Chapter 2
Enterprise Cannot Survive Without Projects

Any circumstance hitting a limit will begin to change. Change would in turn lead to an unimpeded state, and then lead to continuity. If someone obey rules of moral and law, his or her life would be very smooth.

—Book of Changes

We live in an era of great revolution. As a result, a number of new products emerged, which brings new kinds of experience and achievements. At the same time, depression and failure is accompanied. Both “deep reform” and “continuous innovation” place emphasis on changes. Many people, especially senior executives of enterprises, are struggling with the paradox of failure with or without changes. Projects exist for dealing with changes. It provides a way of surviving and developing to accommodate these challenges.

2.1 Issues Associated with Successful Experiences

What is most dangerous to a successful enterprise or individual? The following parable may provide a clue.

There was an old man selling straw hats. During a hot summer day, he took a rest under a tree with a straw hat on his head. A stack of straw hats were put aside. When he woke up, all straw hats disappeared. Sooner he found that all straw hats were taken by monkeys. With knowledge that monkeys tended to imitate human being’s behavior, he threw his straw hat to the ground. Not surprisingly, monkeys followed the lead. He was very happy to have all straw hats back and passed on this experience to his family.

A few years later, his grandson experienced the similar situation. He recalled the story told by his grandfather and threw his straw hat to the ground. The tactic did not work this time. Monkeys not only kept their straw hats, but also took away
those on the ground. He was confused why the experience from his grandfather did not work. Suddenly, one monkey said: “Everyone has grandfather!”

As shown in this parable, past successful experience should not be used as the only guidance for future works.

The contemporary business environment is featured with turbulence. It is not appropriate for enterprises or individuals to purely rely on previous successful experience.

Why the previous successful experience is not dangerous for a successful enterprise? There is only one reason, i.e., changes. We are within an environment which is changing constantly. Furthermore, the speed of changing is growing.

In 1990, Mr. Jack Welch, former CEO of General Electric, made a prediction that “compared to the growth rate in 1990s, the pace of 1980s is like picnic and walking in parks.” In 1999, Mr. Bill Gates, former CEO of Microsoft, predicted that “with the growth of digitalization, the changes to enterprises in next 10 years will be equivalent to those been made in last five decades.” To address this challenge, Bill wrote a book “Business @ the Speed of Thought.” However, he did not realize that even such a new way of business thinking cannot fulfill the demands derived from the fast change. Ten years’ time, Microsoft did not realize that mobile terminals such as tablets and mobile phones are replacing notebooks gradually. In fact, Microsoft has fallen much behind from iOS and Android in terms of the operation system of mobile terminals. The last decade has witnessed the fallen of giants such as Kodak, Nokia, BlackBerry, Sharp, Panasonic, LG, and Hummer. By contrast, other enterprises are rising such as Google and Samsung. Under the modern business environment, it is not unusual that enterprises lose their competitive advantages in comparatively short period of time. One of the typical examples is that Apple is facing significant challenges from Samsung.

The significance of experience depends on the similarity between the past and the future. In such a fast changing environment, the previous successful experience becomes irrelevant to the environment, even becoming a risk. This is especially the case for successful enterprises and individuals. This is mainly due to the fact that they have more successful experience and are more confidence to rely on this experience!

There is a common saying in Western countries, i.e., nothing is certain but death and taxes. For enterprises, nothing is certain but competition and insolvent. All enterprises are facing fierce competition. Even for those enterprises in the monopolized market, it is not appropriate to perceive a safe future.

PricewaterhouseCoopers released a research report in 2011 on the long-term incentive mechanisms for Chinese enterprises. According to this report, small- to medium-sized enterprises in China only lasted for 25 years on average. The 2012 bankrupt auditing report released by the Zhejiang Higher People’s Court on May 6, 2013, showed that there had been 65 insolvent cases in the first season, nearly
half of the total number of cases in 2012. As an indicator of the national economy, the economy of Zhejiang Province is in a predicament which brings financial difficulties to banking sector.

As the largest manufacturer of modern office equipment and the inventor of photocopier, Xerox has enjoyed a glorious era. Indeed, for a certain period of time, Xerox has been regarded as equivalent to photocopying. With the leading-edge photocopying technologies, Xerox has joined the Fortune Global 500 list, ranked 182th in 1999. In 1998, the total revenue of Xerox reached more than US$20 billion, with company assets of more than US$30 billion and profit of US$395 million. Only one year later, this giant struggled in the market. Its share market value was as low as US$8 billion with a debit of US$18 billion. In the end, Xerox went bankrupt and was acquired by other companies.

A typical example of glorious stories in high-tech sector is Apple. However, even high-tech firms are facing enormous pressures in terms of business competition. A number of Chinese high-tech firms proactively pursue public listing. These entrepreneurs either have transformed their business (e.g., Mr. Lei Ding) or are on their way of transformation (e.g., Mr Yun Ma). This is mainly attributed to the dilemma of annual reports. On the one hand, a negative annual report results in falling share prices. On the other hand, a positive annual report with less profit will bring the general manager into trouble.

