Jordan Bramerson & Gerard J. Tellis

Strategic Bundling of Products and Prices: A New Synthesis for Marketing

[illegible]

[illegible] bundling is the sale of two or more separate products in a package. This strategy is pervasive in markets today in one form or another. In the [illegible] has received growing attention in the marketing literature. However, the published studies are fairly silent on basic terms and concepts, do not measure the frequency of bundling, and do not develop a comprehensive framework for the economic rationality of bundling. As a result, practitioners have not approached the task of bundling and the search for strategies implemented by the firm. Marketing managers may find opportunity in the literature on bundling strategy and gain insight into the strategies of bundling in various markets.

Examples of bundles abound: [illegible] bundles, [illegible] bundles (Sokoloff, 1991), [illegible] bundles (Fortune magazine, 1991), [illegible] bundles (Brandt of Will [illegible]), [illegible] bundles (Business Week, [illegible]), and [illegible] bundles (Business Week, [illegible]). Bundling strategies are [illegible] multimedia personal computers (PCs), [illegible] bundling, [illegible] MBA programs, [illegible] premium beverage accounts. The multimedia PC is a bundle of the traditional PC plus [illegible], a CD-ROM, and [illegible] multimedia software. A travel [illegible] bundle is a package of airfare, [illegible] and [illegible]. The executive [illegible] is a bundle of [illegible] resources [illegible] education, [illegible]

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[illegible] Review of Marketing
[illegible] Vol. [illegible], [illegible]

[illegible] bundles offered (Walt Disney) of various information and educational [illegible]. A premium beverage account [illegible] brands, [illegible] market, [illegible] and [illegible] in one account.

These examples show the pervasiveness and strategic importance of bundling. Firms need to resort to bundling [illegible] because of the legal [illegible] involved. For example, the multinational [illegible] against Microsoft is at the core. A case against the bundling of Windows and Netscape caused the U.S. Congress has a long history of legislating on bundling issues, and the U.S. Department of Justice [illegible] motion to [illegible] further. The Justice Department has prosecuted [illegible] cases. The number of antitrust cases [illegible] between 1969 and 1989 is approximately double the number of cases [illegible] between 1890 and 1969.

Prior marketing literature on bundling has examined the rationality of bundling (Bakos and Brynjolfsson 1999, 2000; Bjorn, Manson, and Martin 1991; Guiltinan 1987; Wilson, [illegible], and Jones 1993), consumer evaluation of bundles (Gaeth, [illegible], and Baum 1990; Simon and Tellis 1997; [illegible] 1991, 1995; Tolley and Mitchell 1993), and [illegible] pricing and promotion of bundles (Chen, Hitt, and Brynjolfsson 1998; Chen, Ables, and [illegible] 1999; Hanson and Martin 1990; Mulhern and [illegible] 1991; Venkatesan and Kumar 1998). Economists have focused mainly on the profitability of bundling for monopolists (Adams and Yellen 1976; Burstein 1960; Carbajo, De Meza, and Seidman 1990; Long 1984; Mussa, Rosen, Schmalensee, and Whinston 1978; Pierce and Winter 1996; Schmalensee 1982, 1984; Stigler 1968; Whinston 1990), equilibrium theories of bundling (Chen 1997; Chernew 1997; Matutes and Regibeau 1992), and the welfare implications of bundling (Bunnett and Conrad 1984; Martin 1993; Salinger 1995; Williamson 1990).

We identify the following three shortcomings in the literature: first, the domain of bundling is ill defined, and

[illegible]

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[illegible]

[illegible]

[illegible]

[illegible] Therefore, the rule of reason is the most suitable benchmark for judging the legality of various bundling strategies.

Legality of various bundling strategies. We apply the previous discussion on legality to our classification of bundling strategies (see Figure 1). [illegible]

[illegible] Microsoft [illegible]

[illegible]

Thus, although [illegible] and [illegible] [illegible] [illegible] the emphasis [illegible] [illegible] commingle [illegible] in the [illegible] [illegible] [illegible]. The debate can be clarified by separating two stages in the legal process: findings of fact and conclusions of law. Establishing findings of fact is an empirical issue, which could be [illegible] in some cases and highly controversial in others, such as in the Microsoft case. Once [illegible] on some findings, the [illegible] of law [illegible] [illegible] [illegible] with the [illegible] [illegible].

Optimality of Bundling Strategies

[illegible] [illegible] discussed the [illegible] of the various bundling strategies. It [illegible] [illegible] [illegible] factors which [illegible] [illegible]. [illegible] [illegible] work done in the literature, the [illegible] makes the following [illegible]: [illegible] [illegible] [illegible] [illegible] (Adams and Yellen 1976; [illegible] and Mahajan 1993; Schmalensee 1984; [illegible]) [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] distribution [illegible] consumers' conditional reservation prices [illegible] [illegible]. We [illegible] [illegible] [illegible] [illegible] factors that affect the optimality of bundling: consumers' conditional reservation prices, economies of the firm, competition, costs, and [illegible] [illegible] [illegible] [illegible] [illegible] heterogeneity of reservation prices. [illegible] [illegible] [illegible] [illegible] [illegible] heterogeneity of reservation prices. However, the distribution of reservation prices involves asymmetry and variation, each of which can affect the optimum strategy. This discussion mainly explains the role of [illegible]. Third, the literature has largely ignored the important distinction between product and price bundling. Product bundling is an important [illegible] of bundling strategies, especially in high-tech markets. The literature [illegible] [illegible] the role of pricing and product bundling.

