

Discussion Paper

The Past and the Future of Employee Voice: Shenzhen's High Technology Industry

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Denise Tsang

Henley Business School, University of Reading, UK

Zhang Yan

School of Economics, Shandong University P.R. China

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dunning@henley.ac.uk

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Abstract

Can a nation's technology future be linked to its past? This article discusses employee voice, as defined in terms of discretionary and constructive behaviour that challenge the status quo, within the innovative, fast growing high technology industry in China. It provides insight into factors shaping employee voice in this under-researched knowledge-intensive sector of China that has emerged rapidly since the economic reform. It suggests the notion of employee voice among the highly skilled knowledge workforce can only be understood in terms of technological convergence and cultural divergence.

Keywords

employee voice; high technology; cultural divergency; Shenzhen

JEL Classifications

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Contacts

d.tsang@henley.ac.uk

zhang.yan@sdu.edu.cn

1 Introduction

Could we explain China's recent success in high technology from the perspective of Psychology? To what extent does individual employee voice play a part in the successful phenomenon? Could contemporary employee voice be embedded in China's historical past? The unique setting of China in high technology and its pace of recent catching up has provided an opportunity to understand the neglected cultural factors that shape the psyche and voice of modern employees in high technology industries. Employee voice, which is defined in this article as discretionary and constructive behaviour that challenges the status quo, is a familiar concept throughout Chinese history and could be traced to the imperial courts where high-ranking officers forwarded personal judgments, suggestions or opinions to the Emperors, with the intention to improve or remedy state affairs [1]. Such voice tended to be considered during the rise of Chinese dynasties but ruthlessly suppressed during their decline [2]. Overall, patriotic officers had put forward their voice to the Emperors in situations endangering their own lives. They did so in accordance with the Confucian ideology of pursuing the righteous and appropriate actions, and some of them such as Qu Yuan were remembered and celebrated for their courageous actions [3].

The past decade witnessed accelerated growth in China's high technology industry, with cities such as Shenzhen emerging as a hothouse of innovation [4]. Some high profile companies have experienced growth and pursued outbound investment by establishing global subsidiaries. Nevertheless, their value-adding knowledge-intensive research and development activities are still located in their headquarters. Competitive advantage within high technology revolves around continuous upgrading of products and service along existing technological trajectory as well as the launching of innovative product and service built upon dynamic and path-breaking advance in diverse fields [5]. Hence, a critical factor for the achievement of Chinese high technology companies is the organizational ability to leverage human capital towards the pursuit of innovation.

How do successful high technology companies compete globally? Existing literature suggests the importance of contextual ambidexterity or the capacity to simultaneously demonstrate alignment and adaptability across the organization to tackle the exploration versus exploitation tension; others argues the role of wider industry competitive dynamics in the creation of competitive companies [6]. Additionally, the knowledge intensity encapsulated in the production process of high technology means that companies are structured into project teams, which operate with high level of autonomy [7]. To a great extent, the importance of contextual ambidexterity and work autonomy suggests that technology has led to global best practices;

however, various studies argue for the imprint of local context in the industry. For example, indigenous successful Chinese and Irish software companies configure their network differently as shaped by respective national culture [8].

Could cultural heritage remain a factor that influence high technology employees and the innovation at the firm and the industry level? A major theme among high technology innovation is the role of employee voice (as opposed to employee silence) which increase engagement, creativity, connectivity and productivity [9]. Psychologists have examined the dimension of voice at the individual and group level and operationalized the concept as discretionary verbal communication of ideas, suggestions, or opinions with the intent to improve organizational functions [10]. It is suggested that voice behaviour could be an asset or a liability to the employee involved [11]. The business and economics literature also elaborates on the importance of voice behaviour on the ground that they challenge the status quo and can be a source of sustainable competitive advantage [12].

Within the boundary of the aforementioned voice definition, there is a general view that innovative suggestions, ideas or opinions tend not to be communicated freely in the highly centralized Chinese management [13]. Moreover, cases such as the standardized, labour-intensive manufacturing operations of Foxconn have been used to illustrate a dismal picture of employee voice in China [14]. However, the emergence of China in concept-intensive high technology development that hinges on innovation at the individual and the team level, has opened up a different avenue to understand the different faces of employee voice. The competitive advantage of Chinese indigenous high technology brands such as Tencent, Huawei, Alibaba, Baidu... are built on technological knowledge intensive employees working individually or in teams, putting forward new ideas voluntarily to contribute towards the process of knowledge creation, diffusion and accumulation [15]. In such sense, this article examines an under-researched area of employee voice within the global technology setting and in a nation that is steeped in history.

