The impact of ethical issues on privatization: Employee perceptions of HRM systems, job satisfaction and organizational loyalty in the Taiwan telecommunications industry

Kevin P. Hwang and Ming-Kuen Wang*

Department of Transportation and Communication Management Science, National Cheng Kung University, Tainan, Taiwan.

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This paper explores organizational employee perceptions of Human Resource Management (HRM) ethical issues by measuring employee perceptions of HRM systems, job satisfaction, and organizational loyalty following the privatization of the telecommunications industry in Taiwan in (1996-present). A total of 815 employees of Chunghwa Telecommunications Company Limited, Far EasTone Telecommunications Company Limited and Taiwan Mobility Telecommunications Company Limited participated as subjects in this study. Following cross-cultural reliability and validity tests, structural equation modeling (SEM) was used to test the hypotheses. The findings reveal that changes in the management environment of the telecommunications industry have resulted in adjustments and transformations of employee perceptions regarding HRM ethical issues and actions. Previously employed HRM promotion and maintenance systems no longer correspond to certain levels of loyalty; employees today tend to act based on the influence of short-term relationships, and organizational loyalty is driven principally by reward systems. These findings provide modest support for the theory that job satisfaction plays an important role in terms of organizational loyalty, which is related to organizational employee perceptions regarding ethical business dilemmas. The results are useful for managers who seek to develop effective recruiting systems within the telecom industry. This paper also enriches the existing body of literature concerning employees’ ethical issues. Organizational changes point to a need for additional research on the different stages of the life cycle construction—a critical factor in work ethical functions; moreover, it is clear that employee values and ethical perceptions are associated with organizational value systems. Employee ethical issues responses to the privatization of the Taiwan Telecommunication industry serve as a valuable reference for other nations and industries facing privatization.

Key words: Perfection of HRM, job satisfaction, organization loyalty, telecommunication privatization, SEM, HRM ethical issues.

INTRODUCTION

Explorations of the roles played by human resource management (HRM) professionals in creating and maintaining organizational performance have been the focus of much research over the past two decades (Arthur and Boyles, 2007; Arthur, 1994; Huselid, 1995; Huselid et al., 1997). HRM is highly correlated with organizational performance (Hiltrop, 1996). Scholars have also found that HRM can assume the role of traditional organizational management and become a strategic asset to the organization (Gerhart and Milkovich, 1990; MacDuffie, 1995; Wright and Haggerty, 2005). The global telecommunications industry has grown out of the traditional use of capital and technology as competitive forces, and shifted to a knowledge-driven era that emphasizes knowledge management and intellectual capital. As such, knowing how to capture and manage human resources...
within an organization is a key success factor for competitiveness in this industry (Wright, and Boswell, 2002).

Researchers such as Purcell and Hutchinson (2007), Arthur (1994), Pfeffer (1994), Huselid (1995), and Wright and Snell, (1998) have asserted that specific HRM systems influence the performance of organizations. HRM systems can create economic value and help firms to reach their goals: appropriate HRM policies can lead to excellent human capital and strengthen the competitive position of an organization (Koch and McGrath, 1996). HRM activities affect the perceptions of HRM systems in the Taiwan Telecommunications industry. That said, HRM research within the Taiwan Telecommunications industry has been limited. As new graduates enter occupations in the telecommunications industry, the author is often asked to consult new graduates about job opportunities in the telecommunications industry and other industries.

Aside from the optimal production and input factors distribution behaviors discussed in the microeconomics field, or the managerial effect assessment reviewed in the management field, issues concerning ways to improve or increase firm operating efficiency mostly focus on the aspect of production techniques. Over the past two decades, shifts in the social environment and the scandals affecting several enterprises (such as the collapse of Enron in 2002, and the embezzlement of client shares by the Lee and Li Attorneys-at-law firm in Taiwan in 2003) have led to increased discussions of organizational ethics. Specifically, the influence of ethical sensitivity and ethical climate patterns on the behavior of firm personnel and the related impact on firm operating efficiency have taken on a position of prominence for researchers in recent years.

The research on organizational ethics and moral climate, job satisfaction, organizational loyalty and performance are positively interrelated (Oz, 2001). Jeffery (1977) believed that business ethics reflected a policy decision with implications for “ethical values.” Brief (1990) pointed out that values impact personal decision-making in terms of solving ethical problems. Hunt et al. (1989) stated that “corporate ethical values unfold the unique quality of organizational ethics and culture”. Singhapatki et al. (1999) and Valentine et al. (2002) pointed out that employees with corporate ethical values would be more aware of ethical consciousness under the guidance of directors. Jose and Thibodeaux (1999) indicated that employees often feel comfortable working in corporations that exhibit respect for ethics, and that they are strongly dedicated to their duties and satisfied with their achievements. Clarke and Gaydos (1998), Hunt et al. (1989) and Singhapatki et al. (1999) all believed that employees’ working attitudes would improve within a firm culture that emphasized the role of corporate ethics. Clark and Gaydos (1998) also stressed that the corporation is responsible for creating a moral environment, rather than expecting employees to create their own versions.

With regards to the difference from the previous studies, the author would like to point out that this study was conducted after the privatization of the telecommunication industry. Wang (1996) and Hsue-cheng (2002) pointed out that employees care less about the rewarding system, while this research shows otherwise. The discrepancy comes from the privatization of the industry. Before this major change, the budget, employment, accounting and related regulations of a telecommunication company are under governmental supervision. Staff are in fact civil servants and subject to a centralized management style and rigid systematic advancement. A rewarding system therefore had little appeal to them than now as shown in this study.

The current study considers HRM effectiveness and explores the relationships between HRM systems, job satisfaction and organizational loyalty. This topic is of great importance to employees within the Taiwan Telecommunications industry, as it can help to maintain and improve relations between employers and employees in terms of their ethical relationships. This study is designed to achieve the following objectives:

1. Integrate and construct a relationship model pertaining to HRM systems, job satisfaction, organizational loyalty and HRM ethical issues that applies to telecommunications industry employees.
2. Test the HRM ethical issues relationship between HRM systems and organizational loyalty, and discover whether the relationship is mediated by job satisfaction.
3. Contributor examines moral aspects of system of HR ethical issues, labor relations, and organizational behavior. Present employee feedback to the telecommunications industry.

Literature review

Means of theories

In 2005, the Taiwan Telecommunications industry was privatized and became fully competitive. Since that time, the industry has expanded to three major telecommunications corporations: Chunghwa Telecommunications Company Limited, Far EastTone Telecommunications Company Limited and Taiwan Mobility Telecommunications Company Limited. Regarding these issues of perception of Human Resource Management (HRM), job satisfaction, and organizational loyalty, it was previously the subject of substantial research. This particular study is aimed at the field of Taiwan Telecommunication. It intends to discuss the difference between the pre- and post-privatization circumstances in the industry. It will explore the significance. Literature reviews and derivations of hypothesizes have been made to the whole research. It strives for a theoretical foundation, which considers multiple variables, using a SEM mode for analysis. It has discovered the working ethical values of employees after the privatization compensation systems become a more driving factor than do job satisfaction and organizational.
loyalty. Such results are worth more attention and reflection.

