

# Project Financial Management and Modern Financial Slavery: The Case of a KSA Metro Project Start-up

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Received: Sep. 11, 2014 Accepted: Oct. 14, 2014 Published: December 1, 2014

doi:10.5296/ajfa.v6i2.6297 URL: <http://dx.doi.org/10.5296/ajfa.v6i2.6297>

## Abstract

This paper explores the personal financial viewpoints on the project management of a metro in KSA and more particularly focuses on the financial issues raised by a group of design engineering staff. The paper examines the scope, reflections, attitudes to the project management in their management and unpredictable way of the development and application of the company's financial policy to personnel.

The paper examines the personal financial factors, which contribute to the establishment and strengthening of work interactions between a single group of engineering personnel of twelve (12) small, client interacting working design facility for a metro development in KSA. The paper develops a model that attempts to conceptualise the findings from a diverse range of qualitative personnel opinion into an engaged framework.

Outcomes from this inquiry suggests that the project managers show clear failings in attitude to its staff and that individual opinion regarding personal finances may be a logical factor in the development of very real negative corporate judgments in this group and explores the derived themes of namely eight (8) main themes, namely Payment Issue; Trust Issues; Work Issues; Job Related; Managerial Related; Socially Related; Cost Issues; and Job Issues.

The outcomes shows clearly that the project management are not effectively managing the project as raised issues of staff financial slavery, project complexity problems, unviable cost overruns, delays to the project schedule through poor coordination, ineffective programme management of the projects activities, improper project preparation and managerial execution affect how the client trustworthiness may be stretched. The paper further suggests how these identified issues may be mitigated through the appropriate application of project management theory.

**Keywords:** Project, Management, Financial, Personnel, Metro

## 1. Introduction

Project management of a metro is a discipline that is seen by most people as complex, vast, uncompromising and difficult for all involved. As such, the project management literature is more focused on time, cost and quality considerations (Babu, & Suresh, 1996) on such a crucial role in construction (Edum-Fotwe & McCaffer, 2000). Project managers plan, execute, and monitor (Jabara, Ismail, Aziz, & Janipha, 2013) functional project events to accomplish the contractual client requirements. However, since the focus of project managers are more towards functional project concerns and issues to reduce project problems (Love, Edwards & Wood, 2011), internal financial issues are often imposed on staff increasing project exploitation (Serpella, Ferrada, Howard & Rubio, 2014), but lack managerial accountability and effectiveness (Avots, 1969).

Little has been reported in the literature surrounding project management of financial issues affecting engineers working on construction projects. Consequently, this paper explores the financial influences on the project management of a metro in KSA and more particularly focuses on the financial issues raised by a group of design engineering staff whom are “encouraged” to follow business policies and procedures that impose concerns on their personal finances. The influence of constructors business arrangements resulting in engineers being associated with difficulties concerning their personal finances has an immediate effect given the economic situation prevailing and its influences on human capital movement, especially in the Middle East.

## 2. Literature Review

### 2.1 Case Project Management at Site

In order to assess the ability of project management to manage design-engineering staff effectively on large construction projects, it would seem pertinent to establish some of the possible raised issues. Mezher and Tawil (1998) suggest teambuilding initiatives should be utilised to ensure that conflicts can be resolved easily. Further, Jamshidi, Zeinahvazi, Adel and Ghasemi Poor Sabet (2012) suggests comprehensively that little attention is given to managing personnel aspects in construction projects. Neither of these are considered capable of helping the present project situation. Another way was to assess the client’s preparation using Flyvberg, Holm and Buhl (2003) by planning, authorising and conducting post-sequence and event evaluation. On applying this assessment, it would appear that the client may not be aware of the issues raised by design engineering staff and thus have no knowledge of the implications such as turnover of 22%, schedule slippage of 54%, cost additive of 150% above estimate for the first 6 months, other legal and contractual implications such as an additional US\$4Mn in payments for missing critical design deadlines. It would appear that failing management (Hughes, 1986) through weakening project management capacity (Ika, 2012), inadequate project planning (James, 2005) and deficient project systems implementation (Chung, Skibniewski, Lucas & Kwak, 2008) has already cost the project an enormous amount of money with little to show for the efforts of the individuals attempting to manoeuvre through this colossal problem underpinning the project. Unfortunately, the reasons for such failure are many, such as no discernable staffing plan

(Schwalbe, 2010) capturing details of the project's resource requirements (Pinto, 2013) whilst establishing competency gaps in mission-critical positions as essential for good project management practices (Liua, Borman & Gao, 2014). Further, providing adequate administrative support was not available at site (Eichinger & Ulrich, 1995) and neither was allowing the questioning of project management ethical business judgments (Small, 2006) leading to questionable financial management behaviour (Farrell, 2003).