All the propositions we advance [illegible] have never been discussed [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], and a few are at least partially supported in the literature [illegible]. We discuss and [illegible] all of these propositions in the context of [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] a proof [illegible] [illegible]. Although the propositions are firmly grounded in [illegible] literature, we also develop a simulation that [illegible] the mechanism underlying each of the propositions. The use of simulation [illegible] this kind of complexity analysis [illegible] [illegible] been used successfully before (Venkatesh and Mahajan 1993; [illegible] [illegible]). Because we [illegible] the simulation, we [illegible] [illegible] in detail.

Simulation

We illustrate the logic of some of our propositions with numerical examples (see Tables 1 and 2). These examples give the optimal prices for a supplier based on various distributions of conditional reservation prices or costs of the supplier. To generate these examples, we developed a program that runs on Microsoft Excel. To determine the optimal prices, the tool is a subroutine of [illegible] Excel, Solver [illegible] [illegible] [illegible] a powerful optimization routine based on an [illegible] genetic algorithm. It requires the [illegible] [illegible] [illegible] which [illegible] [illegible] [illegible] [illegible] our program does.

Figure 2 provides a flowchart of our program. It consists of the following five steps or components:

1. The user must first specify the segments, their sizes, and the distribution of reservation prices for segments and products.
2. The user then assigns an array for the optimal prices that the program tries to determine.
3. Based on these prices, the program [illegible] consumer surplus for the various offerings of product and price combinations.
4. Next, the program [illegible] each segment [illegible] [illegible] offering. The [illegible] [illegible] [illegible] the following rules: (1) [illegible] buys [illegible] for a particular offering if and only if consumer surplus is positive and a maximum among alternatives is available. (2) If consumers are equally indifferent between buying and not buying, they buy a product. (3) If consumers are equally indifferent between buying a bundle and the separate products in the bundle, they buy the bundle.
5. Finally, the program calculates the revenues based on the product of sales, the segments' size, and the prices offered.

The program then [illegible] to maximize revenue in Cell H by varying values in Array B, subject to certain constraints. The basic constraints specify the minimum (the lowest reservation price) and maximum (the highest reservation price) values that Array B can take. These constraints are not essential, but they ensure a faster convergence to the optimum. (A technical note and the spreadsheet program are available from the authors.)

The program easily determines the optimal prices for a variety of price distributions, segments, segment sizes, and products. As such, it is easier and more flexible than any program available in the literature. It has three benefits. First, it can generate suitable examples with minimal computational effort, for papers, classroom use, or presentations. Second, it can help managers determine what strategy is optimal in specific situations. Third, it can be used to evaluate the robustness of various propositions, when the user generates examples that search the boundaries of a particular proposition.

We next proceed to discuss the propositions under each of the five factors: consumers' conditional reservation prices, economies of the firm, competition, costs, and consumers' [illegible] [illegible]. Where appropriate, we [illegible] [illegible] in the discussion based on the simulation [illegible] [illegible] previously.

Consumers' Conditional Reservation Prices

An important factor in determining which strategy is optimal is the distribution of conditional reservation prices. We first explain the basic principles about heterogeneity of conditional reservation prices. We then develop and explain our propositions. We do so in two general cases: a base case, in which only price bundles are possible, and an extended case in which product bundles are possible.

Heterogeneity of conditional reservation prices. Many researchers have stated that heterogeneity of conditional reservation prices is an important factor in determining the optimality of bundling strategies. However, this heterogene-

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[illegible]

[illegible]

Table [illegible] Response to [illegible] and [illegible] Treatment in [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]			[illegible]		
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]

[illegible]

[illegible] product bundling [illegible]

[illegible] mixed product bundling [illegible]

[illegible] when strategies are implemented.

[illegible]

The previous research addressing combining a price and a product bundling strategy [illegible] two conditions for the optimality of such a strategy. First, [illegible]

Product Bundling Strategies by Synergy and Variation Pattern

A. Illustrative Prices for B. 1–6 Four Cases of Synergy and Variation When a Product Bundle is Possible

	Variation Pattern (V)					
	Case 1: Synergy and Similarity			Case 2: Synergy, Dissimilarity		
Product Segments	Separate	CD player	Product Bundle	Separate	CD player	Product Bundle
A	300	150	600	200	150	800
B	300	250	500	350	250	600
	Case 3: Complementarity, Similarity			Case 4: Complementarity, Dissimilarity		
A	300	250	500	150	250	400
B	250	200	400	300	400	600

