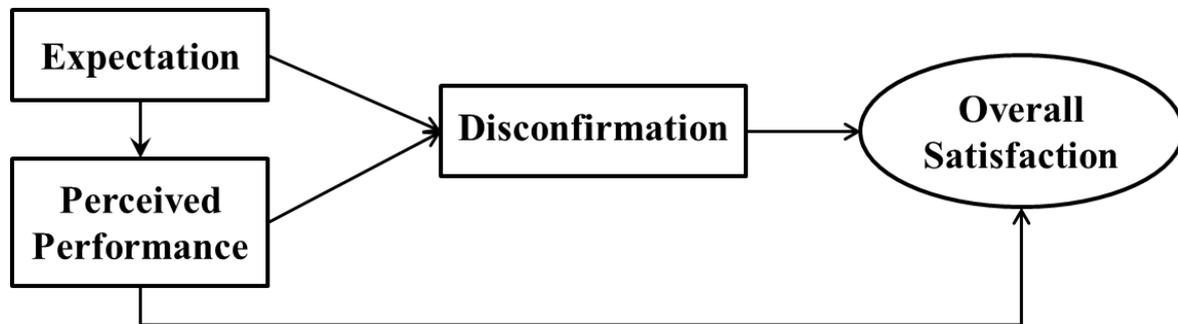


Figure 4. Expectancy Disconfirmation Theory Model

Source: Oliver (1980), Elkhani & Bakri (2012)

In above model, ‘expectation’ has affected to ‘perceived performance’ and ‘disconfirmation’ and ‘perceived performance has affected to ‘disconfirmation.’ Finally, ‘perceived performance’ and ‘disconfirmation’ has affected to satisfaction.

One of satisfaction’s dictionary definitions is fulfillment of a need or want. If IFEZ Authority is considered as provider or producer and IFEZ Model Consulting (IMC) is considered as product or service, country which need or want to develop its own economy can be considered as customer. In this case, customer satisfaction is a fulfillment of customer’s need or want.

2.2.1 Cognitive Dissonance Theory (CDT)

Cognitive Dissonance Theory (CDT) as one of antecedent theory of Expectancy Disconfirmation Theory was introduced by Leon Festinger (1957) and he proposed Cognitive Dissonance Theory (CDT) that defines a dissonance between cognition of something and its reality (Elkhani & Bakri, 2012).

The theory of cognitive dissonance suggests that an individual has cognitive elements (or "knowledges") about him / herself, a person’s past behavior, beliefs, attitudes and

environments (Oshikawa, 1968). Cognitive dissonance Theory explains how discrepancies (dissonance) between one's cognition and reality change the person's subsequent cognition and/or behavior (Bhattacharjee & Premkumar, 2004).

For a person who intends to moderate the dissonance's unpleasant feelings, he/she tries to decrease the dissonance that is occurred as the result of the existing difference between two kinds of cognition; the initial cognition of something and what is happened in the real world (Elkhani & Bakri, 2012). On the other hand, persons normally are resistant of change which means willing to change their attitude just when they have the least resistance to alter their idea (Elkhani & Bakri, 2012).

Cognition refers to one's beliefs, affect, opinion, values, and knowledge about one's environment, while behavior refers to actions initiated in response to this cognition and/or personal evaluation of that behavior (Festinger 1957; Bhattacharjee & Premkumar, 2004).

Dissonance between the expectation and experience leads to an unpleasant feeling that according to human's psychology, the persons demonstrate the least resistance for reducing dissonance feeling and are willing to align their expectation and experience, if the difference or issuance between their expectation and experience is not be fundamental (Staples, 2002; Elkhani & Bakri, 2012).

If one cognitive element follows from another, they are said to be consonant, but if one does not follow from another, they are said to be dissonant and arouse a psychological tension called cognitive dissonance (Oshikawa, 1968). Because Cognitive dissonance is psychologically uncomfortable, the individual changes the dissonant cognitive element to reduce the dissonance (Oshikawa, 1968).

In summary, CDT is a theory for matching the person's expectation of something or a performance with what he/she is experiencing about this thing or this performance in the real world (Elkhani & Bakri, 2012).

2.2.2 Expectancy Disconfirmation Theory (EDT) Model

EDT which is defined as a theory for measuring customer satisfaction from perceived quality of products or services is reviewed in this research for measuring customer satisfaction (Elkhani & Bakri, 2012). According to previous researcher posits that the expectancy-disconfirmation (ED) paradigm has been dominated consumer satisfaction / dissatisfaction research in the early 1970's (Erevelles & Leavitt, 1988). Moreover, significant disconfirmation effects, larger in magnitude than that of expectation, were observed in all cases to support for an adaptation level interpretation of satisfaction decisions (Oliver, 1980).

Erevelles and Leavitt (1988) studied that the concept of expectations is generally defined as consumers' beliefs that a service or a product has certain attributes. The ED model (Figure 5) by Erevelles and Leavitt (1988) explains that reveals to the consumer the actual performance of the product. One's expectations will be negatively disconfirmed if the product performs more poorly than expected, confirmed if the product performs as expected, and positively disconfirmed if performance is better than anticipated (Oliver, 1977).

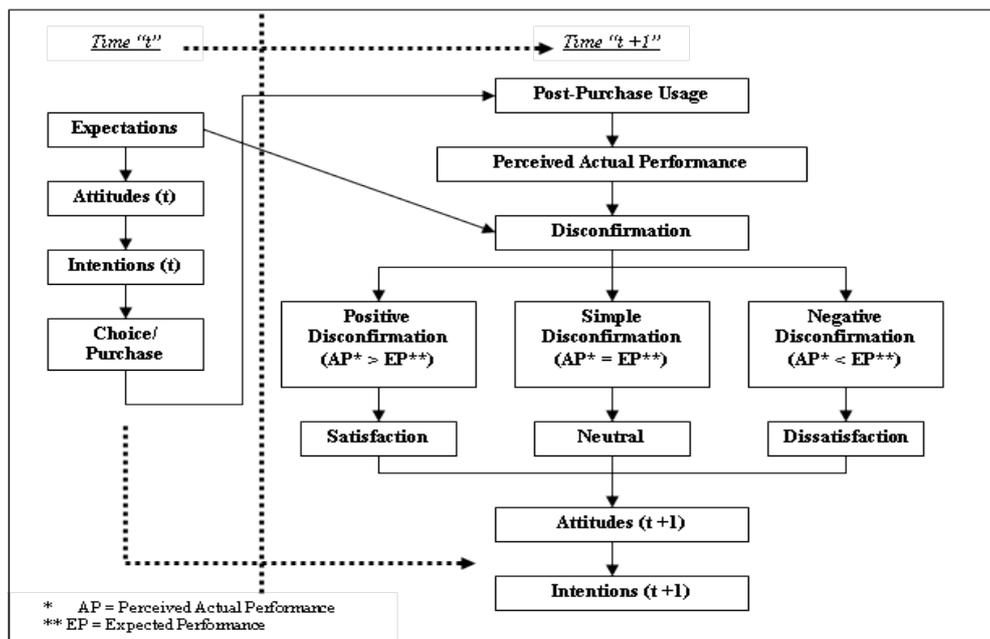


Figure 5. The Modified Adapted Expectations-Confirmation Model

Source: Erevelles and Leavitt (1988)

The customer satisfaction model has defined by Oliver (1980) in Figure 6. Oliver (1980) established to utilize “disconfirmation paradigm”. Expectation is related to the pre-purchase time period that a customer has initial expectation about a specific performance such as quality of products or services (Elkhani & Bakri, 2012).