**Corporate ethics and HRM ethics issues**

Ethics is a philosophical term derived from the Greek word “ethos” meaning character or custom. Ethics refer to the principles that tell the right thing to do, or what things are worth doing, as well as a set of broad-based, value-driven standards governing behavior (Sims, 1992; Kubal et al., 2006).

Ethics is distinguishable from morality in that, while morality deals in general with principles of right or wrong conduct, ethics is more concerned with standards of conduct acceptable to a group, a profession or employees of an organization. Moreover, organizational ethics can be understood as elaborations of pre-existing broader moral principles, which include standards of behavior and are designed to respond to the particular dilemmas presented by that context (Sinclair, 1993). In any case, there is clear evidence that the level of moral reasoning is related to the choice of action that is advocated, and is also related to people’s value positions and stands on controversial public issues. In other words, moral judgment is not a value-neutral or purely cerebral style of intellectualizing, but is connected with values and decision-making (Rest, 1980).

There is evidence of an interaction between employees’ individual values and the organizations’ value systems. Thus, when an individual is faced with an ethical dilemma, his or her value system will color the perception of the ethical ramifications of the situation. It is, therefore, critical to have a basic understanding of the relationship between value systems and employees’ perceptions of organizational ethics. One can also try to understand how people’s values determine not only their perceptions of morality but also the actions they might take (Finegan, 1994; Nwachukwu and Vitell, 1997).

In the last decade, the corporate world has come under increasing pressure to behave in a socially responsible manner (Finegan, 1994). In particular, recent accountability failures in the West and elsewhere have led to bankruptcies and restated financial statements that have harmed countless shareholders, employees, pensioners, and other stakeholders. These failures have created a crisis of investor confidence and caused stock markets around the world to decline by billions of dollars (Walker, 2005).

Standards outlining what constitutes ethical behavior lie in a hazy area where clear-cut right-versus-wrong answers may not always exist. Scholars from a variety of disciplines have contributed significantly to efforts to develop useful conceptual categories for dealing with what has been termed the “management of values” (Sims, 1992).

This study explores employee perceptions of organizational ethics. Difficulties continue to exist in the measurement and description of employees’ ethical perceptions.

Corporate ethics mainly study enterprise-related “ethical issues”. Among these ethical issues are many HRM issues pertaining to: HRM systems, employee job satisfaction and organizational loyalty, the relationship between employers and employees, conflicts of interest between individuals and organizations, employees’ personal behavior, and work safety (Lai, 2004).

Quantitative efforts to develop scales in this regard have tended to focus on perceptions of HRM system, job satisfaction, and organizational loyalty concepts such as organizational HRM ethics-based issues such as value priorities (Hunt et al., 1989). Both the HRM Ethical Issues Questionnaire developed by Wang (1986) and the Corporate HRM Ethics Scale developed by Huang et al. (2004) measure employee perceptions regarding organizational HRM ethics. The scale used in the current study to measure perceptions of HRM systems, job satisfaction, and organizational loyalty attempts to capture the degree to which organizational employees take an interest in ethical issues and act in an ethical manner.

**Perceptions of human resource management systems**

Robbins (1996) pointed out that perception is a procedure where sense and calculative organs organize and explain the external environment in order to make it meaningful. Barney (1991) maintained that competitive advantages, which can be generated by human resources, are due to the following key elements: (1) human resources can increase the organization’s value in the production procedure; (2) human resources in the organization have scarce manpower skills; (3) the human capital of human resources within an organization cannot be easily imitated; and (4) human resources are non-substitutable by technological progress or other substitutes. MacDuffie (1995) also pointed out that the following factors exert a positive influence on organizational performance: decentralization, work teams, problem-solving teams, employee rotations, incentive compensation, and employee selecting, hiring and training. Based on the above factors, this study follows Huang’s (2004) viewpoints on HRM functions and strategies. It divides HRM systems into:

1. staffing management system perceptions;
2. development management system perceptions;
3. compensation management system perceptions; and
4. maintenance management system perceptions.

**Organizational change (dynamics) perspective—work ethics issues**

This study employs the perspectives of dynamics in
observing the changes that occurred in the telecommunications industry as it moved from state-ownership to privatization, and found dynamic changes in the relationships between employees’ perceptions of HRM, job satisfaction, and organizational loyalty. Privatization expedited social information exchanges, operational efficiency, and customer awareness of telecommunications products. Continuous transformation led to great changes in the competitive structure of this industry. With the impact of globalization, there was a trend whereby the operational limits resulting from state-ownership were removed; the ecological telecommunications environment is now a free and open competitive market.

Before privatization, the systems of budgeting, HRM, accounting, and corporate policies were supervised by the government; employees were public servants; the organizational structure was centralized; promotion and compensation systems of the organization were non-flexible; and HRM systems were largely ignored. Wang’s (1996) research on organizational loyalty ethics, which took place prior to privatization, indicated that employer emphasis on organizational development and maintenance of HRM systems significantly affected employee organizational loyalty: employees were satisfied with their working environment and had positive perceptions of existing HRM systems, excluding the development and compensation systems. In addition, Hsu-cheng (2002) investigated Chughtwa employees working in the south of Taiwan and found that their perceptions had significant effects on their job satisfaction and organizational loyalty ethics before privatization took place.

**HRM system perception and organizational loyalty**

Robbins (2001) pointed out that employee organizational loyalty refers to the aggressive level of identifying with the organization, participating in organizational activities, identifying with organizational goals, and hoping to become a long-term member of the organization. Organizational loyalty is negatively related to turnover and absenteeism. From the organizational behavior viewpoint, Robbins (1996) stated that work attitudes have three correlations: job satisfaction, job involvement, willingness, and organizational loyalty. O’Reilly and Chatman (1986) analyzed the organizational loyalty measurement instrument, they extracted three factors: (1) organizational identification, (2) organizational internalization and (3) organizational compliance. Identification and internalization comprise identification with the company’s values, while compliance stands for employee’s work willingness and involvement. The current study adopts the above-mentioned theoretical foundations and assumes that attitudes and behavioral loyalty toward an organization should include: identifying with organizational values, as well as a willingness to be involved with and comply with organizational directives. Based on the above, the study proposes the following hypotheses:

H1: Perceptions of HRM staffing systems positively affect organizational loyalty.
H2: Perceptions of HRM development systems positively affect organizational loyalty.
H3: Perceptions of HRM compensation systems positively affect organizational loyalty.
H4: Perceptions of HRM maintenance systems positively affect organizational loyalty.

