10. Creating and sustaining economic growth through HR

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1. INTRODUCTION

With the rise of the knowledge economy, the importance of intellectual capital has grown. The concept of intellectual capital was raised by Galbraith in 1969, since when the market to book value of corporations around the world has increased dramatically. The implication of this phenomenon is that value creating factors have shifted from tangible assets to intangible ones. Thus, in order to create and sustain economic growth, there is a need for both scholars and practitioners to break down the value creating process and identify the crucial intellectual capital that creates value.

However, there is no consistent definition of intellectual capital. For example, Chen et al. (2004) argue that intellectual capital includes human capital, structural capital, innovation capital and customer capital. Human capital is the source of all intellectual capital, and through structural capital and innovation capital, human capital can enhance customer capital. Wang and Chang (2005) use the Taiwanese information technology industry as an example and conclude that by using the human capital, performance can be increased through the enhancement of innovation capital and process capital. Sveiby (1997) suggested that market value is created by tangible net book value and intangible value, which includes external structure, internal structure and individual competence. Edvinsson and Malone (1997), using a similar structure, argue that market value is composed of financial capital and intellectual capital, including human capital, structure capital and customer capital.

Edvinsson (1997) also mentioned a 'Skandia navigator framework', arguing that in the past, 'human capital' is provided only in the form of 'labor' in corporations, and tangible assets such as machines are the source of value, so a historically based financial analysis is enough to modify the efficiency of material input, labor and machine usage. However, since the modern business focus on service and value created by intangible assets, human capital becomes the source of customer capital, process capital and innovation capital. All those intellectual capitals are future oriented and focus on the leading input instead of lagging result.

Based on the previous analysis, human resource management is a critical issue in management. Unlike the traditional resources, such as accounting assets, human capital is not a simple physical substance. Roos et al. (2005) define human capital as all people-related characteristics that cannot be replaced by machine or recorded by words, including capability, skills, tacit knowledge and human networks. Human capital triggers the value creation process of business, so it becomes important to retain human capital in the business.

Based on the resource based view theory, to optimize corporation profit, investment in human capital must be valid and efficient. However, based on our previous research, investment in human capital alone has little effect on firm performance. This is because the current accounting system is not designed for collecting human capital information, so the data collected from this system may not be an adequate measurement. The system may mislead organizations to invest in so called 'human capital' items but produce an irrelevant financial result. Thus, focus on the behavior perspective of employees can be a more efficient way to observe the influence of human capital investment.

Employee attitude is a critical issue for retaining talent within organization. This study investigates the relationship between employee participation, trust and affective commitment. We use path analysis and find out that both perceptions of financial participation and degree of non financial participation are positively associated with affective commitment. Also, the relationship between financial participation and affective commitment is mediated by trust. However, trust doesn't have complete mediation effects on the relationship between non financial participation and affective commitment. This result is of interest to decision makers concerned with human capital retention.

2. HUMAN RESOURCE ACCOUNTING

What is the component of human capital? Chen and Lin (2004) suggested that unique employees who can contribute high value to business are human capital. The investment in employees with these characteristics is an investment in human capital. Flamholtz (1999) classified the investment in human capital into three categories:

1. *Acquisition cost* e.g. recruitment and selection costs, cost of promotion within organizations.
2. *Development cost* e.g. cost of orientation, formal workshop training, formal and informal on-the-job training, and other development (such as formal outside training).
3. *Replacement cost* For example, separation costs and pension.

If human capital is the source of other intellectual capital and critical to the creation and sustaining of value, should performance be in better shape once we invest more in human capital? The answer is not necessarily. We carried out several empirical tests on different intellectually oriented industries since 2005, such as high technology electronics, software and pharmaceuticals. The results suggest that investment in human capital alone does not significantly influence firm performance. However, if we included the investment in other intellectual capital, such as structure capital or customer capital, it would create synergy and improve performance.