2 What is Employee Voice

Social scientists have been pre-occupied with the ideas revolving around employee voice since the 18th century [16]; however, the concept has been explored from different perspectives, ranging from the macro level activity of unionism and collective bargaining as well as the micro level communication behaviour of employees such as voluntary suggestions [17]. Contemporary scholars, define the concept with a broad perspective as consultation, communication and say,

clarifying the meaning, purpose and practice of employee voice along three dimensions. The dimensions are individual voice versus collective voice, employee-employer shared agenda versus contested agenda and the extent of employer influence versus employee influence over decision making [18].

Various theoretical frameworks have been proposed to elaborate employee voice. Economists have utilized transaction cost approach to explain the choice of individual versus collective voice governance mechanism at the organization and the industry level, and have focused on characteristics including unregulated labour market, bounded rationality, opportunism and neutral risk [19]. Accordingly, organizations will utilize the governance options of union-voice, non-union voice and a mix of union- and non-union voice as to minimize the transaction costs when handling contractual employment relationship, as in the make, buy and hybrid governance scenario of intermediate goods production [20].

Organizational behavioural and human resource theorists draw from the literature in the domain of psychology focus on the definition promotive behaviour that emphasizes expression of constructive challenge intended to improve rather than merely criticize. They discuss employee voice in terms of individuals voluntarily communication of suggestions, opinions or information about problems to their employers [21]. Such action is assumed to be motivated by personal achievement and organizational performance. A leading model proposed by Morrison points to the role of individual difference in terms of attitudes, personality, demographics and work related variations upon employee voice [22]. Most importantly, organizational variables such as structure, culture, team and leadership style also moderate the relationship between the motive to benefit the organization and employee voice.

The cross-disciplinary approach put forward by recent employment relations theorists provide a general framework to conceptualize employee voice in contrasting contexts [23]; employee voice as defined in terms of consultation, communication and say could be individual and collective, relational and communicative as well as formal and structural. Kaufman provided a model encompassing external environment, organizational configuration, governance structure, employment relationship, internal contingencies and voice climate. The external environment could further be divided into economic factors (e.g. macro cycles and economic growth), legal factors (e.g. employee rights, regulation, union organizing and bargaining) and socio-cultural factors (e.g. individual versus collective attitudes and authority-conformity norms) [24]. To a certain extent, the more recent notion of employee voice has broadened and included individuals under specific bounty contracts to assist companies such as Apple and Google, in order to come up with innovative approaches against hacking [25].

In a nutshell, these frameworks examine employee voice from the micro and/or the macro perspective. Moreover, they explore the relationships between the variables in a quantifiable manner, and do not place great emphasis on the qualitative analysis of softer cultural-historical factors which incorporate longer time horizon. This article will utilize the high technology setting in Shenzhen to explore the cultural-historical perspective that build on concepts from the aforementioned frameworks.

3 China and Its History

Though Chinese high technology industry have acquired global practice, they utilize the practice selectively and in alignment with local context. For example, Huawei's stock ownership scheme is inclusive for high performers rather than an exclusive motivation scheme; indeed the company is owned by some 80,000 employees whose performance are deemed to be high and qualified for stock ownership. Hence, it is far more equalitarian than the practice of Anglo-American companies that typically focus narrowly on stars and senior management [26]. China's space company CASC structure its project management in terms of administrative managers and technical managers simultaneously, rather than directed unilaterally by one project manager [27].

China is one of the oldest civilizations in the world with historic continuity and cultural heritage that provide a strong bond and unique identity. The discussion of employees' discretionary verbal communication of ideas, suggestions, or opinions that aims to enhance organizational competitiveness therefore could not be isolated from China's core cultural value. Competing models have been proposed to elaborate the concept of culture and its associated values, but researchers have pointed out that individualism and collectivism represents a core value that is distinctive across cultures [28]. Individualism denotes that each human being is unique and independent; it is manifested in loose human relationships and is fostered by individual freedom of action [29]. As a contrast, collectivism places strong emphasis on the inter-dependent relationships among people as well as the socio-economic units they create [30]. Though there are always a small percentage of people that are counter cultural as well as exaggerating the core cultural value, individualism and collectivism could be observed among the mainstream groups across western culture such as the USA and eastern cultures such as China in terms of contrasting values [31].