**Employee perceptions of HRM system and job satisfaction**

Robbins (1996) indicated that perception is a type of procedure that is organized and interpreted through sensate impressions. Perception makes an external environment meaningful to an individual. Factors that influence the perception of an individual include attitudes, motivation, and experiences of perceivers; individual expectations and goals; and the circumstances surrounding the formation of the perceptions. In sum, perception is the process whereby an individual senses and collects all the information and endows it with “meanings” (Chang, 1994). The dimension employee perception of HRM for this study relates to the perceptions of employees who work in telecommunications companies that use new HRM systems following the privatization of their organizations, as well as its effects on their behaviors and job performances. That is to say, the top three telecommunications companies have changed their HRM policies and strategies that pertain to staffing, development, compensation, and maintenance owing to the great changes engendered by privatization. As such, one research goal of this study concerns how employee perceptions of their new HRM systems influence their job satisfaction and organizational loyalty. Judge and Ferris (1993) adopted six different enterprises as research subjects and found that organizational systems, transformation, and HR work systems positively correlated with organizational performance, compensation system, and job satisfaction. Money and Graham (1999) employed electronics corporation salespeople in Japan as study samples and found that their compensation levels were significantly correlated with their job satisfaction levels.

The current study employed the perspective of social exchange, psychological contracts, and social change theories to explore the impacts of privatization on the telecommunications industry ethics issues, where entire budgeting, accounting, policy, and HRM systems underwent drastic changes. Previously, those systems had been supervised by the government under a centralized structure in which the work system flexibility was poor. Following privatization, however, elements such as the compensation mechanisms within the HRM
system became more market-oriented; in addition, staffing, recruitment, development, and performance assessment work systems became more flexible. These great changes affected employee perceptions, and consequently their job satisfaction. Therefore, the study suggests that employee perceptions of organizational HRM systems influence their job satisfaction levels; in turn, the study proposes the following hypotheses:

H5: Perceptions of HRM staffing systems are positively related to job satisfaction.
H6: Perceptions of HRM development systems are positively related to job satisfaction.
H7: Perceptions of HRM compensation systems are positively related to job satisfaction.
H8: Perceptions of HRM maintenance systems are positively related to job satisfaction.

Relationships among personal characteristics, HRM system perceptions and organizational loyalty

Mowday et al. (1997) used the Organizational Causal Model developed by Steers and Porter (1979) to point out that the causal variables consist of organizational norms, organizational individual characteristics, personal related role characteristics, structural characteristics, and job experience variables. Among these, related role characteristics, job experience, and organizational norms mean that personal characteristics and structural characteristics in different industrial environments shape the perception of a company’s organizational structure, as well as perceptions of HRM systems.

The relationship between personal characteristics and job satisfaction

Money and Graham (1999) investigated employees of Japanese electronics companies and found that compensation systems significantly influence job satisfaction. Wexley and Yukl (1997) proposed the casual model of determining job satisfaction; their findings show that personal characteristic comprise the main influence factor for job satisfaction.

Employee perceptions of HRM systems, job satisfaction, and organizational loyalty

Law and Zhang (2003) examined the relationship between job satisfaction and organizational loyalty in the Hong Kong fast food industry. They found job characteristics, training, fair rewards, and job satisfaction to be related to organizational loyalty: that is to say, the HRM system in place affected organizational job satisfaction and organizational loyalty (Horng, 2005).

Riketta (2002) analyzed 110 samples from 93 empirical studies and found that organizational loyalty, job satisfaction, and job performance are significantly related (Huang et al., 2004). Bolon (1997) employed hospital staff as research subjects and found that job satisfaction (mediating variable) influence organizational loyalty.

Moreover, in 68 experiments, Mathieu and Zajac (1990)
found that organizational loyalty significantly related to job satisfaction. As such, when job satisfaction increases, employees will exhibit higher organizational loyalty and, in turn, increase productivity and work performance.

Podsakoff et al. (1990) sampled employees of AT and T Incorporated, and they found that equal justice under organization leaders and the employee’s working scope will influence job satisfaction (intermediate variable) and behavior. On the basis of the literature review above, the authors propose the following hypotheses:

H9: Job satisfaction is significantly correlated with organizational loyalty.
H10: Job satisfaction acts as a mediating factor between employee perceptions of HRM and organizational loyalty.

**Research into the telecommunications industry in Taiwan prior to privatization**

Wang (1996) conducted research on all the employees of Chunghwa Telecommunications Company (henceforth referred to as Chunghwa) prior to its privatization, and noted that employee perceptions of HRM systems significantly affected their levels of job satisfaction and organizational loyalty. Employee job satisfaction and organizational loyalty were both strongly affected by perceptions of human resource (HR) development systems, maintenance systems and compensation systems. Prior to the privatization of Taiwan’s telecommunications industry, HRM systems were irrelevant, as Chunghwa had employed a government recruitment system.

Hsu-cheng (2002) also studied Chunghwa before it was privatized and reached similar conclusions: HR systems had great influence on both job satisfaction and organizational commitment (Figure 2).

**METHODOLOGY**

**Research framework and construct of linear structural model**

This study employed LISREL to test the overall goodness of fit of the empirical data. Structural equation modeling (SEM) was used to analyze the causal model analysis. SEM can simultaneously probe a series of relationships among independent and dependent variables; it can overcome the basic hypothesis limitations of path analysis; and it is a proven analytical tool in the social and behavioral sciences (Hair et al., 1995; Zheng and Kuo). The empirical research framework is shown in Figure 3.

Figure 4 shows the LISREL path model, meanings of symbols, and relationships among variables. The latent endogenous variables pertain to job satisfaction and organizational loyalty. The manifest variables of the latent endogenous variables are represented by Y1-Y6. In addition, the latent exogenous variables of the manifest variables and patent exogenous variables are represented by X1-X15.

**Operational definitions and measurements of main variables**

This study employed structured questionnaires as the research tool. The items were extracted from the relevant literature, and were suitable in terms of the pertinent theories. The survey questionnaire included 49 items that were measured using a five-point Likert Scale. The operational definition for each variable, its measurement dimension, and the number of items for each variable are elaborated on below.
Perceptions of HRM systems

This area entailed employee perspectives on various HRM facets including: manpower planning, job design, staffing, work environment, compensation, promotion, development, labor-management relationships, and incentive systems, bonuses paid in stock, performance evaluations and executive communication. This section, referencing Huang’s (2004) notes on HRM systems,
included a total of 15 items across four dimensions: staffing management, development management, compensation management and maintenance management.

Job Satisfaction

According to Wexly and Yuki (1977), job satisfaction can be divided into four dimensions: task satisfaction, reward satisfaction, promotion satisfaction, and leadership satisfaction. This study adopted the 16-item Minnesota satisfaction questionnaire (Weiss et al., 1967) to measure job satisfaction.