The disadvantage of using the accounting system to calculate investment in intellectual capital is that it is hard to collect the data. The traditional accounting system does a great job in recording hard assets but is not designed for collecting intellectual capital data. The lack of physical substance of intellectual capital makes it difficult to present the fair market value in monetary units. Even if we use formulae to calculate ratios that may represent intellectual capital, it is still unsatisfactory. To sum up, an incorrect measurement of human capital may mislead decision making and show no result from the current accounting system.

3. THE MEASUREMENT OF INTANGIBLES

Monetary investment is not an efficient tool to measure human capital. Instead, we argue that it is better to measure intellectual capital by using 'connections' between people and organizations. To involve human capital in the organization process, the most important thing is to 'keep' the high value and unique employee in the organization. Thus, we suggest that employee participation, trust and affective commitment are the three critical functions.

Kaler (1999) defined participating as a form of sharing among employees of business. Organizations may choose to share power and benefits with employees, which may increase employee trust in managers and the organization. Trust involves willing to increase one's resource investment in another entity, based on positive interaction between the two parties

(Tzafrir and Dolan, 2004). There is relatively little research discussing the relationship between participating and trust. For example, Coyle-Shapiro et al. (2002) considered financial participation and the trust between employee and manager. We will expand the aspects of participation, including non-financial participation, in this research.

Lastly, Meyer and Herscovitch (2001) defined commitment as a power that glues the related action guidelines between one entity and others. Employee commitment makes organizations retain valuable employees. When employee commitment exists, it means that an employee would like to contribute his or her efforts to the organization. A business devoted to gaining commitment from valuable employees may get better performance.

This research is developed on accounting firms. The reason we look to accounting firms as our sample is because they are in a human capital oriented service industry, and the high turnover rate is a common issue and constant problem in the industry. A high turnover rate means that every year, the employer loses huge training and development cost and has to go through the recruitment procedure again and again. Professional skills that can contribute high value can be viewed as human capital (Chen and Lin, 2004), which can help accounting firms to make profit and create value. Investment in retaining human capital in accounting firms will lower the separation cost and create value. After several conversations with the partners in the industry, we decide to discuss the relations among employee participation, trust and commitment in the accounting firms.

3.1 Employee Participation

Researchers classify employee participation as financial participation and participation in decision making (Bakan et al., 2004; Wilson and Peel, 1991). Kaler (1999) classified participating into two sorts: financial participation and operational participation. Operational participation includes delegatory, informatory and consultative. For delegatory participation, managers hand over the running of certain areas to the workforce, such as quality circles. Informatory is employee sharing in business information, which is essential to the process of running the organization. It is not just participation, but a specifically operational form of it. Consultative is not joint decision making in any straightforward sense. It is an opportunity for employees to influence decision making through persuasion. Combining the three characteristics gives the so called co-determinatory. The co-determinatory can be identified by degree (partial or full), level (procedure or strategic), mode (direct or indirect), and weighting (Kaler, 1999).

3.2 Financial Participation

Vaughan-Whitehead (1995) defined financial participation as employee incentives from all plans that are proportional to business performance, excluding salary. It can be classified as 'gain sharing', 'profit sharing' and 'workers' share-ownership'. In 'gain sharing', a gain is calculated by a pre-determined formula and the purpose is to encourage individual employees to make an improvement on corporate performance. 'Profit sharing' considers the contribution from all employees and can be deferred or paid in cash. 'Workers' share-ownership' is an incentive plan for an organization to offer its own capital stocks to employees at a bargain price or at no cost. Because of the capital structure of accounting firms, the financial participation in the research refers to 'gain sharing' and 'profit sharing'.

3.3 Non Financial Participation

Non financial participation is defined as people contributing to decision making, not because of their position but according to their ability. More precise information is communicated through an open channel (Mitchell, 1973).

Based on previous research (Dachler and Wilpert, 1978), Cotton et al. (1988) illustrate that employee non-financial participation includes (1) participation in work decisions; (2) consultative participation; (3) short-term participation; (4) informal participation; and (5) representative participation. This research will reference the classification by Cotton et al. (1988) to define non financial participation.

