Cognitive transformation of founder CEO in Acer: a case study

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Abstract: Founder CEO cognitive transformation is a necessary step in creating a successful business in the entrepreneurial process, yet there has been little conceptual and empirical development of this issue in literature. This study examines the cognitive modulation of founder CEOs to improve their managerial abilities while handling business crises. An in-depth case study on Mr. Stan Shih, founder CEO of Acer, suggests that founder CEOs are more likely to transform their cognitive and managerial abilities when they face business crises or failures with a positive attitude. Moreover, the findings of this study propose a cyclic framework to illustrate the importance of learning from failure. Implications for future research on founder CEO transformations are discussed.

Keywords: cognition; CEO; transformation; managerial ability; case study; Acer.


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1 Introduction

Chief Executive Officers (CEOs) or top managers have traditionally been viewed as making a positive contribution to the firm (Katz, 1974). They are able to direct their companies in the active pursuit of opportunities (Barnard, 1938), make strategic material choices to influence firm performance (Child, 1972), and implement strategic and operational decisions that may create rents which can not be competed away by other firms and managers (Castanias and Helfat, 1991). The quality and quantity of decision making, and performance of an organisation’s top managers are often the most important determinant of both the success and survival of the organisation (Nikolopoulos, 2002; Drucker, 1954). Consequently, their unique managerial skills and abilities, involving a combination of the firm’s resources, development of organisational routines and management decisions can be a source of competitive advantage (Packham, 2002; Barney, 1986).

However, changing firm and industry conditions may modify the managerial skills that the firm requires. Founding entrepreneurs face new and different challenges with the growth of their organisations, but success at managing the challenges associated with one stage of growth does not guarantee future success (Jayaraman et al., 2000). Several studies argue that founder CEOs often have difficulty in developing the skills needed to become professional managers during or after the IPO stage or the future, and CEO succession may improve the firm performance and the deployment of management resources (Rubenson and Gupta, 1992; Virany et al., 1992; Wasserman, 2003). But people such as Fred Smith of Federal Express, Bill Gates of Microsoft, Michael Dell of Dell Computers and Jeffery Bezos of Amazon.com are noteworthy examples of people who successfully founded and managed a firm throughout its IPO and growth. Nevertheless, it is less descriptive of what triggered their transformation and how the transformation process is taking place. This study examines the transformation process of the founder CEOs.

The entrepreneur who adapts to this environment, in effect, embraces the necessary metamorphosis (Holt, 1992). By engaging in real experimentation within business activities, CEOs need to exercise their cognition to recognise new opportunities and problems, and then take strategic actions in risky and uncertainty venture activities (Loasby, 2001). Cognition implies what you have learned from the information you have received. But, an erroneous cognition could lead to wrong decisions. So a founder CEO has to regulate his framework in cognition and learn from business crises and failures (McGrath, 1999; Shepherd, 2003; Nystrom and Starbuck, 1984); then he can lead the firm to overcome predicaments and learn how to improve the firm’s new resource utilisations and abilities.

This paper explores founder CEOs whose experience of business crises or failures that represent a personal affair, may impact their abilities to adjust their cognition and learn when the circumstances surrounding the crisis are ambiguous (Shepherd, 2003). We believe that their characters today are no longer the same as they were at the beginning of the start-ups. In Taiwan, there are many entrepreneurs who have experienced crises and straitened circumstances, and yet, have overcome them to lead their firms to become international corporations. For example, the founder CEOs, Morris Chang of TSMC (Taiwan Semiconductor Manufacturing Company Ltd.), Barry Lin of Quanta Computer Inc, Terry Gwo of Foxconn and Stan Shih of Acer. In order to understand how the transformation process takes place, we examine the founder CEO of
Acer, Mr. Stan Shih, the promoter who carried Taiwan’s OBM (Own Branding and Manufacturing) computers into the international market, for our research. During the thirty years of entrepreneurial experiences, Mr. Shih experienced three critical business crises, launched three reengineering programs, modified his cognition and improved his managerial abilities. We hope we can explain the transformation of the entrepreneurs’ cognition in facing crises, what they have learned from their lessons, and the change in their managerial abilities.

