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MEASURING SERVICE QUALITY IN CONSTRUCTION PROJECT MANAGEMENT SERVICE AT AIC MANAGEMENT CO., LTD- A DIMENSION-BY-DIMENSION ANALYSIS

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Abstract: In construction industry today, the consultancy companies need to improve service quality- an important part of consultancy service - in order to enhance customers' loyalty, boosting business for future projects and word of mouth reputation. The question is whether the dimensions applied to measure the quality of the generic services can be applied to professional services such as construction project management service? If yes, how to do so?

The research aims to conduct an assessment on service quality at AIC Management Co., Ltd based on SERVQUAL, a form of dimension-by-dimension analysis. The outcome would provide management with a big picture of current service quality. Consequently, recommendations will be provided according to the findings.

Keywords: AIC Management Co., Ltd, construction project management service, dimension-by-dimension analysis, service quality

INTRODUCTION

In Vietnam, under the positive economic growth of the nation, the construction sector has been forecasted to grow by annual rates of 10-15% by 2017. Following economic growth, the demand for high-rise buildings increases and therefore, the need for efficient construction are evident. In addition, mass renovations in law and regulations encouraged investors from various sectors to focus on construction investments which have been seeing exponential increase due to the high demand of residential housing and infrastructure development.

Nowadays, clients are more demanding than ever before and *investors nowadays are not easy to please*. Accordingly, the requirements of clients on improvements in terms of quantity, cost, and technology are also increasing. It is commonly understood that the completing projects on-time and on-budget, or with approved variances, results from the application of project management principles.

Currently, project management service has become a general interest to most popular service firms in the market. As a result, competitions among construction consultancy groups become stiffer and stiffer. Winning a consulting contract depends on a consultancy's competence as well as the assurance that all expectations are met. However, client's satisfaction throughout the service's delivery is the key. Therefore, it is critical that quality of service be a priority in future adjustments in order to secure customers' loyalty and strengthen business relationships.

AIC Management Co., Ltd was established in Ho Chi Minh City in 1997 to provide engineering and project management services for many development projects in Vietnam. The company has been granted full license of engineering consultancy under 100% Foreign Owned

Company status. AIC Management Co., Ltd has grown and diversified its services since establishment. The company's strength lies in its experienced staff and a multi-disciplined and multi-cultural environment. AIC Management Co. Ltd needs to improve its service quality to meet the high demand from the construction clients as well.

THEORY BASE

The nature of service

A service has been defined by many scholars: Kotler et al (2002), Grönroos (1979, 2001), Gummesson (1993), Lovelock (1991). In a brief way, Kotler & Amstrong (2001) defined "*services are a form of a product that consist of activities, benefits, or satisfactions offered for sale that are essentially intangible and do not result in the ownership of anything*". Services have the following four key distinguishing attributes: **Intangibility, Inseparability, Heterogeneity, Perishability** (Kotler & Bloom, 2002).

Kotler & Keller (2006) classified products/services into three categories in the continuum based on the difficulty of evaluation of products/services quality: **Credence-based qualities**: the buyers find it hard to evaluate even after purchase such as legal service, medical service, and education service, **Experience-based qualities**: the buyers can evaluate after purchase such as hairdressing, travel, accommodation, hotel service, **Search-based qualities**: the buyers can evaluate before purchase such as clothing, in which most of services are in the first two categories. As a kind of credence–based services, **professional services** are also intangible, inseparable, variable and perishable. Unlike other service organizations, professional service providers have to deal with high level of uncertainty, limited service differentiability, quality control difficulties, have to face ~~with~~ some distinctive problems that have not been faced by other types of service organizations such as client uncertainty, limited service differentiability, quality control difficulties, and several obstacle to mounting a successful marketing effort (Kotler *et al,* 2002). Named as goods of credence, the professional services attract the buyer by great faith in consultants who sell the service because services are usually lacking in many attributes that a buyer can confidently and competently evaluate before, or even after, making a purchase decision (Kotler & Bloom, 1984).