Organizational loyalty

In order to measure organization commitment, this study adopted the organizational commitment questionnaire (OCQ), consisting of 12 items. In line with the viewpoints of Mowday, Steers and Porter (1979), we divided organizational commitment into two dimensions: value commitment and willingness commitment.

Participant demographic attributes

The study also collected some demographic information regarding gender (male/female), age, education, job field (business, technology, management), and which telecommunications firm they worked for.

Sampling and subjects

Samples were drawn from the top three telecommunication corporations in Taiwan. Through a combination of stratified and convenient sampling methods, 2,300 questionnaires were sent out: for Chunghwa branches in each county/city office, we used stratified random sampling; for the other two firms, we used a convenience sampling method. Some 1,015 questionnaires were returned, although some were incomplete. After removing these, the study was left with 815 valid responses, for a response rate of 80%.

Statistical analysis

This research utilized descriptive statistical analysis, factor analysis, and linear structural relation (LISREL) analysis to analyze the relevant research data. LISREL combines factor analysis and path analysis of the traditional statistics and includes simultaneous equations of economics. It can estimate multiple factors and causal paths simultaneously.

Table 1. Summary of LISREL Evaluation Indicators.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Parameters</th>
<th>Judgment criterion</th>
</tr>
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<tbody>
<tr>
<td>Whole goodness-of-fit</td>
<td>The absolute value of t-value parameter</td>
<td>Greater than 1.96</td>
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<tr>
<td></td>
<td>X2 value / P value</td>
<td>P value is greater than 0.05</td>
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<td></td>
<td>GFI</td>
<td>Over 0.9</td>
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<td></td>
<td>AGFI</td>
<td>Over 0.9</td>
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<td></td>
<td>RMR</td>
<td>The smaller, the better</td>
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<tr>
<td></td>
<td>CFI</td>
<td>Over 0.9</td>
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</table>

Regarding the evaluation of goodness-of-fit, Bagozzi and Yi (1988) asserted that “whole model goodness-of-fit” must be used to measure the goodness-of-fit level of the whole model and the observed data; following this suggestion, we summarize the entire model goodness-of-fit evaluation items in Table 1.

RESULTS AND DISCUSSION

Descriptive statistics of each variable

Table 2 shows the means and standard deviations for each variable. Regarding the overall perceptions of HRM systems, the mean for the four dimensions was 3.3662 (on our 5-point scale) the 67 percentile. As for job satisfaction, the mean was 3.3832, the 67.7 percentile. The average telecommunication employee organizational loyalty is 3.5090, which is 70.2%. Figure 2 presents the results of a descriptive statistics analysis, including means, standard deviations and correlations, that construct correlations all appear significant (P<0.01, except between of “involvement and willingness loyalty”. Correlation coefficient being too high (such as above 0.7) would cause the problem of collinearity and affect the analytical results. None of the correlation coefficients between variables is too high.

Integrated factor analysis, reliability analysis and validity analysis

Prior to the factor analysis, we performed both a Kaiser-Meyer-Olkin measure of sampling adequacy and a Bartlett test to the three internal dimensions of the perceptions of HRM systems, job satisfaction and organizational commitment. The examination results showed that the three dimensional KMO values all exceeded 0.9, which indicated that a factor analysis would be appropriate.

Factor analysis adopted the principal component factor analysis to extract factors, and then carried on to orthogonal rotation by varimax, selecting eigenvalues greater than 1 and the factor dimension that had a loading greater than 0.45. The factor analysis results are shown as Table 3. Further, a summary of the measurement model analysis results is offered in Table 5.

This study also employed two steps to ensure the
quality of the questionnaire. The first was the use of triangulation to translate the English version of
the questionnaire into Chinese. One qualified translator translated the scale into Chinese, and
then the other translator back-translated it. Three
graduate students compared the original copy and
the translated copy of the scale, and indicated the
conceptual differences. The second step involved a pre-test of the scale. Thirty re-
spondents were chosen from the three tele-
communications corporations. Each respondent
was asked to fill out a questionnaire and indicate
any items or concepts that they felt were strange
or unreasonable. The questionnaire was later
adjusted in light of the opinions expressed, and
then distributed to another 30 respondents for
comment. This second distribution outlined rela-
tively minor issues, which were efficiently re-
solved. The penultimate version of the scale was
then sent to three HRM professionals comprised
of one top manager at Chunghwa and two HRM
instructors with PhDs to identify any other
possible issues or errors.

Table 3 shows perceptions of HRM systems had
eigenvalues greater than 1 (the study set the
standard at one or above). For the four sub-
dimensions of employees' perceptions of HRM,
only one staff management item was a reversed
item description; the factor loading was 0.881, and
the eigenvalue was close to 1 (1.004). The eigen-
value of the development management system
was 6.419, and the factor loading of each item
was between 0.473 and 0.763. Moreover, the
analysis results show that each item matched the
four dimensions of the perceptions of the HRM
system. The cumulative level of variance explained
by staffing management was 6.429%; the cumu-
late level of variance explained by development
management was 38.06%; the cumulative level of variance explained by compensation management
was 8.96%; the cumulative level of variance ex-
plained by maintenance management was 6.58%;
and the overall cumulative level of variance
explained was 60.02%.

Also from Table 3, factor analysis of the mea-
surement of job satisfaction had eigenvalues that
were set larger than 1. The factor loading of each item
was between 0.661 and 0.746. Moreover,
the analysis results show that each item matched the
two dimensions of the perceptions of the job
satisfaction system. The cumulative level of variance explained
by job satisfaction was 73.95%; the cumu-
late level of variance explained by leadership
satisfaction was 70.65%; the cumulative level of variance explained by promotion satisfaction
was 9.61%; and the overall cumulative level of variance
explained was 82.21%.
Table 3. Factor analysis.

