Communities of Practice

Abstract:

The aim of this essay is to describe how a community to approach a goal of the project and what knowledge of project is sharing in a community for the architectural project. The knowledge exchanging is a social process contingent on histories in project management. It indicates the tacit knowledge and explicit knowledge in architectural area and also how these transfer and how to spread from the individual to team.

First section of this article is to introduce the background of the project. This architectural project is a serious and great project from government in China. The requirement of government project is to build a community building on a public site with a limited space areas of building. In this project, there are some issues to influence the project delay or out of control because of the situation of project. Some of these are related to the communication and some of these are related to the leadership.

The second part indicates some reflection of this project and how to solve some problems, and it also presents the how to make a combination of the different culture knowledge. I explain some previous factors how to influence this project. Simultaneously, it present the methodology of the knowledge transferring and sharing, because this project is transfer from another team in the architectural company. This section also shows the influence of leadership. A good leadership led the project success.

Overall, the main issues are included the leadership, communication and knowledge sharing. In the conclusion, there all issues belong to the whole community.

Key words: Community, Leadership, Knowledge sharing, Architectural project, reflection-in-action

Introduction:

As an architecture graduated student, I have one and half year experience. One year is in the UK architects company, half year is in Chinese architects company. There is one project which is very impressive for me. This project is the first biggest project when I join this Chinese architects company. Our company got this bid from the government of Nan'an District, Chongqing. The requirement of project from clients is to build a community building for children and elder.

According to the demand of client, client and design team got the common idea which design an organic building on the site. Organic building is like a real shape which is to imitate the exit organism. Our whole design team decide to accept the demands and design a building with a dragon shape. For the first draft design and second draft design, the concept design of this building is finished. Most of design work are done and deliverable. When we prepare to deliver the design to our client. They said that we have to change the site for this project. Some resident around the site reject this project build on the site. Most people think that will damage the environment of site, because site is a green area in that district. For the whole design team, that is terrible news. It means that our team have to redesign everything for this project with a new site. We also met some construction problem when we finished the design.

On the other side, our company got this outcome after several month. The previous design team is to begin a new project with another client. The primary team could not back to work this project again. So the head of company decide to build a new and casual team. Our boss choose team leader who is previous team leader as a casual team leader also and assign me as a vice-executing leader and internal space designer. Our team get 6 members, including one leader, one vice leader, two landscape designer and one brochure designer. Because main leader have more business with another new project, he could not have much time to work with us. In general way, I just report the

process of project to him, he supervise the dragon project as a mentor. While, for a new team that is not only an issue, this team is also very young and less experience, expect the main leader.

In my mind for this project, the first issue is to face the team transfer. New team must face new colleague and strange environment work together. Secondly, issue is to the knowledge transfer from the previous team. For the new team, this project is totally unacquainted. Thirdly, the trust of new is also an issue for the whole group. There are some contradictions in the team. At last, this project delayed 4 weeks to deliver.

Background of topic:

The formalised structure of sharing knowledge could be extended to the apprenticeship or internship model which is aimed at developing new skills on-the-job. The relationship between a manager and an 'intern' is dynamic and often evolves as the intern becomes more competent. This process of reflection-in-action can become elliptical, "using shorthand in word and gestures to convey ideas that to an outsider may seem complex or obscure" (Donald Schön 1987). In my opinion, most of theoretical knowledge is judged by the practical factors. I think the favorable knowledge of project management is a basic aspect. It is a fundamental factor as a project manage. Simultaneously, when the project manager face the flexible problem practically, only using the theory to solve the problem is not correct solution. It turns out that some errors would happen in the project and even these errors led project fail. So favorable knowledge of project is premise, how to use these knowledge reasonably according to the practical situation. Although, the communities of practice is venturesome action. But on the advantage side, it is a good way to seek the problem for an individual, also for the whole team. When the problem is found during the practical project, project manager could improve knowledge to face the problem in next time.

In the theoretical way, option of knowledge transfer should be from tacit knowledge to explicit knowledge, but that is theoretical way to do. In fact, the theoretical way need much time to develop and improve the process of knowledge sharing. The tacit knowledge sharing is utopian. Tacit knowledge is based on the culture beliefs, values, attitudes, mental models in the personal brain of the human. Most of the time, the tacit knowledge is uncertain factor, but essential. For the explicit knowledge, from a managerial perspective, the greatest challenge with explicit knowledge is similar to information. It involves ensuring that people have access to what they need; that important knowledge is stored; and that the knowledge is reviewed, updated, or discarded. If the tacit knowledge is uncertain knowledge, so the explicit knowledge is certain knowledge for the project. Most of explicit knowledge is from the past information which is from the external environment.

