



Characteristics of the Industrial Distributor's Innovation Activities An Exploratory Study

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Recent trends in industrial distribution suggest that distributors may perform an important role in various stages of product innovation from idea generation, through product design, to product launch and subsequent marketing. In this article, Eunsang Yoon and Gary Lilien review the literature and discuss the potential role of the industrial distributor as an innovation participant. An exploratory study with an Australian data base suggests that the industrial distributor performs tasks associated with market-driven product innovation (reformulation and imitative new products in particular) as effectively as the industrial manufacturer.

Introduction

Market coverage and customer contact are the primary functions of an industrial distributor. Recent trends in distribution, however, suggest that the industrial distributor may become an efficient participant not only in generating and screening ideas, but also in designing products and testing them in the market. The potential advantages for the industrial distributor are expected to be greatest in market-driven product innovations.

In the next section we discuss the changing distribution environment in the United States. Following that, we explore the potential role of the industrial distributor as an active participant in product innovation. Using a data base of 135 industrial firms, we then examine the innovation activities of Australian manufacturers and distributors. We describe a comparative analysis between the traditional manufacturer and distributor and the distributor owning manufacturing facilities and the manufacturer performing distribution functions. Finally, we discuss the implications of our empirical results and future research directions.

Trends in Industrial Distribution

Innovation Functions of the Industrial Distributor

The industrial distributor is a full-service intermediary who performs a broad range of marketing channel functions between industrial manufac-

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BIOGRAPHICAL SKETCHES

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turers and industrial end-users. The distributor contacts customers, makes the product available by providing the necessary supporting services (such as delivery, credit, technical advice, repair service and sometimes assembly or light manufacturing) and participates in promoting the product.

The industrial distributor has traditionally been chosen by the manufacturer and, for marketing new products, has been seen as less effective than the manufacturer's salesforce [30]. Crawford [6] suggests, however, that the industrial distributor could be a suitable channel member for a product that (1) has a large potential customer base, (2) is a stockable item, (3) is sold in small quantities, (4) is a low-involvement item for the customer or (5) requires rapid delivery and service. Webster [31] also suggests that in certain situations a better product development program can be devised by the distributor or through a closer relationship between the manufacturer and the distributor. These propositions are based on the reasoning that, because the industrial distributor is more customer-oriented than supplier-oriented, it can develop market-driven innovations more effectively.

Recent Trends in US Industrial Distribution

Distributors are the most important force in industrial distribution channels. A survey by *Industrial Distribution* [14] reports that in 1982 the number of industrial distributors in the United States was about 12,000, and the total sales volume was about \$43 billion. Distributors are typically small and working-capital intensive. They serve a small geographic area, although those few with over 100 branches approach the "supermarket" status [7]. A typical firm's sales were \$2.1 million, the number of employees was 12.1 and the salesforce was 3.85. The order size of an average customer was small, \$150 to \$200, and net profits are relatively low (2.5% of sales and 7.0% return on investment). The assets of a typical distributor are broken down into 57.4% for inventory, 32.2% for receivables, 4% for cash and 6.4% for other items.

In recent years, however, several important trends in industrial distribution have been observed in the United States and are summarized in Exhibit 1. Larger, more sophisticated distributors have emerged [22], and chains of distributor outlets that are owned and managed by large corporations exhibit strong market power and customer loyalty [20].

The industrial distributor has begun performing more functions for both the manufacturer and the end-user [12]. In surveying electronics distributors, Narus and Anderson [24] found that managers believe that a greater proportion of certain selling tasks will be reallocated from manufacturers to industrial distributors. The distributor's salesforce would take a greater role in prospecting, specifying products, problem solving and maintaining sound relations with end-users. In particular, outside salespersons would take greater responsibility for identifying potential customers, determining their requirements, and recommending the kinds of products and services that the distributor should offer. The evolution of the distributor's function has been driven by the increases in manufacturers' selling costs [23] and the technical complexity of the many industrial products that require more customer service [24], and has resulted in the increase of the proportion of industrial products sold through distributors [8].