As a result of this difference disconfirmation of expectation can be positive or negative (Elkhani & Bakri, 2012). When a customer’s perceived performance about the quality of specific product or service is higher than customer’s expectation or desire, the positive disconfirmation occurs (Elkhani & Bakri, 2012).

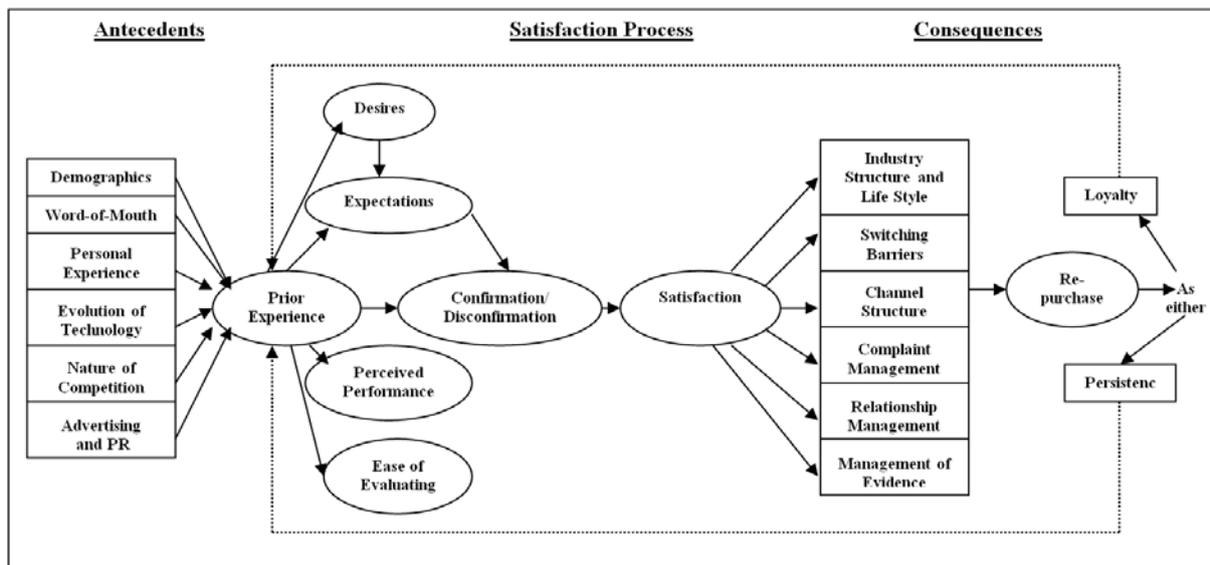


Figure 6. A Model of Customer Satisfaction

Source: Oliver (1980)

2.2.3 Additive Difference Theory

The additive difference model (Tversky, 1969) has been introduced for operationalizing disconfirmation constructs (Spreng et al., 1996; Spreng & Mackoy, 1996; Spreng & Page, 2003). The additive difference model provides a distinct measurement of the disconfirmation of the customer’s expectation and desire (Elkhani & Bakri, 2012). Because of the importance of additive difference model (ADM) in measuring the disconfirmation of customer’s

expectation and desire that also make the measuring customer's satisfaction possible, in the next section the review was followed by studying the ADM mathematically in order to identify how ADM measures the customer's satisfaction (Elkhani & Bakri, 2012).

The subject in this model is asked to evaluate discrepancy for its goodness/badness, similar to an expectancy-value model where the discrepancy between the standard and performance is the belief component, and the goodness/badness of the discrepancy is evaluative component (Spreng & Page, 2003). This provides a measure that is close to the conceptual definition of disconfirmation in that it measures the discrepancy between the standard and performance, and evaluates this difference (Spreng & Page, 2003). The ideal-point model and the value-percept disparity model like other combinatorial models suggest that congruency evaluation is a negative function of the comparison between expectations and perceived performance, because any discrepancy from what is expected will be negatively evaluated (Myers 1988; Westbrook and Reilly 1983, Spreng et al., 1996).

III. Hypotheses Development

Based on literature review and research questions, 6 hypotheses are developed and tested in this study.

3.1 Framework of the Study

This research has focus on perceived performance effect on other components; Expectation, Confirmation and Overall Satisfaction, and specific hypotheses has developed in perceive performance which divide it in five components; achievement, working experience and development concept & infrastructure, etc.

3.2 Hypothesis Development

3.2.1 The Effect of Awareness on Expectation

The first hypothesis in this research focuses on the relationship between ‘awareness’ and ‘expectation.’ This research assumes that ‘awareness’ brings the expectation. As Blackwell *et al.* (2006) mentioned customer must enter into the awareness before a service or product consider to purchase because the consumer must know that the service or product’s existence. The study also adds to the psychological literature because it provides insights into the cognitive effects of review awareness (Tan, 1995).

H1: ‘Awareness of A’ affect to ‘Expectation of A.’

3.2.2 The Effect of Expectation on Perceived Performance

The second hypothesis in this research focuses on the relationship between ‘expectation’ and ‘perceived performance.’ This research assumes that ‘expectation’ gives positive affect on the ‘perceived performance’ if the performer achieved similar performance on its work. According to many researchers, expectations have been shown to have a positive effect on performance (Spreng *et al.*, 1996; Yi, 1990; Spreng & Page, 2003). Assimilation theory suggests that a person's beliefs affect the person's perception of product performance, in that perceptions tend to be assimilated toward expectations (Sherif & Hovlan, 1961; Spreng & Page, 2003).

Based on cognitive dissonance theory, it could be argued that there would be a similar positive relationship between what one wants to receive and one's perception of performance(Spreng & Page, 2003). Dissonance theory states that when there is a discrepancy between two cognitions, this discrepancy is psychologically uncomfortable,

and the person will change one of the cognitions so that the discrepancy will be reduced (Festinger, 1957; Spreng & Page, 2003).

H2: 'Expectation of A' affect to 'Perceived Performance of A-1' if the performer has similar performance of A.

In Addition,

H2-1 Expectation of A affect to Improving Country Brand Value

H2-2 Expectation of A affect to Working Experience as government organization

H2-3 Expectation of A affect to Foreign Direct Investment Achievement

H2-4 Expectation of A affect to Smart & Compact Concept (Applied urban infrastructure based by ubiquitous technology)

H2-5 Expectation of A affect to Green & Eco-friendly Concept (Equipped green infrastructure and Etc.)