But in my personal view, different people have different comprehension for a same object. So that is also another reason to occur the errors in the process of knowledge sharing. For the personal explicit knowledge, if people cannot understand explicit knowledge which is from the literature, it will be harder than tacit knowledge, I think. For the process of knowledge transfer, there are 4 steps from tacit knowledge to explicit knowledge for knowledge creation. First step is tacit-to-tacit, it is called socialization. Then the next step is tacit-to-explicit, it is called externalization. Moreover, the combination is explicit-to-explicit. After that, the internalization is from explicit-to-tacit. This process is a cycle of develop. Also this process improves develop again and again. The process of knowledge transferring from tacit knowledge to explicit knowledge will waste time. When the project team face the emergency issues, project should not reply too much on the theory. While in fact, project manager should use the solution flexibly and adopt some adjustment for depending on the particular situation of project.

Project Issues: Unacquainted Environment:

In this project, the satiation is emergency and unpredicted for our company. We have to face the practical issues. In fact we do not know some information about this dragon project and also we do not know the habit for working of each other team members. The unacquainted environment and unacquainted project both are big challenge for the team. For our new team, we do not do anything for the preparation and communication with each other. I think that is not very logical and reasonable situation

For this situation, the most useful approach is to introduce the project to the team and also do some initial communication. Because all the member of new team expect the team leader do not know the project information. Leader should hold a meeting for a whole team and introduce this project to the new team and help them understand. That would be helpful to understand some information of this project directly and effectively instead of reading some document. In my opinion, a meeting is a saving time and quick approach. Simultaneously, team member could ask some questions of project and discuss with a person who knows project deeply. After that action, we could know which step we are in the project and we could find what should do for the next period. In the project, we will not lose much time and get wrong direction. Team also could establish the common goal of project. That would be a good start.

For the initial communication between member, because of unacquainted environment, team member should know each other firstly. This communication is effective to increase the cooperation in a team. It would also reduce the contradiction during the working process. In our team, there are two landscape designer. The biggest misunderstanding in the team happened in these two designers. If they have some communication before they work together and they would know each other's mission, they do not design a same work in the same period. Our team could

avoid the internal contradiction and also not delay our project deliverable. I believe the good cooperation will increase the working effect.

Project Issues: Elements of Adjustment:

On the second part, not only the new site should be considered into the new design. In our team, we only think the changed site is unique problem for this project. We design the building with depending on the previous design from draft 1 and draft 2. In this project, we just copy the whole design which is from the previous draft. Also we do not consider that unknown issues identification and changed site are two aspects why the project delayed.

For the team, we should not totally rely the previous data for designing, because the project is not on the same site. In this stage, I think we should consider how to identify more potential issues of project. In my opinion, more preparation for potential risk would reduce the probability of project failure and prevent the emergency problems. If our team are brave to do more problem identification for the dragon project, we would find out the dragon does not belong to the organism. Perhaps, we do not have issues with the construction of building after the designing period. If we know wrong definition of project, we will try to create the structure and not waste time on other structure of the past projects. That is another reason to lead the project delay. Simultaneously, if we adjust some design from the previous design, that will be helpful to design a building on the new site. It also avoid some problems for the new site.

Project Issues: Period of Issues:

Although the problem identification is a big problem, but also for some issues which we have solution and preparation, they still block the project. During the design and construction term, there are some issues which are found the solution, but the outcomes are not predicted before start.

In that period, our team concentrate on how to increase the quality of the project, not pay more attention on the time of problem solving. For this period, we just tried to work them effectively and save time, but we lead it into the opposite side. If we can do some confrontation for the project, we cannot waste much time on the exiting problem. Then we could use the spare time and concentrate on some unknown issues in the project, which is another way to increase the quality of project.

For the unknown issues, like I indicated that we did not identify some unknown issues for this project. When the project is blocked by some unknown issues, we cannot find solution on time to solve these problems. In fact, if we seek some help from experienced and elder people in the company, we could solve the problem which we met as soon as possible. Project will not delay, because of some emergency situation.