Individualism and collectivism affects individuals' perceptions of self and therefore influence the way they interact with other individuals and the environment [32]. Individualistic cultures encourage their members to be self-reliant, unique and competitive in order to achieve their

goals. The emphasis on the interests of individuals therefore support the ideology of competition and endorse the practice of winners take all [33]. The fundamental reason for employee voice therefore allows individuals to stand out with unique contribution and to gain individual award. In his discussion of individualism in the USA, Lodge elaborates it as ‘the idea that fulfilment lies in an essentially lonely struggle in what amounts to a wilderness where the fit survive and where, if you do not survive, you are somehow unfit’ [34]. Indeed, the value of individualism, as exhibited in the neo-classical economic theory, states that the aggregate of individual self-interests and independent decisions will contribute towards the most efficient allocation of resources and lies in the core of competitive markets.

As a contrast, the relationships between individuals are tighter and social behaviour is determined by the objectives shared with families, communities or clans within collective cultures [35]. Collectivism has reinforced and supports the spirit of cooperation. Within collective cultures, group interests are accorded greater importance than the interests of individuals [36]. Triandis states that ‘social behaviour is determined largely by goals shared with some collective’, and ‘if there is a conflict between personal and collective goals, it is considered socially desirable to place collective goals ahead of personal goals’ [37]; he further points out that ‘well-beings for collectivists depends on fitting in and having good relationships with the in-group which requires close attention to the norms of the in-groups’ [38]. The purpose of employee voice in collective culture is to improve welfare of the group rather than the enhancement of individual uniqueness.

4 Methodology

This article adopts a grounded theory approach to explore employee voice within China’s collective culture, in a global industry characterized by technological upgrade and knowledge intensification [39]; the focus is on the technology hub Shenzhen in the Pearl River Delta which is also known as the Silicon Delta. Shenzhen leads the world’s digital transformation with entrepreneurial companies specializing on the design and production of high technology hardware including computers, telecommunications equipment, information technology, biotechnology, pharmaceuticals, smartwatches and aerial drones; these high technology outputs are significant and contributing towards half of the city’s total industrial output [40]. Indigenous and global companies have established cutting edge research and development activities in the city; they benefit from the high concentration of college educated workforce migrated to the city from other parts of China. This unique group of internal migrants accounts for approximately forty percent of Shenzhen’s total permanent population [41]. It has been suggested that the key forces

that enable Shenzhen's success include entrepreneurial spirit brought over by these individuals [42].

Shenzhen's transformation from a fishing village to a technology hub is an unprecedented urbanization miracle and could be traced to Deng Xiaoping's designation of the city as a special economic zone in 1980. Shenzhen's economic miracle has found no parallel in global economy history and the city is built on human capital that embraces diverse values and offers complementary skills [43]. The achievement of Shenzhen could be summarized in terms of its recent GDP, which surpassed that of Hong Kong and Singapore. International patent application data has shown China's strong position from the 2010s onwards, which only lagged behind the leaders USA and Japan. It was reported that inventors in the Tokyo cluster had 94,079 patent filings as compared to Shenzhen-Hong Kong's 41,218 filings and the Silicon Valley's 34,324 filings. Indeed Shenzhen contributed towards half of China's total patent application [44].

The high technology industry in Shenzhen and China comprises of state firms and private firms. Despite the differences in ownership structure, they build upon Anglo-American high technology management model. A recent empirical study compared the critical success factor of contextual ambidexterity in high technology in the UK and China, as supported by sharing organizational vision and accepting diverse ideas, observed among Chinese firms as in the British counterparts [45].

This article is based on a single case study that explores employee voice in five Chinese companies headquartered in Shenzhen; they are Huawei, ZTE, BYD, Tencent and DJI. The five global companies have either leading technological or market share positions in their fields. The data collection included both primary and secondary data. Twelve person-to-person and telephone interviews with Chinese technical personnel was conducted in early 2018; they had either past or current experience in Shenzhen, related directly or indirectly to the aforementioned companies. Open ended questions were asked in relation to the interviewees' technical background, work experience, work motivation, work pattern and work environment. Furthermore, a wide range of literature in relation to Chinese historical and cultural texts was reviewed in the libraries of Oxford University. Finally, industry information concerning Shenzhen's high technology growth was obtained from the public domain.