In the USA, only 6 out of 1000 high-tech firms secured investment from venture capital funds for their business proposals, among which only 10 % can successfully be public-listed. More than 60 % of these companies went bankrupt or with minor profit. In those successfully public-listed companies, a vast majority of them did not enjoy the long-term success. In past 17 years, only 4 % of public-listed companies in the technology category have their share price grow by 67 %. In other words, 96 % of high-tech public-listed firms only generated one-third of the total value after having been public-listed. The success of high-tech firms has become special cases rather than a rule.

According to many people, Apple cannot be defeated. Since the release of iPhone in 2007, the global revenue of Apple has soared from US$24.6 billion to US$156.5 billion. However, the share price of Apple dropped to a historic low of just over US$398. This was the first time that the Apple’s share price dropped below US$400. As a result, the share price of Apple declined nearly 43 % since September 2012, resulting in around US$289 billion of loss from the market.

The era has gone that someone will get security of job and promoted as long as working as instructed. Enterprises are facing significant challenges of “terminator era” where the average life of enterprises is much lower than the career life of individuals. Even giants like Microsoft keep reminding themselves that it may take only 18 months from the involvements. Under such context, it is not feasible to
expect loyalty from employees. Indeed, many employees are loyal to their professions or occupancies, rather than the enterprise they work for.

“Those staffs made redundant were not aware of that at all. Prior to the interview, all procedures went through. Sooner after they were called into the meeting room, their mailbox, human resources directory, and IC card were deregistered. They have to leave the company in next two hours.” Such a scene is not unusual in practice. In the fast moving era, no enterprise can guarantee employees the future. For survival and further development, a number of actions could be taken by enterprises such as transformation, merger and acquisition and closedown. Not being loyal to employees, how could enterprises expect loyalty from employees? On June 11, 2011, Mr. GenshengNiu left Mengniu Dairy Co. Ltd. for the so-called dedicated charity. This famous entrepreneur has gained reputation for representing domestic brand and charity. Since then, Mengniu Dairy Co. Ltd. enjoys a new era.

The rapid change within the business environment has forced enterprises to be adaptive. As a result, employees have to face a number of challenges in their career. The fierce competition not only presents significant risks to enterprises but also leaves everyone in an instable social environment. It is imperative for enterprises and individuals to explore ways to survive and sustain development in such fierce competitive environment.

This not only applies to enterprises but also applies to regions and countries. Ghost town in Ordos and Icelandic financial crisis are two of typical examples. There seems to be a number of drivers, but essentially, it is due to changes. These include changes to economic situations, business environments, customer requirements, and attitudes of individuals. These changes occurred either slowly or dramatically. Those countries, enterprises, and individuals not responsive to changes will struggle.

### 2.2 Effective Measures to Deal with Changes

Negative psychological behavior such as complaint and depression is mainly derived from the confusion between the environment and problems. We cannot change environment but are able to deal with problems. Change is not our problem. Rather, it is an environment we have to face. It is imperative to understand that it is not our problem if we cannot decide or change. Many people are used to mixing the environment with problems and simply blame the external environment. It is not unusual that we are told that “it will be great the executive is in this seminar” or “if it is not a state-owned enterprise, we will succeed.” This is a typical behavior of blaming others, which is a reflection of confusion between the environment and problem.
As change is inevitable, the only thing enterprise can do is to adapt to changes. Therefore, the most critical issue managers should consider is how the enterprise can adapt to changes. Indeed, this is the most crucial strategy for the enterprise to survive and sustain development. The book “Who Moved My Cheese?” is very popular as it points out that human beings have to adapt their own behavior according to changes. However, Spencer Johnson does not explain how we can adapt to changes!

Christopher Columbus was a well-respected explorer and voyager. There is also Columbus style of managers. Their management style is very ad hoc without a good plan in place. This is not useful for enterprises to deal with changes.

There are generally three ways to adapt to environmental changes.

The first approach is to learn. A number of new products, things, ideas, and phenomenon emerged. As a result, we should learn new theories, technologies, tools, and methodologies accordingly.

Training has drawn a growing attention. When Jack Welch took over the CEO of General Electric, he cut the budget of almost all departments. However, US$45 million was invested in the GE training center, which well paid off. GE gained remarkable success due to well-trained human resources.

All universities are crowded at weekends. A variety of training camps such as CEO, EMBA, and sinology have become the most profitable business of universities. With some connections with Harvard University or MIT, these training camps charge at a very high rate, although the quality varies significantly.

It is not doubtable that many executives participate in these training camps for learning. New knowledge and technologies emerge constantly. To keep pace with the market, an enterprise has to maintain an adequate learning capability. As a result, learning enterprises have gained a wider popularity.

