

The Challenges of Transferring Modern Project Management Principles and Methodologies to Developing Countries

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Introduction

Projects worldwide are sure to fail if effective project management principles and methodologies are not provided for their execution. Ample evidence of these failures exists throughout the world and is particularly severe in developing countries where necessary skills have not been successfully developed in its project management related work force. Asia Pacific developing countries whose economies had been transformed into market-oriented environments have been fuelled by years of significant economic growths resulting in urgent needs to improve all facets of project management operations as they are accelerating their strategy of industrialization, modernization and globalization with the execution of all kinds of projects of increasing diversity and complexity in a wide variety of industries. As a result, the project management profession has been evolving rapidly in recent years in these developing countries whose rigors of competitive market economies had particularly unfortunate results for those slow in adapting project management tools.

Other factors creating barriers to successful project executions in developing countries include political and social systems, cultural blocks and lack of financial support. These difficulties, however, could be mitigated through successful project implementation provided through effective transfer of project management expertise from more industrialized, developed countries of the world. Vietnam, with its open door economic policy, considered to be one of the world's top economic performers over the last ten years, has been recognizing the effective application of project management for successful project implementation and receiving project management technology transfer from developed countries and international organizations with limited results. As a country about to be admitted as a member of the World Trade Organization (WTO) in 2006, Vietnamese project managers and related professionals will be functioning in an increasingly, globally competitive and project-driven market in which project management knowledge is indispensable. Consequently, an attempt is made in this paper to present and discuss challenges associated with effective project management transfer mechanisms in this country and suggest approaches for improvement. These challenges can also be applicable to other developing countries as well.

The purpose of this paper is to describe and discuss the challenges of transferring modern project management principles and methodologies to developing countries, the resulting complexities as well as recommendations for transfer mechanism improvement, using Vietnam as a typical example. It examines and discuss the following key areas of project management:

- Types and complexities of project management transfer mechanisms to developing countries
- Challenges for effective transfer of project management technology to a developing country
- Recommendations for process improvement and future trends
- Conclusion

Types and Complexities of Project Management Transfer Mechanisms to Developing Countries

In general, to speed up their economic development with the implementation of a significant number of infrastructure projects, developing countries are depending on different types of funding from Official Development Aid (ODA) donors, e.g., Japan's Overseas Economic Cooperation Fund (OECF), the World Bank (WB), the Asian Development Bank (ADB), etc., in which financial sources are attached to effective management of funded projects. The international aid program for developing countries is a major undertaking on a global scale. However, the slow pace of ODA disbursements reflects a lack of confidence from donors caused by the poor quality of implementation of development projects which often face delays, cost overruns and many require major costly project changes. While there are many factors that contribute to the poor performance, the most significant problem is lack of effective, modern project management training for project managers, staff and professionals responsible for preparing and managing these projects. Consequently, developing countries, not being familiar with the project

management practice required by their donors, are instrumental in obtaining project management principles and methodologies technology transfer in globalized project management knowledge in order to improve its foreign aid management capability, maintaining a high growth rate, and continue to improve their people's living standards.

Since 1986, Vietnam has instituted an open door economic policy of restructuring its economy towards a market one. Project management transfer mechanisms had been applied to train thousands of its project managers aiming at serving the cause of making Vietnam an industrialized country by 2020. Complexities, however, had been observed in the lack of senior management support for fear of weakening their strong hold on how projects should be run, the perception of the so called "in-applicability" of the project management methodology as this could be related to the transparency and accountability aspect of managing projects, the lack of financial contribution for training programs from government authorities citing ODA support justifications, lack of training credentials recognition from government authorities for private training firms due to monopoly of government authorized training to be provided by public organizations such as universities and colleges as well as lack of up-to-date educational resources. In addition, bureaucratic red tapes, lack of consistent project organizational structures, inappropriate project management tool applications, governments' indecisiveness and procrastination contributed to the complexity of the training programs to be transferred. Consequently, although Vietnam is increasingly recognizing the importance of high quality, urgently needed training in project management skills in the era of globalization and heightened international competitiveness to tackle future project challenges, these skills are likely to be too slow to compete in a complex, fiercely competitive global economy

Challenges for Effective Transfer of Project Management Technology to a Developing Country

Developing countries may be in different stage of project management maturity but they, especially Vietnam, share a common aspiration to improve the management of their projects in all industries through effective, modern project management training for their professional project managers to successfully plan and execute their projects. They are increasingly recognizing the importance of effective transfer of project management technology in an era of business globalization and heightened international competitiveness. However, success in meeting the challenges of transferring project management technology can only be achieved if the following issues, caused by the above-mentioned complexities as well as the project management maturity of the developing country involved, can be overcome. In the case of Vietnam, whose situation could be applied to other developing countries as well, negative issues of significant importance are:

- Frequent contradiction in terms of projects' planned completion dates and existing, available capabilities resulting in unrealistic project plans and scheduled completion forecasts
- Lack of team work concept due to individual team member's momentary interests and ambitions
- Ineffective and inefficient management of subcontractors
- Rigid vertical organizational structures and staff assignment unsuitable for a market economy
- Poor project control implementation
- Low level of professional training in project management from institutions of higher learning
- Current methodologies for managing projects are useless for effective, efficient and practical application
- Lack of active exchanges of ideas pertaining to project management training concepts and methodologies
- Lack of suitable training materials and piecemeal training in modern project management body of knowledge, mostly in the mode of fire fighting covering such areas as international procurement and selection and evaluation of development projects

Consequently, an urgent need exists in Vietnam, as well as in other developing countries, to improve all facets of project management operations as this developing country is accelerating its strategy of industrialization and modernization through effective execution of projects of all types. This could be achieved through successful project management training being impaired by problems identified in each area associated with the Project Management Body of Knowledge (PMBOK). Most of these can be associated with those of a developing country's open market environment. Attempt will be made to identify these issues, propose possible approaches for their mitigation, if not their solution. Conclusions will be drawn and assessment made as to the vitality of the proposed approach. Problems discussed and approaches proposed are derived from the author's experiences in providing project management

training to developing countries' project managers and related professionals for the last ten years. The challenges present themselves in the following problems, identified along the PMBOK practices:

Project Integration Management includes the processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities. It ensures that the various elements of the project are properly coordinated. The greatest challenge in integration management training is to expose trainees to the concept of project integration, i.e., making trade-offs among competing project objectives and alternatives to meet or exceed stakeholder needs and expectations. This could be difficult due to the fact that the most effective way of working with developing countries is a top-down approach associated with overcoming the institutional problems within the client's implementing agencies where authorities, responsibilities and accountabilities are often fragmented, overlapping or totally undefined leading to inefficient decision-making on project implementation. It is imperative to transfer the process of realistic, effective project planning processes so that project priorities are known culminating in proper execution of project trade-offs for effective integration purpose.

Project Scope Management includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. Training in this area encounters difficulty due to the fact that the majority of projects implemented in Vietnam were managed by the owners (investors) represented by the Project Management Units (PMUs) whose responsibilities involve the day-to-day management of the project. Managers within the PMUs rarely use modern project management techniques in running their projects and, hence, do not have the basic understanding of scope management application. Cost overruns and schedule slippages are frequent due to lack of effective scope change control process. Lack of expertise in scope management in developing countries often lead to contract disputes particularly when clients ask for more than they contract for and when developers believe that the requests are changes to scope. The quick pace of opening to world's economies and the dynamic changes of social, economic environment of developing countries require intensive training mechanism in this particular area of project management. In Vietnam, complicated bureaucracy is very heavy for any type of projects, particularly when it came to engineering projects. In addition, in the area of scope management, there often exists a lack of a common, shared perception and concurrence on the objectives of the project by not only the project team members but also the project stakeholders. Training approach focussing on the scope planning and control processes and how to implement these effectively, particularly the application of the Work Breakdown Structure (WBS) for scope definition and verification processes, must be the most important commodity urgently needed to be transferred to developing countries. The task, however, could be difficult and self-defeating taking into account the context of project operations and environments, thus the challenge is great.

Project Time Management includes the processes required to accomplish timely completion of the project. Notwithstanding the fact that direct transfer of time management training is well-received thanks to today's availability of project management software products, e.g., Microsoft Project, Primavera, Artemis, centralized planning and ineffective and inefficient project execution whose activities are closely connected with that of scope management continue to impair effective planning and scheduling processes to meet the time objective of the project. In Vietnam, lack of detailed, realistic and current project plans are quite common. Hence, forecasts of project completion dates are often unreliable. Training must be provided in the context of how to de-centralize the planning process leading to clearly defined project activities for effective planning, scheduling, estimating and control of project parameters for project stakeholders. In other words, the success of time management often relies on the commitment and knowledge of the client to understand and implement the planning and scheduling techniques to be transferred to them. The client's perception of the time management training, and his/her willingness to receive the type of time management training can only be enhanced if we are able to provide a well-proven methodology that had been implemented properly in the developed world, maintained and demonstrated to the trainers' satisfaction.

Project Cost Management includes the processes involved in planning, estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. The cost parameter is one of the most important elements during project implementation in developing countries. It normally is considered to be closely connected with the time parameter and senior executives' realistic budget approval is an obstacle to be overcome. The challenges in term of training in cost management in Vietnam include a lack of experience in effective cost management practice such as the Earned Value Management (EVM) approach, inadequacy of existing base for costing approach, lack of cost estimating and control tools adaptable to the tendencies of cost changes in market conditions and lack of personnel training in cost management methodologies and tools to be used in market

economies. In addition, continued bureaucratic regulations and corruptions impeded the training of effective cost management process whose main objective is to promote budget transparencies. Training in cost management must focus on the various cost management processes to be applied through various phases of the project implementation.

