
Efficiency and effectiveness of high impact social responsibility projects, Chiang Mai University, Thailand

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Abstract The research findings revealed that for overall performance, in terms of efficiency and effectiveness in implementation, the project recipients allocated a weighted score of 74.35% (high performance). Project efficiency was equated to weighted score of 48.88%, while for overall project effectiveness weighted score was 25.47%. However, the efficiency and effectiveness of the social responsibility project classification were considered according to the grouping of teaching and learning disciplines of Chiang Mai University, the Health Science exhibited the weighted score (overall performance) of 82.50% (high performance level), followed by Science and Technology with a weighted score of 71.25% (high performance level), while the Humanities and Social Sciences exhibited a weighted score of 66.65% (moderate performance level). The service recipients experienced a high level of satisfaction in the work process and a good perception of the projects. They get benefit from the projects in terms of health, the environment, and cost-effectiveness. These results aligned with the university's aim of bringing knowledge readily available within the university to solve upstream, midstream, and downstream problems in response to improve the livelihoods of people in the area. The project achieved to be a high level of productivity and outcome according to the objectives of the university's social responsibility project.

Keywords: Efficiency and effectiveness, High impact social responsibility, University social responsibility

Introduction

Chiang Mai University has formulated a strategy accordingly committed to "Excellent Academic Service" (service excellence) and academic services serving society (CMU social engagement) that promotes social responsibility (university social responsibility: USR). In 2020, the university had the policy to implement high impact social service academic projects (high impact social responsibility project). In other words, any projects undertaken by the university must be worthwhile. As well as maximizing the benefit to society,

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many of the projects are carried out by the various faculties/departments of the university under the royal initiative of Her Royal Highness Princess Maha Chakri Sirindhorn. Such projects involve education and community development in the highlands and aim to serve society through area-based academic service. It is found that universities play a role in providing academic services or university social responsibility and having positive impacts on the community in many aspects of social responsibility such as help the community to develop a better society, solve social problems (Boon-long *et al.*, 2013). University social responsibility (USR) as social responsibility of organizations is concerned with economic, legal, altruistic, and moral responsibilities, in the same sense institutions of higher education are required to exceed their fundamental responsibility of developing students, creating research and community outreach, and adjust these activities to the concept of USR (Alia *et al.*, 2021). University social responsibility (USR) has gained momentum in the European higher education context. Facing the ascent of global challenges led by new learning spaces and working methods, the climate crisis, the large-scale population movements, and the growing diversity of publics, higher education institutions are set with new demands both in the sense of rethinking their internal practices as well as their interaction with the community (Coelho and Menezes, 2021).

An analysis of the efficiency exhibited by those involved with the Rajamangala Village Project revealed that the development, implementation, and success of the social service project were both economic, social, environmental, and educational, improving the lives of people in the community (Sakhunkhu *et al.*, 2016). The implementation of the social service academic project resulted in the involvement and acceptance of the target community. Furthermore, the project helped students to acquire a positive attitude toward service provision, develop a volunteer spirit, and consider the benefits to society (Laoopugsin and Pochakaparian, 2018).

A project assessment is analyzed the operational results to determine if they align with the project objectives, whether its implementation is efficient and effective, and whether the planned impacts have been achieved (Kirkpatrick, 2016). The results of the assessment are used to improve the project or create a new project (Rodprasert, 2002). Therefore, it is necessary to assess the efficiency and effectiveness of the university social responsibility project. The objectives of the research were to assess the efficiency and effectiveness of Chiang Mai University's high impact social responsibility project, and to suggest guidelines for the implementation of a university social responsibility project that can be effectively benefit the community while ensuring project consistency and the university's commitment to "service

excellence” and “CMU societal engagement.” It is led to the greater efficiency for the university to meet the social responsibility obligations.

Materials and methods

The research conducted in the targeted service areas of Chiang Mai University in seven districts of Chiang Mai Province: Omkoi District, Chaem District, San Pa Tong District, Mae Taeng District, Phrao District, Mae On District, Chiang Mai Province and Sri Bua Ban District, Lamphun Province, consisting of 24 projects. The research was implemented over a nine-month period from November 2020 to July 2021.