The industrial distributor has developed more

control over marketing channels [25] on the basis of its increased market power and marketing functions. In certain situations, the manufacturer relinquishes control over the marketing mix in favor of the distributor's choices on product policy, pricing and communications [6]. The evolutionary shift of power from the manufacturer to the distributor has been supported by (1) the computerization of the distributor's operation [5, 27] and (2) the concentration of the distributor's efforts on restricted product lines [13]. All of these factors positively affect the distributor's capability and involvement in product innovation activities.

Potential Roles of the Distributor in Product Innovation

The industrial distributor may figure in the manufacturer's innovation program as a channel member. Understanding market needs and serving the target market more effectively with new products depends on cooperation between the manufacturer and the distributor. In a traditional, independent manufacturer-distributor system, however, the distributor may not be part of the new product introduction team because the distributor wants to act as a "purchasing agent to its customers" as well as a partner with the manufacturer. The relationship between the manufacturer and the distributor may be characterized by conflict or coercion based on the power of each channel member [26, 9, 10]. Confrontations between manufacturer and distributor are often inherent in the product, pricing and promotion strategies [6].

One way to involve the distributor more fully is to have it act as an active member of the manufacturer's new product project team. The manufacturer may be able to recruit distributors as team members in the overall product innovation program from an early stage of product development. Trust is an essential element in such a channel working relationship [1, 2]. The distributor, however, may greatly affect the manufacturer's innovation activities. Even when firms have achieved a cooperative, productive partnership, one usually controls the other [6]. The distributor may be strong enough to handle various marketing functions, including product development. An innovation-oriented distributor may ac-

Exhibit 1. Recent Trends in Industrial Distribution

1. Market power has strengthened.
Larger, more sophisticated distributors emerge [22].
Chains of distributor outlets owned by large corporations exhibit strong market power [20].
2. Marketing function has expanded.
Distributors are beginning to perform more functions for both the manufacturers and the end-users [12].
Managers believe that certain selling tasks are reallocated from manufacturers to distributors [24].
Higher selling costs of manufacturers increase the importance of distributors [23].
Technical complexity of many industrial products requires distributors' involvement in product development [24].
The proportion of industrial products sold through distributors increases [8].
3. Channel control has increased.
Distributors develop more control over marketing channels [25].
In certain situations, manufacturers relinquish control over the marketing-mix in favor of the distributor's choice on product policy, pricing and communication [6].
Distributors concentrate their efforts on restricted product lines, increasing the distributor's expertise and control [13].
Introduction of computers and innovative telecommunications equipment enable distributors to access information rapidly, increasing the distributor's capability of channel control [5, 27].

tively identify new market opportunities, generate and evaluate new product ideas through its distribution network, develop product specifications and contact manufacturers to produce to specifications. Strong distributors may obtain control over a new product developed by a financially weak or inexperienced manufacturer.

A second possible role is for the industrial distributor and manufacturer to combine into a single corporate system. A vertical integration of the marketing system may achieve economies in developing and marketing new products that cannot be realized through the use of the conventional marketing channel [21]. Under the corporate vertical marketing system [16], successive stages of production and distribution are owned through forward and backward integration by a single entity. Examples are Sherwin-Williams, which

owns and operates 2,000 retail outlets, and Hart, Shaffner & Marx, which operates 275 stores. Singer, International Harvester, Goodyear and Sohio are other examples of forward integration of retailers by manufacturers. Another is the acquisition of Conoco Inc. by Dupont in 1981 [3]. An example of backward integration by the industrial distributor is an electrical distributor with seven manufacturing facilities [28]. Vertical marketing systems have become the dominant model of distribution in consumer marketing, serving as much as 64% of the total market [16], and are expected to account for over 85% of the total retail sales in the 1980s [15]. Similar trends may be developed in industrial marketing and distribution.

A third role is for the industrial distributor to be a partner or a team member in product innovation for the end-user firms. The end-user manufacturer may need the market expertise of the industrial distributor to develop a new product. Component distributors in the electronic industry are frequently asked to participate in designing and developing a new component for the end-user's product [29]. In certain circumstances, the industrial distributor may even perform part of the assembly or manufacturing function of his customer firm.

Considering the trend discussed in the previous section, we expect industrial distributors would pursue all three of the roles outlined here. The empirical analysis below focuses on the second role, which is the integration of manufacturing and distribution functions for a positive synergy in the product innovation activities and performance. We are interested in two propositions: (1) because the distributor is typically customer-oriented, its contribution is expected to be greatest for market-driven product innovations; and (2) because the distributor is typically small, its role as an innovation participant is likely to be achieved more effectively through interactions with manufacturers rather than through independent in-house product development.