### *2.2 Case Project Financial Management*

Consistently matching initial project cost-estimates (Morris, 2008) can help raise client stakeholder confidence in the management of a construction project. However, actual cost overruns and schedule slips in the very short-term create tensions in the management of the project and leads to suggestions of inadequate management control and capability (Okpala & Aniekwu, 1988) due primarily to human resource issues (Jackson, 2002). Further, in the construction industry in KSA it would appear that cost overruns in the longer term maybe prevalent (Assaf, Al-Khalil & Al-Hazml, 1995) but in many short-term exercises, management have clearly failed to examine their operational systems and HR needs when developing appropriate cost-estimates (Baloi & Price, 2003). Additionally, cost overruns are seen as being initiated and built right from the start (Kholi & Chitkara, 2007) in poorly managed construction projects.

Reasons for cost overruns include poorly developed specifications which has also led to resource constriction and mismanagement (Chester & Hendrickson, 2005); inadequate and complex interfaces (Locatelli, Littau, Brookes, & Mancini, 2014); lack of experience of project management (Kog & Loh, 2012); unusual (Zou, Zhang & Wang, 2007) or unrecognised methods of risk management (Fisk, 2000); design variations (Kog & Loh, 2012); and not being able to manage human resources effectively (Jackson, 2002).

Given the economic issues prevalent in Western countries – Europe, New Zealand and Australia (where most of the design engineering staff were from) – this supports the notion that the design engineers were subject to difficult economic working conditions. However, given that the project worth is in the tens of billions of dollars, it is perhaps a little difficult to accept that money is an issue at this early stage – 6 months into a 6-year project. However, from a professional standpoint being subject to such HR managerial behaviour affects not only the individuals involved, but also their families, who succumb to bad labour conditions by reactions to poverty constriction (Bales, 1999; Bales, 2002) as the effective management of relationships is considered essential to good project management (Volckmann, 1997).

These concerns can be resolutely circumscribed as underpinning exploitative practices and termed as modern slavery and are now further discussed.

### *2.3 Case Project Modern Slavery Issues*

It is an anachronism, that in today's construction economy in the Middle East, that financial slavery practices still exist (van den Anker, 2004). Given the economic circumstances surrounding construction patterns of work in Europe, it is perhaps understandable to see individual engineers seeking work elsewhere (Shaw, 1999). In order to understand financial

slavery more effectively, the Oxford dictionary defines slavery as “a person who works very hard without proper remuneration or appreciation” (Oxford Dictionary, 2014); and debt is often used to control another person or have an inordinate influence on them (Global Research, 2014). Slavery of any kind today cannot be condoned, but unfortunately the “slavery of economics is very much of the present” (Telegraph, 2014). To do it openly and in a way that puts severe pressures on people’s livelihoods is perhaps a little unacceptable and dehumanising. Making staff pay for things that should be paid for by the employer is not a good way of doing business. Nor is it a means to develop a caring culture for people whose work requires that they abandon their home and live in another country. Economic dependence through participating in construction programmes in the Middle East, leaves individuals open to such abuse.

Consequently, driving the financial mobilisation of engineers has always been globalization (Doomernik, Penninx & van Amersfoort, 1997). This has created the economic ability for companies to behave in a way that offsets their risks – “let them pay if they want to work for us” gambit – representing disposable human capital (Bales, 2012). Further, making staff pay directly for things first, means that construction companies are circumventing the corruption issue by making lower staff responsible if corruption occurs rather than project managers. However, this has just recently changed in the UK through the publication of the Anti-Bribery Act 2010, by making an organisation culpable if it fails to have “adequate procedures” in place to stop bribery and corruption from taking place – wherever it takes place in the world. Consequently, this gives some protection to staff, but does little to stop the support and implementation of defined policies creating financial slavery activities.