The comparative thematic analysis was used to process the data collected. It involved the assessment of patterns and themes across the five firms in the case study that elaborated on culture and ideology upon employee voice. The process of data analysis also involved re-examining data and concepts where necessary, moving forward and backward. A framework that

highlights the cultural impact of employee voice emerged and is presented in the final section of this article.

5 Culture and Ideology Upon Employee Voice

This section will discuss the key themes in association with the data analysis, elaborating on China's historical past and its relevance to the modern day employee voice in high technology industry in a societal culture characterized as a high level of collectivism.

5.1 The Role of Leaders

Since their pioneering studies on leadership tracing back to the 1930s, US institutions have continuously shaped the research agenda in the field [46]. They have focused on the leadership traits, leader behaviour and leadership styles as well as situational and environmental factors pertinent to leadership, which led to the improvement of organizational performance [47]. The Global Study of Leadership Effectiveness has, from 1991 onwards, further addressed the universal and cultural specific dimensions of leaders [48]. The GLOBE study found that though leaders endorse dimensions such as charismatic, participative and team-orientation across the world, the extent of desirable dimension differs. Examples are American culture preferring more participative leaders than Chinese culture whereas Chinese culture prefers more participative leaders than Russian culture. Employee voice within the individualistic culture provides opportunities for employees to present their unique contributions as a basis for recognition and promotion, and the low power distance culture in the USA further facilitates the process in a competitive manner [49]. Recent studies suggest that the attributes of leaders in terms of approachability, action taking and accessibility also influence employee voice [50].

There has also been a discourse on leadership among Chinese philosophers since the Springs-and-Autumns period; they illustrates opposing views on the notion of good leaders. Overall, proponents have specifically discussed how leadership could enhance collective welfare in the family and the state. Though China is a high power distance culture, employee voice is seen to be appropriate among the educated middle class. Like their preceding Confucian scholars, the perception is that technical employees have a duty to put forward good ideas in order to improve collective welfare. Confucianism also advocates virtuous and paternalistic leaders to lead by examples enabling subordinates to provide inputs appropriately. As a contrast, Daoism proposes individuals to follow the natural cycle of the universe and endorses leaders who adopt laissez faire approach, employee voice is therefore available for those who voluntarily participate [51]. These philosophical views contrasts with Walumbwa and Shacubroeck's study on ethical leadership (as

positively related to agreeableness and conscientiousness) providing psychological safety net for employee voice within the US financial sector on the ground that Chinese employee voice is perceived to be a duty or the way [52].

The high demand for talented technological knowledge-intensive labour [53] and the intrinsic difficulty in monitoring mental labour within contractual working hours mean that the key to sustainable competitive advantages is to elicit employee commitment to organizational innovation [54]. Building on its collective culture, the successful high technology companies in this study combine paternalism with high level of work autonomy. Individual employees are paid well and are given the opportunity to explore and exploit technology relevant to the companies. For instance, the annual salary of a typical software programmer in Shenzhen was approximately RMB120,000 while the more senior programmer could be between RMB200,000-300,000, which represented a narrowing gap with that in the Silicon Valley [55]. Ideas are also highly appreciated in the five companies. The well cited example in Tencent is that proposal of new ideas could lead to a generous cash award reaching RMB1,000,000 concerning significant technological innovation [56]. Furthermore, there is a process of person-organization fit between the recruits and the five firms, which generate a unity of purpose [57]. This also explains the turnover rate in these companies and the perception that they provide training grounds for the transient employees.

Overall, the Confucian practice of reciprocity means that dedicated employees would try their best to repay the generosity of their employers accordingly whereas the Daoist practice of go with the flow means that courageous employees pursue employee voice that follow the natural path of successful companies.