Population and sampling

The population examined in this research is divided into two groups: 1) the academic service provider or project leader group, which refers to the faculty, institution, unit of Chiang Mai University that operates the academic service projects to serve society. 2) service recipients include villagers, farmers, students, and teachers in 7 operating areas. The sample group in this research was selected by the quota sampling method and the sample size was determined using a percentage ratio based on the proportional size of each subgroup of project recipients. The total number of sample groups of service recipients was 140 people. Three academic faculty sample groups were involved in this research project, grouped according to the nature of the academic faculty responsible for teaching and learning disciplines of Chiang Mai University namely: 1) Health Science (11 projects), 2) Sciences and Technology (4 projects) and 3) Humanities and Social Sciences (9 projects) with a total of 24 projects.

Research instrument and data collection

The interview form, containing questions about efficiency of the high impact social responsibility projects consisted of four indicators. The questionnaire is designed to elicit responses from the service recipients on the effectiveness of the high impact social responsibility projects consisted of four indicators. Objective conformity check form was to collect data on the indicators relating to the consistency of purpose, and project goals. Experts from outside the university served as evaluators.

Data analysis

Data were analyzed using descriptive statistics, including frequency distribution and percentage values, to assess the efficiency and effectiveness of the high impact university social responsibility project (four efficiency indicators and four effectiveness indicators). The evaluation criteria were divided into three levels and the percentages calculated using the weighted mean score method. The mean scores were interpreted and compared with the criteria to determine the percentages as follows: mean score 0.00 – 1.09 (less than 36.67 %) = low level, mean score 1.10 – 2.09 (36.67 – 69.67 %) = moderate level, and mean score 2.10 – 3.00 (more than 69.67 %) = high level

Results

The results for the overall project implementation (efficiency and effectiveness) revealed a weighted score of 74.35% (high performance level). Health Science disciplines were ranked to be the highest (82.50%), followed by Science and Technology with 71.25% (high performance level), and Humanities and Social Sciences with a score of 66.65% (moderate performance level), respectively (Table 1).

Table 1. Overall project implementation of high impact social responsibility projects classified by academic disciplines

Academic disciplines	Overall project implementation (100 %)
1) Health Sciences	
%	82.50
meaning	high
2) Sciences and Technology	
%	71.25
meaning	high
3) Humanities and Social Sciences	
%	66.65
meaning	moderate
Overall	
%	74.35
meaning	high

When considering project efficiency, the total weighted score was 48.88% out of a total weighted score of 60.00%. The Health Sciences had the highest efficiency score (51.34 %), demonstrating a high efficiency across four indicators. The Humanities and Social Sciences (47.76%) was the second most efficient in three indicators, while budget utilization showed a moderate result. The Science and Technology (45.23%) exhibited high efficiency in three indicators, while budget utilization and economic impact showed a moderate result (Table 2).

Table 2. Efficiency weighted scores for executing high impact social responsibility projects classified by academic disciplines

Academic disciplines	Efficiency weighted scores (60%)								Total efficiency	
	1 (10 %)	2 (15 %)	3 (5%)	4				4.1-4.4 (30%)		
				4.1	4.2	4.3	4.4			
1) Health Sciences										
value	9.28	12.67	4.32	2.37	2.54	2.41	2.71	25.07	51.34	
%	92.80	84.47	86.40	79.00	84.67	80.33	90.33	83.57		
meaning	high	high	high	high	high	high	high	high		
2) Science and Technology										
value	5.31	12.01	4.13	2.07	2.53	2.44	2.49	23.78	45.23	
%	53.10	80.07	82.60	69.00	84.33	81.42	83.00	79.25		
meaning	moderate	high	high	moderate	high	high	high	high		
3) Humanities and Social Sciences										
value	4.95	13.02	4.24	2.44	2.49	2.55	2.73	25.54	47.76	
%	49.50	86.80	84.80	81.33	83.00	85.00	91.00	85.13		
meaning	moderate	high	high	high	high	high	high	high		
Efficiency	value	6.90	12.69	4.26	2.34	2.52	2.47	2.68	25.03	48.88
	%	69.00	84.60	85.20	78.00	84.00	82.33	89.33	83.43	
	meaning	moderate	high	high	high	high	high	high	high	

