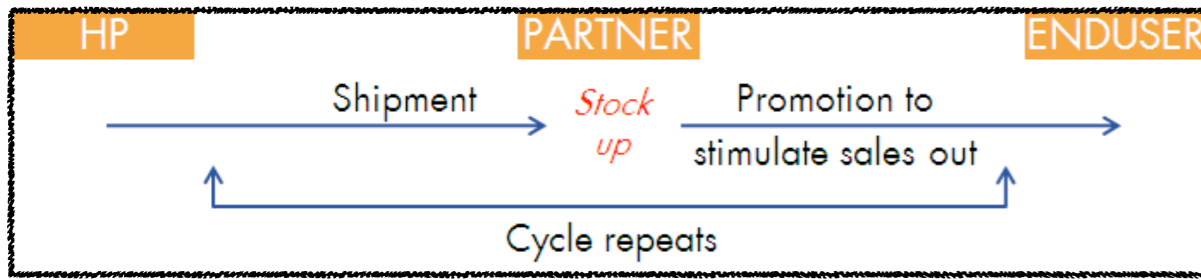


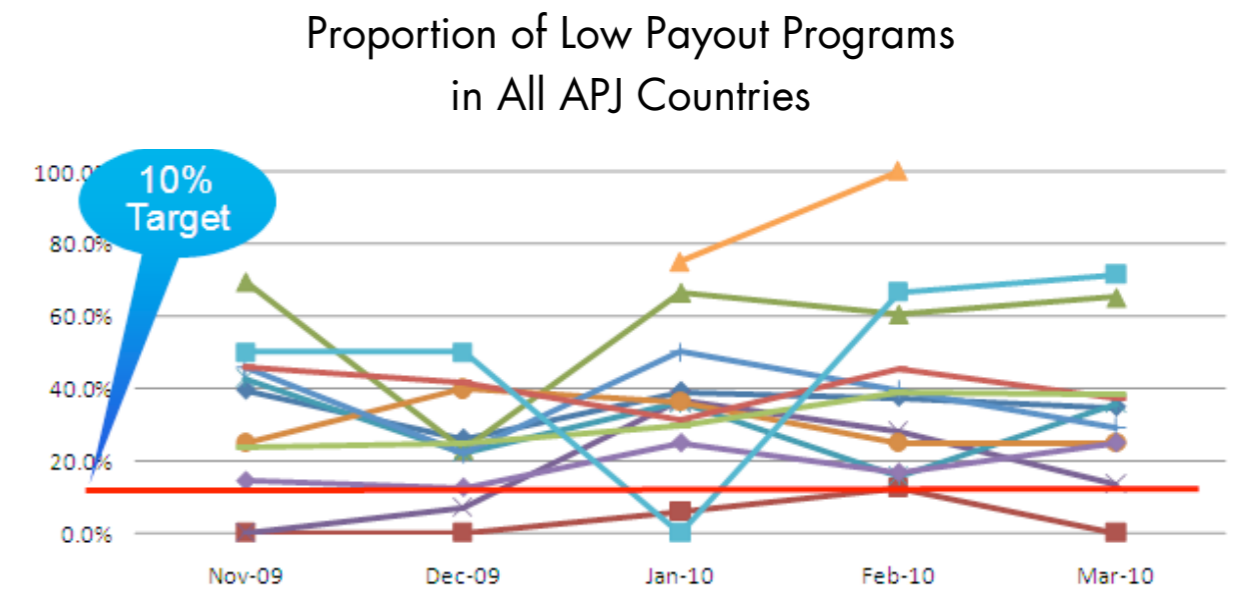


PROBLEM DEFINITION AND OBJECTIVE

HP distributes products to end user through channel partners and grants price adjustment and discount to partners to encourage sell through/sell out motion, which is called **back-end promotion**.