Innovation Activities of Australian Industrial Firms

The Data Base

A survey of the innovation activities of the leading industrial firms in Australia was conducted by

the Chisholm Institute of Technology in 1986. The survey sought (1) a general description of the firms, (2) motives for being innovative, (3) idea sources, (4) market testing methods, (5) innovation performance and (6) the perceived reasons for success. A total of 135 completed questionnaires was received from 111 manufacturers, 20 distributors and 4 service suppliers that are active in product development and distribution. The frequency distribution of these firms across industry sector and sales volume is seen in Table 1, A and B. Manufacturers were sampled more in engineering, chemical and construction industries, whereas distributors were sampled more in electric/electronics and engineering industries, reflecting the policy emphasis and innovation intensity in Australia. The sales volume of the manufacturer is distributed over a range of less than \$1 million to over \$200 million with a median of \$22.6 million; that of distributor ranges from \$1 million to \$100 million with a median of \$17.5 million. Exploratory studies¹ by Link [19] and Gauvin, Lilien and Link [11] report that the data base represents a good cross-section of Australia's leading industrial companies.

Manufacturing-Distribution Categorization

On the basis of the firm's primary function, we differentiated the industrial firms in the data base by manufacturer and distributor. Then we divided them into four categories. Category MM includes the manufacturer firms that manufacture 100% of their new products in their own plants. Category MD includes those manufacturers for whom outside suppliers manufacture some new products. Category DM includes the distributor firms that manufacture some of their new products in their own plants. Category DD includes those distributors whose new products are manufactured entirely by other firms. Thus, in terms of the corporate marketing system we discussed

¹ Link [19] investigated success and failure determinants of new industrial products with this data base. He found that the companies with more innovative new product programs have significantly different success and failure factors at work than their less innovative counterparts.

Gauvin, Lilien and Link [11] observed that, with respect to product innovation, the industrial firms in Australia are similar to those in North America [4, 18] and Europe [32] in failure rate, motives and idea source, but differ in screening research procedure and overall competitiveness.

**Table 1. Description of the Australian Data Base
A. By Industry Sector**

Industry sector	Composition (%)			
	Manufacturer (n = 111)	Distributor (n = 20)	Service supplier (n = 4)	Total (n = 135)
Minerals, metals, fuels	4	10	—	4
Chemicals, paints, plastics	18	5	—	16
Food components, machinery	9	5	—	8
Engineering equipment	26	20	25	25
Transportation equipment	5	10	—	6
Building products	14	—	—	11
Electric/electronic equipment	5	30	—	9
Office equipment, supplies	4	5	—	4
Packing materials/equipment	11	—	25	10
Industrial services	1	—	50	3
Industrial supplies	3	15	—	4

B. By Company Sales

Annual sales (\$million)	Composition (%)			
	Manufacturer	Distributor	Service supplier	Total
Under 1.0	1	0	0	1
1- 4.9	10	15	50	12
5- 9.9	11	20	0	12
10- 24.9	34	35	25	34
25- 49.9	16	15	0	16
50- 99.9	17	10	0	16
100-149.9	4	5	0	4
150-199.9	4	0	0	3
200 or over	4	0	25	4
Median (\$million)	22.6	17.5	10.0	21.4

previously, the Category MD firm is the manufacturer who has vertically integrated the distribution function forward, and the Category DM firm is the distributor who has vertically integrated the manufacturing function backward. Table 2 shows the number of firms for each group: 55 manufacturers in Category MM, 45 manufacturers in Category MD, 11 distributors in Category DM, and 9 distributors in Category DD. Table 3 summarizes the industry sector and sales statistics for each of these four categories.

Results of Comparative Analysis

Manufacturer versus distributor. Table 4 summarizes the results of a comparative analysis of

the manufacturers' (Category MM and MD firms) and the distributors' (Category DD and DM firms) innovation strategies, idea generation and evaluation methods and success rates and determinants.

With respect to the overall innovation strategy (Table 4A), we found that:

1. New products accounted for about 30% of total sales for both manufacturers and distributors.
2. The distributor had launched and planned to launch more new products than the manufacturer, reflecting the typical market structure in which distributors are networked to manufacturers.