5.2 The Legacy of Culture

Unlike highly individualistic cultures, the role of family and its extended relationship has been a foundation of business in collective cultures such as China [58]. Some theorists point out the familism or putting the interests of family before others within Chinese business as a key feature among the Overseas Chinese. The importance of family could be traced to the Confucian worldview of family as the basic unit of a prosperous and harmonious society [59]. The sense of family has been transferred and maintained in even large high technology companies, it is accompanied by the emphasis of national interests reinforced by the Chinese Communist Party since 1949. The five case study companies also have mechanisms to identify best practices and address the significant contribution of individuals towards the organizational growth and the wider society. ZTE, for example, awarded 31 gold and silver medals to its most valuable employees

towards the growth of ZTE in 2016; it also participated in various schemes to alleviate poverty and natural disaster in China [60]. BYD explicitly states that it strives for a family culture and provides meals, accommodation, schools and leisure facilities to create the family atmosphere in its headquarters. [61]

Facing the highly competitive and rapidly evolving external environment, the five companies reveals tactics specified in the Art of War as well as the paradoxical thinking embodied in Dao De Jing. The respective Legalist and Daoist classics highlight the importance of flexibility; the former states that tactics are like the course of water, which shapes its course according to the nature of the ground over which it flows whereas the later see the world as yin and yang with no mutual opposition [62]. Successful Chinese high technology companies are constantly adapting themselves for survival; hence they provide less specific job specifications and allow employees to continuously develop themselves and align with the requirement for environmental changes. Last but not least, Chinese Buddhists' emphasis on suffering as a pre-condition for self-actualization could be seen in the five companies. Buddhism, which was diffused from India to China through trade links, believes in enduring physical and psychological hardships while keeping a focus which will eventually lead to enlightenment or self-actualization. For example, Huawei gave new recruits mattresses to take a nap in the office, signifying the importance of endurance, hard work and dedication. The five companies provide opportunities and expect employees to constant upgrade their knowledge, which is a form of character building and require a strong work ethic.

Successful Chinese high technology companies, to a great extent, are embedded in the collectivism of Chinese culture and shaped by the heritage of its rich philosophical underpinnings. The five successful companies encourage constructive employee voice and tolerates diverse ideas. Employees' discretionary behaviour such as suggestions, ideas and opinions, a potential impetus that challenge the status quo, are perceived as key assets and sources for innovation and change.

5.3 Nation Building

The collectivism in Chinese culture intertwines with the socialist ideology in contemporary China, has conjured a necessity for the re-creation of the nation's global position in technology. Marx has famously written that the importance in the development of industry, science, technology and technique, and if any society cannot develop its mean of production, it will not be able to survive [63]. Given China's historical achievement in science and technology, the Chinese society and its ruling elites have widely acknowledged the innovation capability and the necessity to implement high technology in the 21st century; this corresponds to the national consensus on the important role and contribution among technical professional towards China's technological position.

Huawei, ZTE and Tencent are conscious about their contributions towards the society. For example, ZTE pointed out its role towards the economic transformation and upgrading of China [64].

Due to its innovation on clean automobile technology, the founder of BYD won the Canton Provincial Award for Individual Contribution in 2011 [65]. DJI, whose 36 years old founder graduated from Hong Kong University Science and Technology and tried to set up its headquarters in Hong Kong during the mid-2000s, settled down in Shenzhen after his unsuccessful attempt to secure funding in Hong Kong. The youthful company is focusing on growth and most employees were proud of its achievement in the context of China's economic miracle.

It was reported that some 4,000 of its technical or 23% of Tencent's overall employees or employees were member of the Chinese Communist Party. Since Tencent is a privately owned company, there is no requirement for employees to become members of the party as in the case of its state-owned counterparts. The fact that the technical employees have joined the Communist Party demonstrates their shared beliefs and supports in achieving the Chinese Dream [66]. Consequently, employee voice has taken a wider implication in the context of high technology; interestingly, this might also explain the success of open innovation and close collaboration among entrepreneurial companies in Shenzhen.

The common threads in the above discussion highlights the role of culture upon high technology. Employee voice in Chinese high technology could only be fully understood in the context of collectivism, which is in turn supported by philosophical thoughts that could be traced back some two thousand years. The continuity within Chinese history could be seen in the Emperor Xiaozong (1163-89) comparing the impact of Confucianism, Daoism and Buddhism to the legs of the widely used bronze ceremonial vessel during the period, which were so integrated that all three had to exist simultaneously in order to function properly [67].