3.4 Trust

Trust is considered as the result of judgement about different characteristics of the trustee (Dietz and Hartog, 2006). Trust behavior is formed after the trustee has satisfied specific requirements (Tzafrir and Dolan, 2004). Considering these characteristics of trustee, we can know why trust occurred and measure the level of trust (Mayer et al., 1995), or understand which characteristics trigger the trust (Burke et al., 2007).

Mayer et al. (1995) summarized those characteristics as three criteria: ability, benevolence and integrity. Dietz and Hartog (2006) extended Mayer's research and add predictability as the forth criterion. In our research, we consider the manager as the trustee and the whole organization.

3.5 Commitment

Brown (1996) defines commitment as a force obliging the keeping of the promise. For years, researchers have developed ways to conceptualize and measure organization commitment (Meyer et al., 1990). Organization commitment can be divided into affective commitment, continuance commitment and normative commitment (Allen and Meyer, 1990; Meyer and Allen, 1984, 1991). Affective commitment is the employee's feeling of attachment to the organization. The employee 'wants to' stay in the organization. Continuance commitment means that the employee 'needs to' stay in the organization because of the separation cost. Normative commitment is the employee's feeling of obligation to stay in the organization and means that the employee feels they 'ought to"' stay in the organization. However, based on empirical study (Meyer et al., 2002), only affective commitment has positive correlation to organization performance. So we adopt affective commitment only as a variable in our research.

3.6 The Relationship Among Employee Participation, Trust and Commitment

3.6.1 Employee participation and affective commitment

According to the expectation theory (Vroom, 1964), people take actions because they expect that such actions will lead to a desirable result. So the employee would expect there to be some kind of connection between hard work, performance and reward. The level of support for that connection by the organization would have a connection to the employee attitude (Coyle-Shapiro et al., 2002).

Blau (1964) uses the basic assumption of social exchange theory and points out that if one side offers tangible or intangible benefits to the other side, there is a moral obligation for the other side to provide feedback to the benefit provider. Based on social exchange theory, Eisenberger et al. (1986) suggest the theory of 'perceptions of organizational support' (POS). The meaning of POS is the employees' beliefs about how much the organization cares about their contribution and welfare. Rhoades and Eisenberger (2002) clarify the cause and influence of POS. The cause of POS includes fairness, support of supervisor, organizational reward and fair working environment. The influence would be job satisfaction, affective commitment, performance and lower separation rate. The financial and non-financial participation can be seen as a cause of POS and in some cases the financial participation can be viewed as the reward from organization to employee. The implementation of employee participation is a signal that the corporation cares about the employee's welfare. So the employee may use affective commitment as the repayment to the organization.

Klein (1987) constructed a model arguing that there are three kinds of employee share option plan that can increase the satisfaction of the employee with the organization and cause employee commitment.

1. Intrinsic, or direct effect. The benefit of this plan is that the employees acquire the ownership rather than the plan itself.
2. Instrumental satisfaction model, or indirect effect in which employees' influence and control over organizational decisions is increased.
3. extrinsic model, whereby participation brings financial reward to employees and it is a system reward.

Bakan et al. (2004) performed an empirical study and found that when employees participate in the organization decision making process, it has a stronger positive influence on employees' attitude and organization commitmment. Thus, this research proposes the following hypothesis:

H1: Employee participation positively affects affective commitment;
H1a: Financial participation positively affects affective commitment;
H1b: Non financial participation positively affects affective commitment.

3.6.2 Employee participation and trust

Based on the exchange theory, we will help and give feedback to those who gave us favor. Lewis and Weigert (1985) argue that when we receive 'trust' from others, we become more willing to trust others. Singh (2009) took an empirical study showing that non-financial participation related to trust. Scholars also found the perception of profit sharing positively related to the trust in the employer (Coyle-Shapiro et al., 2002). Based on the literature review, we propose that:

H2: Employee participation positively affects trust in managers;
H2a: Financial participation positively affects trust in managers;
H2b: Non financial participation positively affects trust in managers.