Table 2. Manufacturer-Distributor Categorization

Manufacturing-distribution mix	Number of firms by company's primary function	
	Manufacturing	Distribution
100% of the products were manufactured in its own plants	Category MM: 55	
Some of the products were manufactured by outside suppliers	Category MD: 45 ^a	
Some of the products were manufactured in its own plants		Category DM: 11 ^b
100% of the products were manufactured by outside suppliers		Category DD: 9
Total	100 ^c	20

^a The average proportion of the new products manufactured by outside suppliers was 53.2%

^b The average proportion of the new products manufactured in the distributor's own plants was 57.8%

^c 11 out of 111 manufacturer firms did not provide the information required for this categorization.

3. Reformulations (or line extensions) accounted for more than 50% of the new products for both manufacturers and distributors. For other products, the distributor was more imitation-oriented and less original product-oriented than the manufacturer.
4. Motives for product innovation were similar for manufacturers and distributors. Major motives were (a) to meet financial goals, (b) to meet changes in customer needs and (c) to be seen as innovative.

With respect to the source of idea generation and the method of project evaluation (Table 4B), we found that:

1. Both manufacturers and distributors relied on market research, customer requests, sales or marketing teams and overseas technology. Among these sources, however, market research was particularly important to the manu-

facturer; overseas technology seemed more important to the distributor.

2. The two project evaluation techniques that were most widely used were strategy determination and customer trailing. Both were used by 50% to 70% of the manufacturers and distributors. Manufacturers also employed "concept testing," but distributors relied more on "test marketing."

And with respect to the success rate and the success factor of the product innovation (Table 4C), we found that:

1. Both the manufacturer and the distributor reported that about 50% of the new products launched in the past two years had been "clear-cut successes." "Clear-cut failures" accounted for 11% to 13% and the rest, 36% to 38% were "too early to tell" or "don't know."
2. Both the manufacturer and the distributor reported that the major factors of new product success were (a) synergy between the new product and the current products, (b) user benefit and quality of the new product and (c) appropriateness of marketing mix instruments. In addition, the efficiency of project management and the availability of stock were reported by the manufacturer as important factors of new product success.

In order to examine the impact of forward and backward integration on the innovation strategy and performance, we performed the two-group mean tests for the two categories of the manufacturers (MD and MM firms) and for those of the distributors (DM and DD firms). We summarize the results of these comparative analyses (Table 5), focusing on the heterogeneous characteristics between categories.

MD manufacturer versus MM manufacturer. Category MD manufacturer (or the manufacturer, some of whose new products were manufactured by outside suppliers) and Category MM manufacturer (or the manufacturer, 100% of whose new products were manufactured in its own plants) were virtually homogeneous in their innovation strategy, idea source and project evaluation method and success rate and success factors (the first versus the second columns in Table 5, A to C). Some minor differences were that:

Table 3. Industry and Sales for Each Category

Sector and sales	Number of firms by manufacturer/distributor category ^a			
	MM(55)	MD(45)	DM(11)	DD(9)
Industry sector				
Minerals, metals, fuels	1	1	—	2
Chemicals, paints, plastics	10	7	1	—
Food components and machinery	8	2	—	1
Engineering equipment	13	15	2	2
Transportation equipment	3	2	1	1
Building products	7	7	—	—
Electrical/electronic equipment	2	3	5	1
Office equipment, supplies	3	—	—	1
Packing materials/equipment	6	5	—	—
Industrial services	1	1	—	—
Industrial supplies	1	2	2	1
Total	55	45	11	9
Company's annual sales				
Under 1.0	—	—	—	—
1- 4.9	6	5	—	3
5- 9.9	6	6	3	1
10- 24.9	19	16	5	2
25- 49.9	11	5	2	1
50- 99.9	6	9	—	1
100-149.9	3	1	1	2
150-199.9	2	2	—	—
200 or over	2	1	—	—
Median annual sales (\$million)	22.6	21.3	19.0	17.5

^a Based on the categorization in Table 2.