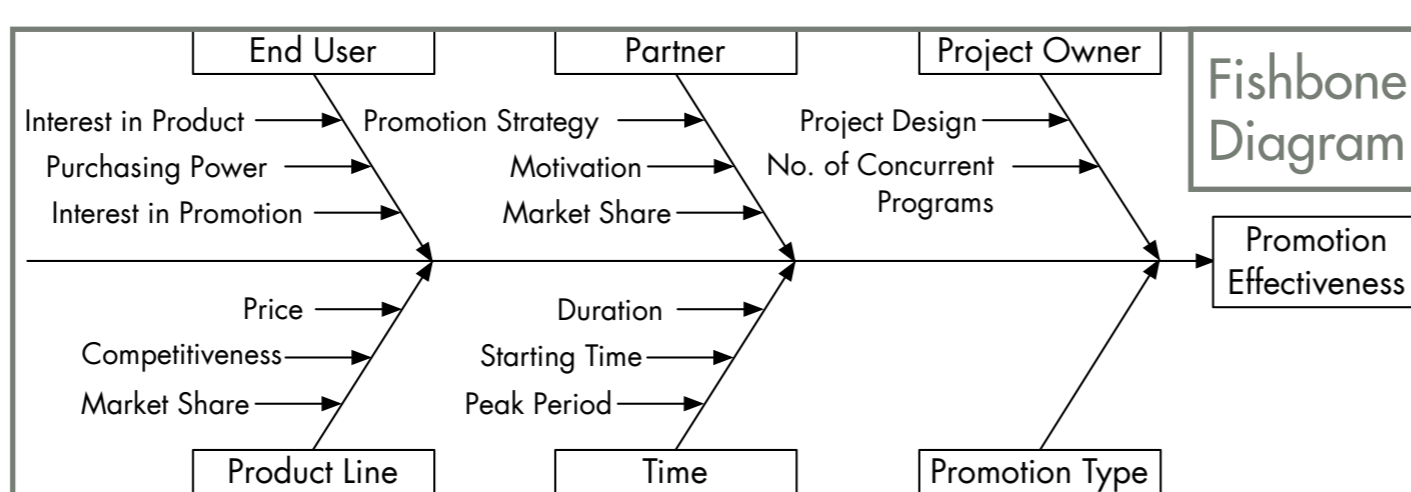


HP measures promotion effectiveness by tracking the proportion of low payout programs (programs with payout lower than a certain value). In Asia-Pacific Japan region (APJ), there are a large percentage of promotions that drive little rebates. Therefore, the objectives of this project are to identify the critical factors that influence promotion effectiveness and recommend preferred practices for future promotion programs in HP.



RESEARCH METHODOLOGY

- ➔ Research on relevant publications
- ➔ Regular meeting with HP staff
- ➔ Survey for program owners to understand promotion mechanism



- ➔ Focus on Singapore due to diverse effects of the same factor across APJ
- ➔ Break down data into groups, observe and test the significance of factors
- ➔ Aggregate similar groups and conclude effects of factors on a large scale
- ➔ Tools used
 - Excel to plot relations between various factors and low payout ratio/average payout
 - Minitab to conduct statistical test and build regression model

Understand the Project Scope

Brainstorm Possible Factors

Identify Critical Factors

ANALYSIS AND FINDINGS

Critical Factors

Month

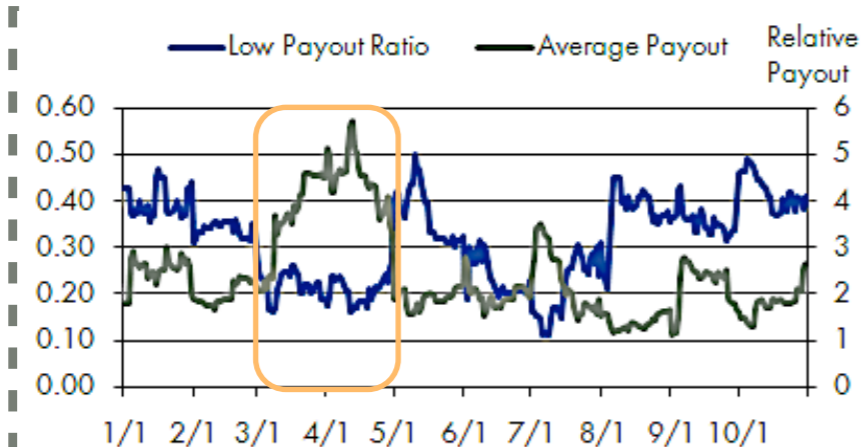
Product Line

Program Owner

Duration

Deep Dive Analysis on Singapore Data from Jan 2010 to Oct 2010

- ➔ March & April considered as peak period, with the best performance



- ➔ Result from Minitab supports the conclusion that March & April are peak period with P-value = 0