3.2.3 The Effect of Expectation on Confirmation

The third hypothesis in this research focuses on the relationship between 'expectation' and 'Confirmation.' As mentioned in conceptual frame work on the relationship between expectation and confirmation, it is more likely flat or as same as each other. Yi (1990) posits expectations are high, perceived performance and expectation are more likely to be disconfirmed.

H3: 'Expectation' affect to 'Confirmation' if IMC could reach customers need or want.

3.2.4 The Effect of Perceived Performance on Confirmation

The forth hypothesis in this research focuses on the relationship between 'perceived performance' and 'Confirmation.' This research assumes that 'perceived performance' gives

positive affect on the 'Confirmation.' if the performer achieved similar performance on its work.

H4: 'Perceived Performance of A-1' affect to positive 'Confirmation of A' if IMC could provide related service or product of A-1.

H4a: 'Improving Country Brand Value' affect to 'Confirmation of A'

H4b: 'Working Experience as government organization' affect to 'Confirmation of A'

H4c: 'Foreign Direct Investment Achievement' affect to 'Confirmation of A'

H4d: 'Smart & Compact Concept' affect to 'Confirmation of A'

H4e: 'Green & Eco-friendly Infrastructure' affect to 'Confirmation of A'

3.2.5 The Effect of Perceived Performance on Overall Satisfaction

The fifth hypothesis in this research focuses on the relationship between 'perceived performance' and 'overall satisfaction.' While original conceptualizations of the disconfirmation model did not include a direct path from performance to satisfaction (e.g., Oliver, 1980; Spreng & Page, 2003), current research has found direct link (e.g., Churchill & Surprenant, 1982; Tse & Wilton, 1988; Spreng & Page, 2003). Since performance will be a common antecedent to satisfaction, find satisfaction with a direct path from performance to satisfaction to facilitate the assessment of the disconfirmation methods (Spreng & Page, 2003).

H5: 'Perceived Performance of AI' affect to 'Overall Satisfaction of A'

H5a: 'Improving Country Brand Value' affect to 'Overall Satisfaction of A'

H5b: 'Working Experience as government organization' affect to 'Overall Satisfaction of A'

H5c: 'Foreign Direct Investment Achievement' affect to 'Overall Satisfaction of A'

H5d: 'Smart & Compact Concept' affect to 'Overall Satisfaction of A'

H5e: 'Green & Eco-friendly Infrastructure' affect to 'Overall Satisfaction of A'

3.2.6 The Effect of Confirmation on Overall Satisfaction

The sixth hypothesis in this research focuses on the relationship between 'confirmation' and 'overall satisfaction.' The effect of confirmation on overall satisfaction has generally been found to be positive (Yi, 1990; Spreng & Page, 2003). Negative disconfirmation leads to dissatisfaction, while positive disconfirmation leads to satisfaction. A valid measure of disconfirmation should have a strong positive effect on overall satisfaction (Spreng & Page, 2003).

H6: 'Confirmation of A' affect to 'Overall Satisfaction of A'

IV. Methodology

To analyze the measuring of satisfaction of IFEZ Model Consulting (IMC), this study adopted both methods; qualitative research and quantitative research. Qualitative research was conducted based on the research questions. The findings from qualitative research led to more detailed need of the potential customers and helps building solid survey question of the quantitative research.

4.1 Methodology for Qualitative Research

For the qualitative research, selected foreign government employees are received interview. The interview was delivered to interviewees after they received a presentation of IFEZ' performance and overview of IMC when IFEZ Authority held an Investor Relations (IR). During the interview, two interviewees want to learn more about IMC because the consulting gives information about their work field. Interviewee A (female and middle of age

40's) answered the process of IFEZ Model Consulting (IMC) helped him to understand more about process of developing a special economic zone and interviewee B (male and middle of age 30's) wanted to have more knowledge about applying IFEZ Model to the urban development of her country. Both interviewees understand that IFEZ had experience of develop Special Economic zone. Hence, they had expectation of IMC and agreed that applying IMC might reduce the trial and error of developing. According to their interview, the interviewees were interesting about specific performance; working experience as public sector, achievement of foreign direct investment and green & eco-friendly infrastructure which have related potential to invite Green Climate Fund from UN.

The second interview was delivered with two foreign government employees in other IFEZ IR. Interviewee C is male and early forties and Interviewee D is female and late thirties.

When they received a presentation of IFEZ' performance and overview of IMC, the interview was requested by two interviewees surprisingly. They mentioned they are interested in the IMC and wanted to learn more about IFEZ Authority's performance which is similar to the process of IMC. According to their interview, the interviewees were interesting about specific performance; improving country value, achievement of foreign direct investment, and development concept of smart & compact which applied urban infrastructure based by ubiquitous technology.

4.2 Methodology for Quantitative Research

For the quantitative research, a survey was conducted and the survey questionnaire was designed from the findings of the qualitative research. The key purpose of the quantitative research is to measuring the satisfaction of Incheon Free Economic Zone (IFEZ) Model Consulting. This study analyzed i) the effect between awareness, expectation, perceived

performance, confirmation, and overall satisfaction, and ii) measuring the satisfaction of IFEZ Model Consulting amid the effects.

To analyze this study, 20 survey questions were developed. The survey questionnaire distributed from an online survey website, 'Qualtrics.' Seven-point or five semantic scales were applied for each construct (e.g., 1 is 'none', and 7 is 'highest' in several form). Sample size was 70, and all participants were selected in the foreign government employees who graduated or attended a program at the Korea Development Institute (KDI) School of Public Policy and Management. These selected participants have at least knowledge about Korean economic development history and experience to stay in South Korea for their education.

To measure the satisfaction of Incheon Free Economic Zone (IFEZ) Model Consulting sophisticatedly, this study's survey questionnaire asks expectation and perceived performance more specifically. This study assumed that can measure the satisfaction of IFEZ Model Consulting (IMC) between the expectation of IMC and the perceived performance of IFEZ. In the original model of Expectancy Disconfirmation Theory, the objective of expectation and perceived performance are same. However, IMC's perceived performance is not defined yet publicly. Therefore, IFEZ's performance is a substitute to apply in the model and collect data from the survey participants.