Some enterprises regard trainings as the best welfare to employees. In fact, such statement is not that appropriate. If training is welfare, employees can use it for anything else not relevant to the enterprise. For future-oriented enterprises, training is not only the best welfare to employees, but also the necessary operational activities. Consequently, enterprises should have a good planning of training contents and reasonable investment. Similarly, training outcomes should be evaluated.

In a comparatively stable environment, those enterprises capable of learning are always able to achieve the competitiveness advantages. However, due to rapidly changing environment and fierce competition, in most cases, resources are only allocated to those most competitive enterprises. In general, only the champion is recognized by the market. As a consequence, enterprise cannot succeed by simply learning. This is due to the fact that those to be learned are not the most advanced, not to mention the amount of time required to learn. It is likely that what you are learning becomes outdated before you have mastered it (see Fig. 2.1). This is compounded by the fact that the time required to learn new thing will increase along with our age.
The importance of training is well recognized in both military and business contexts. There is a growing awareness of the critical role of training to employees. Enterprises are willing to invest time and money in training their staff members. From a long-term perspective, trainings are helpful to improve the competency of employees. However, it is not necessary beneficial to the enterprise. Effectiveness of technological and skill trainings is straightforward. By contrast, it may take a long period of time to capitalize from management trainings. It is not unusual that employees are motivated during trainings and then back to normal afterward. In some cases, there are negative outcomes from trainings. Employees did not have their management awareness and skills improved as their managers expected. Rather, they found excuses to criticize the enterprise through the training. Some observations are as follows: It is difficult to manage employees because they are too smart. Employees become smarter as a consequence of training, which makes it even more difficult to manage.

Normally, the HR department is in charge of internal training. In extreme cases, a training manager is responsible for running training sessions. It is very rare that executives are part of a training process. This is probably the reason why a number of trainees state “it will be good if our general manager is here as well.” By contrast, executives frequently join the marketing analysis meeting, technological analysis meeting, financial analysis meeting, and even sports event. Internal training is largely overlooked by executives.

The second approach to adapting to changing environment is innovation. Learning means following. Even if following very closely, learning does not indicate leading. Under the context of fierce completion, innovation has featured the agenda of many enterprises, regions, and countries.
According to Mr. Andrew Grove, followers will not succeed. “When driving in the fog, it is a lot easier to drive fast if we are chasing the taillights of the car ahead of us. The danger in the “taillight” strategy is that, once we catch up and pass the car ahead of us, we will find ourselves without a set of taillights to follow. And we may not have the confidence and competence to set our course in a new direction.” Therefore, “… early movers are most influential to the future industry structure and to change the rules of the game. It is more likely to achieve success if taking actions earlier.”

—Andrew Grove • Only the Paranoid Survive

As the baseline of survival, profit is the issue which has to be taken into consideration by every single enterprise. What are sources of profit? Profit comes from the innovative advantage of the enterprise. Profit will disappear if the enterprises lose the innovative advantage. Therefore, in order to adapt to the environmental changes, enterprise should learn to do something different from previous experience that is non-repetitive.

A simple curve can be used to depict the value-adding potentials in each component of value chain (see Fig. 2.2). This curve appears like a “smile” and therefore is called “smiling curve.”

In Fig. 2.2, value-adding potential is the largest at two ends of the curve. They come from the R&D and service activities within the value chain.

A typical example of high added value from R&D is the rapid growth of Apple via iPhone. There is also high added value from service within the value chain. The massive business value associated with service has attracted attention from multinational companies worldwide. As Mr. Peter Drucker stated, “the only thing customer wants to know is the service or products he will receive. What he cares most is his value, demand and status. From this perspective, everyone should try to show that our service is customer-oriented, based on their situation, environment, behaviour, expectation and value.”

Another typical example is the transformation of IBM from a computer supplier to a service-oriented enterprise. An IT hardware supplier is transformed to a

Fig. 2.2 Smiling curve
one-stop solution supplier which provides comprehensive services to clients. As a result, IBM has become an elephant which can dance. The theme of IBM between 1992 and 1996 is survival. Accordingly, IBM aimed to provide one-stop solution by integrating software and hardware to meet customers’ requirements. IBM’s situation was largely improved; however, not all products gained profit. In the next 6 years, IBM devoted itself to transforming to an “IT service company” where service is the core business driving hardware and software sales. During this period, IBM acquired a number of software products and consultancies. As a result, service and software replaced hardware to become the main source of revenue, while the profitability of the entire enterprise improved. Since 2003, IBM has paid attention to the business integration at the global scale. Service, software, and high-end hardware become the major businesses. By means of global integration of sales, R&D, implementation, and delivery, IBM shaped as a partner to assist clients to achieve their business goal. As a result, IBM has its profitability and productivity largely improved. Indeed, IBM is an exemplar for the global integration of enterprises.