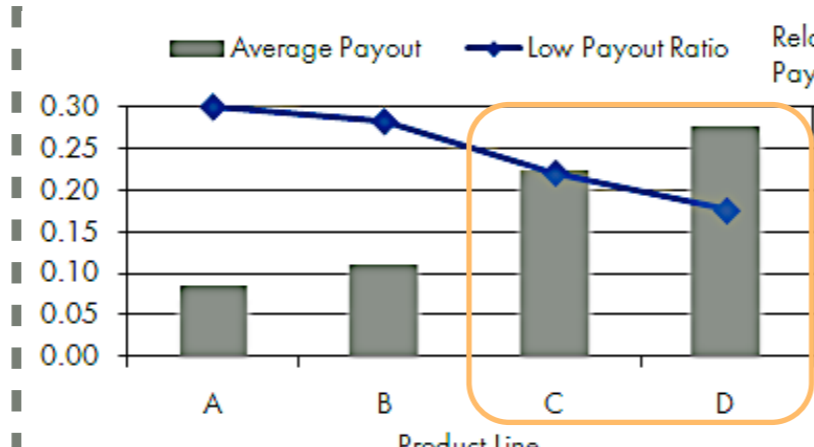
Source	DF	SS	MS	F	P
Month	1	1.73341	1.73341	656.08	0.000
Error	302	0.79693	0.00264		
Total	303	2.53034			

S = 0.05137 R-Sq = 68.50% R-Sq(adj) = 68.40%

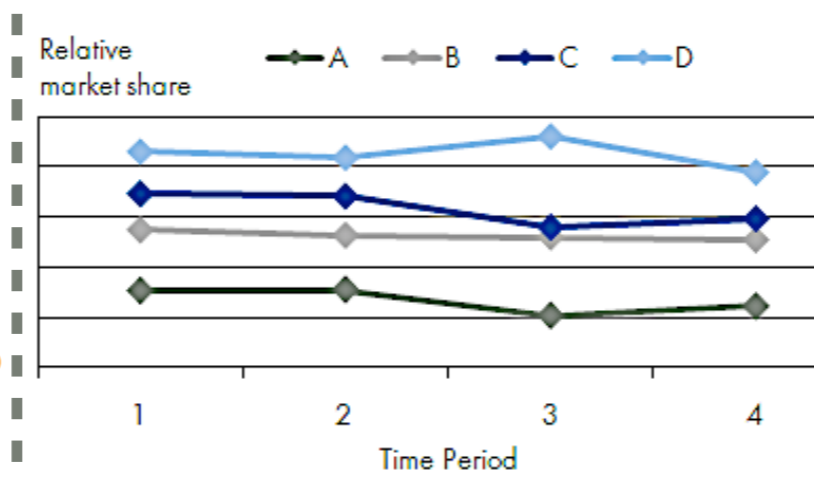
Level	N	Mean	StDev
3,4	97	0.20344	0.03346
rest	207	0.36544	0.05785