1. The MD manufacturer reported that new products accounted for a smaller percentage of its firm's sales.
2. The MD manufacturer was more motivated to innovate in order to "cope with the slow growth of current products," while the MM manufacturer was more motivated to innovate in order to "meet changing customers' needs," and "to be seen as innovative."
3. The R&D/engineering and production staffs generated many of the new product ideas for the MM manufacturers; competitors and suppliers tended to be important sources of new ideas for the MD manufacturers.

DM distributor versus DD distributor. The DM distributor (or the distributor, some of whose new products were manufactured in its own plants) and the DD distributor (or the distributor, 100% of whose new products were manufactured by outside suppliers) were homogeneous in sev-

eral aspects of their innovation strategy and performance, but heterogeneous in other aspects (the third versus the fourth columns of Table 5, A to C). Major differences between these groups are that:

1. The DM distributor reported fewer sales of new products than did the DD distributor.
2. The DM distributor was more likely to develop new products in response to "changes in customer needs and technology" and to "cope with the slow growth of current products."
3. The DM distributor generated more new product ideas "from overseas technology" and through "sales and marketing teams" and "R&D/engineering and production staffs."
4. "Test marketing" was *not* widely used by the DD distributor.
5. The DD distributor reported that "the appropriateness of the distribution channel" and "stock management" were important for the

**Table 4. Manufacturer Versus Distributor
A. Innovation Strategy (Level/Focus/Motive)**

Innovation strategy measures	Manufacturers (n = 101)	Distributors (n = 20)	Two-group mean test statistic ^a
Proportion of 1985 sales accounted for by products less than five years old(%)	29.9	31.3	.43
Number of products launched in the past two years	12.1	29.4	.16
Number of products planned to be launched in the next two years	9.1	30.1	.09
Reformulations/line extension(%)	51.3	51.0	.97
Imitative new products(%)	24.3	40.3	.10
Innovative new products(%)	24.4	8.7	.00
Motives of new product launch ^b			
To meet financial goals	7.2	8.0	.21
To match competitors' innovations	5.4	5.6	.82
To be seen as innovative	7.3	6.2	.06
To meet changes of customer needs	7.5	7.4	.81
Availability of technology	5.7	5.6	.83
Slow growth of current products	6.1	5.4	.29
Forced by government legislation	2.9	2.9	.95
Changes of raw material costs	4.4	3.9	.44

^a Two-tail probability that the two-group means are equal.

^b Measured by 1- to 10-point scales: 1 = not very important, 10 = very important.

B. Project Management: Idea Source and Evaluation

Project management measures	Manufacturers (n = 101)	Distributors (n = 20)	Two-group mean test statistic ^a
Idea Source			
Market research on consumer needs	7.1	5.9	.10
Customers' requests	7.6	6.9	.12
Sales or marketing team's ideas	7.4	7.1	.53
Inspired by competitor	5.3	5.5	.75
Supplier suggestions	3.9	5.0	.10
R&D/engineering ideas	5.7	4.5	.07
Patent search	2.4	2.6	.66
Production staff ideas	5.2	3.8	.50
External inventor's ideas	2.8	4.0	.14
Overseas technology sources	6.6	8.0	.07
Project Evaluation Method(%) ^b			
Concept testing	37.6	10.0	.00
Preference testing	21.8	15.0	.50
Strategy determination	49.5	70.0	.10
Customer trailing	60.4	60.0	.97
Test-marketing	17.8	25.0	.46
None used	10.9	5.0	.32

^a Same as in A.

^b Proportion of the firms that used the relevant market research method.

C. Success Rate and Reasons

Success rate/reason measures	Manufacturers (n = 101)	Distributors (n = 20)	Two-group mean test statistic ^a
Success/failure rate(%) ^b			
Clear-cut success	51.1	50.3	.92
To early to tell	36.0	32.6	.66
Clear-cut failure	11.0	12.9	.66
Don't know	2.0	4.2	.32
Success factors ^c			
Market and Competition			
Market was large and rapidly growing	4.5	3.6	.24
Market was not very competitive	7.2	7.5	.79
Product Benefit and Quality			
Product offered big benefits to users	3.2	3.6	.50
Product quality was quite satisfactory	2.8	3.3	.31
Ease of Adoption			
Product was extremely novel	5.1	5.0	.87
Product could be tried on a small scale	5.0	5.2	.83
Product needed little change in behavior	3.8	3.6	.75
Synergy			
Product was compatible with current			
1. technical/production capability	2.2	3.6	.13
2. marketing skills	2.2	2.7	.53
Marketing			
Targeting and pricing were appropriate	3.0	3.5	.41
Adequate sales effort was allocated	3.8	3.6	.71
Adequate promotion was allocated	3.9	3.9	.97
Distribution channels were appropriate	3.1	4.0	.29
Production			
Stock availability was adequate	3.3	4.5	.07
Research			
Internal research was sufficient	5.7	5.5	.82
External research was sufficient	5.2	4.6	.36
Market was correctly predicted			
Project Management			
Dedicated advocate was responsible	3.1	4.8	.08
Development stages were well managed	3.4	4.7	.03