Note: Details of indicators: 1 = budget utilization, 2 = public satisfaction / service, recipients in the process of the project, 3 = perception of participants, 4 = impact, value and benefits from the project (4.1 economic 4.2 health / environment, 4.3 social and quality of life 4.4 value and benefits)

In terms of project effectiveness, the total weighted score was 25.47% of a possible total score of 40%. The Health Sciences had an effectiveness score of 31.16% and high scores in two indicators, namely project management and productivity, goals, achievements, and outcomes based on project objectives. The Science and Technology had shown to be the next highest effectiveness score of 26.02% with a high score in one indicator, namely productivity, goals, achievements, and outcomes based on project objectives. Finally, the Humanities and Social Sciences received an effectiveness rating of 18.89%, exhibiting low scores in two indicators, namely project management and problem suggestions for the development or improvement of academic service in serving society (Table 3).

Table 3. Effectiveness weighted scores for executing high impact social responsibility projects classified by academic disciplines

Academic disciplines	Effectiveness weighted scores (40%)				Total effectiveness
	5 (5%)	6 (10%)	7 (20%)	8 (5%)	
1) Health Sciences					
value	3.55	5.14	19.00	3.47	31.16
%	71.00	51.40	95.00	69.40	
meaning	high	moderate	high	moderate	
2) Science and Technology					
value	2.19	6.58	15.00	2.25	26.02
%	43.80	65.80	75.00	45.00	
meaning	moderate	moderate	high	moderate	
3) Humanities and Social Sciences					
value	1.83	4.32	11.11	1.63	18.89
%	36.60	43.20	55.55	32.60	
meaning	low	moderate	moderate	low	
Effectiveness					
value	2.	5.07	15.22	2.54	25.47
%	52.80	50.70	76.10	50.80	
meaning	moderate	moderate	high	moderate	

Note : Details of indicators, 5 = project management, 6 = consistency of project objectives/goals, 7 = productivity, metrics, goals, achievements, and outcomes in accordance with the project objectives and 8 = problem suggestions for the development or improvement of academic service in serving society

In summary, the results demonstrated the efficiency and effectiveness of the Chiang Mai University with high impact social responsibility projects. Apart from the implementation of the project by three teaching and learning disciplines, the overall project performance (efficiency and effectiveness) was found to be 74.35%, divided into project efficiency (48.88%), and project effectiveness (25.47%). The Health Sciences was found to be the most efficient in implementing the university social responsibility projects (51.34%), followed by the Humanities and Social Sciences (47.76%), and Science and Technology (45.23%), respectively. The Health Sciences also demonstrated the highest level of effectiveness in implementing the university social responsibility projects (31.16%), followed by the Science and Technology group (26.02%), and Humanities and Social Sciences group (18.89%), respectively (Figure 1).