R&D and service activities share one common feature, i.e., non-repetitive. These activities are subject to changes in customers’ requirements. As shown in the smiling curve, manufacturing activities have the lowest added value. China is regarded as the world’s factory. Within such environment, it is crucial for every single manager to explore the way to achieve the largest added value.

Thomas Alva Edison was an American inventor and businessman. Dubbed “The Wizard of Menlo Park,” he held a number of patents under his name. He was one of the first inventors to apply the principles of mass production and large-scale teamwork to the process of invention. He owned more than 2000 inventions, including the phonograph, the motion picture camera, and the tungsten bulb. As a prolific inventor, Edison held 1093 US patents under his name and more than 400 patents in the UK, France, and Germany. Edison General Electric Company (the predecessor of GE) was established in 1890. Edison is the greatest inventor and his record in terms of number of inventions has never been broken. In October 22, 1879, Edison ignited the first electric light bulb that was commercially practical. After experiments with more than 6000 materials, Edison and his team discovered a carbonized bamboo filament that could last over 1200 h. As a result, a long-lasting, practical electric light bulb is achieved.

In 1956, Genrich Altshuller and Raphael Shapiro’s “On the psychology of inventive creation” was published in “Issues in Psychology.” This paper presented groundbreaking findings in the field of innovative psychology. In past, psychologists believed that inventions took place occasionally. Genrich Altshuller reviewed a number of patent abstracts in order to find out in what way the innovation had taken place and developed the concept of technical
contradictions. He argued that a number of technical contradictions can be solved comparatively easily by means of basic principles. As he stated, “you can either wait for 100 years to gain insights or solve the problem within 15 min by using these principles.” In 1969, Genrich Altshuller published a new book: Algorithm of Inventing. In this book, 40 inventive principles (i.e., the first complete set of principles to solve complex problems) were proposed. He proposed “the theory of inventive problem solving” (TIPS). Currently, TIPS has “been applied in a number of engineering fields to develop the innovative solutions. However, there are very few successful cases of applying TIPS in management decisions.

During examinations, students often say “Answers are much more difficult than examination questions.” Similarly, “the process to control innovation is much more difficult than the innovation itself.” There are much more inventions reached via inspiration than scientific experiments. Of course, rigid logic and scientific evidence should be sought post the invention. This is especially the case in the management decisions which is called “leadership art” and “leadership intelligence.” This is not only the beauty of innovation but also a significant challenge to managers. Steve Jobs is popular as he brought surprise all the time. His successor, Tim Cook is often criticized as all are expected. In fact, managers should pursue the controllable rather than surprise. From this perspective, Steve Jobs is an entrepreneur with excellent innovative inspiration and capability. By contrast, Tim Cook is more like a professional manager.

In a dramatically changing environment, it is a luxury to wait for unknown innovation. Therefore, enterprises should not rely on those innovations unexpected or difficult to control. Innovation is always associated risks. This is exactly the reason why we expect and admire heroes. Excellent entrepreneurs have unexpected intuition and inspiration. As a result, experiences drawn from their success seem less useful to others, despite some inspirational effects. The return of investing a large amount of money to having a meal with Warren Buffett is very little except some advertisement effects. More importantly, Warren Buffett’s enterprise is in a most dangerous position as he will pass away one day. Similarly, it is not feasible to expect Warren Buffett always has the proper intuition. This is the reason why innovation is advocated largely in concept rather in practice.

The third approach to adapting to environmental change is cooperation. New products, demands, and ideas are proposed by someone(s). The styles of these people vary significantly. However, very few of them have ongoing innovative capacity as Edison. Similarly, new concepts are generated from a variety of sources. From a management perspective, it is better to cooperate with them than to learn from them.

Steve Jobs’ iPhone is the most successful product in recent years. Excellent industrial design and unexpected application functions provide enormous economic benefits and brand value to Apple. Steve Jobs is also regarded as the best entrepreneur. However, there is always someone stronger. iOS has been prison broken constantly. It is not effective for Apple to invest in a new operation system.
The product costing a large amount of resources might be cracked by some talents when eating hamburger. It is an appropriate decision for Apple to cooperate with these talents, no matter how good Steve Jobs is.

Comex is a famous prison-breaking hacker who developed the JailbreakMe 3.0 to crack iPad2. On August 26, 2011, he announced via Twitter that he had been invited to join Apple as an apprentice. His real name is Nicholas Allegra, a gifted student of Brown University. He was only 19 years of age at that time. Forbes had an exclusive interview with him which displayed various aspects of this talent programmer. At the end of the interview, the columnist from Forbes suggested Apple to recruit Nicholas Allegra. It was beyond everyone’s imagination that Apple took actions so quickly. Comex did not disclose his work assigned by Apple. However, it will definitely not be developing prison-breaking tools.