Since the case reflects an American construction company, discussion of slavery aspects that affect their operations may be of use here. A definition of slavery in Article 1 of the 1926 Slavery Convention (updated and adopted by the UN in 1955) indicates that, ‘Slavery is the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised’ – Taking possession of a passport to prevent movement and having great influence on a person’s ability to leave a foreign country, are examples of this. However, the American project manager company has to be managed in ways that ensure compliance with anti-slavery law in the US – wherever it is operating in the world. For example, the 2010 California Transparency in Supply Chains Act: the first law of its kind. Since the company also operates in California, USA, it is globally required to adhere to this law - California’s SB657 – and will require that all such companies disclose what they are doing to prevent labour abuse in their supply chains.

#### *2.4 The American Company’s Culture*

This discussion would not be complete if the company’s managerial culture that is responsible for developing the metro wasn’t analysed briefly. It is an American company operating in the UK, across Europe and the Middle East. Consequently, an assessment of why it operates the way it does, may give some indication of why project management behave the way they do. However, the company would not operate this way in the UK, so why is this a financial “modus operandi” in KSA?

In essence, the company should be considered to have a knowledge-creating and sharing culture (Skyrme & Amidon, 1997); utilising technology to support the application of KM processes (Alavi & Leider, 2001); linking KM to support the developing business strategy (Maier & Remus, 2002); and tending to exploit good business practices through the appropriate application of KM (Goh, 2004). Unfortunately, the company in KSA behaves very differently. The company appears to be - in the overall strategic sense - a knowledge-intensive firm but not conforming to Lowendahl's (2000) typology as a strict technical service company, as the scope of its work arrangements mirrors an adhocracy (Mintzberg, 1979) or at best a soft-bureaucracy (Robertson & Swan, 2004) depending on a person's location in the project. In essence, the project is managed in a bureaucratic way, with design-engineering staff positioned as knowledge workers but without the apparent requirement of organisational or personal consideration. Thus, project management was focused on organizational performance (Seng, 1990) without knowing how to engage the substantive engineering workforce. The project is managed through the contextual and collective experiences, knowledge and capabilities that were seen as vital (Lawson & Lorenz, 1999) to the overall management of the project as their collective tacit knowledge provided mechanisms for developing and applying an appropriate business/project strategy. Unfortunately, mismanagement at this level has had serious repercussions further downstream that affected the design output, technical uncertainty (Morris & Hough, 1987) and negatively impacted on many individual's attitude to performing project work.

This brings up three distinct research questions:

- 1: In what ways do financial management affect the design-engineering staff attitude to project management at site?
- 2: What factors affect design-engineering staff desire to continue to spend money on behalf of the company?
- 3: What issues affect design-engineering staff interests in staying at site?

### **3. Methodology**

In order to develop a much broader approach surrounding the financial issues created within the engineering design facilities context, this empirical groundwork used an interpretative approach (Walsh, White & Young, 2008). This was an attempt to understand the perceptions of engineering staff regarding their opinions about the company's financial practices. Design engineering staff were considered specialist knowledge agents and actors (Benn, Buckingham, Domingue, & Mancini, 2008) as their opinions and experiences influenced the effectiveness of the design outcomes as essential project participants (Chua, Kog & Loh, 1999).

The research used a semi-structured interview process, which provided an appropriate element of context and flexibility (Cassell & Symon, 2004). Given the lack of appropriately focused research in this area using this type of methodology, this is seen as suitable for creating contextual data for the purpose of forming richer theory development (Cayla & Eckhardt, 2007).

The population for this study was made up from a total of twelve (12) design engineering personnel from differing engineering specialisms located at a single facility in a metro design/construction development – chosen through applying the approach of a targeted population of interest (Carman, 1990) and this also reflected the criteria of theoretical purpose, relevance and appropriateness (Glaser & Strauss, 1967). Further, using Glaser's (2004) sampling processes, a total of 8 engineers were thus determined as the resultant sample frame.

Each interview was audio recorded for future analysis. Interviews were conducted in English and took approximately one hour. All interviews were recorded digitally after gaining explicit permission, and were later transcribed verbatim using NVivo 11 software. The conduct of the interviews follows a similar process used by Gray and Wilcox (1995). Each interview was initially manually interrogated and coded initially using the Acrobat software according to sub-themes that 'surfaced' from the interview dialogue – using a form of open-coding derived from Glaser (1992a); and Straus and Corbin (1990). Each interview was treated and coded independently. Various themes were sensed from the use of the software packages, as well as from the initial manual-coding attempts. This dual form of interrogation was an attempt to increase the validity of the choice of both key themes and sub-themes through a triangulation process (Thurmond, 2004) and led to a more effective convergent validity (Huberman & Miles, 2002). In this way, it was possible to capture each respondent's comments across transcripts (Riessman, 1993) on each supported sub-theme and place them together for further consideration and analysis.