Project management service in the construction industry

Although the construction industry produces tangible items and has been categorized as a production instead of service activity, the industry still has some following features that have been characterized for service sector: they cannot be stored means perishability attribute; it is impossible to sell the expertise inside the landmark once it is committed or used; the processes of service production and service consumption process are inseparable; the fact that construction products cannot be standardized creates the nature of heterogeneity of the industry; the intangibility in the construction process can be shown in the preliminary design.

There are various definitions of project management: Cleland (1990), Kerzner (1992), Pinto & Kharbanda (1995). Emphasized on client satisfaction, Walker (2002) conceptualized project management as the planning, control and coordination of a project from conception to completion on behalf of a client. It is concerned with the identification of the client's objectives in terms of utility, function, quality, time and cost, and the establishment of relationships between resources. The integration, monitoring and control of the contributors to the projects and their output, the evaluation and selection of alternatives in pursuit of the client's satisfaction with the project outcome are fundamental aspects of construction project management. In summary, project management brings together **a set of skills, a suite of tools**, **a series of processes**.

Service quality of the construction project management

There are a number of different definitions to service quality from scholars: Peters & Austin (1985), Zeithaml & Bitner (2000), Boomsma (1993), Lewis (1993), Juran (1988)…. One that is commonly used claims *service quality as the extent to which a service meets customers' needs or expectations* i.e. whatever the customers say it is and whatever the customer perceives it to be (Buzzel & Gale, 1987; Lewis

& Mitchell, 1990; Dotchin & Oakland, 1994; Asubonteng *et al.,* 1996; Wisniewski & Donnelly, 1996).

The Gaps model of service quality was formed by Parasuraman *et al* (1985) based on ten determinants: **Reliability; Responsiveness**; **Credibility; Competence, Access**, **Courtesy, Security, Communication, Tangibles, Understanding/ knowing the customer**. Then, Parasuraman *et al* (1988) performed scale purification on their original model of ten determinants and reduced their model to only five dimensions, which include **Tangibles, Reliability, Responsiveness, Assurance** and **Empathy**.

Recently, Ong (2007) summarizes 12 essentials elements for the/no article effective project management needed in formulating and facilitating the/no article effective project management to achieve project excellence and success:

1. Understanding of the Project's Objectives and Priorities
2. Understanding of the Project Nature and Characteristics
3. Management of the Project Risks
4. Selection of a suitable Project Team
5. Using of a suitable Building Procurement System
6. Use of a suitable Contractual Arrangement
7. Effective Organization Structure
8. Having proper and appropriate Planning
9. Effective Monitoring and Control Systems
10. Good Information Recording and Retrieval Systems
11. Ability to adapt and Manage Change.
12. Good Commercial/Business and Human Relations

Murugavarothayan *et al.* (2000) conclude(d) the model of criteria for customer to evaluate the construction professional service offered, in which the determinants of consultant service quality will be listed and ranked in an order of priority: **Reliability, Assurance, Empathy, Time of Project completion, Responsiveness, Function of completed project, Quality of completed project, Final cost, Tangibles.**

The findings of Hoxley's research (2000, 2004) are (were) that construction professional service quality can be described as a four-dimensional construct **"what", "how", "when"** and **"who"** with 27 item(s) scale

Giao & Trang (2010) has developed a system of 41 items to

1. **Assess service delivery process** will be based on the original 5 dimensions of SERVQUAL. They are: **Tangibles** (4 items); **Reliability** (6 items); **Responsiveness** (4 items); **Assurance** (9 items); and **Empathy** (7 items);
2. **Assess the outcomes** will be followed 4 achievements that a construction project should aim at. They are: **Function** (3 items); **Quality** (2 items); **Time** (2 items); **Cost** (3 items);

This research applied that system from Giao & Trang (2010) and the SERVQUAL model basic formula of **service quality = Customers' Perceptions (P) – Customers' Expectation (E)** or in short **Q = P – E.** The gap of performance-expectations is considered service quality for each dimension, and is evaluated as below:

$$SQ_j = \frac{\sum_{i=1}^{nj} P_{ij} - E_{ij}}{nj}$$

Where following stands for:

- ✓ SQ*j* - Service quality of a dimension j
- ✓ E*ij* - Company's expectations for an item and which relates to a dimension j
- ✓ P*ij* - Company's perceptive performance for an item and which relates to a dimension j
- ✓ n*j* - The number of items for a dimension j

ANALYSIS AND FINDINGS

The data are collected from people who are living and working in Ho Chi Minh City, all respondents have been involving in high rise residential blocks and complex building projects. It is established that 33.58% of respondents come from construction industry e.g. *Engineer/Architect*, and 37.96% of respondents are *Contract*

Manager/ Contract Administrator/ Cost controller who possess experiences in construction project investment. Both of the two groups are powered by Project owners to plays critical roles in the whole process of project implementation. Project investors who accounted for 15.33% of total respondents mostly come from other industries e.g. financial groups, trading groups and other economic fields. Their perception on quality of consulting service as standard or sub-standard is extremely crucial to service providers. The rest 13, 14% of the correspondents are individuals who play varied important roles in client's organizations e.g. heads of functional departments, managers, assistants, counselors, advisors and other roles. They do not directly control the operation of project management but could raise remarks to their bosses i.e. *project owners* on how smoothly the projects has been executed by a project management consulting organization.

Exploratory Factor Analysis

Among 137 feedbacks, 89 can be used in the analysis. We followed Giao & Trang (2010)'s suggested dimensions to assess the quality of project management service. The items analysis shows that 05 variables that have low corrected item-total correlation values: TAN2; RES13; F34; Q36 and C40 and were dropped out (table 1).

Table 1
Item analysis results

Scale	*Scale mean if item deleted*	*Corrected variance if tem deleted*	*Item total correlation*	*Alpha if item deleted*
TAN1	158.5693	223.5558	.4280	.9284
TAN2	159.9781	235.1392	-.0039	.9311
TAN3	158.4453	224.0135	.5279	.9274
TAN4	158.4234	225.0106	.4112	.9285
TAN5	158.5328	220.4419	.6348	.9263
REL6	158.6715	224.6193	.5382	.9274
REL7	158.5109	225.6047	.4530	.9281
REL 8	159.1314	216.8650	.8202	.9245
REL9	158.8029	220.6006	.5108	.9276
REL10	158.5036	220.8254	.6139	.9265
REL11	159.0365	218.1090	.7543	.9252
RES12	159.2044	226.3403	.5490	.9275
RES13	159.0073	232.5367	.1335	.9305
RES14	159.1387	221.6792	.5385	.9272
RES15	159.2847	223.4992	.4984	.9276
ASS16	158.5036	220.4577	.6580	.9261
ASS17	159.1168	218.8539	.4811	.9283
ASS18	159.4818	220.8103	.5193	.9275
ASS19	158.6861	227.5405	.4555	.9281
ASS20	158.6569	219.9770	.6559	.9261
ASS21	158.3869	224.8860	.5316	.9274
ASS22	158.4964	224.9136	.5231	.9275
ASS23	158.3212	223.3373	.6795	.9265
ASS24	159.0146	226.2057	.4818	.9279
EMP25	158.6204	221.6784	.4987	.9277
EMP26	158.6423	224.7461	.5426	.9274
EMP27	159.3650	227.6158	.3281	.9292
EMP28	159.2920	218.8994	.6476	.9261
EMP29	159.2993	221.9465	.6904	.9262
EMP30	159.2555	227.2651	.3371	.9292
EMP31	159.6350	222.3658	.5275	.9273
F32	158.4745	223.3541	.5623	.9271
F33	159.4307	228.3352	.3694	.928
F34	159.9416	226.6142	.2653	.9307
Q35	158.6496	225.7146	.4403	.9282
Q36	159.7810	229.3929	.1520	.9325
T37	158.7737	226.7499	.5142	.5142
T38	158.7956	228.1491	.3009	.9295
C39	159.0803	228.8097	.5176	.9281
C40	158.7883	230.1975	.2805	.9294
C41	159.0584	222.4966	.5657	.9270