^a Same as in A.

^b Proportion out of the new products that were launched in the past two years.

^c Measured by 1- to 10-point scales: 0 = strongly agree, 5 = neither agree nor disagree, 10 = strongly disagree.

success of its new products. But they were not very important to the DM distributor.

To complete our comparative analysis between each pair of manufacturing-distribution mix categories, we also performed two-group mean tests for the MD manufacturer against the DM distributor, and for the MM manufacturer against the DD distributor.

MD manufacturer versus DM distributor. Both the MD manufacturer and the DM distributor per-

formed manufacturing and distribution functions. They employed similar innovation strategies and their new products accounted for about the same proportion of total sales (the second versus the third columns in Table 5, A to C). Other characteristics of these categories of manufacturers and distributors are that:

1. The MD manufacturer reported that it would launch a smaller number of new products in the next two years than would the DM distri-

Table 5. Comparison Between Manufacturer/Distributor Categories
A. Innovation Strategy (Level/Focus/Motive)

Innovation strategy measures	Manufacturer/distributor category ^a			
	MM(55)	MD(45)	DM(11)	DD(9)
Proportion of 1985 sales accounted for by products less than five years old(%)	36.3 ^b	22.2	25.5 ^b	48.2
Number of products launched in the past two years	12.8	11.3	42.1	13.9
Number of products planned to be launched in the next two years	10.5	7.6 ^b	47.5 ^b	8.8
Reformulations/line extension(%)	51.4	50.0	55.2	45.2
Imitative new products(%)	23.2	26.1	35.4	47.1
Innovative new products(%)	25.3	23.9 ^b	9.4	7.7 ^b
Motives of new product launch ^c				
To meet financial goals	7.3	7.0 ^b	8.6	7.2
To match competitors' innovations	5.3	5.4	6.4	4.6
To be seen as innovative	7.7 ^b	6.8	6.5	5.8 ^b
To meet changing customers' needs	7.9 ^b	7.0 ^b	8.5 ^b	5.9 ^b
Availability of technology	6.0	5.4	6.5 ^b	4.4
Slow growth of current products	5.6 ^b	6.6	6.5 ^b	4.0 ^b
Forced by government legislation	3.1	2.8	3.1	2.7
Changes of raw material costs	4.3	4.5	4.7	2.8

^a The four manufacturer/distributor categories are defined in Table 2.

^b Indicates that the difference is statistically significant at 0.1 level in the two-group mean tests. MM is compared to MD, MD to DM, DM to DD, and DD to MM.

^c Measured by 1- to 10-point scales: 1 = not very important, 10 = very important.

B. Idea Generation and Evaluation Methods

Innovation strategy measures	Manufacturer/distributor category			
	MM(55)	MD(45)	DM(11)	DD(9)
Idea Source				
Market research on consumer needs	7.1	7.1	6.7	4.9 ^b
Customers' requests	7.5	7.8	7.5	6.0
Sales or marketing team's ideas	7.4	7.3	7.9 ^b	6.0 ^b
Inspired by competitor	4.9 ^b	5.7	6.1	4.7
Supplier suggestions	3.4 ^b	4.3	5.7	4.0
R&D/engineering ideas	6.4 ^b	4.8	5.8 ^b	2.8 ^b
Patent search	2.3	2.5	2.8	2.3
Production staff ideas	4.6 ^b	3.6 ^b	5.2 ^b	2.0 ^b
External inventor's ideas	2.6	3.0	3.5	4.6
Overseas technology sources	6.5	6.7 ^b	9.0 ^b	6.7
Project Evaluation Method(%) ^c				
Concept testing	36.6	40.0	18.2	0.0 ^b
Preference testing	23.6	20.0	18.2	11.1
Strategy determination	49.1	49.0	63.6	77.8
Customer trailing	63.6	55.6	72.7	44.4
Test-marketing	10.9	26.7	9.1 ^b	44.4 ^b
None used	7.3	15.6	0.0	11.1

^a Same as in A.