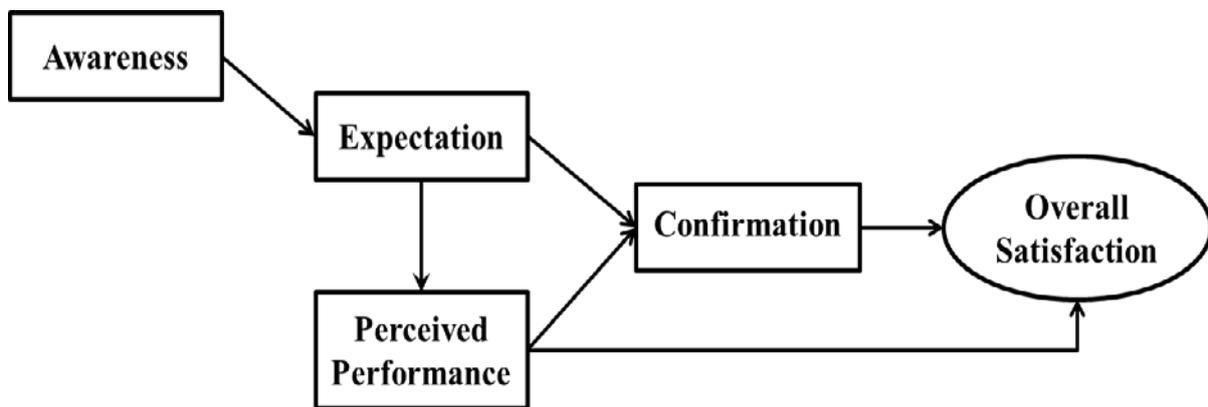


Figure 7. Applied Model of Expanded Expectancy Confirmation for this study (modified from figure 4)

Moreover, Awareness of IMC is added on the original model. This study needs a process to brought attention of the survey participants because IMC is unknown for most of countries' in the world.

To analyze the proposed hypotheses, the linear regression analysis was conducted using SPSS. This study shows the results of regression analysis for hypothesis testing. In regards with effect of each elements; awareness, expectation, perceived performance, confirmation, and overall satisfaction, the survey participants were asked their understanding or need of each element with 7 point scale (i.e. "1" refers to "none, less important and etc." and "7" is "a lot, very important and etc.") and 5 point scale (i.e. "1" refers to "Strongly not affected or Most Insignificant" and "5" is "Strongly affected or Most Significant") for measuring the effect among each elements. To apply regression, the data measuring the survey participants' answer is recoded from 1 to 3 as negative, 4 as neutral, and from 5 to 7 as positive with 7 point scale and also, recoded from 1 to 2 as negative, 3 as neutral, and from 4 to 5 as positive with 5 point scale.

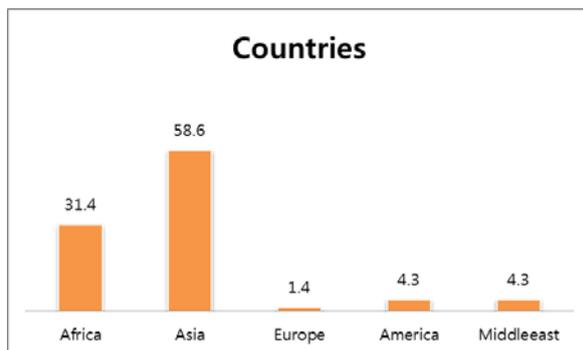
Demographic Information

All the participants are foreigners Of the 70 participants, about 77.1 % were male, 22.9 % were female. Approximately, 12.9 % of participants' current or final education background was bachelor degree, 85.7 % of participants' current or final education background was master degree and 1.4 % of participants' have Ph.D. Among 70 participants, 57 people responded to the annual household income. Approximately, 57.9 % answered annual household income of USD 10,000 or under, 26.3 % between USD 10,000 and 29,900, 10.5 % between USD 30,000 and 49,900, 3.5 % between USD 50,000 and 69,900, 1.8 % between USD 70,000 and 89,900.

Approximately, 18.6 % of respondents were in the 20-29 age group, 57.1 % were between 30-39, 18.6 % were between 40-49, 4.3 % were between 50-59, 1.4 % were 60 or

more. Around 8.6 % were high-level officials, 77.1 % were middle-level officials, 8.6% were low-level officials, 4.3 % were others like consultant and 1.4 % were not answer the question.

For describing their work, about 21.4% were working at public affairs, 17.1% were working at financial / accounting, 11.4% were engineering / development, 5.7% were working at law enforcement like police and attorneys, and about 40% were working at training institute, education, mining, strategic planning and etc.



Roughly, 58.6% were from Asia in Bangladesh, Pakistan, Indonesia, and etc., 31.4% were from Africa in Ethiopia, Tanzania, and etc. 4.3% were from Middleeast and America and 1.4% were from Europe.

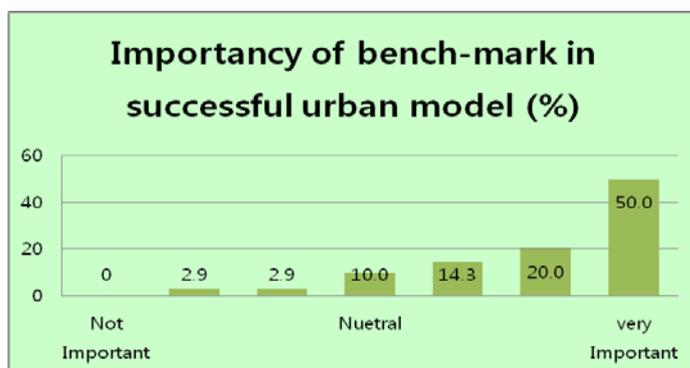
Figure 8. Countries of respondents

Finding about additional statistical information

Most of respondents are recognize about economic development history of South Korea. 98.6% agreed ‘yes.’ Only one person said no.

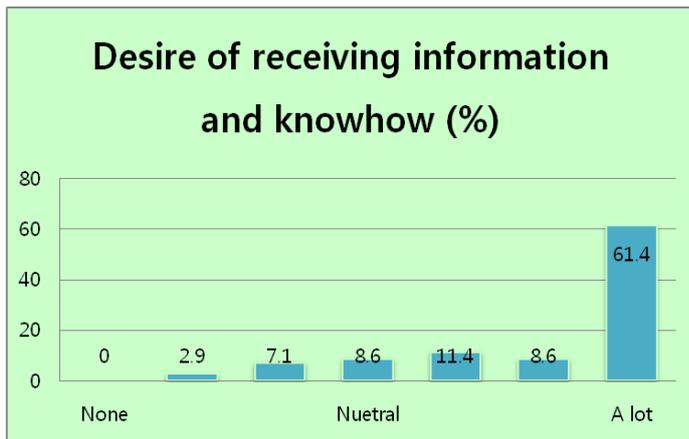
Among 70 respondents, 65.7% have plan or had an experience to develop city or to designate a special economic zone in their nation. 34.3% were not.

Moreover, 98.6% think that it is important to develop a special economic zone in their country to help developing their country’s economy. 1.4% doesn’t agree.



50% think that it is very important to bench-mark successful urban model to apply in their nation. 34.3% were in the acceptance level. Totally, 84.3% think it is important.

Figure 9. Importancy of bench-march in successful urban model



61.4% want a lot to receive information and knowhow about management and operation of successful urban model. 20% were in the acceptance level. Totally, 81.4% have desire to receive them.

Figure 10. Desire of receiving information and knowhow

V. Data Analysis

The qualitative research was qualitatively examined the specific perceived performance of IFEZ and the quantitative research was statistically analyzed the survey questionnaire data to test hypotheses.