3.6.3 Trust and affective commitment

Nyhan (1999) found that in public organizations, interpersonal trust can increase the affective commitment in the organization. He also found that if employees can participate in the decision making process, have feedback from the organization and have the chance to complete work autonomously, it will help productivity and organizational commitment (Nyhan, 2000). Perry (2004) also believed that trust in the employer will increase the level of organization commitment.

Coyle-Shapiro et al. (2002) argued that personal ability in contribution to the organization and the perception of relation with the organization are positively related to organization commitment. Trust in the manager can be an intermediate variable between personal ability in contribution to the organization and organization commitment.

Based on the literature review, this research suggests that the trust in the manager can increase employees' affective commitment. Once the employee builds up trust in the manager, it may mean that the employee has attached to the organization and has positive expectations of the employer. Human capital may be retained in this way. Thus we propose that:

H3: Trust in managers positively affects affective commitment;
H4: Trust has a mediation effect between employee participation and affective commitment;
H4a: Trust has a mediation effect between financial participation and affective commitment;
H4b: Trust has a mediation effect between non financial participation and affective commitment.

4. METHODOLOGY

4.1 Research Structure and Propositions

Based on the literature, we present our conceptual framework in Figure 10.1

4.2 Questionnaire and Sample

In our research, we use the questionnaire developed by Pendleton et al. (1998) for financial participation, and the questionnaire developed by Cotton et al. (1988) for non financial participation. We also modify the questionnaire developed by Dietz and Hartog (2006) and Mayer and Davis (1999) for the test of trust between employee and managers. Finally, the affective commitment questionnaire is adapted from the Allen and Meyer (1990) questionnaire. We use a Likert 5-point scale for research questions to investigate the response.

Pretesting was done to adjust the questions. After that, we distributed 370 copies of the questionnaire to the accounting firm employees, and

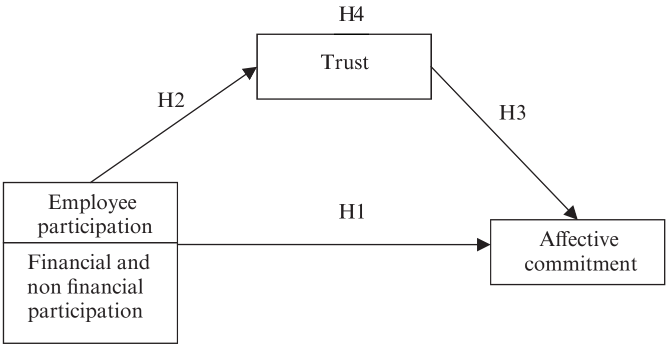


Figure 10.1 Conceptual framework

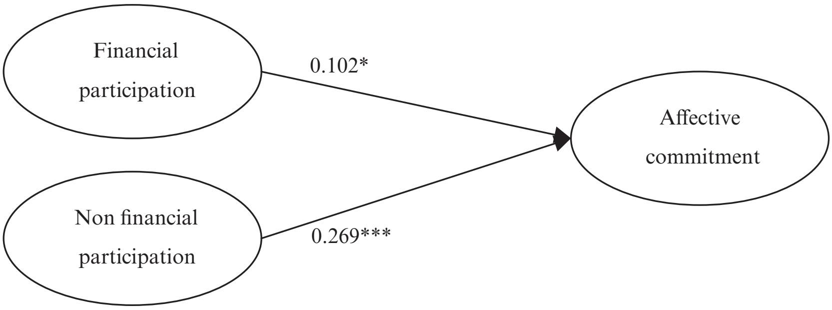
330 copies were collected back. After elimination of 49 invalid questionnaires, 281 valid copies remained for analysis. The KMO values for employee financial participation, non-financial participation, trust and affective commitment are 0.860, 0.835, 0.955 and 0.769 respectively. The Cronbach's α for each perspective is 0.807, 0.925, 0.956 and 0.807.