### *3.1 The Research Framework*

The outline of the research outcomes for this study is shown in Figure 1 below. The framework also illustrated below in Table 1, consists of five (8) main themes, namely Payment Issue; Trust Issues; Work Issues; Job Related; Managerial Related; Socially Related; Cost Issues; and Job Issues. Table 1 further shows the nineteen (19) sub-themes and subsequent issues raised from the literature forming the basis for this framework.

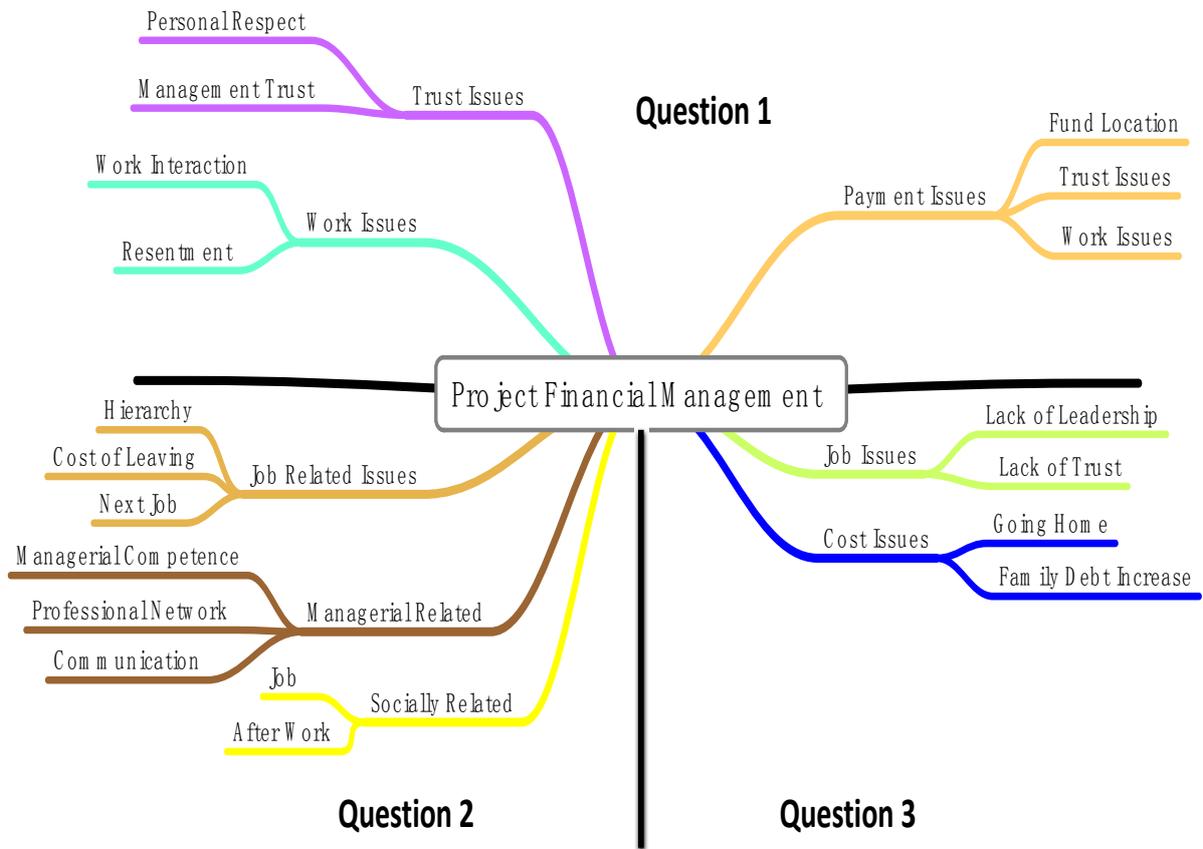


Figure 1. Project Financial Management Main Themes

Table 1. Research Questions, Major Themes, Sub-Themes

	Research Question	Main Themes	Sub-Themes	No. Refs
Q1	In what ways do financial management affect the design-engineering staff attitude to project management at site?	Payment Issue	Fund Location	11
			Funds Available	12
		Trust Issues	Personal Respect	9
			Management Trust	11
Work Issues	Work Interaction	7		
	Resentment	9		
Q2	What factors affect design-engineering staff desire to continue to spend money on behalf of the company?	Job Related	Hierarchy	6
			Cost of Leaving	11
			Next Job	9
		Managerial Related	Managerial Competence	11
			Professional Network	8
			Communication	9
Socially Related	Job	8		
	After Work	10		
Q3	What issues affect design-engineering staff interests in staying at site?	Cost Issues	Going Home	12
			Family Debt Increase	12
		Job Issues	Lack of Leadership	10
			Lack of Trust	9