2 Literature review

2.1 Entrepreneur’s cognition influences the decisions and actions of an organisation

What people can see, predict, and understand depends on their cognitive structure – which means logically integrating and mutually reinforcing systems of beliefs and values (Isen and Baron, 1991). And cognitive ability is the level of intellectual capability brought to a decision, a focus on problem-solving methods and manifests the individual’s cognitive complexity or information-processing, skills (Hitt and Tyler, 1991). Entrepreneurial cognition has primarily focused on how individuals interpret information, exploit brief windows of opportunity, and implement decision-making heuristics (Baron, 1998, 2004), which then results in an evaluation of the situation and the intention to (or not to) pursue specific business activities. It is typically influenced by the manager’s historical experience as opposed to his current knowledge of the environment (Busenitz and Barney, 1997). When managers work together over time, they often develop a set of beliefs or ‘dominant logic’ for the firm, based on their shared history and their cognition, that strongly influences their organisation’s actions (Prahalad and Bettis, 1986).

The top managers’ cognition and interpretation must keep pace with a changing environment. Even top managers were acting wisely, but they were misled by their faulty beliefs and cognition, resulting in poor organisational performance (Busenitz and Lau, 1996; Tripsas and Gavetti, 2000). Therefore, strategic reorientations are rooted in cognitive shifts, and turnarounds almost always involve both significant changes in top management and changes in overall strategies (Isen and Baron, 1991).

2.2 Learning from business crises and accumulating managerial abilities

Individuals do not learn in a vacuum. Mostly, they learn using the outcome of actions (or feedback) to revise their cognition systems (Brown and Eisenhardt, 1997). Therefore, there is an opportunity for the founder to process feedback information to his knowledge and abilities. Several scholars of entrepreneurship are in agreement with many organisational scholars in their opinion regarding the benefits of learning from business failures (McGrath, 1999; Shepherd, 2003). Recovery from grief of business failure offers the opportunity to increase one’s knowledge, and provides benefits to the individual and society (McGrath, 1999). Sometimes ‘crucibles’ – negative events or experience that shaped leaders, forced people to transit and learn distinctive leadership abilities (Bennis and Thomas, 2002). McGrath (1999) and apply the real options reasoning to develop a more balanced perspective of the role of entrepreneurial failure in wealth
creation. For entrepreneurs, learning from business crisis or failure occurs when they can use the information available about why the business failed (feedback), to revise their existing knowledge of how to manage their own business effectively (Founder knowledge). That is, to revise assumptions about the consequences of previous assessments, decisions, actions and inactions. Hence, business crisis or failure is more important than success for learning (Sitkin, 1992). In this paper, we adopt the term of ‘business crisis’ or ‘business failure’ as a situation that seriously threatens an organisation’s survival and decreased business performance.

However, past learning inhibits new learning (Nystrom and Starbuck, 1984), which means that an individual’s cognitive limits can represent a barrier to learning (Levitt and March, 1988; Vince, 2001). Hamel and Prahalad (1994) pointed out that many senior managers of hugely successful companies learned well, only collectively, and failed to learn about the future, and grew blind to competitive challenges on the horizon. Top managers must develop the mental space for new ideas to emerge, and reframe their assumptions about what it means to be strategic (Bierke and Hultman, 2003).

Cognitive reorientations spark corporate turnarounds and top managers successfully convert losses into profits by identifying opportunities. If managers can accept dissents, interpret events as learning opportunities, and characterise actions as experiments, then they may execute remarkable turnarounds by changing both their and their organisations’ beliefs and values.

2.3 Developing managerial abilities and knowledge

Most important and most challenging for the founder or a chief executive officer, is coping with crucial transitions and the change in management tasks, such as recognising the need for change, developing human resources, delegating responsibility and developing formal controls (Timmons, 1991). Founder CEOs are also required to effect a fundamental change in the attitudes, behaviour and managerial abilities of the entrepreneur within the various organisational life cycles. For example, Fred Smith, founder of Federal Express, identified his role during the rapid-growth stages as a ‘transitional state of mind’ when he had to develop the ability to assimilate information from many different disciplines, synthesise his vision into workable plans, and learn to trust his people to execute activities that achieve success.

Therefore, entrepreneurs need to develop managerial abilities and knowledge to suit various stages of organisation and changing environment (Mentzas, 2004). Managerial abilities (and human capital) can be seen as a set of innate and learned abilities, expertise and knowledge that managers acquire, in part from previous work experiences (Castanias and Helfat, 2001; Bailey and Helfat, 2003). Also, managerial abilities can be categorised to four parts: firm specific, industry-specific, related to industry, and generic, to reflect different levels of transferability between firms, from most easily transferable skills (generic skills) to least easily transferable skills (firm-specific skills). As the company and environment continue to expand and change, initial capabilities, accumulated knowledge bases, path-dependent cognition, and satisfaction in learning may affect the learning and the evolution of knowledge abilities (Nonaka et al., 2000). Managerial abilities such as the development of dynamic capabilities can make top managers sense and seize opportunities quickly and proficiently, and create new managerial abilities through mistakes and failures.
3 Method and research design

3.1 Research framework

This study is based on a case study to explore how the founder CEOs transform their cognition, managerial abilities, and knowledge within the business crises, and through reengineering. We propose the research framework through the literature review in cognitive theory and learning theory, as Figure 1, and clarify our conception as follows.