Project Issues: Knowledge Sharing:

In my opinion, if the problem identification is one of the most serious issues. Another one is the Knowledge sharing. Knowledge sharing is very important and essential element in this project. Especially for the project is transferred from one team to another team. The good approach of knowledge sharing influence a project success or fail. In the knowledge, there two kinds of knowledge, one is called tacit knowledge and another is explicit knowledge. Tacit Knowledge: "Personal knowledge embedded in individual experience and involving intangible factors such as personal belief, perspective, and values" (Groff & Jones 2003, p. 10). Tacit knowledge belong to personal opinion, it is hard to describe with language, document and picture. On the opposite side, explicit knowledge: "has been documented or articulated into formal language in order to be more easily transferred among individuals" (Groff & Jones 2003, p. 10).

In the knowledge sharing, there are three aspects to indicate and develop. Primarily, the incomplete explicit knowledge is transferred to the team. Secondly, the uncertain tacit knowledge is to delay the project. Finally, misunderstanding the transfer of expertise is also a reason to influence the project for the client.

Firstly, I think that the incomplete explicit knowledge is very serious problem for a team or company. When our team got the data of draft 1 and draft two for the dragon project, there are some information lost, such as the original site plan including the building plan. In fact, that is problem for conserving the explicit knowledge. For our company, there is no complete and systemically database to conserve the past project. Our company should establish the database for all the project which are designed or related to our company, they should become influential example for the future project. Also a complete database is helpful for project team to find some past experience directly and clearly. Simultaneously, because of a good experience from database, some potential clients would feel more confident from our team and company.

In addition, tacit knowledge is significant and hard to describe with literature way, but it is still essential for the project. First of all, the dragon concept is a tacit knowledge from the client, because dragon is not an organism in the world. It just exits in the fairy tale. Our team should understand this definition firstly and then try to transfer this tacit knowledge into the explicit knowledge through some literature in the past. This action would help team members understand what is dragon. On the other hand, client want to have a "flying dragon" on the site. That feeling is also tacit knowledge in the architectural language. My colleague uses some attempts to show the "flying dragon" feeling, but failed. In my opinion, feeling is personal and tacit knowledge in the brain. It hard to show with the certain style. Our team leader should explain that information to our client and also tell them we would try our best to build the dragon looks like a flying dragon. I think that

is only way to explain that tacit knowledge. Because this tacit knowledge cannot be transferred to the explicit knowledge. If our team could know this situation early, I can give up building the perfect flying dragon as a building.

Finally, the architectural expertise is professional knowledge, but it is difficult to understand for the client who is not in this area. In my view, all the plans of design look like professional, but that is for who get professional knowledge in architectural aspect. For the client, they do not understand. In my reflection, our team should separate the plan in different topic to show our client. That is certain and logical option. I agree that a combination of diverse pieces of information to produce new knowledge in theoretical are, but do not make this knowledge too complex in a practical way. As a project manager should make combination between theory and practicality, do not totally follow the theory and practicality.

Conclusion:

In the communities of practice, project team have to face much diverse and emergency issues in a project. The theory of project is basic element for project manager. But not all the issues of project could be solved by the theoretical way. As a project manager, the most important ability is to use the technical knowledge flexibly. Project manager must make some combination between knowledge theory and particular situation and find out the solution of issues, which will be more helpful for the project. A good project team or project manager should understand that policy in the society. Because the knowledge is died, but people is alive. In the world of project management, project manager should control the knowledge, not project manager could be controlled by knowledge. That is communities of practice in the project management.

Reference:

Cicmil, S., Williams, T., Thomas, J. & Hodgson, D. 2006, 'Rethinking Project Management: researching the actuality of projects', *International Journal of Project Management*, vol. 24, no. 8, pp. 675-86.

Groff, T.R. & Jones, T.P. 2003, *Introduction to Knowledge Management: KM in business*, Elsevier Science, Burlington, MA.

Laufer, A., Post, T. & Hoffman, E.J. 2005, *Shared Voyage: learning and unlearning from remarkable projects*, NASA, Washington D.C.

Nonaka, I. & Takeuchi, H. 1995, the Knowledge-Creating Company. Harvard Business Review.

O'Dell, C., & Hubert, C. 2011, The New Edge in Knowledge – How Knowledge Management is changing the Way We Do Business. Hoboken: John Wiley & Sons, Inc.

Schön, D.A. 1987, Educating the Reflective Practitioner, Jossey-Bass, San Francisco, USA.

Stewart, T. 1997, Intellectual Capital, New York: Doubleday.

Wenger, E.C. & Snyder, W.M. 2000, 'Communities of Practice: The Organizational Frontier', *Harvard Business Review*, vol. 78, no. 1, pp. 139-45.