The outcomes are stated below where the discussion focuses on the sub-theme elements within each key theme. Further, Table 2, below, shows the connection between the research question, major themes and number of respondents. The discussion format used in this paper reflects the respondent's voice through a streamlined and articulated approach for reporting. Consequently, the style adopted for reporting and illustrating the data is greatly influenced by Gonzalez (2008) and Daniels et al. (2007), focusing on the raised research questions and the resultant main themes.

Table 2. Major Themes and Respondent Numbers

Research Question	Major Themes	No. Respondent
1	Payment Issues	1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12
	Trust Issues	2, 3, 4, 6, 8, 9, 10, 11, 12
	Work Issues	3, 5, 6, 7, 9, 10, 11
2	Job Related	1, 2, 4, 5, 6, 8, 9, 12
	Managerial Related	2, 3, 4, 5, 6, 7, 8, 10
	Socially Related	1, 2, 5, 6, 7, 8, 11, 12
3	Cost Issues	1, 3, 4, 7, 8, 10, 12
	Job Issues	3, 4, 5, 8, 9, 11, 12

#### 4. Results

The results are presented below using the research questions as pointers and supportive empirical evidence through indicated extractions. Consequently, considering the first research question - In what ways do financial management affect the design-engineering staff attitude to project management at site?

##### Main Theme – Payment Issues

In terms of the sub-theme Fund Location, all interviewed design engineering staff used their own credit cards to fund their stay at site. As one respondent (R9) stated clearly, ...A group of us met with the project director and informed him that our financial situation is not for use by [Company]. It's our money, not theirs. He told us that it is [Company] policy to operate this way and it can't be changed. Another respondent (R1) indicated that, ...I have to pay using my British bank account for a job in Saudi... This doesn't make sense.

In terms of the sub-theme Funds Available, one respondent (R4) stated, ...Forcing me to use my own credit card – that not right. Further, another respondent (R7) affirmed, ...I just can't afford to do this. As a contentious issue, this is further illustrated by another respondent (R11) who described, ...I never thought I'd be caught like this. I'm a professional... ...this shouldn't be happening to me. Another respondent (R2) indicated that ...I can't afford to be here. I certainly can't afford to have a credit-card, but it doesn't have enough in it. As a last point on this subject, one respondent (R8) indicated that ...I have already had to raise my credit limit twice and it's still not enough.

##### Main Theme – Trust Issues

In terms of the sub-theme Personal Respect, one respondent (R3) indicated that, ...they [management] don't respect anyone. They just make you pay for things and the system may pay it. There's not much respect here. Another respondent (R6) suggested that, ...you're just a number with a bank account for them. When the system doesn't pay, they are not interested in solving the problem, I have to speak to someone in the States. Further, another respondent (R10) stated that, ...management are not here most of the time. They just don't care.

In terms of the sub-theme Management Trust, one respondent (12) indicated that, ...no I don't trust them at all. They won't fight for us. Another respondent (2) stated, ...It's easy for them, they don't have to spend their own money. They even quibble when I ask them to sign my expense sheet.

#### Main Theme – Work Issues

In terms of the sub-theme Work Interaction, one respondent (R3) indicated that, ...It is difficult to interact with management. They don't seem to want to discuss this thing. They seem only focused on project financials. Another respondent (R7) suggested that, ...we're working on the same project, but they seem miles away, as if they aren't interested.

In terms of the sub-theme Resentment, one respondent (R11) suggested that, ...I resent not being able to discuss everything in this project with management. They just do not want to be involved in what is a major financial issue. Further, another respondent (R5) indicated that, ...What is it with this management? Are they trying to get rid of all of us? One respondent (R6) typified the interview outcome as, ...I feel like I am paying to be here, not the other way round... It's not what I expected from this company.

Considering the second research question - What factors affect design-engineering staff desire to continue to spend money on behalf of the company?