In the literature review, we utilise cognitive theory which is proposed by psychologists, to explain why founders’ cognitive ability influences their decision-making. Executives who possess greater overall cognitive ability than others can probably more quickly perform intelligence and design activities in decision-making processes (Wally and Baum, 1994). Therefore, many scholars recently devoted themselves to investigating the relationship among top manager’s cognitive ability, decision-making and business performance (Prhalad and Bettis, 1986; Isen and Baron, 1991; Hitt and Tyler, 1991; Busenitz and Lau, 1996; Baron, 1998; Brown and Eisenhardt, 1998; Tripsas and Gavetti, 2000; Baron, 2004). Then, we apply learning theory to emphasise the top managers’ learning efforts from crises, because failure is more important than success for learning (Sitkin, 1992), which can lead managers and firms to re-assess their cognition and information collection, enhance their abilities and improve business performance (McGrath, 1999; Bennis and Thomas, 2002; Shepherd, 2003).

Therefore, cognitive ability is accumulated to become tacit knowledge by the process of experience and problem solving. Top managers adjusted their current knowledge and cognition to reorganise their cognitive ability and shape it into new knowledge. Accordingly, the right flowchart of Figure 1 is most important in this study, and is presented by solid lines. Founders make decisions based on their cognitive ability, and wrong strategies and decisions would lead to business crises or failures when the external environment is not the same as expected. Founders have to learn their lessons, find out the meaning of learning to adjust their abilities in cognition and management for avoiding another misjudgment, and correct their strategy and decision to create a profit for the firm. The left flowchart is set to combine the right one for our future research. However, since we did not have a deep discussion in this study, we use the dotted lines to represent. Founders make decisions based on their cognitive ability; once the environment matches the one in decision-making, effective strategies will bring profit for the company and strengthen the original managing cognition. However, it may not help a lot in improving...
the current managing ability, and sometimes the firm can easily fall into the success trap (Hamel and Prahalad, 1991).

Every business faces the challenge to be a success all the time. Being a success can strengthen the original cognitive ability, failure will renew the old cognitive ability and bring out the new knowledge. We should not ignore the effect of failure or adversity. Therefore, we present Figure 1 to explain the switching process of the transformation of the founder’s cognitive ability. The influence from the failure brings in the motivation to renew the cognitive ability and learn the new one.

3.2 Data collection

This research is based on an in-depth, inductive case study to examine how the founder CEO of Acer Group, Mr. Stan Shin, transformed his cognition and managerial abilities and knowledge within three business crises and three reengineering programs. We take a case study approach for three reasons:

- we are interested in how the process progresses rather than its frequency or incidence
- we have largely qualitative data
- the coauthor of this study, the director of Hsiou Lien Foundation which was named after Mr. Shih’s mother, has known Mr. Shih for over 20 years and is very familiar with Acer’s development history.

Given the open-ended nature of our questions regarding the relationship among cognition structure, learning from business crises, and managerial abilities, we felt that this approach would be most useful for theory building (Yin, 1994).

In addition, by taking a long-term historical perspective, we gain insight into the CEO’s transformational nature of both capabilities and cognition. A combination of public data, company archives and interview data were collected. Publicly available data included a complete set of historical annual reports, corporate brochures, biography books, newspaper and magazine reports, information from the internet, public speeches, and case studies. Historical strategic plans, organisational charts, and financial reports helped to document the transition of the organisation. Then, we interviewed Mr. Shih, one ex-manager, and three middle-level managers from research and development, and marketing and manufacturing. In addition, we also interviewed two competitors to learn the various aspects of the PC industry development at that time. All interviewees have worked in Acer for more than five years, they are very familiar with the development of Acer’s history and the transformation of Mr. Shih’s cognitive and managerial abilities. According to the historical records, and from public reports and interviews, we believe we have an objective report.