<table>
<thead>
<tr>
<th>Construct Factors</th>
<th>Items</th>
<th>Factor loading</th>
<th>Eigenvalue</th>
<th>Cumulative (%)</th>
<th>Alpha</th>
<th>Composite reliability (CR)</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) Perceptions of HRM staffing systems</td>
<td>H11: HRM staffing system unfair</td>
<td>0.881</td>
<td>1.004</td>
<td>6.429</td>
<td>-</td>
<td>1.0000</td>
<td>1.0000</td>
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<td></td>
<td>H1: Intranet job content fitness self-ratings</td>
<td>0.724</td>
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<td>H2: Manpower fitness self-ratings</td>
<td>0.646</td>
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<td>H3: Responsibility fitness self-ratings</td>
<td>0.763</td>
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<td>H4: Performance appraisal self-ratings</td>
<td>0.473</td>
<td>5.709</td>
<td>38.063</td>
<td>0.7761</td>
<td>0.7775</td>
<td>0.5700</td>
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<td>H5: Training self-ratings</td>
<td>0.583</td>
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<td>H6: Training appraisal self-ratings</td>
<td>0.478</td>
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<td>(II) Perceptions of HRM Development systems</td>
<td>H7: Career development positive reinforcement</td>
<td>0.526</td>
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<td>H8: Stock system self-ratings (can help to retain employees)</td>
<td>0.627</td>
<td>1.343</td>
<td>8.955</td>
<td>0.7785</td>
<td>0.7812</td>
<td>0.6741</td>
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<td>H9: Stock system self-ratings (promotes effectiveness)</td>
<td>0.811</td>
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<td>H10: Benefit system self-ratings</td>
<td>0.806</td>
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<td>(III) Perceptions of HRM compensation system</td>
<td>H12: Leader /employee communication pathways</td>
<td>0.661</td>
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<td>H13: Environmental scanning</td>
<td>0.676</td>
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<td>H14: High morale for employees</td>
<td>0.746</td>
<td>1.086</td>
<td>6.576</td>
<td>0.7826</td>
<td>0.7862</td>
<td>0.5830</td>
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<td>H15: Codetermination</td>
<td>0.717</td>
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<td>(IV) Perceptions of HRM maintenance system</td>
<td>J1: Job competencies</td>
<td>0.667</td>
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<td></td>
<td>J2: Job loading</td>
<td>0.537</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>J3: Job fitness competencies</td>
<td>0.735</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>J4: Worker functions</td>
<td>0.751</td>
<td>6.419</td>
<td>40.118</td>
<td>0.7932</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>J12: Environment satisfaction</td>
<td>0.457</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>J13: Mentoring</td>
<td>0.533</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>J5: Competency based pay</td>
<td>0.681</td>
<td>1.521</td>
<td>9.508</td>
<td>0.7510</td>
<td>0.7820</td>
<td>0.5729</td>
</tr>
<tr>
<td></td>
<td>J6: Benefit satisfaction</td>
<td>0.721</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

※Cumulative Explanatory Power : 60.023%  Overall Reliability : 0.8799
### Table 3. Contd.

| (III) Promotion satisfactions | J7: Disparate treatment | 0.686 |
|                              | J8: Stock and profit-sharing | 0.544 |
| J9: Promotion path           | 0.752 |
| J10: Promotion self-ratings  | 0.826 |
| J11: Promotion of internal equity | 0.803 |
| J14: Leadership ability      | 0.775 |
| J15: Leadership structured interview | 0.767 |
| J16: Leadership conflict     | 0.764 |

| Overall Reliability : 0.8995 |

| (IV) Leadership satisfactions | J12: Leadership ability | 0.775 |
| J13: Leadership structured interview | 0.767 |
| J14: Leadership conflict     | 0.764 |

**Cumulative Explanatory Power : 63.845%**

| (I) Value and identification loyalty |
| R1: Willing to accept any difficult job | 0.681 |
| R2: Willing to affect work       | 0.744 |
| R3: Fair treatment               | 0.751 |
| R4: Organizational development   | 0.701 |
| R5: Active learning              | 0.739 |
| R6: Internal comparison estimate willing on duty | 0.701 |
| R7: Corporate values             | 0.675 |
| R8: Continue stay no identity    | 0.789 |
| R9: I often go-show              | 0.772 |
| R10: Our corporation lacks vision | 0.789 |
| R11: Our corporation lacks competitive advantage | 0.823 |

**Cumulative Explanatory Power : 58.386%**

| Overall Reliability : 0.8663 |

Eigenvalue of compensation satisfaction was 1.521, and the factor loading of each item was between 0.544 and 0.721. The eigenvalue of development satisfaction was 1.320, and the factor loading of each item was between 0.752 and 0.826. The eigenvalue of achievement satisfaction was near 1 (1.065), and the factor loading of each item was between 0.764 and 0.775. This means that each job satisfaction item matched the four factors constructed by the job satisfaction. The cumulative level of variance explained by achievement satisfaction was 40.12%; the cumulative level of variance explained by compensation satisfaction was 9.51%, the cumulative level of variance explained by development satisfaction was 58.386%. Overall Reliability was 0.8663.
was 8.25%, the cumulative level of variance explained by colleague satisfaction was 5.97%, and the overall cumulative level of variance explained was 63.85%. As such, we were confident regarding the construct validity of the independent variable, HRM perception, the dependent variable and job satisfaction.

Organizational loyalty, the third measurement instrument, had an eigenvalue that exceeded 1, as shown in Table 3. According to the above literature review, international scholars have divided organizational loyalty into two factors: value loyalty and willingness loyalty. The eigenvalue of value loyalty was 4.98, and the factor loading of each item was between 0.675 and 0.751. All five willing loyalty items were reversed item descriptions and were put into the same category, which had an eigenvalue of 2.027. In addition, the factor loading for each item was between 0.704 and 0.823, proving that each item matched the two factors of organizational loyalty. The variance explained by value loyalty accounted for 41.49%, while the variance explained by willingness loyalty accounted for 16.90%; the overall level of variance explained was 58.39%. Therefore, the construct validity of the organizational loyalty portion of this research was deemed to be acceptable.

Results from the Cronbach’s alpha analysis are shown in Table 3. The Cronbach’s alpha value of the overall perception of HRM was 0.880; the Cronbach’s alpha value of overall job satisfaction was 0.900; and the Cronbach’s alpha value of the overall organizational loyalty was 0.866. All of these correspond with Nunnally’s (1978) point that a questionnaire has extremely high inner consistency when the Cronbach’s alpha value is higher than 0.7.

The reliabilities of all factor dimensions were all quite high, and met the internal consistency and reliability requirements. As such, they were deemed suitable for the requirements of this study.

**LISREL model goodness-of-fit analysis (CFA)**

To estimate the overall goodness-of-fit of the LISREL model, this research used the Chi-square value, the goodness-of-fit index (GFI), the adjusted goodness-of-fit index (AGFI), and root mean square residual (RMR) indicators. Data from each measurement indicator are listed in Table 4.

Table 4 shows that in the overall model $X^2(32) = 170.416$, the $P$ value was 0.06. The null hypothesis is accepted at a level of $\alpha = 0.05$. The variance-covariance matrix from the empirical study was equal to the theoretical variance-covariance matrix; therefore, it was deemed to be acceptable (Jöreskog and Sörbom, 1989). The GFI value represents the variance-covariance level that the theoretical model can explain; the larger the number, the better the model’s goodness-of-fit (Zheng and Guo, 2004). In this study, the GFI results of each factor including HRM perceptions, job satisfaction and
organizational loyalty all exceeded 0.90, and the overall GFI reached 0.926, which show that the overall fitness of this model was good. The AGFI is another indicator used was 0.027, which is quite close to 0, meaning the goodness-of-fit was excellent.

**Goodness-of-fit test of the model’s internal structure (internal quality)**

The goodness-of-fit test of the model's internal structure mainly assesses and measures the reliability and validity of the scale on which the results of the final analysis have been compiled (Table 5).