#### Main Theme – Job Related

In terms of the sub-theme Hierarchy, one respondent (R6) indicated that, ...I think they are really putting on us. It's as if they have no money. Another respondent (R2) stated that, ...it is as if they are arrogant of getting people to work for them. I think they are power mad. Further, another respondent (R9) suggested that, ...the system does not support us. They have built an empire of paper.

In terms of Cost of Leaving, one respondent (R8) indicated that, ...I cannot afford not to have a job. Now I'm here, I can't afford to leave. Another respondent (R4) suggested that, ...they owe me money. I cannot leave this place right now without causing myself and my family some hardship.

In terms of the sub-theme Next Job, one respondent (R12) indicated that, ...I wish I could move to another company – but they won't let me go – I've asked, and now they make it more difficult for me financially by not paying my expenses on time. Another respondent (R5) suggested that, ...I have spoken with other engineers who are employed elsewhere – they have a much better job than me, but I cannot move now. Further, another respondent (R1) stated that, ...I need to move, but they won't let me. It is sad that they keep me here like a prisoner - financially or otherwise.

#### Main Theme – Managerial related

In terms of the sub-theme Managerial Competence, one respondent (R3) indicated that, ...I do not know where they managed before, but one is very aggressive, and the other manager isn't one. He just isn't. Another respondent (R10) suggested that, ...I think they must be

living in cuckoo-land. They just don't seem to get it. Some of us just won't take this XXXX and leave. Further, another respondent (R2) determined that, ...they are really out of it. They are kind of running around from one meeting to another, not really knowing what to do.

In terms of the sub-theme Professional Network, one respondent (R6) stated that, ...I am lucky I belong to a network. I can talk with other people who have worked in similar situations and help make it easier to accept. Further, another respondent (R5) stated that, ...we talk amongst ourselves and my network helps. But it is difficult. The most difficult project I've been on.

In terms of the sub-theme Communication, one respondent (R7) indicated that, ...management desperately need to go on a communication course. They are horrid communicators and worse managers. Another respondent (R4) stated that, ...no they [management] don't communicate. They just take over a meeting and try to belittle everyone into submission.

#### Main Theme – Socially Related

In terms of the sub-theme Job, one respondent (R2) states, .....the job is great, but I need to move, if I can - It's just the management here. Another respondent (R8) signaled that, ...the other people here are wonderful, it's a pity about the management. We don't get much social interaction with the management, but that's good though.

In terms of the sub-theme After Work, one respondent (R12) suggested that, ...we get together sometimes, even in the gym. But management don't care. They [management] haven't even invited us to dinner as a group. There are no social graces with these guys. Further, another respondent (R11) indicated that, ...there is no after work for management. Sometimes, there is no management either since they are in Dubai. So, nothing after work. Nothing.

Considering the third research question - What issues affect design-engineering staff interests in staying at site?

#### Main Theme – Cost Issues

In terms of the sub-theme Going Home, one respondent (R7) indicated that, ...I have now been waiting 2 months for payments to be made. I am still paying my way and I am in gross debt to the tune of £10000. I can't afford to move back home as I had friends here who resigned and who have received no expenses from [Company] once they have returned to the UK. Another respondent (R3) suggested that, .....I am expected to bear the financial cost first. Then [company] can think about reimbursement... and they don't always pay it, as I've been waiting for months... Further another respondent (R10) stated, ...I wish I hadn't come here. I am made to think about the finances, rather than enjoying the job. It stinks. I prefer to go home, but can't afford it now.

In terms of the sub-theme Family Debt Increase, one respondent (R1) stated, ...I have paid my own flight because [Company] couldn't make up their mind... I still haven't been paid for this. Another respondent (R8) suggested that, ...My bank manager does not like this

situation at all. It is demeaning to have to get extra loans to pay for things that [company] should pay for on international assignment. Further, another respondent (R12) stated, ...the further I am involved here the more debt I create. It's a disaster! Another respondent (R7) stated that, ...I can't get out of this because I am now too much indebted by the company. ...I am trapped.

#### Main Theme – Job Issues

In terms of the sub-theme Lack of Leadership, one respondent (R8) suggested that, ...they [management] are selfish. Leadership is something they have missing. I don't know what they've done before, but it sure wasn't leading. Another respondent (R11) indicated, ...from an engineering perspective they are obsolete. They shouldn't be here. Further, one other respondent (R9) suggested, ...it's a mess. We look to them for guidance and leadership. But they only deliver threats.