Project Risk Management includes the processes concerned with conducting risk management planning, identification, analysis, responses, monitoring and control on a project. The concept of managing risks is quite new to developing countries, especially Vietnam. Normally, accumulated experience on risks are mainly related to technical systems failures, not management issues where heightened risks normally exist in non-technical areas such as time, cost and scope management. Delayed, poor feedback and inefficient control mechanisms for early detection and warning of potential problems often result in high project risks. In addition, added headaches of pervasive corruption, red tapes and developing countries' failures to develop project management procedures contributed to potential risks to projects. Training in risk management, therefore, should concentrate on the basic necessity of the development and adaptation of fundamental approaches, methods, and tools of risk management to be used in an unstable social, political and economic environment for mitigating potential risk impacts on projects.

Human Resource Management includes the processes that organize and manage the project team. It involves the activities required to make the most effective use of the people involved in the project during its entire life cycle, aiming at successfully completing the project by achieving the project's objectives within the constraints of scope, time, cost, quality with acceptable risk level in order to meet the requirements of all project's stakeholders. Although opened to world economy over the past decade to meet globalization challenge, Vietnam is still lacking the ability to organize effective, structural project team to meet the project's objectives. Human resource training has never been considered as essential for project managers in Vietnam due to the fact that project staffing is basically aiming at meeting the project's external and internal constraints as state-owned enterprises are still dominating this developing country's economy. Lines of authority, responsibility and accountability in terms of project organization structure are often unclear. In addition, the lack of understanding other cultures particularly those associated with the transparency and accountability aspects of managing projects impairs effective project management. Training in this area should be concentrated in the concept of how to form project teams and set up the Responsibility Assignment Matrix to effectively execute projects in an environment of open market economy as opposed to a centrally planned one as well as proper selection of the project organization structure while respecting the cultures of developing countries' organizations.

Project Quality Management includes all the activities of the performing organization that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken, i.e., provides necessary results of project implementation to meet clients' requirements and expectations. The definition of project quality in Vietnam is strictly associated with the technical specifications as opposed to the real, critical factors of stakeholder needs, wants and expectations normally relating to stakeholder needs analysis performed during the scope management process. In addition, poor fulfillment of project responsibilities in the delivery of products and services in a manner that meets stakeholders' requirements and expectations is a key factors leading to poor quality in a project. Quality management must start with a thorough understanding of the clients' requirements and end with the clients' evaluation of the project performances against those requirements. This is a real challenge to overcome as there continues to exist countless government documents, providing minute, ministry-level directions on how to meet quality requirements on projects. The stringent, rigid and bureaucratic application of quality control based on these also resulted in poor quality on projects. Training should, therefore, be concentrated on modern methods, tools, and techniques of quality management, concentrating on a dynamic and client-focused approach of continuously improving project performance to satisfy the customer by constantly and incrementally achieving higher quality products and services resulting in superior quality products for client satisfaction and their adaptation to Vietnam's existing conditions of open economy.

Project Communication Management includes the processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval and ultimate disposition of project information, i.e., successful coordination of all project team members' activities and the on-time delivery of the required information for project implementation. In Vietnam, the lack of appropriate procedures for project progress audits and reviews to monitor and control the project tasks accomplishment and forecast its trends, e.g. the Earned Value Management technique, oversight management, effective project reports and reviews, etc., frequently contributed to ineffective communication of project information and status to stakeholders. Training in this area should be concentrated on techniques to improve effective and timely information exchanges by using formal (meetings, reviews, audits) and

informal (inter-personal contacts) approaches. Project resources should only be expended on communicating information which contributes to project success or where lack of communication can lead to failure.

Project Procurement Management includes the processes to purchase or acquire the products or services needed from outside the project team to perform the work. Project procurement in Vietnam is still characterized by the planned distribution of goods and services through a centralized system of planning and procurement. Services of external organizations have been implemented based on centrally controlled planning process and are dependent on implementation directives from central organizations. Training is urgently needed for better, more effective procurement processes in Vietnam where recent corruption case involving project management members of the so-called Project Management Unit (PMU) #18 had sent shock waves through ODA donor community. Historically, there has been little need to establish clear procurement principles for professional conduct for management people in a project as most infrastructure projects were built in developed countries where effective procurement practices were well trained and established. It is, however, predicted that by 2020 nearly 80% of new infrastructure will be built in developing countries where these systems are in need of strengthening. In Vietnam, the application of different contract types was adapted to respond to both centrally controlled and open market economy resulting in complication associated with the processes. Intensive personnel education and training need to be carried out to support efficient implementation of projects in this area to meet stringent WTO era requirements.