Interviews were open-ended. Interviewees were asked to discuss their specific role in periods and to broadly discuss the transformation of the CEO and organisation in different stages, from business crisis to reengineering. Interviews lasted from 2 hours to 4 hours. Then, researchers identified common words and events using the following steps: First, we identified specific business crises as the basic unit of analysis. Second, we coded the events and the time of their occurrence into four stages according to the ‘cognition’, ‘business crises’ and ‘managerial abilities’ variables in the illustration of case study. Finally, we corroborated our findings from multiple sources.
4 The case evidence of Acer

Acer was established in 1976, and it is now a worldwide top 10 PC manufacturer with Original Brand Manufacturing (OBM). Mr. Stan Shih, the founder and the CEO of Acer, founded Acer with $30,000. The total business sales of the Pan-Acer Group (or named ABW Group which including Acer group, BenQ group and Wistron group) amounted to 22 billion in 2004. During the entrepreneurial period, he had experienced the globalisation and evolution in the computer industry, three crises in business operations and had launched three re-engineering programs. Shih admitted honestly that he had proposed the wrong strategies in some decisions, and led the company with an unswerving determination to break the difficult position. Once in a public speech, he said, “For the past twenty years, Acer had experienced lots of setbacks and paid a lot of tuition, I think I am the CEO who had paid the highest tuition in this field”. Now, Mr. Shih continuously trains successors of each subsidiary through the intra-preneurship and is leading Acer into another stage of its growth.

4.1 Stage I in establishment: 1976–1985

4.1.1 Cognition: popularise and apply the microcomputer and microprocessor-based technologies

In 1976, Mr. Shih and his friend, who established ‘Multitech’, the former name of Acer, considered itself as a ‘Gardener of microprocessor machines’, with the mission to popularise the application of microprocessors. “Although we are not sure where we can find our market, we believe the prospects are brightening”, said one senior manager. Because of limited capital, Acer’s business initially focused on consulting, R&D, and trading. In 1981, Taiwan’s Hsin-chu Science-based Industrial Park was established. At the same time, Acer successfully created a learning machine ‘Micro-Professor I’, and
decided to transform the company into a manufacturer, and extended their business to the international markets, approaching towards the OBM. Since then, the market of Acer has increased 100% and their Sales have increased to 212 million. By 1983, when Acer became the biggest computer firm in Taiwan, it had more than 40 dealers in 20 nations, an annual growth of around 100% was maintained from 1981 to 1984 (See Table 1 in Appendix).

4.1.2 Business crises: infracting intellectual property rights and causing serious loss in market and sales

In 1982, Acer developed a new PC ‘Micro-professor-II’ and was accused of infringing on Apple’s IPR (Intellectual Property Right). The US customs seized these products and this event made Acer lose the US market. Later, in 1984, Acer exported the 32-bit IBM-compatible PC to America. Again, the manual, which was written by ITRI (Industrial Technology Research Institute) in Taiwan, violated IBM’s copyright and its entry into the market was delayed.

4.1.3 Transforming business cognition: emphasising IPR management and grounding R&D technology

After these two infringements, Shih realised the importance of IPR (Intellectual Property Rights) in product development and decided to manage the IPR and protect the work of R&D. He established an internal management regulation for IPR, signed a contract with employees and encouraged staff to develop the IPR.

4.2 Stage II in establishment: 1986–1995

4.2.1 Cognition: go global strategy and OBM

From 1986 to 1995, Acer had the highest business growth. Shih changed the company’s name to ‘Acer’, and clarified his goals for OBM business for penetrating the international market. He set up branch offices worldwide and merged with other companies to expand Acer’s foreign markets. However, growing too fast and ignoring the revolution in the PC industry, Acer then faced the biggest crisis in its operations.

4.2.2 Business crises

4.2.2.1 Facing the corporate cultural difference with merged firms and PC industry revolution

In 1986, Shih recruited new staff for the ‘Go global’ strategy and deployed ‘Have a foreign brand or buy it’ strategy. Acer merged with Contec in 1987. However, it did not bring a large profit for Acer because the market had declined due to upgraded technology, low-price strategy and direct-sell policy. The mini PC market had failed.

In 1989, Acer invested 1.5 million to merge with SI (Service Intelligent Ltd.), but when the company was disbanded, its deficit was $200 million. In 1990, Acer spent 94 million to merge with Altos in hopes of promoting Acer’s PC market in the USA. Unfortunately, due to small size, low price and multi-support in the software, the PC386 and PC486 captured Altos’ market, and caused huge debts for Acer (see Table 2 in
Appendix). Furthermore, during the years 1987–1992, Acer’s business culture did not blend with its three merged companies, causing talented staff to leave. The revolution in the PC industry led Acer into a major crisis and Acer faced a persistently declining sales growth rate (see Table 1 in Appendix).