Pooled StDev = 0.05137

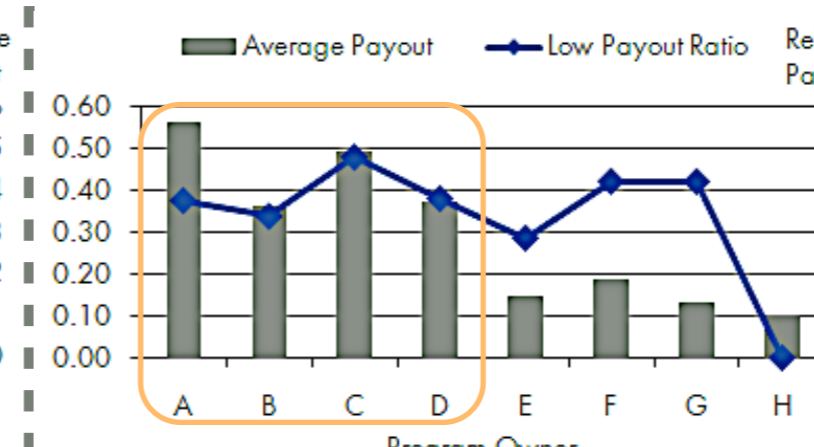
- ➔ Group X(C,D) products performs better than Group Y(A,B) products



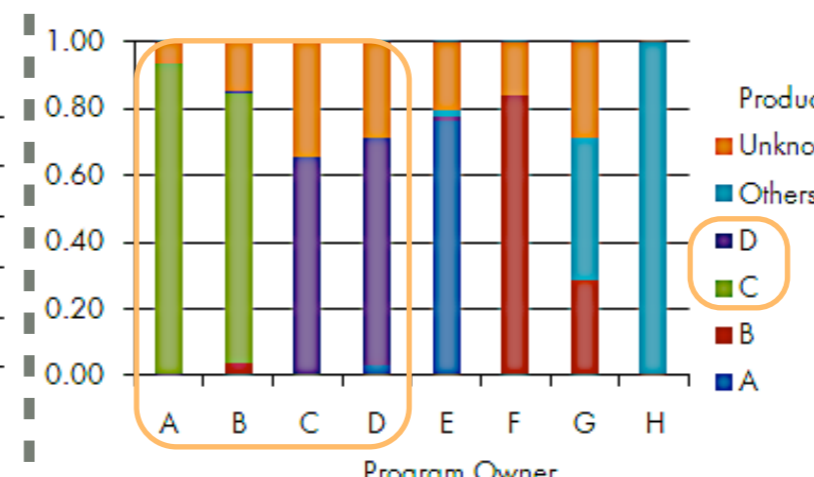
- ➔ The reason behind may be the difference in market share between product lines which is shown below



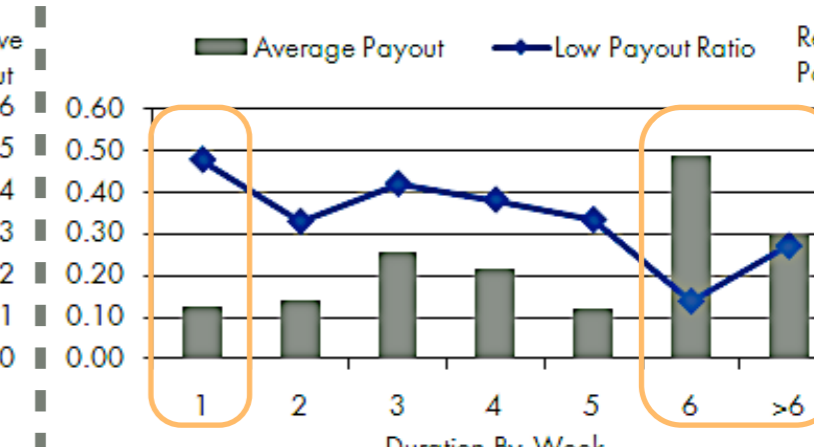
- ➔ Significant difference between different program owners



- ➔ Average payouts of top 4 are significant higher, but may due to that they run product line C and D