Alpha = **.9295**

N of Cases = 137.0 N of Items = 41

Exploratory Factor Analysis

Details of the reiterated EFA process are showed on **Table 2.**

Factor 1: COMPETENCE

ASS 22	PM Staff are of relevant experienced
TAN4	Filing systems of project are well organized
REL 10	PM staff perform and complete promised tasks at the promised time
ASS23	PM Staff have relevant professional knowledge
F32	Completed buildings are suitability for purpose that meet client's needs

TAN5	Project documents are self-exploratory, comprehensive and authentic
TAN3	Providing right level of PM staffing i.e. proper post and proper personnel
ASS21	PM Staff effectively co-ordinate with other consultants and project participators

In general, this factor portrayed the expertise and competence of project team. Hence, it will be labeled COMPETENCE

Factor 2: CREDIBILITY

ASS 17	Regulation of banning PM consultants taking gifts from contractors
C41	Final cost is calculated accurate and reliable
EMP28	Convenient operating hours with appropriate single contact points
EMP29	Listen clearly, respect client's input and act accordingly
ASS20	Early identifying risk and taking action to avoid
TAN1	Modern equipment (Fax, phone…) and software (CAD, Etab, …) are available
REL9	PM Staff has its own internal quality assurance (QA) system
ASS16	PM Staff are trusted as they are honest and incorruptible

All of them express a credible service offered to client who contractually delegates power and money to project team to fulfill a project. It will be labeled CREDIBILITY.

Factor 3: EFFECTIVENESS

Q35	The quality of completed building is achieved as client's original expectation
ASS19	Awareness of health, safety and environment issues
T37	Buildings are completed on schedule
REL11	PM staff carrying out task technically accurately, no mistake

It explains the ability to perform a range of work-based tasks effectively to produce specific outcomes which could be visually check and control by clients. This factor will be labeled EFFECTIVENESS

Table 2
Final Rotated Component Matrix

Rotated Component Matrix[a]

	Component				
	1	*2*	*3*	*4*	*5*
ASS22	.869				
TAN4	.811				
REL10	.790				
ASS23	.789				
F32	.780				
TAN5	.769				
TAN3	.730				
ASS21	.536				
ASS17		.803			
C41		.760			
EMP29		.718			
EMP28		.668			
ASS20		.653			
TAN1		.620			
REL9		.591			
ASS16		.553			
Q35			.825		
ASS19			.798		
T37			.773		
REL11			.546		
ASS24				.820	
EMP25				.752	
RES15				.670	
REL8				.516	
REL6					.860
EMP26					.795
EMP30					.676

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 14 iterations.

Factor 4: COLLABORATION

ASS24	Working plan creativity and capability , especially in problem solving
EMP 25	Understanding clients' needs for a project
RES15	Always available and readiness to respond to clients' request
REL8	Cooperation and openness with customers in solving problem

Since all 4 items regarding to/concern communication and shared understanding to build a collective competence in the/no article project execution and conveying the importance of client involvement in the process, this dimension will be named COLLABORATION.

Factor 5: COMMITMENT

REL6	PM staff provide service as promised
EMP 26	Respect the commitment to the project and clients
EMP30	Keep client informed by periodically sending quality and time reports to clients

To narrow down the discrepancies during project implementation to tension the satisfaction graph to ensure a cooperative relationship not become adversarial, the most proactive step could be taken by consulting firms is sending a clear message to client: We are committed with what we promised. This is dimension of COMMIMENT

Internal consistency assessment by Cronbach's alpha (α)

Reliabilities coefficients of COMPETENCE dimension

Table 3
Reliability coefficients of COMPETENCE dimension

Scale	*Scale mean if item deleted*	*Scale variance if tem deleted*	*Item total correlation*	*Alpha if itemdeleted*
TAN4	31.2774	14.9666	.7441	.9143
ASS22	31.3504	15.5234	.8321	.9075
REL10	31.3577	14.9520	.7761	.9112
ASS23	31.1725	16.0720	.8063	.9107
F32	31.3285	15.6928	.7287	.9148
TAN5	31.3869	14.8860	.7939	.9096
TAN3	31.2993	15.7701	.7105	.9163
ASS21	31.2409	16.6989	.5860	.9250
Alpha =	**.9238**			
N of Cases = 137.0		N of Items = 8		