4.2.2.2 Crisis in IPR again

In May 1989, IBM found another infringement in the publication of keyboard controlling from Acer’s BIOS and requested 9 million royalty. But Acer’s annual profit was 5 million only. This event caused Shih to make up his mind to build the clean room and implement IPR management. In 1991, the ‘Chip-Up Event’ made Acer get royalty from Intel and led Taiwan to a new milestone in IPR.

4.2.2.3 Diversification into unfamiliar business

Shih was certain about the development of the semiconductor industry and established Ali in 1986 for IC design. In 1989, Acer put up a joint venture with Texas Instruments and set up TI-Acer for DRAM. Although the semiconductor market was not booming and TI-Acer was still short of the competitive ability, Shih still invested in the field and caused the latter crisis.

After an analysis of the phenomenon, Shih, stated,

“There are five symptoms in Acer: (1) Surplus capital, (2) Big but useless organization, (3) Short of worry, (4) Slow reaction, (5) Communism.”

(Shih, 1997)

He thus decided to effect major changes in the company and in himself too.


4.2.3.1 Strategy, structure and management coordination

In 1989, Mr. Shih hired Dr. Leonard Liu, an ex-vice president of IBM, to be Acer’s General Manager. Liu had business powers to promote an organisational revolution. He divided the company into five strategic business units (SBU) and four regional business units (RBU), adopted the profit centres policy, laid off unnecessary employees to replace the old systems, and improve business performance. However, because the overseas operations were continuously in the red, and caused a severe deficit, at the end of 1991, Acer lost 17 million, and the yearly growth was under 15%. Shih submitted his resignation as Chairman at the board meeting but was retained. However, Liu’s resignation in 1992 showed that his responsibility for the continuous oversea losses had set a good paradigm in Acer.

4.2.3.2 Correcting the business model and proceeding with the global strategies

In 1992, Shih remained as the General Manager; corrected the business model with the globalisation strategy, used the concept of the game – ‘GO’ – to set the ‘Hun-Shih’ strategy for globalisation, and strengthened the ability by incorporating the strengths of other partners. For example, Acer supplies the Motherboard, PC case, etc to its oversea subsidiaries for assembling, Shih called this way the ‘Fast food business model’. He also reorganised the business structure to be ‘Client-server organisational structure’. Each
subsidiary became Acer’s client, and Acer was not a server but the backstage supporter. The new policy – ‘Global brand and local touch’ – allowed the local subsidiaries to be the majority shareholders and operate the company independently. This worked successfully in South America, where Acer became the leading PC brand. Shih kept in communication with his staff and led the company to generate 37 million in profits in 1993. He learned his lesson, “Things done in a hurry cannot be done well” (Shih, 1997). Meanwhile, the booming of semiconductors led Ti-Acer to a profit.

Shih believes that a decision maker should admit to his mistakes so that he can learn from them. He transmitted the concept of ‘losing but not giving up your intention’ inside the firm. Then he promoted the concept of the ‘Smile curve’ in the firm and emphasised that value added business is on both sides of this curve, namely, R&D and marketing service, to reach his goal of becoming one of the top 10 PC manufacturers in the world. Then, Shih announced his third goal – make and sell, and engaged in the field of consumer electronic products. In 1995, Aspire, the first digital computer was put on the market.

4.3 Stage III in establishment: 1996–2001

4.3.1 Cognition: business diversification and OBM product development

At the time it was experiencing the business crisis and reengineering, Acer owned 64 subsidiaries and was the fourth on the list of Taiwan’s business group, and its business sales were 45 billion in 1995. In this stage, the company’s first priority was to provide novelty and the most affordable technology for consumers worldwide. Also, IPR management and the digital internet service are Acer’s new goal. In 1999, Acer and IBM signed a contract to cooperate in digital service development. With this contract, Shih hoped to promote Acer’s competition in the PC market, deepen their relationship in cooperation, achieve his goal – XC, and expand Ti-Acer’s business scope in wafers. However, the diversification strategy and dispersed investment led Acer to face another crisis.