In terms of the sub-theme Lack of Trust, one respondent (R4) stated, ...it is difficult to leave this place as they take your passport without my permission. This is not right at all. Another respondent (R1) indicated that, ...I am convinced that management don't care about building trust. They are here for themselves. Hopefully they will move on. Further, another respondent (R12) outlined that, ...we do not seem to be important to them. I don't trust them at all. Sad really.

In order to triangulate some other data, an assessment was made of the work contract and how management treated staff. The result suggests that most engineers have a contract that with minimum salary conditions – same as in home country contract, but still with tax being extracted and kept by the company. It was also reported that the majority of engineers had their passport taken from them to be returned at the discretion of the company. Further, documentation indicated that staff had no right to give up their job to join another company; nor the right to personal movement within the country; nor the right to just get on plane out of the country. As one respondent suggested, (R5) ...It is unacceptable. It's like being treated like animals. Even in all this, one respondent (R9) indicated that, ...my family expects me to earn a living. I can't move from here now that I am owed so much, so I have to continue in the same way... trapped!

## 5. Discussion

In order to take this inquiry forward, the discussion focuses on the raised questions to help address some of the outcomes. Consequently, the main focus for this discussion are the characteristics that include, personal financial management; financial controls; cost overruns; project schedule delays; enhancing the quality of interaction; team management; ineffective design management and inaccurate evaluation of the project.

1: In what ways do financial management affect the design-engineering staff attitude to project management at site?

As a result of this inquiry, of continuing concern is the managerial response to issues of financial slavery. This is perhaps the most difficult - from a personal perspective - to manage

- and serves to illustrate the negative effect of the company culture (Hofstede & Hofstede, 2005); management payment intent (Doloi, 2013); and the quality of interaction (Sacks, Koskela & Dave, 2010) between project management and other engineers, and needs to be addressed using more integrated processes (Eastman, Teicholz, Sacks & Liston, 2008) such as teambuilding (James, 2005); top management training in project strategy development (Arttoa, Kujalab, Dietrichb & Martinsuo, 2008); meeting the needs of project staff (Roberts, 2005) - rather than treating the project as an off-shoot of the parent company (Milosevic & Srivannaboon, 2006); utilising appropriate program management techniques in order to reduce project confusion and enhance financial and process efficiency (Martinsuo & Lehtonen, 2007a); reducing the impact of an established hierarchal approach (Kerzner, 2003); and directing the project through program initiation (Pellegrinelli, 1997).

Project complexity (Kaming, Olomolaiye, Holt, & Harris, 1997) appeared to show incongruent and divisible responses from the project management, which may underpin the cost overruns (Gkritza & Labi, 2008), and the consequent delays to the project schedule through poor coordination (OGC, 2010), leading to ineffective programme management of the projects activities (Owen et al., 2010), and improper project preparation (Gray & Hughes, 2012).

Managerial execution (Wainaina, 2008) of the project is considered a sum of the factors associated with leadership and good project administrative practices – neither of which are considered optimum by the staff.

Although there appears to be greater pressure on the project managers to deliver the project on time (Patrick, Guomin & Jiayuan, 2007) due to increasing design complexity and scope (Enshassi, Mohamed, & Abushaban, 2009), the business behaviour of management does not fit well with its functional, legal or ethical financial management requirements in line with the contract and the approval of KSA financial regulators. Further, the perception of design-engineers suggest that project managers do not show that they accept that they need to engage in different practices to deal with the dynamic nature of the working environment of the project (Turner, Huemann & Keegan, 2008) leading to better financial management and controls. It may also be useful to consider that the combination of ineffective scheduling and financial project controls (project overrun and project expenses) and the ineffective personnel financial management of the projects leaves the project critically mired in confusion and mistrust (Zaghloul & Hartman, 2003).

The ineffective management of the design-engineers finances may also be considered a result of inadequate understanding of different social-cultural backgrounds (Gilbert & DeVilbiss, 2010) that impose on their ability to manage the project (Kwak, 2002). However, given that the majority of engineers are also from the same background context then this argument can be negated. The result of exposing engineering staff to such implausible financial mismanagement events is thus motivating engineers to want to leave (Oyedele, 2013).

2: What factors affect design-engineering staff desire to continue to spend money on behalf of the company?

In this project the hierarchy in operations suggests a negative use of power (Larson and Gobeli, 1989) that denigrates good management practices. It also appears to have a negative effect on staff moral, notions of leaving and how the money spent on behalf of the company can be reimbursed.