Table 4
Reliability coefficients of CREDIBILITY dimension

Reliabilities coefficients of CREDIBILITY dimension

Scale	*Scale mean if item deleted*	*Scale variance if tem deleted*	*Item total correlation*	*Alpha if item deleted*
ASS17	28.2555	16.8681	.7447	.8688
C41	28.1971	20.0712	.6137	.8798
EMP29	28.4380	28.4380	.7667	.8695
EMP28	28.4307	19.1441	.6660	.8748
ASS20	27.7956	18.9285	.7725	.8653
TAN1	27.7080	19.8259	.5265	.8888
REL9	27.9416	18.7760	.6297	.8791
ASS16	27.6423	19.6432	.6811	.8740
Alpha = **.8890**				
N of Cases = 137.0		N of Items = 8		

Table 5
Reliability coefficients of EFFECTIVENESS dimension

Reliabilities coefficients of EFFECTVENESS dimension

Scale	*Scale mean if item deleted*	*Scale variance if tem deleted*	*Item total correlation*	*Alpha if item deleted*
Q35	12.2628	2.3275	.6921	.7620
T37	12.3869	2.7831	.6682	.7801
ASS19	12.2993	2.7554	.6688	.7786
RES11	12.6496	2.2881	.6263	.8029
Alpha =	**.8260**			
N of Cases = 137.0		N of Items = 4		

Table 6
Reliability coefficients of COLLABORATION dimension

Reliabilities coefficients of COLLABORATION dimension

Scale	*Scale mean if item deleted*	*Scale variance if tem deleted*	*Item total correlation*	*Alpha if item deleted*
REL8	11.8394	3.5181	.6042	.7782
RES15	11.9927	3.5220	.5837	.7880
ASS24	11.7226	3.9078	.6173	.7793
EMP25	11.3285	2.7957	.7566	.7016
Alpha =	**.8131**			
N of Cases = 137.0		N of Items = 4		

Table 7
Reliability coefficients of COMMITMENT dimension

Reliabilities coefficients of COMMITMENT dimension

Scale	*Scale mean if item deleted*	*Scale variance if tem deleted*	*Item total correlation*	*Alpha if item deleted*
REL6	7.5620	1.6303	.6387	.7610
EMP26	7.5328	1.5302	.7466	.6597
EMP30	8.5255	1.3394	.6188	.8030
Alpha =	**.8095**			
N of Cases =	137.0		N of Items = 3	

In general, in case of Cronbach's alpha analysis, it is true that the more items, the higher reliability/it is true that quantity of items and level of reliability correlated positively. However, all dimensions of adjusted/adjustment with reliability coefficients $\alpha > .8$ will be considered of/no of GOOD internal consistency of the items in the scale.

Gap 5 analysis on the base of adjusted quality measurement scale

The modified quality measurement scale is now appropriate for the use of examining the AIC project management service at the moment. On the ground of 48 completed replies, we can examine Gap 5 i.e .the difference between what clients' expect from AIC service and what they perceive from the offers for further actions as followed:

- Monitoring service process, detect and track service failures, analyze complaint data
- Use findings to improve quality of service offered, prevent failures and dissatisfaction from happing repeatedly.

According to the perception value shown in the replies, the quality of AIC project management service is considered fairly well. The details of measurement and comments as shown as followed

The perceived service quality is the differences computed by subtracting the rating on an item dealing with the perceived service from the corresponding item to the expected correlatively. A negative gap score indicates that the actual service (the Perceived score) was less than what was expected (the Expectation score). Accordingly, service providers can obtain an indication of the level of quality of their service provision, and highlight areas requiring improvement.