- ➔ Programs longer than 5 weeks perform the best

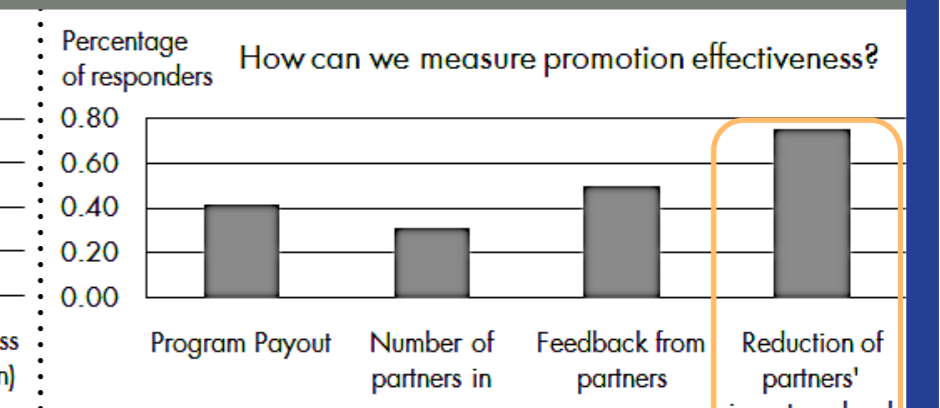
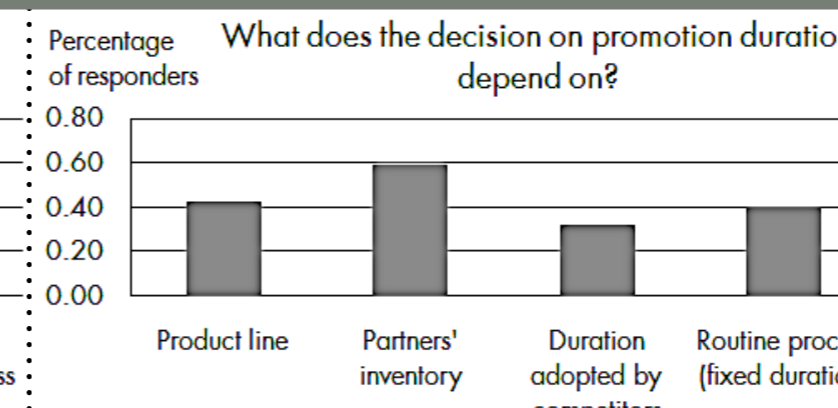
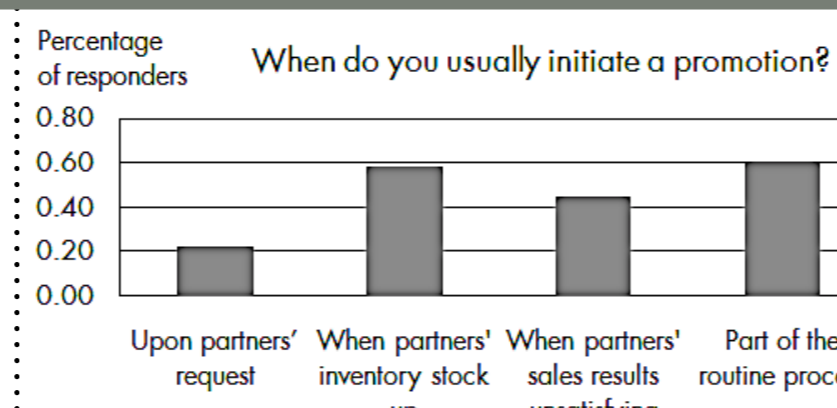


- ➔ Programs with duration in one week perform the worst with the lowest average payout and highest low payout ratio
- ➔ Results from Minitab support the conclusions above.

ANOVA Test (Compare payout)		P-value
Level 1	Level 2	
Programs within one week	The rest	0.004
Programs longer than 5 weeks	The rest	0.000

Program Owner Survey Result

- ➔ Various mechanism to decide when to launch a promotion and the duration
- ➔ Reduction of partners' inventory level mostly considered to measure promotion effectiveness



RECOMMENDATIONS

- 1 Initiate more promotions during peak period
- 2 Control the numbers of short-term promotions, promote long term promotions
- 3 Setup different criteria for different product lines
- 4 Hold more information sharing session among program owners and encourage them to learn from each other
- 5 Increase rebate amount for ineffective promotions
- 6 Revise promotion effectiveness measurement system, include other indicators like the reduction of inventory level and introduce normalization

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