As shown in Table 5, each standard estimate (variable loading in latent construct) was between 0.531 and 0.807, other than the estimate for the structure of organizational commitment (0.383).

Reliability greater than 0.5 and an overall factor loading value higher than 0.5 (Table 3) are minimum requirements, and in addition no item can have a negative error variance.

All construct reliability (CR) values in Table 3 are larger than 0.7, which meets the requirement that the average variance extracted (AVE) value is at least 0.5, as well as the requirements above (Fornell and Larcker, 1981; Hair et al., 1998). As such, the model exhibited ideal internal quality.

### Table 5. Summary of analysis results for measurement models.

<table>
<thead>
<tr>
<th>Construct indicator</th>
<th>Standard estimate</th>
<th>Unstandardized estimate</th>
<th>Standard error</th>
<th>Critical value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ξ1 Perceptions of HRM staffing system</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H11</td>
<td>1.000</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ξ2 Perceptions of HRM development system</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1</td>
<td>0.573</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H2</td>
<td>0.531</td>
<td>0.879</td>
<td>0.086</td>
<td>10.281***</td>
</tr>
<tr>
<td>H3</td>
<td>0.558</td>
<td>1.068</td>
<td>0.100</td>
<td>10.648***</td>
</tr>
<tr>
<td>H4</td>
<td>0.678</td>
<td>0.179</td>
<td>0.098</td>
<td>12.041***</td>
</tr>
<tr>
<td>H5</td>
<td>0.666</td>
<td>1.170</td>
<td>0.098</td>
<td>11.925***</td>
</tr>
<tr>
<td>H6</td>
<td>0.629</td>
<td>1.010</td>
<td>0.088</td>
<td>11.519***</td>
</tr>
<tr>
<td>ξ3 Perceptions of HRM compensation system</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H7</td>
<td>0.732</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H8</td>
<td>0.760</td>
<td>1.093</td>
<td>0.068</td>
<td>16.113***</td>
</tr>
<tr>
<td>H9</td>
<td>0.665</td>
<td>0.910</td>
<td>0.062</td>
<td>14.634***</td>
</tr>
<tr>
<td>H10</td>
<td>0.584</td>
<td>0.889</td>
<td>0.068</td>
<td>13.018***</td>
</tr>
<tr>
<td>ξ Perceptions of HRM maintenance system</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H12</td>
<td>0.766</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H13</td>
<td>0.759</td>
<td>0.907</td>
<td>0.053</td>
<td>17.062***</td>
</tr>
<tr>
<td>H14</td>
<td>0.547</td>
<td>0.577</td>
<td>0.046</td>
<td>12.654***</td>
</tr>
<tr>
<td>H15</td>
<td>0.686</td>
<td>0.784</td>
<td>0.050</td>
<td>15.750***</td>
</tr>
<tr>
<td>η1 Job satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J1</td>
<td>0.647</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>J2</td>
<td>0.624</td>
<td>1.142</td>
<td>0.090</td>
<td>12.657***</td>
</tr>
<tr>
<td>J3</td>
<td>0.640</td>
<td>1.428</td>
<td>0.111</td>
<td>12.898***</td>
</tr>
<tr>
<td>J4</td>
<td>0.654</td>
<td>1.400</td>
<td>0.107</td>
<td>13.104***</td>
</tr>
<tr>
<td>η2 Organizational loyalty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R1</td>
<td>0.807</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>R2</td>
<td>0.383</td>
<td>0.470</td>
<td>0.111</td>
<td>4.249***</td>
</tr>
</tbody>
</table>

Critical value $a = \frac{\text{estimate}}{\text{standard error}}$. When CR is larger than 1.64, 1.96 and 2.32, it represents confidence levels of 90, 95 and 99%, respectively. *** denotes (P<0.001).
Unfixed indicator loading (unstandardized estimate ≠ 1) and the corresponding latent constructs in Table 5 all showed extremely eminent levels of CR, indicating a significant interrelationship (coefficient between 4.249 and 17.062, P<0.00). This in turn indicated the convergent validity of the measurement model (Anderson and Gerbing, 1988).

### Test results of the hypothetical paths

The γ and β values, estimated by using the method of maximum likelihood, can test whether the research hypotheses reach a significant level or not. Through LISREL analysis, we list the detailed empirical results of the hypothetical paths in Table 6. Moreover, as the estimated absolute value of parameter t exceeds 1.96, it confirms that the estimated parameter reached a 0.05 significance level.

### Relationship between HRM systems and organizational loyalty

Table 6 illustrates the relation paths among staffing management, compensation management, and organizational loyalty. The empirical data show that γ 21 =0.376, γ 13 =0.239, and γ 14 =0.580; all appeared to positively influence relationships and exceeded the Cronbach’s alpha = 0.01 significance level, corresponding with hypotheses H6, H7 and H8. This empirical result reflects that development management, compensation management, and maintenance management are the key factors in terms of job satisfaction.

### Relationship between job satisfaction and organizational loyalty

Table 5 shows the relational path β 21= 0.692 between job satisfaction and organizational loyalty; this also exceeds the Cronbach’s alpha = 0.01 significance level. This result provides clear evidence of the positive relationship between job satisfaction and organizational loyalty, and also confirms the research hypothesis.

### Test of job satisfaction’s mediating effect

According to Baron and Kenny (1986), in a situation where a positive significant relationship between the antecedent variable and the outcome variable exists, when the addition of a mediating variable in between will weaken the original relationship or make it become insignificant, then the addition of the mediating variable is referred to as the complete mediating effect. Hair et al. (1995) suggested that researchers should propose a rival model of the totally different structure geared towards the hypothetical model characteristics. In accordance with this suggestion, we added a rival model in Table 4, under the condition of positive significant relationships among staffing management, compensation management, and organizational loyalty (H1, H3). This rival model was called the non-mediating model 3 (33). We then compared the original whole model 2 (32) (GFI = 0.926, *** denotes (P<0.01), ** denotes (P<0.05).