^b Same as in A.

^c Proportion of the firms that used the relevant market research method.

C. Success Rate and Reasons

Innovation strategy measures	Manufacturer/distributor category ^a			
	MM	MD	DM	DD
Success/Failure Rate(%) ^c				
Clear-cut success	59.5	42.0	49.6	51.2
To early to tell	30.6	41.1	32.5	32.8
Clear-cut failure	7.4	15.6	13.8	11.9
Don't know	2.5	1.3	4.2	4.2
Success Factors ^d				
Market and Competition				
Market was large and rapidly growing	4.7	4.1	4.5	2.6 ^b
Market was not very competitive	7.3	7.2	7.3	7.7
Product Benefit and Quality				
Product offered big benefits to users	3.4	2.8	3.8	3.3
Product quality was quite satisfactory	2.7	2.9	3.5	3.0
Ease of Adoption				
Product was extremely novel	5.1	4.9	4.6	5.6
Product could be tried on a small scale	5.4	4.5	5.4	4.9
Product needed little change in behavior	4.1	3.5	3.2	4.0
Synergy				
Product was compatible with current				
1. technical/production capability	2.0	2.4	3.9	3.1
2. marketing skills	2.4	1.9	3.5	1.7
Marketing				
Targeting and pricing were appropriate	3.1	2.8	4.1	2.8
Adequate sales effort was allocated	3.9	3.5	4.0	3.0
Adequate promotion was allocated	4.3 ^b	3.3	4.4	3.3
Distribution channels were appropriate	3.0	3.2	5.1 ^b	2.6
Production				
Stock availability was adequate	3.2	3.5 ^b	5.5 ^b	3.1
Research				
Internal research was sufficient	5.5	5.7	5.1	6.0
External research was sufficient	5.5	4.9	5.0	4.0
Market was correctly predicted				
Project Management				
Dedicated advocate was responsible	3.4	2.7 ^b	5.1	4.4
Development stages were well managed	3.2	3.7 ^b	5.4	3.8

^a Same as in A.

^b Same as in A.

^c Proportion out of the new products that were launched in the past two years.

^d Measured by 1- to 10-point scales: 0 = strongly agree, 5 = neither agree nor disagree, 10 = strongly disagree.

butors, perhaps for the same reason mentioned earlier, that is, distributors tend to be networked to manufacturers.

2. "Overseas technology" was reported as the most important source of new product ideas, particularly for the DM distributor.
3. Among the new product success factors, efficiency of project management and stock control were reported as important for the MD manufacturer.

DD distributor versus MM manufacturer. Finally, the DD distributor and MM manufacturer

were compared. They were found homogeneous in innovation performance and success factors but heterogeneous in several aspects of their innovation strategy and in their idea generation and evaluation methods (the fourth versus the first columns in Table 5, A to C). Major differences between the pure manufacturer and the pure distributor are that:

1. The DD distributor was much less original product-oriented than the MM manufacturer.
2. The MM manufacturer was more motivated "to meet changing customers' needs" and "to

be seen as innovative” than the DD distributor was.

3. The MM manufacturer generated new product ideas relatively more often “from market research” and through “sales and marketing teams” and “R&D/engineering and production staffs” than the DD distributor did.
4. “Test marketing” was widely used by the DD distributor, but “concept testing” was more widely used by the MM manufacturer. This finding is consistent with our observation that the MM manufacturer is more likely to develop original products that need a careful testing.

Summary, Implications and Future Research

Our empirical study of 135 Australian industrial firms revealed that overall innovation strategies and idea generation/evaluation methods are somewhat different for the manufacturer and the

distributor and for different categories of manufacturing–distribution mix. Success rates and success factors, however, were quite similar between them. Figure 1 summarizes the differences and similarities between these groups. Although the findings are especially pertinent to Australian industry, they are likely to have wide international relevance for all manufacturer–distributor interaction.