In fact, the attractiveness of iPhone largely came from a large number of unknown Apps developers. Apple simply provides a platform for them to show their talents. Currently, Samsung is the biggest rival of Apple. However, there is nobody in Samsung well known as Steve Jobs.

Most of enterprises are facing a similar issue, i.e., retaining employees fit into the enterprise. However, is this really an issue which needs to be resolved? From economic rationality perspective, no economic benefit will be generated from inside of an enterprise. Rather, benefits are generated from the exchange between the enterprise and other organizations. An enterprise will not be able to produce profit and hence survive without the marketing relationship with customers as well as business relationships with suppliers and subcontractors. From this perspective, all internal activities are costs. Retaining talents itself is an activity which increases the enterprise cost. Therefore, it is not appropriate to retain staff unless such an activity can provide more profits for the enterprise. However, it is a proper but not necessary action to retain talents. This is due to the fact that there are more approaches than retaining talents for enterprises to earn profits. Indeed, it is imperative to distinguish goals from processes.

Talents owned by the enterprise are a kind of risk cost. Rapid changes of the business environment present significant threats to the enterprise due to rapid depreciation. With a growing salary of talented staff, it is more costly to own them fully. As a consequence, the input–output ratio declined. In addition, professionals are more inclined to be loyal to their professions rather than an individual enterprise. The number of freelances grows continuously. As a consequence, enterprises will place more focuses on those sectors they are most capable of. Indeed, an increasing number of projects will be undertaken by multiple enterprises due to this reason.

A simple way for an enterprise to adapt to changes (and continuously) is to acquire those enterprises that are capable of adapting to environmental changes. Similarly, the simplest way to grasp the most advanced technology is to recruit personnel familiar with this technology. Therefore, the BOT type of enterprise can
last longer under a rapidly changing environment. BOT refers to acquiring qualified companies when business opportunities emerged (B, Build), running this business (O, Operate), and closing down or transferring the business when the business opportunity has gone (T, Transfer). The BOT approach benefits both small- and medium-sized firms but also large-scale firms.

**IBM experienced a difficult period of time during the late 1990s. Under the leadership of Mr. Louis V. Gerstner, IBM was transformed from a hardware manufacturer to one-stop solution service provider. In the manufacturing sector, standardized products can be provided to different customers. For instance, computers of schools, governments, army, and companies are literally the same. By contrast, the service sectors are entirely different. Service varies significantly in different sectors and organizations. As a result, service has to be customized. How did IBM achieve this?**

**BOT is one of the most critical approaches that allow this transformation in IBM.** In 2002, the entire consultancy sector suffered from creditworthiness crisis due to the Enron scandal. However, IBM went ahead to invest around 3.5 billion US$ in acquiring the PricewaterhouseCoopers. By contrast, it only costed Lenovo 1.25 billion US$ to acquire the ThinkPad notebook business. Other acquisitions include the following:

- **Lotus, 1996, office automation**
- **Tivoli, 1997, IT systems management**
- **Informix, 2002, database market share**
- **Rational, 2003, development tools and project management capacity**
- **Cognos, 2007, business intelligence capacity**
- **SPSS, 2009, data analysis functions**

**In addition, IBM got rid of some businesses such as hardware manufacturing. All these actions have allowed IBM to become an enterprise capable of adapting according to demands. IBM is also widely recognized as the best project-oriented enterprise. Indeed, IBM has become an exemplar of business integration at the global scale.**

By using the BOT approach, enterprises can survive and sustain development in a changing environment. This is attributed to the adaptive capability of enterprises to eliminate those outdated and unprofitable businesses. In other words, enterprises may have to sacrifice some businesses proactively for the benefit of the whole organization. There are three conditions for the utilization of the BOT approach, i.e., fund, qualification, and knowledge. Available fund allows the enterprise to pay for partners and acquire required businesses. The changing era is full of risks. It is difficult to locate partners unless funds are made available. As defined in the legislation, it is compulsory to cooperate with firms with relevant qualifications. Qualification of construction firms, patents of high-tech companies, and registration of business mark are typical examples. Knowledge is the specialized technology and methods for the enterprise to undertake projects, which is necessary for working with partners.
Learning, innovation, and cooperation are three approaches for enterprises to deal with changes and to survive and sustain development in a changing environment. Among these three approaches, cooperation is the most effective, sustainable, and manageable. All cooperation activities undertaken by enterprises are undertaken in the form of projects.

2.3 Project Paves Way for Enterprise Success

Under the context of fierce competition, enterprises cannot afford repetitive mistakes. Rather than relying on previous successful experience, they should pay attention to those non-repetitive activities. Enterprises have to be responsive to accommodating every single customer’s demand. One way of doing that is to become a knowledge-oriented enterprise. This is not achievable without proper project management. Enterprises will struggle if they are not project-oriented or do not manage project successfully. Operation thinking has to be replaced by project thinking when running an enterprise.