<table>
<thead>
<tr>
<th>Research hypothesis</th>
<th>Hypothesis relation</th>
<th>Test-value</th>
<th>t-value</th>
<th>Test-result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Perceptions of HRM staffing system → organizational loyalty</td>
<td>+</td>
<td>γ = 0.075**</td>
<td>-2.534</td>
<td>acceptance</td>
</tr>
<tr>
<td>H2: Perceptions of HRM development system → organizational loyalty</td>
<td>+</td>
<td>γ = 0.061</td>
<td>0.147</td>
<td>refusal</td>
</tr>
<tr>
<td>H3: Perceptions of HRM compensation system → organizational loyalty</td>
<td>+</td>
<td>γ = 0.125***</td>
<td>-3.837</td>
<td>acceptance</td>
</tr>
<tr>
<td>H4: Perceptions of HRM maintenance system → organizational loyalty</td>
<td>+</td>
<td>γ = 0.059</td>
<td>0.256</td>
<td>refusal</td>
</tr>
<tr>
<td>H5: Perceptions of HRM staffing system → Job satisfaction</td>
<td>+</td>
<td>γ = 0.067</td>
<td>0.056</td>
<td>refusal</td>
</tr>
<tr>
<td>H6: Perceptions of HRM development system → Job satisfaction</td>
<td>+</td>
<td>γ = 0.376***</td>
<td>10.308</td>
<td>acceptance</td>
</tr>
<tr>
<td>H7: Perceptions of HRM compensation system → Job satisfaction</td>
<td>+</td>
<td>γ = 0.239***</td>
<td>6.597</td>
<td>acceptance</td>
</tr>
<tr>
<td>H8: Perceptions of HRM maintenance system → Job satisfaction</td>
<td>+</td>
<td>γ = 0.580***</td>
<td>14.297</td>
<td>acceptance</td>
</tr>
<tr>
<td>H9: Job satisfaction → Organizational loyalty</td>
<td>+</td>
<td>β = 0.692***</td>
<td>15.188</td>
<td>acceptance</td>
</tr>
</tbody>
</table>

*The t-value Judging criterion: The absolute value of t-value parameter more than 1.96.

**Unfixed indicator loading (unstandardized estimate ≠ 1) and the corresponding latent constructs in Table 5 all showed extremely eminent levels of CR, indicating a significant interrelationship (coefficient between 4.249 and 17.062, P<0.00). This in turn indicated the convergent validity of the measurement model (Anderson and Gerbing, 1988).
AGFI = 0.872, RMP = 0.027, χ²(32) = 170.416, P = 0.06, Chi-square/degree of freedom = 5.325, with mediating effect) with the non-mediating model 3 (33) (GFI = 0.839, AGFI = 0.731, RMP = 0.124, χ²(33) = 826.501, P = 0.053, Chi-square/degree of freedom = 25.045, with no mediating effect). The results showed that the model with no mediating effect had a worse goodness-of-fit and a lower relative effect. Later, we altered the degrees of freedom and Chi-square values in order to test the impact of these different models. The results reflected that the original whole model had a mediating effect, and that job satisfaction also had a mediating effect.

**CONCLUSIONS**

**Empirical research conclusion**

LISREL analysis was used to conduct the empirical analyses. Figure 5 summarizes the results. Six of the nine hypothetical paths reached statistically significant levels. In addition, three of the four paths that were mediated by job satisfaction reached statistically significant levels. Therefore, the main findings are as follows:

1. Following the deregulation of the Taiwanese telecommunications industry, employees from different telecommunications companies exhibit significant differences in terms of their perceptions of HRM systems, job satisfaction, and organizational loyalty.
2. Following deregulation, previously prevalent perceptions of HRM promotion and development systems, as well as HRM labor/management relationships and maintenance systems no longer affect organizational loyalty (as neither were statistically significant).
3. The influence of perceptions of staffing management on job satisfaction is not significant.
4. Job satisfaction and organizational loyalty appear to be positively related.
5. Employee perceptions of HRM have a direct effect on job satisfaction and organizational loyalty; and job satisfaction has a direct effect on organizational loyalty.
These results demonstrate the mediating role of job satisfaction.
6. Telecommunications employees rate organizational loyalty higher than both job satisfaction and HRM perceptions.
7. Among Taiwan telecommunications companies, perceptions of the company HRM system, job satisfaction and organizational loyalty are the highest for Chunghwa employees, followed by employees from Far EasTone and Taiwan Mobile.
8. Job satisfaction is a mediating factor between employee perceptions of HRM and organizational loyalty.

**Comparison of the pre-privatization and post-privatization models of the Taiwan telecommunication industry**

Figure 6 shows work ethics issues the pre- and post-privatization states of the Taiwanese Telecommunications industry. This comparison indicates that four paths have been altered:

1. Perceptions of HRM development systems ethics → organizational loyalty ethics. Post-privatization, the relationship is not significant, whereas pre-privatization it was strongly significant. (Work ethics issues have been altered).
2. Perceptions of HRM compensation systems ethics → organizational loyalty ethics. Post-privatization, the relationship is strongly significant, whereas pre-privatization it was only a significant relationship. (Work ethics issues have been altered).
3. Perceptions of HRM compensation systems ethics → job satisfaction ethics. Post-privatization, this is a strongly significant relationship, whereas pre-privatization it was only a significant relationship. (Work ethics issues have been altered).
4. Perceptions of HRM maintenance systems ethics→ organizational loyalty ethics. Post-privatization, this is no longer
a significant relationship, whereas pre-privatization it was a strongly significant relationship. (work ethics issues have been altered).

**Ethical issues discussion**

Miller et al. (2002) believes that work ethics play a deciding role in employees' behaviour. Previous studies on this subject have mainly focused on the balance between work ethics and personal work values, work satisfaction, organizational loyalty and HR system.

This study contributor examine moral aspects of system of HR ethical issues (HRM system), labor relations (HRM system), and organizational behavior (organizational loyalty, and job satisfactions). These findings provides modest support for the theory that job satisfaction plays an important role in terms of organizational loyalty, which is related to organizational employee perceptions regarding ethical business dilemmas. Organizational changes point to a need for additional research on the different stages of the life cycle construction—a critical factor in work ethical functions; moreover, it is clear that employee values and ethical perceptions are associated with organizational value systems. Employees' ethical issues responses to the privatization of the Taiwan telecommunication industry serve as a valuable reference for other nations and industries facing privatization.

Furnham (1984) and Boatwright and Slate (2002) classified the relationship between employee behavior and work ethics into four levels by strength: strongly significant relationship, significant relationship, no relationship and negative relationship. This study looks at the organizational change of the telecommunication industry in Taiwan. Before privatization, the industry featured a rigid management style with employment, salary and benefits under governmental control. In the view of the employees the most important code of conduct is to abide by the rules. There was a strongly significant ethical relationship between the employer and the employees. The employees perceived organizational changes after privatization as threat to their old power, status, salary and personal values. They tended to reject it fearing the insecurity of their futures. In a privatized company what an HR department has to do with regards to work ethics varied greatly, as seen in Figure 6. How privalization leads to the employee's loss of trust toward the company, followed by changing work ethics are interesting phenomena worthy of research.

The telecommunication industry in Taiwan is now facing the pressure of organizational change. During this transitional period, existing relationships among employees and between them and their superiors are under threat. Work ethics therefore play an important role in maintaining trust between different interest groups within an organization. Such ethics also work as a catalyst to the transformation of outdated mindsets or as motivations for the employees to take own incentives at work, instead of relying on external pressure or supervision. Like secret codes, work ethics are able to highlight employees' shared values and enhance their senses of identity and achievement. Looking ahead, companies should further improve their HR systems and codes of work conduct to sustain the coexistence of profit seeking and ethical business performance.