Our findings suggest that the distributor’s active involvement in “product innovation,” or the innovative manufacturer’s involvement in “distribution,” can be as efficient as the “product innovation” by the (traditional) pure manufacturer, particularly for market-driven product innovation. Overcoming the marketing difficulties associated with market newness has been reported as a key to a high success rate of new products [4]. New channels and salesforce, new advertising and promotion methods, new competitors and new customers tend to lower the suc-

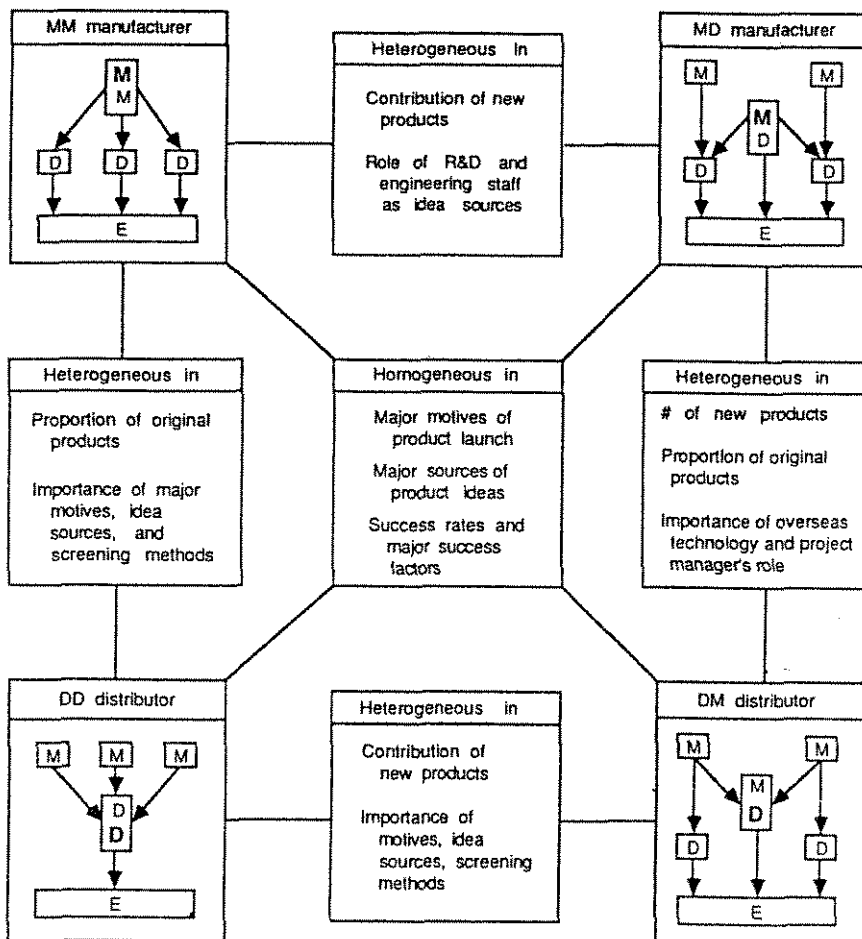


Figure 1. Manufacturing-Distribution Functional Mix and Innovation Strategy/Performance. Major function: M = manufacturing; D = distribution; E = end-users. MM = manufacturer operates no distribution function; DD = manufacturer operates some distribution function, too; DM = distributor operates some manufacturing function, too; DD = distributor operates no manufacturing function.

cess rate. An active involvement by the distributor in the product innovation program can be of great help in avoiding or reducing those market-newness problems.

The industrial distributor's expertise in communicating with end-users may help identify user needs early. An early identification of customer needs can allow the innovator extra time for idea screening and product development that will enhance the likelihood of success of a new product. The distributor's expertise in stock management can also be combined with the manufacturer's in R&D, idea screening, product development and marketing strategy formulation. A high potential for synergy between the new product manufacturer and the distributor is supported by a review of industry practice. A study of directness of channels in industrial distribution [17] reports that indirect distribution is more heavily practiced early in the product life cycle, whereas manufacturer-internal channels become the more popular strategy as the product goes from growth to maturity.

We expect to see continued research on the role of the distributor in industrial product innovation, given the changing distribution environment. In order to extend this exploratory study, some future research should focus on the strategic interaction between the manufacturer and the distributor.

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