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**AN EVALUATION OF THE PRODUCT DEVELOPMENT  
PARTNERSHIP PROGRAMME BETWEEN NEW ZEALAND  
BUSINESSES AND INSTITUTE OF TECHNOLOGY AND  
ENGINEERING, MASSEY UNIVERSITY**

*A thesis presented in partial fulfilment of the requirements  
for the degree of Master of Technology  
in Product Development at Massey University*

**SHIRLEY SIAW-HUI LIM**

**2002**

## ABSTRACT

This masterate thesis, *An Investigation of The Effectiveness of the Product Development Partnership Programme Between New Zealand Businesses and Massey University*, is the final report of a masters research undertaken throughout New Zealand from mid 2000 to mid 2001. The primary purpose of this research was to evaluate the Product Development Partnership Programme (PDPP) at Massey University from 1997 to 1999. The study intends to provide an in-depth understanding of (i) the PDPP, (ii) its design and management, and (iii) the survey outcomes to the client companies and Massey University.

A nation-wide self-administered survey was mailed to fifty-five New Zealand companies who had sponsored student projects from 1997 to 1999. The total survey sample accounted for the survey analysis was reduced to forty-six as a result of seven surveys returned with apologies of being unable to participate and two were returned uncompleted. An overall response rate of 48% was achieved by contacting the companies prior to the full-scale mail-out and follow-up calls when the deadline of returning the survey was drawing near and/or had past. A series of case study interviews with the selected mail survey respondents was conducted following the nation-wide mail-out. The objective for the interviews was to gain more depth and clarification on some of the answers given in the survey.

This thesis contributes new knowledge for the reason that, in spite of being almost a decade since the PDPP was first introduced at Massey University, no formal and/or comprehensive study has been undertaken to measure its performance. Other than meeting the domestic needs, this thesis would also be able to satisfy the international needs and interests on Product Development practice that incorporates the student-client relationship in the academic domain.

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Results of this study show that more than three-quarters of the respondent companies carry out all the thirteen common stages in Product Development process, either formally or informally. The percentage of Product Development usage in the respondent companies was much higher in this research compared to studies conducted in related area and subject. Yet, the results also showed that all but one client company's utilisation of Product Development practice remained unaffected by their involvement in the PDPP. This was due to the insufficient time to introduce such a sophisticated system to companies untrained to it and with limited financial and human resources. It needs to be reminded that improving the client company's PD process or helping them to install a new PD process is not the objective of the PDPP. Companies of limited financial and human resources were mainly those of micro and small to medium-sized enterprises (SMEs) which were accounted for 73% (6 micro enterprises and 10 SMEs) of the total responses returned.

According to 95% of the mail survey respondents "consumer research information" was the most useful among the nine benefits listed in the questionnaire. The number of businesses favouring marketing research and marketing research information indicated that New Zealand companies are increasingly acknowledging the importance and usefulness of marketing research information in new product development (NPD). Overall, 68% of the survey respondents rated the information gathered and skills learned through the PDPP useful. Besides providing the client companies with information and skills useful to them, PDPP also gave them the opportunities and assistance needed to test the product concepts and reach commercialisation quicker.

Analysis of the survey found that student's ability and performance, and communication with students were the main obstacles to the progress of the project. The same aspects were also found to be the top three most important factors to Product Development projects. This thus demonstrated that project barriers and factors important to Product Development project were inter-related with each other.

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The majority of the respondent companies considered "helping student and university" as their main objective to joining the partnership programme. Other notable objectives from the client companies' point of view on the joint-partnership project included economical reason to get a potential project underway and gaining access to research expertise. When asked about their opinion of the concept of working with Massey through the partnership project, all of the case study companies supported the concept. On top of that they also believed that the Programme is beneficial for both the student to gain practical experiences and assist them in testing the new product concepts quickly leading to economic benefits.

Overall, though there are improvements such as project scope that matches the student's ability and project timeframe, resources availability, and communication to be made in order to be continually successful, PDPP had received satisfying reception and recognition from the responded client companies. The recognition received from the client companies was based on the assistance given to the new projects, project benefits received which included information gained and skill learned, and to some also included project commercialisation.

## ACKNOWLEDGEMENTS

First of all, I would like to thank both my supervisors, Aruna Shekar and Lionel E. Loo, for their guidance and support. Without their input, this would be a very long and bumpy ride.

Secondly, I would like to extend my gratitude to all the company owners and managers who generously gave me their time in responding my questionnaires and participating in the interviews. Their comments and suggestions had contributed significantly in this research study and similar research direction in the future.

My sincere appreciation to: Maureen Oemcke, for her proof reading and constructive comments and suggestions in thesis presentation; Kathy Hamilton for her support, friendship and encouragement; Joan Brookes and Lisa Valenzuela for all the secretarial help; Scott Doty for providing the much needed inter-professional undergraduate/graduate programme in art and design in USA; Renee Evans for her useful and constructive comments; and my fellow post-graduates who never gave up entertaining me when I was at my lowest point.

Last but not least, to my parents and family, for their complete and unconditional love and support. Especially my brother, James, whom I know is watching over me everyday. Mucho gracias guys, for having the faith in me and always being there throughout my academic endeavours!

Before ending, many thanks to my Echo, Dr. RS Pan, who had given me so much of everything but asked so little. Your humorous nature and presence had put a lot of smiles on those gloomy days.

*This research was not sponsored by any Government or industry body. All the funding of research expenses was met by the Institute of Technology and Engineering, College of Sciences, Massey University.*

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