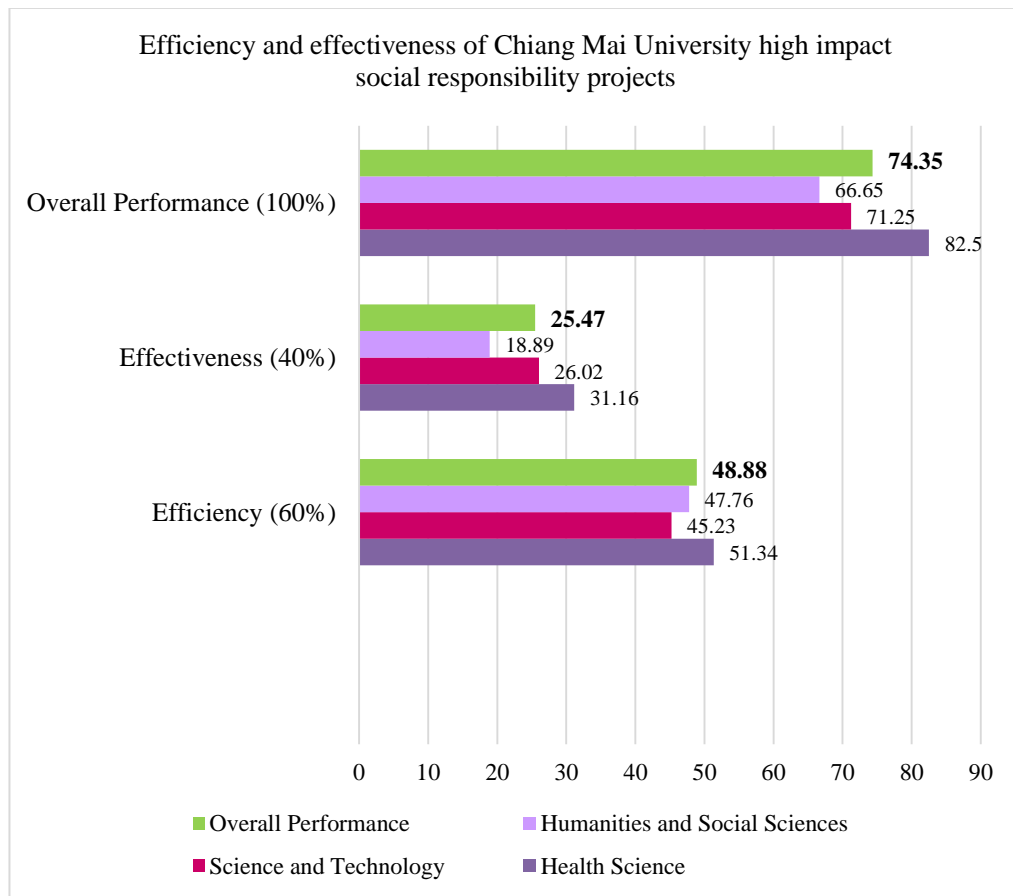


Figure 1. Efficiency and effectiveness of high impact social responsibility projects

Discussion

The results of the Chiang Mai University high impact social responsibility projects revealed that the efficiency and effectiveness of three teaching and learning disciplines led to its successful overall implementation. The overall performance (efficiency and effectiveness) percentage were 74.35%, with the efficiency of project execution equating to 48.88%, and the effectiveness of its implementation equal to 25.47%. The Health Sciences discipline exhibited the highest efficiency regarding implementation (51.34%), followed by the Humanities and Social Sciences discipline (47.76%) and the Science and Technology discipline (45.23%). These results demonstrated that the Health Sciences discipline exhibited the best performance regarding the implementation of the social responsibility projects. This is because people who receive services are satisfied with various activities and satisfied with the process of the projects carried out in the area is consistent with daily life. They also recognize the value and benefits of projects that contribute to their health and wellbeing. These findings are consistent with Mar á-Jes ús *et al.* (2022) who found that health promotion is not only considered as a Corporate Social Responsibility activity by a growing number of companies; likewise, national, and international calls for companies to act in a socially responsible manner through health promotion. All possible resources are available. both inside and outside the organization Must realize the common importance of Corporate Social Responsibility. Health promotion as part of sustainable development that will integrate, first of all, Corporate Social Responsibility and sustainability from a health stakeholder perspective. and secondly promoting the health of stakeholders from the perspective of sustainable development It is proposed as a national social responsibility that the company operates in a socially responsible manner through health promotion.