4.3.2 Business crises

4.3.2.1 PC industry revolution and Ti-Acer’s expansion cause a serious debt

In 1997, Compaq, Dell, and HP launched a low-price strategy to increase the competition in the market, which affected Acer’s market share and caused Acer to lose 45 million and showed negative growth rate after 1997. At the same time, Shih thought the wafer service business was on its way to the stars. In 1998, he decided to buy back all TI’s holding stocks in TI-Acer and positioned the semiconductor as the core business to earn profit for the Acer Group. However, the price of DRAM was dropping fast on the market. So Ti-Acer was not strong enough to compete with Korea and Japan, or transcend UMC and TSMC in wafer service. Acer had a debt about of 71 million and decided to sell 30% of Ti-Acer’s stock to TSMC in 1999. Then, TSMC took charge of the business and successfully changed Ti-Acer to a professional wafer service company. One manager of Acer talked about this event, “We were happy to see this deal. It was really a burden for us to run a diversified firm”. Shih also expressed his changed cognition and said, “After experiencing with Ti-Acer, I am not enthusiastic to capital intensive industries any
more”. Shih found that he should re-focus on management, and dispose of uncompetitive departments to maintain the long-term competition.

4.3.2.2 Paradox with OBM or ODM

The first reengineering brought success and led to many assembling factories being set up overseas. Since it was difficult for the RBU (Regional business unit) and SBU (Strategic business unit) to coordinate the resources in each assembly factory, the business performance declined after 1998. Moreover, Acer faced business conflicts between OBM (Original Brand Manufacturing) and ODM (Original Design Manufacturing) operations that caused distrust relationship with clients and reduced competence. This situation reduced the orders, influenced operational performance and caused Acer’s business sales to decline seriously during the period 1998–2001. As one SBU manager described a client’s words, “If you are a part of Acer, we won’t do business with you”. Therefore, Shih finally decided to solve this crisis and launched a reengineering at the end of 1998.

4.3.3 Business reengineering caused another business crisis

At this point, Shih readjusted Acer’s organisational structure and business direction. He divided the Acer Group to five sub-groups, Acer Computer Group, BenQ Group, Acer International Group, Acer Technology Group and Acer Semiconductor Inc to provide better service to clients and to develop IPR. However, these sub-groups did not work as expected, complaining about unequal resource allocation and taking each other’s clients. Therefore, Mr. Shih launched the second reengineering in 1998, but this reengineering didn’t work well either, as there was unequal resource allocation and the taking of each other’s clients. The sales growth was still declining. “When one crab tried to climb out of the basket, the other crabs would climb over it, and no one could get out of the basket”, said a manager of competitors. And a manager from Acer also expressed, “The implementation was not put into effect in the second reengineering, each group did things in its own way and wasted resource duplicate”. Moreover, Shih described his comments with the following:

“Acer had faced the strategic dilemma of Global Brand and Local Touch. Since the Local Touch strategy was over executed, each local subsidiary has its own policy in running business; they could not reach the goals of economic scale, centralized purchasing, and reducing cost. The Fast-Food business model had also faced the problem of talented employee shortage after the business expansion. It caused stocks and failed in benefiting from the Fast-Food business model.”

Finally, Shih admitted the failure of this reengineering in 2001, and planned to have another changing project to get out of the plight. As Shih said,

“Acer used to be the sole named brand of our business, I was hoping the named brand Acer could exist forever. Now I have a different idea: profit is much more important than the named brand. If the named brand Acer existed without gaining profits, it was meaningless to possess the business.”
4.3.4 Business reengineering

Shih realised this interior predicament and spoke out in a speech, “Diversification strategy spreads our focus ... What we need is to extend our competitive ability, but not expending force”. Thus, he admitted the failure of his sub-group strategy and again set his teeth to reorganise the organisational structure. He emphasised the strategy of focus, simplification and perspective, and re-divided the main Acer Group into Wistron Group, BenQ Group and Acer Group to offer marketing and electronic service for customers. As Shih recalled and said:

“The reason why I did it is to focus on my core business and to fade the peripheral business out. To me, this is a big change. I used to run the subsidiary as the core business; I always summed up all the operation performance from every subsidiary. But the financial market didn’t look at it this way. I’m no longer treating reinvestment as my core business. … I do not resist different philosophy of management from outside any more. Nevertheless, I master the direction which can benefit my business; keeping adjustment and focus on my core business.”

Mr. Shih also surrendered the chairmanship of BenQ Group and Wistron Group to successors. This partition strategy eliminated the impediment between ODM and OBM, and also gained the clients’ trust and reduced their anxiety in cooperation. One Acer’s manager said “Recalling the crises we had, I think it was not a crises but a turning point”.

4.4 Stage IV in establishment: 2001–2004

4.4.1 Cognition: be a global information service company and focus on business value creation

After Acer group experienced partition in 2001, it had effectively revolutionised and enjoyed 35% business growth rate in 2002. In 2003, Acer’s business sales had reached another peak and it had demonstrated the partition strategy that helped Acer to allocate resources effectively. “Our firm was a huge but impractical animal, we needed a regulation” said a manager of Acer. Also, Mr. Shih told the public media in a speech that, “We were not fast enough to deal with our pre-crises. We must have the consciousness of impending crises, and another reengineering may come in next the five years”.