5. RESEARCH METHOD AND RESULT

We adopted the questionnaire investigation method and used statistical software SPSS 12.0 in the research. Regression and path analysis are performed to examine the relationship between perspectives. The results are showing in Figure 10.2 and Figure 10.3.

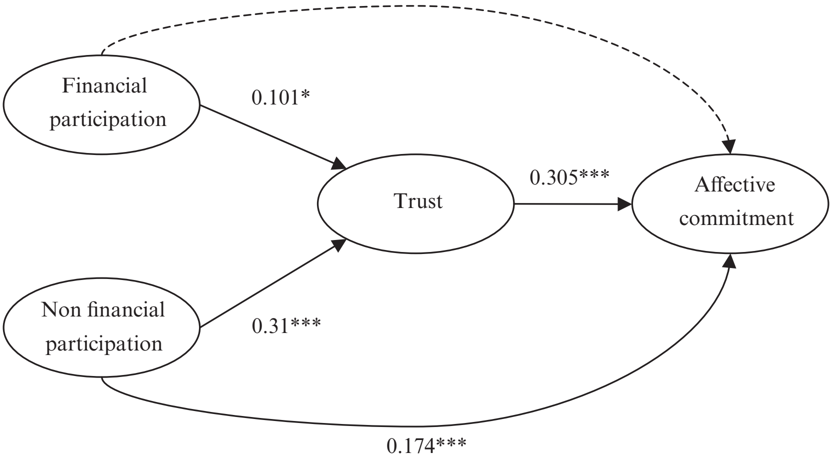
In Figure 10.2, we can observe that both financial and non financial participation has a positive and significant influence on affective commitment, which supports proposition 1. We also find that non financial participation has greater influence on affective commitment compared to financial participation.

In Figure 10.3, we add trust as a mediator variable to test the relationship between participation and affective commitment. Figure 10.3 shows that both financial participation and non financial participation have significant influence (0.101* and 0.31***) on trust; the empirical result supports propositions 2, 2a and 2b. The significant influence from trust to affective commitment (0.305***) also supports proposition 3. Finally, after we add trust as the mediator variable, the direct effect of financial participation to affective commitment becomes 0.071 and is not significant. Thus proposition 4a is supported. However, although the



Note: P< 0.01***, P<0.05**, P<0.1*.

Figure 10.2 Path analysis for participation and affective commitment



Note: P< 0.01***, P<0.05**, P<0.1*

Figure 10.3 Path analysis for participation, trust and affective commitment

direct effect of non financial participation to affective commitment is significant, it is lower (0.174***<0.269***) after we put trust as a mediator variable in the framework. The result suggests that trust has only a partial mediation effect to non financial participation and affective commitment. Proposition 4b is partially supported as well as proposition 4.

6. DISCUSSION AND CONCLUSIONS

Based on the empirical evidence, we found trust is a mediator variable to financial participation and affective commitment, but does not have full mediation effect for non financial participation and affective commitment. To maintain human capital in the accounting firm, we suggest that:

1. Although financial participation is adopted in the sample accounting firms, trust should be cultivated between employee and manager to gain affective commitment.
2. We suggest the accounting firms design activities or create an atmosphere that helps the construction of trust between employee and manager. It also helps to enhance the connection between non financial participation and affective commitment. Trust may also reduce turnover rate and maintain human capital in the accounting firm.

The result told us again that for investment in human capital such as giving incentives, the influence on firm performance may not be significant. Based on the resource-based view theory, the limited firm resources should be invested in the place that can improve the performance most. In this case, the accounting firm should first use resources in activities that can improve 'trust', and use non financial participation as a powerful way to improve affective commitment. Implementation of the two human resource strategies may cause the turnover rate to decrease and the performance to increase at the same time, thus creating and sustaining the accounting firms' economic growth through HR.

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