In terms of efficiency in implementing academic service projects to serve society, it was found that the people who received the service had a high level of satisfaction in the work process and a good perception of the social responsibility projects they benefited from the project in terms of health, the environment, and cost-effectiveness. These results aligned with the objectives of the university, which made the body of knowledge readily available within the university to solve upstream problems and improved the livelihoods of people in the area. The university has made the body of knowledge readily available within the university to solve upstream problems to meet the livelihood of people in the area. In the midstream and downstream, that university is collaborated with the community in driving the project to achieve its objectives by engaging the community in all activities. The results of the

study are consistent with the method of operation of Sukloy and Mungkang (2006) which allowed the people to participate in various activities carried out by a group process to share opinions. Participate in action and received benefits with the objectives of that activity as a location as for the cost-effectiveness and benefits of downstream processes. It was found that the people in the area benefited the most. Value and have sustainable local responsibilities. It is still not in line with Acosta *et al.* (2017), who stated that institutions governing public social programs should ensure continuity of social spending focused on promoting equality of access to high-quality services in a cost-effective manner, Boon-long *et al.* (2013), who stated that providing academic services is concerned the primary mission of the entire university. The aspects are teaching, research, and academic service with the missions for well-connected society and can be linked among each other to produce many results, including graduate production, research, and academic service. The people in the area get the most benefit. Satisfied with the work process, knowledgeable understanding increased skills to create value for the community. Mingchai (2021) mentioned academic services could apply the principle of blending expertise between people with academic knowledge and conditions for its use in the same way as higher education institutions through commitment. The main business of the organization is the way of thinking about social service education starts with a problem, come from a society in many dimensions, which related to both research problems and challenges of development by communicating to teachers in higher education institutions. The most important is to go through the process of solving the problem, commitment activities such as using research and used in social service academic services, which is consistent with the study of Laoopugsin and Pochakaparipan (2018) reported the results of the university's social service academic project revealed that the involvement of the target community to enhance the students' skills and positive attitudes toward the provision of academic services. The effectiveness of the academic service project is demonstrated by the willingness of volunteers to serve society.

However, in terms of the effectiveness of social responsibility projects, this study was found the implementation of the project which delayed due to project management, resulting in the request for an extension of time. Consequently, the project implementation did not follow the specified plan for two reasons. Firstly, the submission of a project requested to obtain budgetary support which involved a hierarchical approval process. Secondly, some programs needed to modify according to the disbursement regulations. As a result, the operating timescale did not go according to the original plan. The inconsistency of the project objectives and the unclearness of the project goals

would lead to the success of the project and the success of the goals. The findings of this study agreed with Julphunthong *et al.* (2014), who proposed that the university should strengthen system administration and evaluated the academic services through the development of systems and monitoring mechanisms. The evaluation of academic services would make it possible to indicate the achievement of goals and setting a clear objectives and goals through a systematic project evaluation model. Furthermore, following the work of Jena and Chander (2017) who concluded that due to the limitations under the academic service agency, administrators that must concern a policy to support the project coordinator through analysis, monitoring, and prevention methods to reduce project management difficulties. The results of a study by Naidu *et al.* (2016) specified that to be effective in project management, executives should consider setting, amending, and streamlining budget approval and disbursement procedures by providing specific practice instructions. Moreover, the study revealed that the person responsible for the project was required to carry out several other tasks, such as teaching, research, and traveling abroad. As a result, the project could be carried out in accordance with the action plan. These findings are consistent with those of Julphunthong *et al.* (2014) who found that the problem with providing academic services to society is personally involved and unable to manage their heavy teaching workload due to a lack of time.

It is recommended that the suggestions arised from the preliminary research findings to enable the university to successfully implement the social responsibility projects and achieved its objectives as for the efficiency and effectiveness of project performance evaluation, project management, coordination, financial resource management, and implementation of the plan, a project leader should be selected to improve the overall process. High impact social or academic service projects tended to experience problems with the implementation of academic service provision to society. It is important that such projects have appropriated plan to ensure their continued operation in an efficient and timely manner while also allowed for future changes in operating costs and timescales. Project planning and the objectives or aims determination of the project are concerned another important step for implementation. A lack of clarity in setting objectives and goals would result in inconsistent results. Consistency in setting the project's objectives and targets would lead to the successful completion of the project and the achievement of its goals. A clear working support agency should be developed to facilitate the provision of academic services to society. Financial resource management should involve a clear policy on budget disbursement to ensure continuity. Projects are approved for a specified period and activity spending should be summarized and a

quarterly financial report provided. A social responsibility unit should also be established at the university to support the implementation of academic service to society.

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