Table 8
Gap score in project management service quality of AIC

Dimension	*Statement*	*Expectation Score (E)*	*Perception Score (P)*	*Gap Score (P) – (E)*	*Average for dimension*
COMPETENCE	ASS22	4.42	4.46	.04	**(.05)**
	ASS21	4.48	4.54	.06	
	REL10	4.5	4.38	**(.12)**	
	F32	4.56	4.44	**(.13)**	
	ASS23	4.67	4.58	(.08)	
	TAN3	4.38	3.98	**(.40)**	
	TAN4	4.33	4.38	.04	
	TAN5	4.27	4.44	.17	
CREDIBILITY	EMP29	3.65	3.58	.07	**(.03)**
	EMP28	3.73	3.90	.17	
	ASS17	3.88	3.71	**(.17)**	
	C41	3.98	3.90	(.08)	
	ASS20	4.17	4.29	.12	
	REL9	4.19	3.88	**(.31)**	

contd. table 8

Dimension	*Statement*	*Expectation Score (E)*	*Perception Score (P)*	*Gap Score (P) – (E)*	*Average for dimension*
	TAN1	4.27	4.33	.06	
	ASS16	4.40	4.46	.06	
EFFECTIVENESS	ASS19	4.31	4.33	.02	**(.05)**
	Q35	4.31	4.33	.02	
	REL11	3.96	3.88	(.08)	
	T37	4.21	4.06	**(.15)**	
COLLABORATION	REL15	3.65	3.81	.16	**.17**
	ASS24	3.92	4.19	.27	
	REL8	3.79	3.92	.13	
	EMP25	4.25	4.35	.10	
COMMIMENT	EMP30	3.38	3.50	.12	**(.03)**
	EMP26	4.38	4.29	(.09)	
	REL6	4.33	4.19	**(.14)**	

According to the mean expectation values, we can rank five dimensions in an order depends on the level at which the clients pay most attention. Ranking is shown in table 9. Among five dimensions, Competence is rated at the highest level because of the credence based attributes of the consulting service. The fact that Effectiveness is ranked the second since in practice, carrying out a project effectively and efficiently to ensure clients' benefit ~~is~~ free from loss is a challenge which makes all investors have great expectation on consultant teams. Sometimes adverse impact is internal rather than external e.g. impossible deadlines suggested by tenants or end users, insufficient resources, scope of the project keeps changing to suit the business plan, etc. Credibility and Commitment are the thirds, and Collaboration the fifth. It is founded there is no significant difference in mean values of the said three Cs.

Table 9
Ranking of dimensions in expectation values

Rank	*Items*	*Mean*
1	Competence	4.45
2	Effectiveness	4.20
3	Credibility	4.03
3	Commitment	4.03
5	Collaboration	3.90

Regarding perception values, the said order has a little change as followed:

Table 10
Ranking of dimensions in perception values

Rank	*Items*	*Mean*
1	Competence	4.40
2	Effectiveness	4.15
3	Collaboration	4.07
4	Credibility	4.01
5	Commitment	3.99

Clients have kept a great appreciation to Competence and Effectiveness dimensions. During the project implementation, AIC's consultancy team have has undertaken the service in a professional manner to satisfy clients' requirements, project standards and ensuring the final outcomes meet the goal of time and quality.

Regarding Credibility and Commitment dimensions, in general, they have approximate mean values of perception. Both have been considered as normative standards to enhance prestige of a consulting firm, and all activities related will be normally treated as indispensible practices to build confidence and faith in Clients.

Totally understanding that lack of customer involvement has proved fatal on many projects; AIC has constantly improved the coordination and team- client relation issues. This move is highly appreciated by clients because it creates a beautiful working climate among stakeholders and makes clients feel secure in project investments. Collaboration factor is ranked the third and enjoying a positive gap score.

In overall view, the average gap scores of the proposed measurement scale is so small that supposedly no adjustment to current service be undertaken. In detail, the results shown in table 8 say that there are discrepancies in expectations and perceptions of service provided. Visually, there are negative gaps to TAN3, REL9, ASS17, T37 and considered positive gaps to TAN5, REL15, ASS24 that show a need of correcting or enhancing the current service.

RECOMMENDATIONS

Based on the findings related to gap 5 analysis of AIC's project management service, we can have some recommendation(s) to enhance the competent project team and improve the criticized project staffing issues appropriately.