An experienced hound was chasing up a rabbit. This hound was very strong and ran very fast. However, rabbit managed to escape. One monkey laughed at the hound by saying “it is shameful that you cannot catch rabbit even you are so strong and eat a lot.” However, the hound responded by saying “it does not matter that I can not catch the rabbit. What I missed is simply a meal. However, rabbit will lose its life if it was caught!” In the growing and fiercely competitive business environment, every single enterprise is a rabbit being chased up. If caught, they will be eliminated (by rivals).

There are generally two types of operation activities of enterprises. The first type of operation activities is featured with repetition, which is called daily operations. The other type of operation activities is featured with non-repetitive, which is called project. Projects exist everywhere and have become one of the key approaches for enterprises to survive.

According to the Project Management Institute, a project is “… a temporary endeavor undertaken to create a unique product, service, or result.”

Project is a temporary endeavor. The temporary nature of projects can be explained in the following aspects.

1. Temporary time

A project has a definite beginning and end. However, sometimes the beginning and end dates of the project can be not determined by managers. In practice, many projects are commenced without being noticed.

Presales marketing activities fall into this category. Although these activities have definite beginning and end dates, it is difficult to define when potential
customers have been approached beforehand. As a result, it is difficult to define the end date of the project.

Similarly, it is difficult to define the end date for those internal projects such as R&D of new products. In some cases, it is due to the nature of projects, e.g., Afghanistan War. In fact, a number of projects were not completed on time due to the lack of clear definition of under what circumstances the project should end.

Of course, a proper project should have predefined beginning and end dates.

2. Temporary resources

No project can be completed without resources. However, these resources are assigned to the project temporarily.

The duration of project (i.e., project life cycle) varies, from minutes, hours, weeks to years. In general, the organizational structure of enterprise exists before the formation of project team. Such organizational structure remains even after the project team is dismissed since the project completion. Therefore, from economical perspective, it is not appropriate to assign dedicated resources to a single project team.

Similarly, specific skills and knowledge are required from project team members. Therefore, these employees can only be assigned periodically. Along the project progress, the composition of a project team may change within the project life cycle. It is very rare that some employees remain in the project team all the time. Indeed, it is a challenge for a project manager to acquire, manage, and release these temporary resources.

3. Temporary project leaders

Project managers are temporary as well. It is crucial to clearly define the power of a temporary position.

There are three sources of power of project managers, i.e., position, incentive, and authority. However, the effectiveness of these three sources is limited. The power refers to the capability to guide others, which is affected by the size of population to be affected. First, the size of population to be affected is small due to the temporary nature of the position. Second, a project manager has very little authority in terms of incentives. For those external projects undertaken by the enterprise, the contract value (if all been realized) is the sales income. However, this income is not allocated by the project manager. What a project manager can allocate is the sales income subtracted by the gross profit, i.e., cost. In terms of cost management, a project manager is more guided toward savings. For those internal projects, it is not unusual that project cost is not allocated properly. As a result, incentive is beyond the reach. Finally, a project is end-product-oriented where project managers have to manage the entire project life cycle. Consequently, project managers are not specialized in scope management as functional managers who restricted their power significantly.

External environment changes constantly. As a result, an enterprise is not able to fulfill the demand derived from uniqueness nature of a project by relying on its own resources. It is a common practice that an enterprise completes the project with partners. A stakeholder is an individual, group, or organization who may affect, be
affected by, or perceive itself to be affected by decisions, activities, or outcomes of a project. These stakeholders play specific roles and take certain actions according to their expectations and responsibilities. A social network is formed based on roles of stakeholders. Within the social network, stakeholders exchange information, resources, and outcomes. Uncertainties associated with stakeholders’ behavior present significant risks during the project management process. In essence, project management is a process of managing the dynamic relationship among stakeholders, which involves a lot of coordination and conflict management. Therefore, a project can be defined as “a social network platform in order to complete temporary and unique tasks and to satisfy expectations of various stakeholders.”

The value project brings to enterprises is mainly reflected in the following aspects.

1. **Projects drive growth of enterprises**

   In a changing environment, the development of an enterprise cannot simply rely on day-to-day operation. It has to be agile in order to be able to be responsive to customer requirements. The growth of an enterprise relies on projects rather than daily operation. Daily operation is essential but does not help to improve the enterprise performance.

   During the start-up phase, an enterprise has to rely on new customers and new products, i.e., project-oriented. However, a profitable product will not last that long in such a rapidly changing environment. It is imperative for the enterprise to develop new projects.

   The contribution of daily operation and projects to the enterprise is shown in Fig. 2.3. As shown in Fig. 2.3, daily operation can only maintain the function of an enterprise, whereas projects are the driver of growth.