Recommendations for Process Improvement and Future Trends

The difficulties encountered for project management training in developing countries may be mitigated and successful training transfer mechanism can be attained if project managers of developing countries can start with an honest appraisal of their countries' capabilities in project management and actively seek support from their senior management, senior business executives, organizational decision makers and, if possible, country leaders for this endeavor. With growing global competition and the explosion of new knowledge, skills and tools in project management, increasing recognition of project management as a profession of choice for the future and couple with concerns over project risks culminating in the urgent need for training to support and enhance the project management maturity processes of developing countries' organizations, the following recommendations should be carried out to encourage and support the project management training mechanisms to be provided by competent project management professionals from developed countries of the world:

1. Develop and establish the "Train-the-Trainer" approach to provide effective, globally recognized project management training for developing countries' competent project management workforce by planning and organizing training programs for those who eventually will participate in the training and supply of future project managers to support their burgeoning national and international economies
2. Governmental support and recognition of professional training development in project management, including technical seminars and continuing education sessions provided by private firms.
3. Support local, regional and national interests in project management training by introducing technical seminars relating to state-of-the art project management knowledge being used by developed countries' project managers and providing forums for matters that concern project management.
4. Encourage professionals with experience in project management to explore ways to fund and put in place a specialized body of knowledge, associated quality training, potential certification program and cooperate with the world's project management community for the advancement of the profession and its disciplines.
5. Enhance exposures and exchanges of project management through joint activities such as conferences, seminars, certifications and others to support and advance the training needs of project managers in developing countries and keep pace with the progress in this profession worldwide.
6. Re-evaluate current project management practices which, in many cases, resulted in irregularities and potential corruption in project operations and explore the possibility of training for weak areas.
7. Promote E-learning programs that allow project managers to gain training and knowledge in project management without having to leave their homes or offices
8. Enhance the social and industrial recognition of the project management discipline and project management professionals
9. Seek support from the government for the transfer of project management development training from experts of the developed countries in order to prepare their project managers for work in conditions of open economies. Project managers must be prepared to move from a training phase-approach of project

management implementation towards greater ownership and accountability of the project management skills in their management responsibilities. Courses should include those from introductory project management through basic, intermediate and advanced topics responding to their responsibilities and their clients' needs and expectations.

10. Make public and private sectors' project managers aware of the usefulness, necessity and effective application of project management principles and methodologies obtained through state-of-the-art training. They must be fully involved in the process of training mechanisms.

Effective transfer of modern, state-of-the art project management principles and methodologies to developing countries through practical, effective training mechanisms will help their project managers adapting to world-class project management skills to effectively compete for and better manage projects of all types in their own business environments whose trends reflect dramatic increases in the number of projects in infrastructure, energy, information technology and industrial processing areas. In addition, the eventual creation of free trade zones among developing countries of the world, particularly in Asia Pacific region, will culminate in fierce competitions for projects where project management skills are indispensable and pivotal for project implementation success. Also, business globalization, fast pace technological development, rapid urbanization of these countries' populations are critical trends which must be addressed through successful executions of all types of projects where successful transfer of project management knowledge, skills, tools and techniques through training mechanism plays a role of utmost importance.

Conclusion

Developing countries are increasingly recognizing the importance of successfully managing all types of projects in an era of globalization. Although in different stages of development, they all share a common aspiration - receive effective project management training transfer mechanisms from countries of the developed world where effective project management practices have been contributing to significant economic growths. Successful execution of projects, a prerequisite for the success of global, competitive businesses in the rigors of open market economies, is the cornerstone of improved global, trade and investment of all countries of the developing world. Effective project management training will help developing countries, like Vietnam, to continually upgrade the skills of their project managers in managing and executing projects and the technologies they employ and becoming more transparent and accountable for how they manage their projects as well as how to satisfy their projects' stakeholders. Effective project management training transfer mechanism has been a powerful driver for the development of China's economy for the last decade. It is believed that, with project management knowledge, skills, tools and techniques effectively transferred to them by competent professionals from developed countries of the world through training programmes, developing countries' managers will work smarter, not harder to accomplish the objectives of their projects and contribute to the growth of their own organizations leading to higher growth rates for their societies and continuing to improve their people's living standards. Only through this effective training transfer mechanism can project managers in the developing countries be equipped with the effective project management skills to face the challenges of effectively and efficiently managing their projects in an ever changing world. Project managers in developing countries should step up to the plate and demand state-of-the-art project management training as a measure of their management excellence. Overcoming the challenges of successfully transferring modern project management principles and methodologies to developing countries will result in eventual project management maturity urgently required for their industrialization and globalization processes.

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