5.1 Findings from Qualitative Research

From the qualitative research, the study was found specific performance of IFEZ from the interviews; ① improving country value, ② working experience as public sector, ③ achievement of foreign direct investment, ④ development concept of smart & compact concept which applied urban infrastructure based by ubiquitous technology and ⑤ green & eco-friendly infrastructure which have related potential to invite Green Climate Fund from UN.

This study need to find specific perceived performance of IFEZ that affected by expectation of IMC. These specific performances could apply in the model in figure 7 for collect better data in the quantitative research.

5.2 Findings from Quantitative Research

5.2.1 Hypothesis Test

This study has the 6 main hypotheses to test. Figure 9 shows those hypotheses flow.

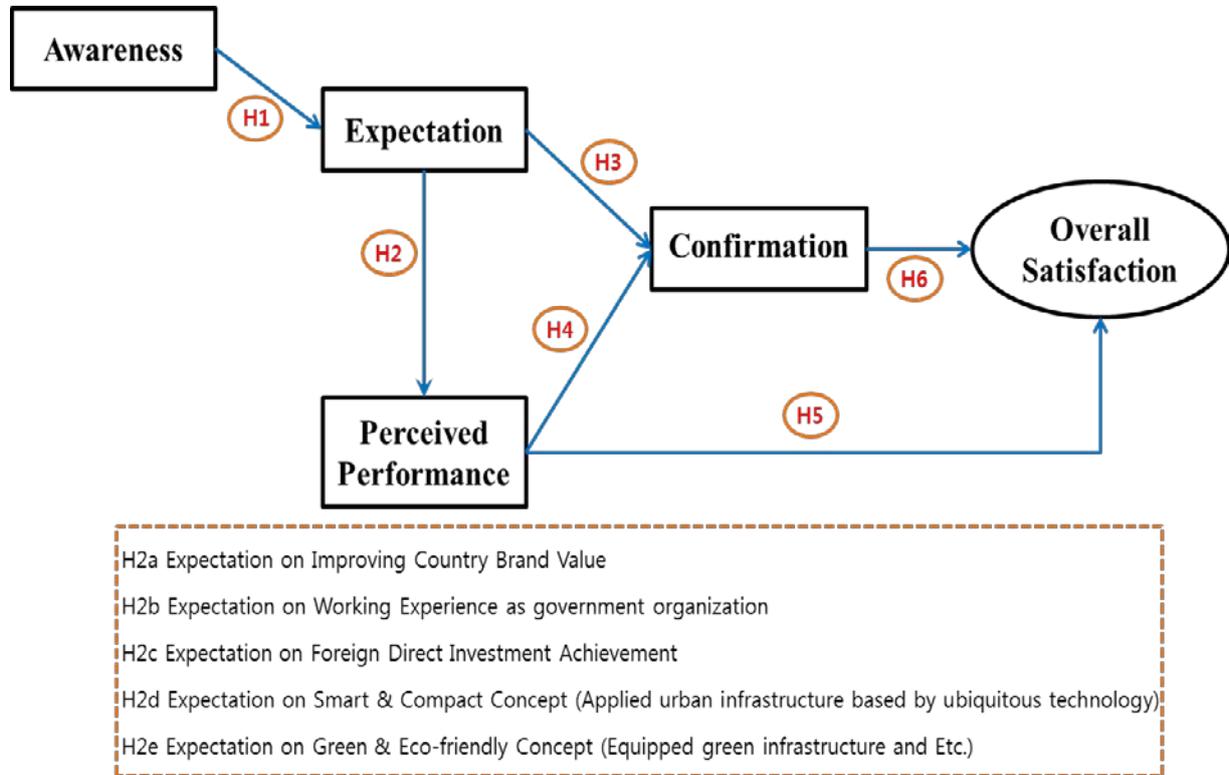


Figure 11. Hypotheses Flow

H1: ‘Awareness of IMC’ affect to ‘Expectation of IMC.’

The regression analysis was conducted based on coefficients as Table 2 shows. The results of the regression analysis found that p -value is almost .004 (r -square = .118) for the awareness on expectation. Results showed $p < .05$ (f -value = 8.872). (Hypothesis is accepted within α sig. of 5%) and alternative hypothesis H1 was well accepted. As mentioned above, 100% of the survey participants recognize about economic development history of South Korea. The respondents are aware that South Korea has Special Economic Zones such as

Incheon Free Economic Zone and has expectation on IFEZ Model Consulting that is carried out by IFEZ.

Table 2. Regression Analysis to ‘Awareness’ affect to ‘Expectation’

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.008	.383		10.452	.000
	How much do you aware that South Korea has Special Economic Zones such as Incheon Free Economic Zone...	.248	.083	.344	2.979	.004

a. Dependent Variable: Like your understanding of economic history of South Korea, how much do you expect Incheon Free Econ...

H2: ‘Expectation of IMC’ affect to ‘Perceived Performance of IFEZ’

To find specific result, perceived performance divide in 5 parts; improving country value, working experience as public sector, achievement of foreign direct investment, development concept of smart & compact concept which applied urban infrastructure based by ubiquitous technology and green & eco-friendly infrastructure which have related potential to invite Green Climate Fund from UN which found in the qualitative research and the regression analysis was conducted on each parts.

H2-1 Expectation on Improving Country Brand Value

As table 3 shows, the results of the regression analysis found $p = .022$ (r-square = .076) for the effects of expectation on improving country brand value. Results showed $p < .05$ (f -value = 5.490, Hypothesis is accepted within α sig. of 5%) Thus, alternative hypothesis 2-1 was accepted.

The survey respondents expected IMC as much as they understand about Korean history and they will select IMC because IMC helps improved country’s brand value.

Table 3. Regression Analysis to ‘Expectation’ affect to ‘Perceived Performance-1’

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.210	.337		9.535	.000
	Like your understanding of economic history of South Korea, how much do you expect Incheon Free Econ...	.150	.064	.275	2.343	.022

a. Dependent Variable: If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-① Improving Country Brand Value

H2-2 Expectation on Working Experience as government organization

As table 4 shows, the results of the regression analysis found $p = .007$ (r-square = .107) for the effects of expectation Working Experience as government organization. Results showed $p < .05$ (f -value = 7.876, Hypothesis is accepted within α sig. of 5%) Thus, alternative hypothesis 2-2 was accepted.

The survey respondents expected IMC as much as they understand about Korean history and they will select IMC because of IFEZ has working experience as a government organization.

Table 4. Regression Analysis to ‘Expectation’ affect to ‘Perceived Performance-2’

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.209	.320		10.035	.000
	Like your understanding of economic history of South Korea, how much do you expect Incheon Free Econ...	.171	.061	.327	2.806	.007

a. Dependent Variable: If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-② Working Experience as government organization

H2-3 Expectation on Foreign Direct Investment Achievement

As table 5 shows, the results of the regression analysis found $p = .049$ (r-square = .057) for the effects of expectation on Foreign Direct Investment Achievement. Results showed p

< .05 (f -value =4.025, Hypothesis is accepted within α sig. of 5%) Thus, alternative hypothesis 2-3 was accepted.