   The major challenge for enterprises during adapting to customers’ demand is to reduce the time required and to deal with associated changes. This is an ongoing

![Fig. 2.3 Impacts of projects and daily operation on enterprise’s growth](image-url)
rather than one-off process. A typical product’s life cycle is shown in Fig. 2.4. All products go through various life-cycle stages, i.e., development, growth, mature, and phase out. In a slowly changing business environment, the development and growth stages of a product may take a long period of time. Similarly, an enterprise will be able to enjoy benefits from products at the mature stage for a long period of time. However, due to changing environment and time pressure, the life cycle of a product is shown in Fig. 2.5. The life-cycle curve of a product showed a sharp decline since the mature stage due to loss of profitability. An enterprise has no chance to be prosperous unless it is responsive to customers’ new demand. Indeed, the frequency of initiating and completing new projects should be in accordance with the speed of changes.

Previous studies showed that those products with 6-month delay to the market earned 33% less profit than expected despite within the budget. For those products to the market on time, the profit earned was only 4% less profit than expected, although with 50% overrun of budget. In other words, customers are happy to pay extra for those good ideas to achieve goals more quickly.

2. Projects provide a necessary platform for enterprises to use external resources

There are more and more freelances that rely on their knowledge to survive. As broader human resources, they are “flexible” staff members of enterprises based on agreement. Knowledge can be utilized by the enterprise, but the owner of knowledge is not a staff member. These include adjunct personnel, consultant, and those undertaking outsourced activities.
At the end of 1990s, 10 million new jobs were created. These new jobs were substantially different from those in the past. There were very few positions with permanent offices. Offices, staff members, alliances, partners, and project team members are mobile. This is exactly the reason why Mr. Peter Drucker called them as knowledge worker rather than knowledge staff. In era of free agent, knowledge workers are more loyal to their professions rather than the enterprise. They pay more focuses on working on what they like and are capable of rather than in a specific enterprise. Under such context, it is very difficult to understand who, when, and how long they have worked for.

In general, an enterprise utilizes external resources in order to achieve three goals: (1) to solve those short-term issues that cannot be solved internally; (2) to increase the manufacturing capacity in order to relieve the short-term pressure; and (3) to outsource the non-core business. In other words, external resources are utilized for undertaking projects rather than daily activities. The real value of external resources will not be achieved until they are used for projects.

However, it is worth noting that a project platform is required to ensure these external resources are in place. Otherwise, negative effect is expected.

In terms of human resource management at the enterprise level, there is a common assumption that a good performance will be guaranteed as long as we can locate personnel who is capable of and willing to act. It is not always the case in practice. Some years ago, during a training camp, I experienced difficulties in wiping out the whiteboard. One trainee tried to help me by using mop even with some water but did not succeed. In the end, he managed to wipe out the whiteboard by means of using cloth with petrol. However, the whiteboard was damaged as well. It is an interesting case. This trainee had both capability and willingness but could not accomplish easy tasks such as wiping out whiteboard. The thorough investigation showed that this was a new whiteboard with a plastic film remained on the top. Without a platform matching resources and tasks, a good performance is not guaranteed.

3. Projects are the source of individual’s performance

Projects are not only the driver of enterprise growth but also the main source of individual’s performance, especially the management.

Annual performance evaluation is widely adopted in enterprises. It is likely a functional manager provides such statement “… executives, colleagues, I would like report what I have done this year. There are 365 days this year with 280 working days. I came to the company 8:30 am every morning and left the company 5:30 pm every afternoon. This is my report. Please review.” This general journal style of report is not appropriate. What were covered were daily activities rather than the contribution to the enterprise. Senior management is more interested in understanding the performance of individuals and the department. Some examples include “new incentive measure is in place and the relocation of the company is
accomplished.” Therefore, both the enterprise and individuals are closely connected with projects.

This is even more important for government-invested projects. The performance of a government is normally measured by the completion of certain type of projects, e.g., road infrastructure, new firms, and attraction of talents. The strategic demand of a region has to be fulfilled by a large number of projects. Government officials make the decision in terms of which projects to be initiated. However, the success or failure of project is determined by the project undertaker. These are exactly the drivers of corruption in government-invested projects. Since project is initiated, government officials are gradually influenced by the project undertaker.

There have been a number of books and articles on flattening the organizational structure, restructure of business processes, and goal management. However, the effectiveness of these approaches remains unclear. The number of positions at the middle management level reduces significantly due to the simplification of organizational structure. This presents a new challenge to the senior management to promote someone without promising a position.

In an enterprise, Parkinson’s disease could be triggered if there are a growing number of managers with stable positions. More people, more work. It is not necessary for completing more works. In order to prove their own value, managers may “create” a number of issues from a variety of perspectives. However, the large number of project managers does not scare enterprises.