**Major theoretical and practical contributions**

This study enables the construction of a model outlining employee perceptions of HRM systems, job satisfaction and organizational loyalty within the deregulated, post-privatization Taiwanese telecommunications industry. There is currently a paucity of research on this topic; the current study addresses this gap. The current research explores and integrates the various HRM system perception constructs, proposes an integrated structure and applies antecedent and outcome variable constructs that apply to the current situation facing the telecommunications industry. As such, this paper represents the first attempt to employ an integrated model to empirically examine telecommunications employee perceptions following privatization.

The results enable researchers to discover and track new trends and perception value strategies. Based on company management philosophies, the goal of each company is to create value for shareholders, employees, and management. Traditional HRM theory also states that employees will enjoy high job satisfaction as long as the HRM system is perceived to be good; moreover, under these circumstances, both job satisfaction and organizational commitment are likely to increase. The fact that this study focused on telecommunications employees is not vital in terms of the importance of the results. Nevertheless, the telecommunications industry is the highest-rated potential career choice for many students. For example, when Chunghwa telecom gave a recruiting drive to fill 569 positions in June, 2007, a total of 20,536 people applied; as such, the hiring rate was only 2.8% (Chunghwa Telecom and June, 2007).

The empirical research results detail employee perceptions following the deregulation of the Taiwan telecommunications industry during a period of strong growth in this industry. Employees in the telecommunications industry who dealt with rapid industrial environmental changes consider "compensation system perception choices" as their primary organizational loyalty consideration within the HRM system. As such, the study can state that HRM promotion development systems and HRM labor-management relationship maintenance systems are no longer the primary factors that effectively influence the organizational loyalty of telecommunications employees.
The results support the pre-privatization findings of Wang (1996) and Hsu-cheng (2002). In those studies, employee perceptions of HRM systems positively affected their job satisfaction, operating performance and organizational loyalty. HRM promotion development systems and HRM labor-management relationship maintenance systems are the primary ways to effectively influence telecommunications employees in terms of organizational loyalty. "Compensation system perception choices" are not a major factor associated with organizational loyalty; perceptions of HRM system results are different. Further, perceptions of compensation systems still rely on the internal indirect effects of said compensation systems, such as benefits and stock bonuses, to satisfy employees. This proves that perceptions of employee values have changed. These findings should prove valuable for telecommunications corporation HRD depart-ments as they consider employees personalities in their selection process.

In addition, our results support previous study conclusions:

1. The construction of the integrated model “HRM system perception/job satisfaction → organizational loyalty” supports the literature’s emphasis on the necessity of encouraging loyalty from employees.
2. Job satisfaction has a positive influence on organizational loyalty, verified through our empirical test of “organizational loyalty satisfaction.” The classical model supports the conclusion that human resource system satisfaction and job satisfaction are evidence of the influence on employees’ organizational loyalty.
3. The literature maintains that organizational loyalty must be based on employees weighing the balance between individual contribution and the organizational reward system.
4. The test shows that organizational loyalty and job satisfaction are built on the “value” foundation associated with perceptions of HRM systems. This finding supports the HRM ethical issues literature, and it emphasizes the importance of recruitment values and perception value strategies.
5. Companies can consult this study’s conclusion on work ethics in setting their recruitment requirements. Work ethics are as significant a quality as professional ability for a newcomer to get accustomed to organizational culture. It is also to the organization’s own benefits to have someone whose perceptions of work ethics are in keeping with its own. Besides, work ethics should be properly addressed in staff trainings.

Managerial implications and practical suggestions

Research results show that perceptions of the sub-dimensions “promotion development systems” and “labor management and relationship maintenance systems” significantly influence job satisfaction. These findings imply that the two HRM system perceptions are positive and that they are the key to ensuring employee satisfaction with their jobs; as such, it can be inferred that employees tend to focus on short-term instead of long-term relations. The post-privatization in the Taiwanese telecommunications industry employees’ job ethics had been changes.

This empirical research verifies that perceptions of HRM system focus on the indirect effects and benefits of the compensation and bonus systems. However, not every bonus system in every company should be identical. Therefore, how to design a more subtle, effective and unique skill-based HRM compensation and bonus system tests the systematic structural design of telecommunications companies. According to the 2006 annual report for all publicly traded companies provided by the Taiwan Stock Exchange Corporation (TSEC), over the last three years, the earnings per share (EPS) for Chunghwa have been NT$ 4.7, for Far EasTone have been NT$ 3.57 and for Taiwan Mobile have been NT$ 3.36 (TSEC, 2006). As such, each of these telecommuni-
ocations companies appears to have surplus profits. Therefore, bonus systems that allocate bonuses to employees based on their skills and performance is a research area in need of further investigation.

Research Limitations

This research used survey questionnaires instead of a census to collect data. Taiwan telecommunications operation offices and employees are geographically wide spread. As such, we employed a stratified random sample to collect data from Chungwha Telecom in each county/city operation office. However, we could only sample Far EasTone Telecom and Taiwan Mobile Telecom offices in three metropolitan areas: Taipei, Taichung, and Kaohsiung. This is an important limitation of this research.

Further, self-report surveys, which collect cognitive information directly from individuals, can lead to common method variance issues. The current study used Harman’s one-factor test to search for common method variance (Podsakoff and Organ, 1986). The basic assumption of the one-factor test is that when one main factor can explain high levels of covariance among all variables, a problem of common method variance exists among the variables measured. Principal component analysis (orthogonal rotation of the largest variance) shows 10 out of 43 items from three dimensions extracted with values larger than 1, with a cumulative explanatory variance of 60.56%, while the first component accounts for 24.476% of the variance. Therefore, the self-report survey adopted by this study does not show any serious problem related to common method variance.

Suggestions for telecommunication companies on work ethics seminars and Suggestions for future research:

1. Ethics training and attend an ethics seminar for all employees—Ethics training is crucial for companies that want to protect their interests and, more importantly, inspire an ethical and thriving workplace. Ethics seminars, bringing ethics training to real life, enable the work ethics, the new accountability in the work place.

2. Through interactive discussion about reality-based ethical dilemmas, attendees will recognize the new role in world of accountability and gain the knowledge to maintain confidentiality and loyalty in their workplace.

3. Corporate all administrative professionals, by virtue of their responsibilities, find themselves from time to time in the ethical issues of business activities. This enjoyable and interactive ethics seminar will provide your administrative professionals with a practical guide to identifying and handling some of these most common ethical dilemmas.

Suggestions for future research: trans-cultural or comparative studies with a multi-trait method can reveal how work ethics vary under cultural and social influences.

REFERENCES


Huang LC, Su, KJ, Li, LC (2004). The study on the relationship among staff’s perception of the HRM system, job satisfaction, role cognitive conflict and organizational commitment after the privatization of state-run business of ChungHwa Telecommunications Co. Ltd.