Since the project team commitment is seen as an important success factor (Chan, Ho & Tam, 2001) this element is considered a requisite in its application to this project. Unfortunately, the project management appears to fail to provide an atmosphere of team commitment to individual engineers (Peters, 2011) and thus may not be able to articulate how important this is when managing a project with so many design engineers. Further, team commitment may also offset the issues of leaving through greater social integration (Eskerod & Blichfeldt, 2005).

In terms of management, the level of competency (GAPPS standard) exhibited by project management especially in terms of context, criticality, collaboration, convergence and confluence (CPMCS, 2012) as perceived by engineering staff appears to be divisive, intransigent and incapable of leading to an effective project outcome according to the schedule and the quality demanded. This further implies that the level of managerial competency of project management (Martina, Hana & Jiří, 2012) does not appear to match international standards of application as the complex construction project requires additional competencies which the project management are not perceived to embrace or articulate; and present behaviour are not seen as proactive or relevant (Pulakos, Mueller-Hanson, O'Leary & Meyrowitz, 2012) to project requirements.

The notion of a professional network was raised which appeared to be used as moral support (Neeraj & Jha, 2011), developing employment relationships (Amit & Belcourt, 1999), and ongoing work-connections after the project concludes. However, in this instance, it could be assumed that the professional network provides reflective capability in order to support and underpin any exit decisions made during the project, as the project management did not appear to provide adequate standards of professional support and lack the application of business partnering (Francis & Keegan, 2006) where more effective financial decisions should be made. Communication appears to be enhanced (Earley & Mosakowski, 2000) with team integration policies and initiatives (Love, Gunasekaran & Lic, 1998) that are seen as ineffective in this project and could be enhanced through the application of partnering (Bresnen & Marshall, 2000) and teambuilding strategies.

Consequently, of immediate concern must be the ineffective design management and inaccurate evaluation of the project (Olawale & Sun, 2010), and the lack of suitable levels of ethical leadership (Waddock, 2007).

### 3: What issues affect design-engineering staff interests in staying at site?

When considering the project management who appeared not to care about whether engineers were getting into debt as a consequence of being on the project (Hart & Moore, 1994). This is part of a significant project management HR issue (Huemann, Keegan, & Turner, 2007), as it

affects corporate governance of projects (Sama, 2003) and influences project personal credibility (Maloney, 2002) and strategic contribution (Kerzner, 2013).

The company's project management appears to be making design-engineering staff experience a process whereby they pay-up first and then possibly get their money back. Forcing an engineer to forgo salary or expenses given to other engineers is an unacceptable part of a company's modern slavery strategy and the operating business model (Shenhar, 2001) must be modified in line with good project management practices (Koskela, Huovila & Leinonen, 2002). It further reflects the ineffectiveness of the country's labour volatility and self-regulation of labour services (Allain, Crane, LeBaron & Behbahani, 2013). Further, concern can be thrown at the effect of financial slavery on the individual who may react formally by withdrawing from the job, raising notions of inadequate project social justice (Cannon, 2009).

Project leadership demands more than resource focus and attention to programme details (Carter, 1988). It demands an engagement with staff emotions and communication (Geaney, 1995). In terms of this project, there would appear to be a reluctance by project management to provide appropriate leadership (Morris & Pinto, 2004) and the application of proper project skills (Engwall, 200) leading to staff perceptions of mistrust (Adler, 2005).

## 6. Conclusions

Managing cost performance as well as quality of design (James, 2005) when considered a success factor has been ignored by the project management in this project (Chan, Ho & Tam, 2001). The project management in this study also appears to demonstrate a conclusive lack of duty of care to its staff. It is project management's duty to prepare, design and bring to bear appropriate solutions (Sambasivan & Soon, 2007) to solve the issues at site. In so doing project management will provide a more enriched managerial environment (Doloi, 2013) for engineers to trust and rely on, whilst undertaking fairly difficult and complex jobs in the design of a metro.

The project management may need to point to contemporary developments in project management in order to understand how design-engineers need a unified performance-measurement system (Nassar & AbouRizk, 2014) and plan and develop how to use human capital and other resources to equitably deliver a successful project outcome.

## 7. Further Work

Since this inquiry assessed the little known area of personal finances and how this has led to suggestions of financial slavery, the research orientation could be extended to project managers and clients as to their views of this. Further implications could be drawn from such work and evaluations made as to how these could be mitigated in the present structuring and management of construction projects.

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