The survey respondents expected IMC as much as they understand about Korean history and they will select IMC because of IFEZ has achievement of inducing foreign direct investment.

Table 5. Regression Analysis to ‘Expectation’ affect to ‘Perceived Performance-3’

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.565	.352		10.124	.000
	Like your understanding of economic history of South Korea, how much do you expect Incheon Free Econ...	.135	.067	.238	2.006	.049

a. Dependent Variable: If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-③ Foreign Direct Investment Achievement

H2-4 Expectation on Smart & Compact Concept (Applied urban infrastructure based by ubiquitous technology)

As table 6 shows, the results of the regression analysis found $p = .009$ (r -square = .099) for the effects of expectation on Smart & Compact Concept. Results showed $p < .05$ (f -value = 7.289, Hypothesis is accepted within α sig. of 5%) Thus, alternative hypothesis 2-4 was accepted.

The survey respondents expected IMC as much as they understand about Korean history and they will select IMC because of IFEZ has Smart & Compact Concept which applied urban infrastructure based by ubiquitous technology.

Table 6. Regression Analysis to ‘Expectation’ affect to ‘Perceived Performance-4’

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.072	.390		7.872	.000
	Like your understanding of economic history of South Korea, how much do you expect Incheon Free Econ...	.200	.074	.315	2.700	.009

a. Dependent Variable: If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-④ Smart & Compact Concept (Applied urban infrastructure based by ubiquitous technology)

H2-5 Expectation on Green & Eco-friendly Infrastructure (Equipped green infrastructure and Etc.)

As table 7 shows, the results of the regression analysis found $p = .003$ (r-square = .128) for the effects of expectation on Green & Eco-friendly Concept. Results showed $p < .05$ (f -value = 9.691, Hypothesis is accepted within α sig. of 5%) Thus, alternative hypothesis 2-5 was accepted.

The survey respondents expected IMC as much as they understand about Korean history and they will select IMC because of IFEZ has Green & Eco-friendly Infrastructure that equipped green infrastructure & has related potential to invite Green Climate Fund from UN.

Table 7. Regression Analysis to ‘Expectation’ affect to ‘Perceived Performance-5’

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.082	.345		8.929	.000
	Like your understanding of economic history of South Korea, how much do you expect Incheon Free Econ...	.206	.066	.358	3.113	.003

a. Dependent Variable: If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-⑤ Green & Eco-friendly Concept (Equipped green infrastructure & has related potential to invite Green Climate Fund from UN)

H3: ‘Expectation of IMC’ affect to ‘Confirmation of IMC’

As table 8 shows, the results of the regression analysis found $p = .005$ (r-square = .114) for the expectation affects positively confirmed the IFEZ Model Consulting. Results showed $p < .05$ (f -value = 8.624, Hypothesis is accepted within α sig. of 5%) Thus, alternative hypothesis 3 was accepted.

The survey respondents expected IMC as much as they understand about Korean history and they confirm for IMC to help developing special economic zone in their nation after recognizing IMC’s information.

Table 8. Regression Analysis to ‘Expectation’ affect to ‘Confirmation’

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.422	.491		9.009	.000
	Like your understanding of economic history of South Korea, how much do you expect Incheon Free Econ...	.275	.094	.338	2.937	.005

a. Dependent Variable: After recognized above information, how much do you confirm for IFEZ Model Consulting (IMC) to help...

H4: ‘Perceived Performance of IFEZ’ affect to ‘Confirmation of IMC’

As table 9 shows, the results of the regression analysis found H4 $p = .002$, H4a $p = .025$, H4b $p = .041$, H4c $p = .042$, H4d $p = .494$ and H4e $p = .663$ (r-square = .258) , for the perceived performance affects positively confirmed the IFEZ Model Consulting. Results showed $p < .05$ (f -value = 4.231, Hypothesis is accepted within α sig. of 5%) Thus, alternative hypothesis4, 4a, 4b, 4c were accepted and 4d & 4e were rejected.

H4a Improving Country Brand Value affect to confirmation

H4b Working Experience as government organization affect to confirmation

H4c Foreign Direct Investment Achievement affect to confirmation

H4d Smart & Compact Concept affect to confirmation

H4e Green & Eco-friendly infrastructure affect to confirmation

This Hypothesis shows that the customer select IFEZ Model Consulting (IMC) affect from the components of perceived performance of IFEZ Authority and ask most affected one to the survey participants. Among the main hypothesis 4 and five components, ‘total perceived performance’ was positively confirmed as a most affected component to select IMC , ‘improving country bland value’, ‘working experience as public sector’ and ‘achievement of foreign direct investment’ are following.

However, ‘Smart & Compact concept’ and ‘eco-friendly infrastructure’ was rejected since the survey participants 58.6% of the survey participants were from Asia like Laos, Bangladesh, Cambodia, Butan, etc., 31.4% were from Africa which need to develop basic infrastructure and primary industry. Therefore, both components are too soon for developing by stages.

Table 9 Regression Analysis to ‘Perceived Performance’ affect to ‘Confirmation’

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.472	.864		4.018	.000
	If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-① Improving Country Brand Value	.488	.213	.328	2.290	.025
	If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-② Working Experience as government organization	.509	.244	.327	2.085	.041
	If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-③ Foreign Direct Investment Achievement	-.438	.211	-.301	-2.073	.042
	If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-④ Smart & Compact Concept (Applied urban infrastructure based by ubiquitous technology)	.131	.190	.102	.688	.494
	If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-⑤ Green & Eco-friendly Concept (Equipped green infrastructure & has related potential to invite Green Climate Fund from UN)	-.099	.227	-.069	-.438	.663

a. Dependent Variable: After recognized above information, how much do you confirm for IFEZ Model Consulting (IMC) to help...

H5: ‘Perceived Performance of IFEZ’ affects to ‘Overall Satisfaction of IMC’

As table 10 shows, the results of the regression analysis found H5 $p = .017$, H5a $p = .075$, H5b $p = .089$, H5c $p = .142$, H5d $p = .314$ and H5e $p = .597$ (r-square = .198), for the perceived performance affects to the overall satisfaction of the IFEZ Model Consulting. Results showed $p < .05$ (f -value = 3.017, Hypothesis is accepted within α sig. of 5%) Thus, alternative hypothesis 5, 5a & 5b were accepted and 5c, 5d & 5e were rejected.

H5a Improving Country Brand Value affect to Overall Satisfaction

H5b Working Experience as government organization affect to Overall Satisfaction

H5c Foreign Direct Investment Achievement affect to Overall Satisfaction

H5d Smart & Compact Concept affect to Overall Satisfaction

H5e Green & Eco-friendly infrastructure affect to Overall Satisfaction

The Hypothesis shows the perceived performance of IFEZ Authority affect to the satisfaction of IMC. Among the main hypothesis and five components, ‘total perceived performance’ was positively confirmed as a most affected component to select IMC, ‘improving country brand value’ and ‘working experience as public sector’ following.