Confucianism provides a framework for a structured and hierarchical social relationships, guided by virtues such as ren (a humanistic love which embodies benevolence) and li (propriety or ritual performance within a specific role such as fathers, sons, employers and employees). Confucianism endorses employee voice that contributes towards wealth creation supported by reciprocity; hence employees perceive their duties to contribute voluntarily towards the success of their companies. Daoism that perceives cosmic harmony as embodied in the paradox of yin and yang, which allows the seemingly contradiction to co-exist based upon complementary, interconnectedness and interdependence. Such paradoxical thinking encourage employees to embrace opposing perspectives and provides the foundation to creativity thinking; employees

engage in voice behaviour when they are ready to take part. Legalism as seen in Sun Tzu’s work has been internalized by businesses that consider competitions as life and death in the battlefield; employee voice could be compared to the collective strategic intelligence, which are cost effective, and could lead to innovation advantages. Though Legalism advocates the strict adherence to rules and guidelines, Sun Tzu’s notion of good leadership relate to those who take care of the soldiers as if one’s beloved off springs. Finally, Buddhism provides the path to self-actualization and pursuit of truth through endurance and place great emphasis between the interaction of the master and the students; hence, the voice of employees are substantially important during the process of individual learning and skill upgrade. Under the diverse and somewhat contradictory philosophical heritage embodied in China’s collective culture, the voice of modern high technology employees as in their discretionary behaviour that challenge organizations’ status quo become an invaluable source for sustainable competitiveness.

6 The Future of the Employee Voice

Drawing from the relationship between the core value of Chinese culture and the practice of successful high technology companies in Shenzhen, this article explores the salient impact of culture associated with China’s historical past on modern employee voice and proposes the following framework that enhance our understanding of Chinese high technology employee voice facilitating a meteoric rise of cities such as Shenzhen within a very short time span that is unrivalled in history.

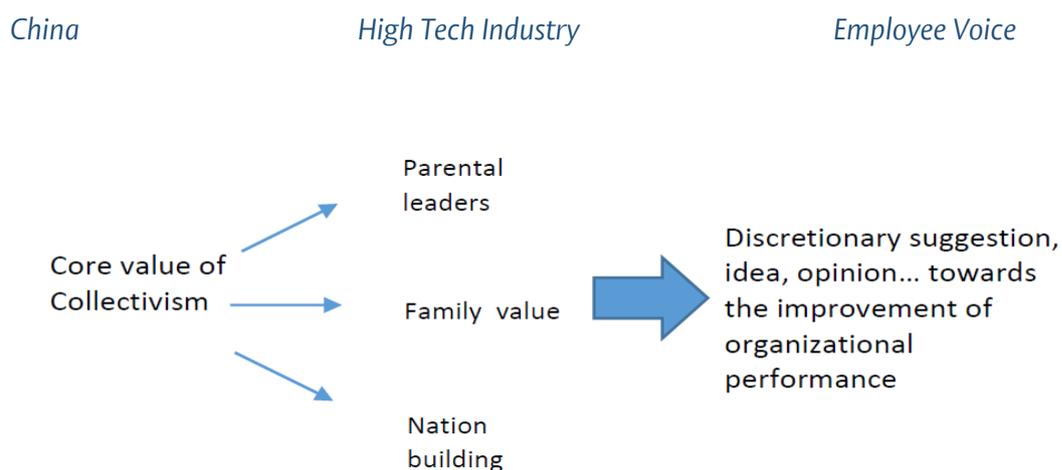


Figure 1: Employee Voice in Chinese High Technology

We have shown a picture of technological knowledge-intensive employees organized into project teams that made judgmental decisions in Shenzhen’s successful high technology companies; these employees voluntarily provide constructive inputs with the intention to improve

organizational performance and competitiveness. This article delves into China's past in order to provide an explanation of the making of employee voice. It illustrates one of the many faces of employee voice in China, which exhibits the impact of global technological influence and the influences of culture and ideology on the way companies tackle employee voice. Overall, the weight of culture and ideology tracing back to the ancient past still runs silently and deeply, providing us the philosophical background to understand an individual approach to voice. Finally, this article continues the volume of work towards the understanding of context within the management of high technology workforce. The first generation of high technology companies emerged in the country since the economic reform, to a great extent, are companies with Chinese characteristics; it is therefore useful for managers of global companies to understand the historical context when operating in China [68].

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