For 30 years, Shih has been through crises and adjusted his steps at the turning points. Once he said in a public speech,

“Perhaps because our reengineering was done out of necessity, everyone saw a clear need for it. Also, we did not see reengineering as being confined to our business processes … More important was the reengineering of our organization structure, our business philosophy and values … Each improvement provided the platform for changes at the next stage.”

One of top manager of Wistron Group expressed that,

“Shih can tolerate all opinions. People in Acer won’t be frustrated by repeated failures, but will keep fighting. Acer can make self-examination during the crises, and succeed.”

During the 30 years since Shih started his business, he faced three crises, launched three reengineering programs and showed his abilities in managing them. Mr. Shih had grasped an idea from his experiences;
Cognitive transformation of founder CEO in Acer: a case study

“The main reason of our success during the reengineering of Acer is that we own lots of resources … After the partition was clear to me, without hesitating, I was willing to strengthen our firm structure … Being pro-active and not afraid of change will keep us from being eliminated in history … After what I have been through, I realize that the key to success is to admit defeat … We’ll find the winning policy after we realize why we failed.”

He will retire at the end of 2004, after completely over handing his position to his successor.

5 Discussion and conclusion

This paper examines founder CEO’s transformation of cognition and managerial abilities due to business crises. Through the story of the founder CEO of Acer, we demonstrated that transformation processes in a new learning environment are deeply interconnected to the way this founder CEO modeled the new cognition spaces and adjusted his managerial abilities. We have some conclusions as follows:

First, the most successful entrepreneurs are strongly convinced of their ability to recognise business opportunities. But we assume that they also need to exploit the value of opportunity constantly, and avoid the shortcomings of the entrepreneurs’ cognitive abilities. For example, Mr. Shih was certain about the potential for the semiconductor business at the early stage and established TI-Acer. TI-Acer did make a profit; however, the good times did not last long. Since the semiconductor is not the core business of Acer and the market is intensely competitive, which led Acer into a large debt, the operation is transmitted to a professional firm, TSMC. Hence, entrepreneurs should escape from two limitations of cognitive abilities. One is the temporal myopia that involves focusing on the short-term, and the other is the spatial myopia that means the lack of awareness of other technologies available within or outside the organisation. And the fundamental need is to understand knowledge management and knowledge-based competitive advantages. Entrepreneurs need to build up their ‘knowledge inventory’ which involves acquiring, retaining, deploying, idling, and abandoning knowledge and technologies to keep valuing flexibility for switching technologies and managerial abilities in future opportunities (Miller et al., 2002).

Second, to overcome organisational predicaments and sustain growth in the future, entrepreneurs must be willing to adjust their business beliefs and constantly adapt to environmental changes, even in failures or crises. Even if an environmental change does not render an entrepreneurs’ current cognition obsolete, the net effect of their strategic modification is hardly positive for the organisation. For example, in order to achieve Mr. Shih’s vision, ‘Go global’, he merged with American businesses and enlisted many professional experts to help Acer enter the international market. However the market was pounded by the upgrade of PC, direct-sale model and low-price policy, so the North American subsidiary suffered a big debt. Mr. Shih and the General Manager at that time, still believed that merging was the way to expand the American market and they ignored the most important problem in merging, which was to coordinate and blend new staff into Acer’s corporate culture. This poor cognition led to the failure of the first stage of the ‘Go global’ plan. After experiencing these business crises, Mr. Shih recognised that during the change in industrial environment, the vision had been the same, and he should have adjusted the organisational structure, control mechanism and the business model to
fit the appropriate way of corporate expansion strategy. That is Chandler’s concept of ‘Structure follows strategy’, and growth without structural adjustment can only lead to economic inefficiency (Chandler, 1962).

Third, the manager should not bear his success in mind, but must recognise small environmental changes by ‘Unlearning’ (Hamel and Prahalad, 1994). There is a paradoxical tension involved in organising, between the desire to learn and the need to avoid learning or unlearn. Hence, successful organisations are seen as having capabilities for adaptation, while good leaders are widely praised for their strategic use of knowledge, their cleverness and their will to change organisations by transforming vision into reality. Shih found that the business strategy for five sub-groups was not suitable for the intense, competitive PC industry; most of all, when the overlapping resources of OBM and ODM resulted in a low level of trust from clients and thus reduced orders. Furthermore it would limit the group development. So he decided to change his previous decision to have a different division of groups. Senior managers may have to discover that they should no longer rely on their current beliefs and methods and can avoid falling into ‘success traps’ (Levinthal and March, 1993). Furthermore, change can make a person, or a firm, maintain elasticity and be open to learning.