However, ‘achievement of foreign direct investment’, ‘Smart & Compact concept’ and ‘eco-friendly infrastructure’ was rejected.

When survey respondents assume that select the IMC, ‘improving country brand value’ and ‘working experience as public sector’ are fulfilled their need of satisfaction.

Table 10. Regression Analysis to ‘Perceived Performance’ affect to ‘Overall Satisfaction’

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.275	.932		3.515	.001
	If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-① Improving Country Brand Value	.416	.230	.269	1.810	.075
	If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-② Working Experience as government organization	.455	.263	.282	1.730	.089
	If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-③ Foreign Direct Investment Achievement	-.339	.228	-.224	-1.486	.142
	If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-④ Smart & Compact Concept (Applied urban infrastructure based by ubiquitous technology)	.208	.205	.156	1.016	.314
	If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free E...-⑤ Green & Eco-friendly Concept (Equipped green infrastructure & has related potential to invite Green Climate Fund from UN)	-.130	.244	-.087	-.532	.597

a. Dependent Variable: How much the IFEZ Model Consulting (IMC) would be satisfied your need of developing Special Economic...

H6: ‘Confirmation of IMC’ affect to ‘Overall Satisfaction of IMC’

As Table 11 shows. The results of the regression analysis found that *p*-value is almost 0 (r-square = .692) for the conformation of IMC affect to satisfaction of IMC. Results showed *p* < .05 (*f*-value = 152.632, Hypothesis is accepted within α sig. of 5%) Thus, alternative hypothesis 3 was accepted.

The survey respondents think confirm for IMC to help developing special economic zone in their country and the fact fulfilled their need of satisfaction.

Table 11. Regression Analysis to ‘Confirmation’ affect to ‘Overall Satisfaction’

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.705	.411		1.717	.091
	After recognized above information, how much do you confirm for IFEZ Model Consulting (IMC) to help...	.859	.070	.832	12.354	.000

a. Dependent Variable: How much the IFEZ Model Consulting (IMC) would be satisfied your need of developing Special Economic...

In conclusion, 4 hypotheses (H1, H2, H3 and H6) are accepted and H4 are H5 partially accepted statistically significant as summarized in table 12.

Table 12. Summary of the Hypotheses Testing Results

H1: ‘Awareness’ affect to ‘Expectation’ if the performer has similar performance.	Accepted
H2-1 ‘Expectation’ affect to ‘Improving Country Brand Value’ H2-2 ‘Expectation’ affect to ‘Working Experience as government organization’ H2-3 ‘Expectation’ affect to ‘Foreign Direct Investment Achievement’ H2-4 ‘Expectation’ affect to ‘Smart & Compact Concept’ (Applied urban infrastructure based by ubiquitous technology) H2-5 ‘Expectation’ affect to ‘Green & Eco-friendly Infrastructure’ (Equipped green infrastructure and Etc.)	Accepted
H3: ‘Expectation’ affect to positive ‘Confirmation’ if IMC could reach its need or want.	Accepted
H4: ‘Perceived Performance’ affect to positive ‘Confirmation’ if IMC could provide similar service like IMC.	Accepted
H4a ‘Improving Country Brand Value’ affect to ‘Confirmation’	Accepted
H4b ‘Working Experience as government organization’ affect to ‘Confirmation’	Accepted
H4c ‘Foreign Direct Investment Achievement’ affect to ‘Confirmation’	Accepted
H4d ‘Smart & Compact Concept’ affect to ‘Confirmation’	Not Accepted
H4e ‘Green & Eco-friendly Infrastructure’ affect to ‘Confirmation’	Not Accepted
H5: ‘Perceived Performance’ affect to ‘Overall Satisfaction’	Accepted
H5a ‘Improving Country Brand Value’ affect to ‘Overall Satisfaction’	Accepted
H5b ‘Working Experience as government organization’ affect to ‘Overall Satisfaction’	Accepted
H5c ‘Foreign Direct Investment Achievement’ affect to ‘Overall Satisfaction’	Not Accepted
H5d ‘Smart & Compact Concept’ affect to ‘Overall Satisfaction’	Not Accepted
H5e ‘Green & Eco-friendly Infrastructure’ affect to ‘Overall Satisfaction’	Not Accepted
H6: ‘Confirmation’ affect to ‘Overall Satisfaction’	Accepted

VI. CONCLUSION

6.1 Discussion and Limitation of the Study

This study measures the satisfaction of Incheon Free Economic Zone (IFEZ) Model Consulting by applying the modified extended expectancy confirmation model which revised by the expectancy disconfirmation model (1980). This study researched the relationships between elements of customer satisfaction; expectation, performance, confirmation / disconfirmation and satisfaction and also including awareness which is an element from the customer behavior. Additionally, This study measured the effect on each elements of Customer Satisfaction like ① awareness of IFEZ Model Consulting (IMC) affect to expectation of IMC; ② expectation of IMC affect to perceived performance of IFEZ; ③ expectation of IMC affect to confirmation of IMC; ④ perceived performance of IFEZ affect to confirmation of IMC and ⑤ perceived performance of IFEZ affect to satisfaction of IMC; and ⑥ confirmation of IMC affect to satisfaction of IMC.

For the better measure of effect of each elements, the perceived performance of IFEZ is specifically divided in 5 components; ① improving country value, ② working experience as public sector, ③ achievement of foreign direct investment, ④ development concept of smart & compact concept which applied urban infrastructure based by ubiquitous technology and ⑤ green & eco-friendly infrastructure which have related potential to invite Green Climate Fund from UN.

This study adopted qualitative research and quantitative research. The findings from qualitative research led to more detailed need of the potential customers and helps building solid survey question of the quantitative research. For the quantitative research, a survey was conducted and the survey questionnaire was designed from the findings of the qualitative

research. 20 survey questions were developed for the study. And the survey questionnaire distributed from an online survey website, 'Qualtrics.'

In order to prove the hypotheses, this study applied statistical analyses such as multi and simple regression analyses. Most of hypotheses are accepted except the some part of performance of IFEZ which cannot be applied into the survey respondents' country currently.

The results of the research found that IMC's satisfaction can measure the difference from expectation of IMC and performance of IFEZ.

6.2 Future Research (Limitation of the study)

The involvement of the consulting always brings curiosity about IMC's customer. The research gives opportunity to respondents to provide basic information about IMC by distributing survey. Also, this study applied statistical analyses like multi and simple regression analyses with the aim of prove the hypotheses by qualitative and quantitative research. Applying the modified extended expectancy confirmation model to examine the IMC and measuring its satisfaction.

The satisfaction of IMC measured by perceived performance of IFEZ because IMC does not finished its first consulting on the client country. For future research, will measuring the satisfaction from its performance.

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APPENDICES

Appendix 1

Survey Questionnaire

Thank you for your kind participation. This survey asks your opinion about Satisfaction in Particular Urban Model Development Consulting of Incheon Free Economic Zone, South Korea.

Please take 10 minutes to answer the following questions. The questionnaire consists of 13 questions (excluding 7 questions of demographic information) and will take 10 minutes or less. This questionnaire will be conducted with an online Qualtrics-created survey.