On the one hand, project managers are end-product-oriented. By contrast, functional managers are function and process-oriented. There is a proverb in enterprise management “everyone in the enterprise is busy to cover the truth from the general manager.” In order to protect their own position, functional managers try to gloss over the truth, no matter on purpose or not. However, project managers cannot cover the truth as all projects have the final and definite outcomes. On the other hand, project managers are not required if there are no projects. As a result, issues associated with availability of manager positions are resolved naturally.

4. **Projects are the main source of enterprise image**

Good customers are needed by every single enterprise. However, an enterprise will not be attractive to good customers without a good image.

Attractiveness of enterprise to potential customers is determined by the image obtained from undertaking projects with existing customers. This image is a critical asset of the enterprise. Customers normally made the decision according to reputations if they do not have a deep understanding of an enterprise.

Successful projects are the main source of an enterprise image. This is especially the case for knowledge-oriented enterprise. Manufacturing-oriented enterprises can improve their image by product advertisement. By contrast, knowledge-oriented enterprises have to rely on publicizing projects they have successfully completed. More precisely speaking, the advertisement of manufacturing-oriented enterprises can only improve the public awareness of the company
and products, rather than the enterprise image. The only way to improve the enterprise image is via the successful completion of projects.

The construction industry is a typical sector where projects are the main source of profits. It is very rare that construction firms run general advertisement. Rather, they always promote the landmark buildings or those projects that have been awarded, i.e., successful projects.

It is a similar story for software integration companies. It is most likely that an ERP developer publicizes their major clients and sectors. For these enterprises, they will not be able to survive without successfully completed projects.

In a fast changing era, the business logic of enterprises is shown in Fig. 2.6.

Step 1  Win customers/projects.

Enterprises are featured with fully satisfying customers’ needs. The operation of enterprises should start from winning customers or projects.

**Fig. 2.6** Business logic of enterprise
Step 2 Establish the production capacity as soon as possible

It is imperative to establish the production capacity when projects are secured. We cannot afford to prepare human resources and to undertake projects slowly. Enterprises should combine various internal and external resources in order to establish the production capacity.

 Traditiona y , e nterprise h uma n r esource m anagement c over s re cr u i t ment , t rain ing, a nd p erformance e valuation. N ow ad a ys, HRM d ep a r t m en ts a r e f aci ng m or e s ig n i fican t chal len ges. T he y h a v e t o t ra nsfo rm f ro m a n a d m inistr at iv e de par t m e nt t o a p roductiv it y m anagemen t d epar t m e nt. R ecruiti ng p roper h uman r esources is n o t t he m ain g oal o f HRM anymor e. R ath er, HRM pla ces m or e f ocuse s on c oor din a tin g in ternal a nd e xternal h um an r esources in orde r to e stablish a p roductiv e t eam.

Step 3 Successful completion of projects

This will be addressed in other chapters of this book.

Step 4 Earn reputation, enhance profits, and accumulate knowledge

Enterprises will benefit from successfully completed projects by earning reputation and profits, and enhancing the enterprise image. It is imperative to accumulate knowledge for every single project completion. Only knowledge allows the enterprise to be responsive to changes.

The accumulation of knowledge helps the enterprise to integrate temporary resources so that the production capacity can be established rapidly. Similarly, knowledge helps to simplify sales process and to improve the success rate of marketing. Various management tools and concepts developed by management consultancies are typical examples of knowledge. Management consultancies accumulated knowledge from practice and consequently promote the knowledge via publications, books, and trainings. The aim is to attract customers and increase the market share.

Step 5 Win customer resources and talents

The focus of competition is placed on winning customers and talents. Therefore, we have to formulate two strategies, i.e., one for attracting and sustaining customers and another for talents. These two strategies are closely related.

Due to the enhancement of the enterprise image, it is not difficult to have stable customers due to their loyalty to enterprises and personnel that delivered excellent outcomes. In addition, these customers are willing to promote the enterprise and products free of charge. This helps to attract new customers for the enterprise.

Talents are always undersupplied. They are always more selective in terms of companies they work for. However, there are normally three factors most attractive to talents, i.e., the enterprise image, enterprise knowledge, and enterprise profits. With a sound enterprise image, the enterprise will be more attractive to talents. This is due to value added to their CV from the enterprise image. As a result, they
will be more attractive to new employees. The unique knowledge will also help enterprise to attract talents as it helps to improve their competitiveness. Of course, the attractiveness of profitability to talents is well recognized.

Step 6  Turn to step 1

Projects help enterprises to survive under the future changing environment. However, it is not an easy task to implement principles of project management fully. Without a full understanding and appreciation of project management, its effectiveness will be seriously doubted. The credibility crisis of ISO 9000 commonly existing in Chinese enterprises should be taken as an example. In order to avoid such an issue, senior management has to facilitate the implementation of project management proactively.
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