Fourth, in Western companies, in many cases, the founder CEOs lead their companies into a new age level, but in many Oriental companies the founder CEOs often keep the position of CEO to lead the company to growth. Most Chinese founder CEOs are very assiduous, and they manage their companies in person. This helps them to grow or even be more mature, so they can remain effective in the position of CEO.

In addition, personality theories point to the importance of personal predispositions for venture success, and venture capitalists have reported that entrepreneur characteristics are extremely important for venture success (MacMillan et al., 1985). Shih had instilled his business idea – ‘human nature is kind’, his forgiveness and teaching everything he knew – to his staff and the criterion of ‘me too is not my style’ for the business at the initial stage. He provided a better working environment to his staff to retain employees, and also applied the concept of sharing stock with high-level managers, promoting an intra-preneurship within the company. One manager of Acer said, “Mr. Shih did not develop his business only for the profit but also considered the national industrial development policy”. For this significant mission, Shih continuously revised his business scope and management. Another interviewee stated, “Mr. Shih is open-minded to accept different opinions, especially in supporting his staff”. Therefore, he could favourably find successors inside the company in the second and third reengineering, promote resource distribution and adjust the business model to create the value of business operation. This promoted individual characteristics such as the knowledge, skills, and/or abilities required to perform a specific job. An entrepreneur’s traits serve to influence the skill sets that are developed and the levels of entrepreneurial motivation, which in turn affect business strategy and performance.

This paper has shed light on new perspectives of entrepreneurship and organisational evolution in the life span of an organisation. Our research contributes to the entrepreneurship literature by showing that the experience of business crises and failures can generate both positive or negative effects and performance, depending on whether the CEO recognises these opportunities. Specifically, we examine how founder CEOs learned and unlearned by those business crises, adjusted their cognition and enhanced their individual knowledge and abilities.
Cognitive transformation of founder CEO in Acer: a case study

These insights are important for understanding the relationships between cognition, managerial ability and entrepreneurship. Further study could add or compare entrepreneurs from different countries in their managing ability and transformation of cognition. Also, through the quantitative research, future study can explore how the entrepreneur’s attitude, cognition and managerial ability affect business development. We believe, that this paper helps explain some of these ‘how’ questions in the organisational management process, and the entrepreneur’s transformation.

References


Cognitive transformation of founder CEO in Acer: a case study


Appendix

Table 1  Annual sales of Acer

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (US$ million)</td>
<td>0.03</td>
<td>3.03</td>
<td>9.09</td>
<td>12.12</td>
<td>60.61</td>
<td>90.91</td>
<td>212.12</td>
<td>333.33</td>
<td>636.36</td>
<td>1,151.52</td>
</tr>
<tr>
<td>Sales growth rate (%)</td>
<td>0</td>
<td>9900.0</td>
<td>200.0</td>
<td>33.3</td>
<td>400.0</td>
<td>50.0</td>
<td>133.3</td>
<td>57.1</td>
<td>90.9</td>
<td>81.0</td>
</tr>
</tbody>
</table>

Shih divided Acer into 3 Groups after 2001 (stage IV) and each group operated business independently. Thus, we did not sum up 3 Groups’ business sales in Table 1 after the year of 2001.


Table 2  The loss of oversea mergers and acquisitions strategies

<table>
<thead>
<tr>
<th>Acquiree</th>
<th>Contec</th>
<th>SI</th>
<th>Altos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiring time</td>
<td>1987</td>
<td>1988</td>
<td>1990</td>
</tr>
<tr>
<td>Acquiring amount</td>
<td>US$ 7 million</td>
<td>US$ 1.5 million</td>
<td>US$ 94 million</td>
</tr>
<tr>
<td>Divestiture loss</td>
<td>US$ 450 million</td>
<td>US$ 200 million</td>
<td>US$ 5.1 billion</td>
</tr>
</tbody>
</table>

Acquiring time: the time taken by Acer to take the action to acquisition and merger.

Acquiring amount: the amount to merge a company.

Divestiture loss: the loss in withdrawing from the merging activity.

In this table, we learned that misunderstanding and a wrong decision-making must pay the price and it may endanger the future survival of an enterprise.