There are no direct benefits for participants. However, it may help you to understand more about procedure of Urban Model Development Consulting of Incheon Free Economic Zone.

We are assured that the data you give will be strictly confidential, and no one would know how you answer. Since our survey is not a test, there is no right or wrong answer, and your participation in this survey is voluntary. The sole purpose of this work is academic research purpose only. No individual or organization will be related with any research analysis or reports connected to the survey data. Samples will be selected from the people, who work at government office in several countries.

For better survey, your sincere responses shall be highly appreciated. If you have any questions, please do not hesitate to contact chicyee@gmail.com. Thank you.

Please read carefully and check on the appropriate square blanks

Awareness of Special Economic Zone in Korea

1. Do you recognize about economic development history of South Korea? (Select one)
 Yes No (If no, stop here)
2. How much do you aware that South Korea has Special Economic Zones such as Incheon Free Economic Zone? (Select one)
None ◀ 1 2 3 4 5 6 7 ▶ A lot

Expectation and Perceived Performance

3. Do you have plan or had an experience to develop city or to designate a special economic zone in your country? (Select one)
 Yes No
4. Do you think that it is important to develop a special economic zone in your country to help developing your country's economy? (Select one)
 Yes No
5. How much do you think that it is important to bench-mark successful urban model to apply in your country? (Select one)
Not important ◀ 1 2 3 4 5 6 7 ▶ Very important
6. How much do you want to receive information and knowhow about management and operation of

successful urban model? (Select one)

None ◀ 1 2 3 4 5 6 7 ▶ A lot

7. Like your understanding of economic history of South Korea, how much do you expect Incheon Free Economic Zone Authority (IFEZ) as South Korea Local Government carry out the IFEZ Model Consulting (IMC) ? (Select one)

Less expectation ◀ 1 2 3 4 5 6 7 ▶ High Expectation

8. How much do you think you can consider to select consulting of IMC which fully organized by public sector by your expectation? (Select one)

None ◀ 1 2 3 4 5 6 7 ▶ A lot

9. If you select IFEZ Model Consulting (IMC), which contents of perceived performance of Incheon Free Economic Zone Authority (IFEZ) Authority is most affected? (Select one for each)

	Strongly not affected	Accepted not affected	Usually	Acceptly affected	Strongly affected
① Improving Country Brand Value					
② Working Experience as government organization					
③ Foreign Direct Investment Achievement					
④ Smart & Compact Concept (Applied urban infrastructure based by ubiquitous technology)					
⑤ Green & Eco-friendly Concept (Equipped green infrastructure & has related potential to invite Green Climate Fund from UN)					

10. What do you think most significant contents of perceived performance of IFEZ Authority to apply for developing a special economic zone in your country? (Select one for each)

	Most Insignificant	Insignificant	Neutral	Significant	Most Significant
① Improving Country Brand Value					
② Working Experience as government organization					
③ Foreign Direct Investment Achievement					

④ Smart & Compact Concept (Applied urban infrastructure based by ubiquitous technology)					
⑤ Green & Eco-friendly Concept (Equipped green infrastructure & has related potential to invite Green Climate Fund from UN)					

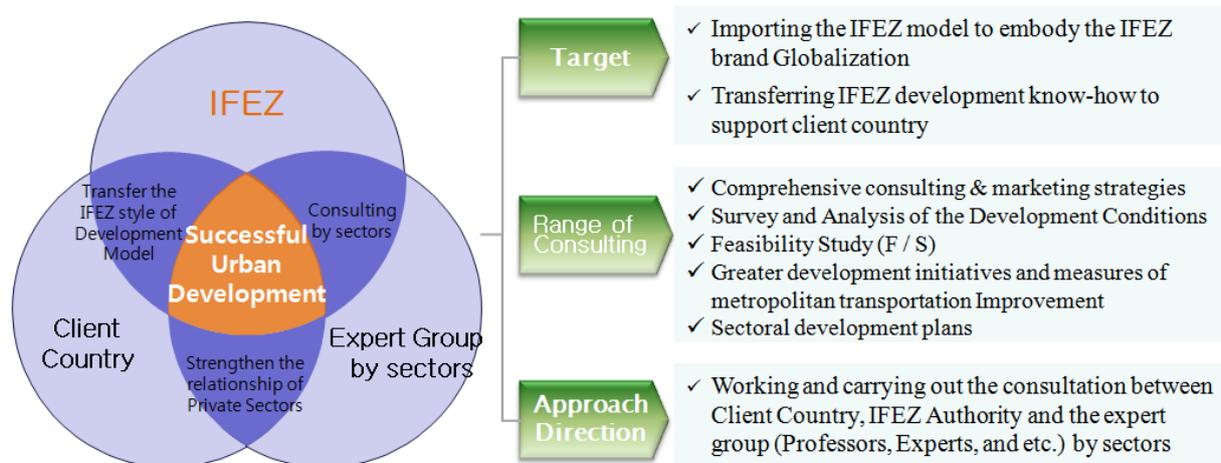
Information of IFEZ Model Consulting

► IFEZ Model Consulting in Steps

Step 1	⇒	Step 2	⇒	Step 3	⇒	Step 4
Feasibility Studies		Master Plan		Action Plan		Construction & Operation

► The Structure of IFEZ Model Consulting

Transferring strategic know-how, reducing trial and error for client country and providing overall consultancy to help completing a new urban development in a short period of time



11. After recognized above information, how much do you want to have more relevant information about IMC? (Select one)

None ◀ 1 2 3 4 5 6 7 ▶ A lot

12. After recognized above information, how much do you confirm for IMC to help developing special economic zone in your country? (Select one)

Less confirmed ◀ 1 2 3 4 5 6 7 ▶ High confirmed

13. How much the IMC would be satisfied your need of developing Special Economic Zone in your country by given information? (Select one)

None ◀ 1 2 3 4 5 6 7 ▶ A lot

Demographic Information

1. What is your gender? (Select one) Male Female
2. What is your nationality? _____
3. How old is your age? (Select one)
 20 - 29 30 - 39 40 - 49 50 - 59 60 or older
4. What is your current or final education background? (Select one)
 Bachelor degree Master degree Ph.D.
5. Which of the following best describes the department you work in? (Select one)
 Mayor / City Council Law Enforcement – Police, Attorneys, etc. Financial / Accounting
 Engineering & Development Public Affairs Municipal Programs – Youth, Parks and Recreation, Water, etc. Others _____
6. Which of following best describes your position here? (Select one)
 High-level officials Middle-level officials Low-level officials
 Others _____
7. What is your annual household income? (Optional: If you are unwilling to answer this question, please just skip this)
 Less than 10,000 USD 10,000 ~ 29,900 USD
 30,000 ~ 49,900 USD 50,000 ~ 69,900 USD
 70,000 ~ 89,900 USD More than 90,000 USD

Thank you for your kind cooperation!

Appendix 2

Incheon Free Economic Zone Development Flow