To enhance the Competent Project team

In a study on project management to identify human resource competencies factors and project performance impact on infrastructure projects in Vietnam, Thi & Swierczek (2007) pointed out that the factors of Manager Competencies and Member Competencies had a positive and significant relationship with Human Resource Competencies and finally impact on Project Performance. Thi & Swierczek have confirmed that these factors not only affect project performance but they also have an impact on client satisfaction and project acceptance.

Regarding to the case of AIC, *Manager Competencies* and *Member Competencies* that improve *Project Performance* could be developed through more appropriate training and occupational education. The training course should be undertaken by the firm periodically in order to get the firm staff upkeep with the ever evolutions in construction environment related to managerial skill, technical skill, construction legal documents and other issues that always challenge to the firm's consultancy activities. To do so, a training budget should be reasonably allocated and effectively used by applying fitness-to-purpose objectives of the firm. To the employees, such qualified training course offered by the firm will be regarded as a kind of career security, a non-money benefit to staff.

To consolidate the working procedure to make it better

Based on the results reported from the measurement of service quality by adjusted scale, it is noted that even though there is no significant negative noticeable gap scores e.g. provide service as promised and onetime, strict regulation, internal quality assurance policy…, AIC has still in need of monitoring service process, detect and track service failures to further better the working process and let clients aware of the intrinsic preeminent of the firm.

By improving the internal regulation, building an internal testing plan for early error detection, AIC will complete tasks on time, as promised and could deliver better quality service to clients. To do so, project team should be competent and project manager should be fully powered so that he/she could not only be an expert but also a facilitator who could smooth the workflow on site.

To improve staffing issues

Losing good employees will affect the performance of the current firm. When an employee leaves, it is difficult to find an identical replacement, in terms of knowledge, abilities, capabilities and expertise. According to Bessell *et al* (2002), managers often fail to utilize motivation in order to retain their employees. This is partly because they lack sound understanding of motivation, or it could be they fail to understand the needs of their employees. This is further supported by Oglesby et al. (1989), who claimed that most managers thought what motivates them, would therefore motivate their employees. Therefore, managers used the wrong techniques in retaining their employees.

The said misunderstanding is the main problems that are generally faced by the construction sector and it is no

exception to the case of AIC. In order to bring down turnover rate, motivation techniques should be applied based on comprehensive understanding of what motivate engineers. Very often, in Asian cultures, monetary benefit plays a big part in our/people's work, as well as motivation which are quite important to them. Besides that, the firm leaders should have better understanding of what inhibits staff from a satisfactory work in a day and avoiding some issues that cause stress to employees in their workplace. And from there, a corrective action may be suggested and discussed to provide a better understanding on the needs and the inhibitions inside company.

CONCLUSIONS

In Vietnam, the demand for high-rise buildings increases and the need for efficient construction are evident. As a result, project management service has become ~~of~~ general interest to most popular consulting firms in the market. Today, construction clients have become smarter and more demanding. They do not only and simply require projects that be delivered to time, budget and quality, work from day of handover, add value and reduced business risk (Williams, 2001) but also consider the results with high attention to all their needs and are thoroughly involved in the project's execution. Hence, the competence of consultancy organizations that can satisfy the client's needs, not only through the final outcomes but also in the whole delivery process, has been considered prerequisite in the selection consultant procedures. In practice, due to the fierce competitions in the consultancy service market nowadays, it is evident that more and more consultancy service organizations are showing greater concern to the quality of service. Better quality service leads to higher level of customer satisfaction.

Challenges to AIC Management Co., Ltd on how to become more prestigious and trust-worthy to clients and prospects for maintaining and developing the company brand in the future have been identified. And through the research, the factors affecting the quality of AIC's project management services have been pointed out also, that lead AIC to the way of improvement its service quality. The firm's top concern is retaining loyal customers in the context of fierce competition and demanding clients because today there are more and more rivals possessing the same strategy. In avoidance of risks of losing market share and competitiveness in key markets because of clients' switch to rivaling services, It is inevitable that AIC has to continuously improve service quality to enhance the customer's loyalty, boosting the business for future projects and word of mount reputation.

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