B. Prices and Some Consumer Surpluses Under Four Cases of Synergy and Variation (Equilibrium Segments)

	Case 1: Synergy, Similarity					Case 2: Synergy, Dissimilarity				
		Sales			Average Income per Consumer		Sales			Average Income per Consumer
Strategy	Prices ($)	A	B		($)	Prices ($)	A	B		($)
Unbundling	Receiver = 600	1	1		700	Receiver = 400	1	1		775
	CD player = 250	1	1			CD player = 250	1	0		
Pure product bundling	Product bundle = 850	1	1		850	Product bundle = 650	1	1		800
Mixed product bundling	Receiver = 600	0	1		800	Receiver = 450	1	1		800
	CD player = 250	0	1			CD player = 200	0	0		
	Product bundle = 850	1	1			Product bundle = 750	1	0		
	Case 3: Asymmetric Similarity					Case 4: Asymmetric Dissimilarity				
Unbundling	Receiver = 550	1	1		650	Receiver = 400	1	0		575
	CD player = 250	1	1			CD player = 350	1	1		
Pure product bundling	Product bundle = 800	1	1		800	Product bundle = 650	1	1		650
Mixed product bundling	Receiver = 500	1	0		800	Receiver = 400	1	0		825
	CD player = 250	0	1			CD player = 450	0	1		
	Product bundle = 800	1	1			Product bundle = 800	1	0		

Note that non-monotonicity prevents unbundling to dominate pure product bundling (only outlined here). For pure product bundling, consumers buy product if value exceeds $\theta_1 + \theta_2 - p_b$.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] product bundling [illegible]

The first part of this proposition is in line with P[illegible]. [illegible] product bundling also creates added value for consumers [illegible] the case for the optimality of pure product bundling [illegible] pure product bundling [illegible]

[illegible]

[illegible]

[illegible] low-margin products, assuming constant price elasticity. For example, consider a marketing manager of Sears who is [illegible]

[illegible]

[illegible]

Summary: Perceptions of Bundles

[illegible]

Conclusion and Directions for Further Research

Although the marketing literature has some modest analysis of bundling in specific situations, the topic has received very limited attention in marketing. Moreover, the auth-

[illegible] firms are fully [illegible] into their [illegible] that product [illegible]. In addition, this [illegible] bundling transactions of [illegible] studies, thus [illegible] for the inquiry of the [illegible] and a comprehensive framework for the [illegible] bundling strategies. We [illegible] these limitations. This article provides a new synthesis of the field of bundling based on a critical review and evaluation of the marketing, economics, and law literatures. This review makes the following contributions.

First, the article defines bundling terms and principles to normal a new, rich set of bundling strategies. It presents a classification of these strategies and provides a clear understanding of the relationship among them. In particular, the classification shows that price bundling and product bundling are independent strategies, which firms can mix and match to best meet consumer demand.

Second, this article reviews the legal literature to analyze how various legal effects can affect the use of bundling strategies. In addition, it clarifies the relevant antitrust law on bundling, the rule of reason, and the rule of reason. The organization emphasizes various areas of law in which these tactics are discussed, and areas of law, in which important issues may be more ambiguous and controversial.

Third, the article develops a framework of 12 propositions that prescribe the optimal bundling strategy depending on five important factors. The framework provides partial guidance to management regarding the use, from of the propositions (P1, P2, and P3), and to management regarding use of the propositions (P4–P12). All the other eight propositions have been proposed here for the first time. The proposition synthesis is only of advantage when the trade-offs management must make when choosing among bundling strategies in specific contexts. This article implies that such trade-offs should include the relative importance of the strategy's approach by of a bundling strategy.

Implications for Bundling Management

The synthesis offers managers a new way to develop bundling strategies.

When is bundling illegal? The controversy about and economic analysis errors in the courts, however, case shows that bundling is not well understood, even by well-financed major corporations. History shows that engaging in illegal or even potentially illegal bundling strategies can be costly. The legal battle takes many years, and many valuable management time and large financial resources. An eventual prevention is often more costly, because it must cause bigger damage monetary, reputation, to optional organizational failures. The new optional rules may by which managers can easily assess whether a certain strategy is illegal. Most important, firms with dominant market power that consider implementing new bundling strategies should evaluate the legality of their bundling strategy. Although pure price bundling for such firms is illegal in all cases, pure product bundling may be legal if the benefits of the strategy in product value to consumers that cannot be achieved when firms sell the required products separately. Based on the three legal [illegible] [illegible] comparison with Apollo's [illegible] point, they find [illegible] optimal to focus on price-based product bundling for long-term benefits rather than to avoid pure price bundling to [illegible] short-term. In this respect, it would have been better for Microsoft to have pursued a unambiguous value-enhancing integration of Internet Explorer and Windows as the main method of merely bundling the browser and the operating system. This latter initial strategy triggered the original lawsuit.

What are the drivers of the optimality of bundling? This article shows that bundling is profitable for a variety of reasons that may interest more attention from managers. In particular, we find that price bundling of existing products may be optimal because it is a form of price discrimination between different consumer groups and because it increases price sensitivity and increases individual consumers' purchase likelihood. We also find that price bundling yields larger profit when the higher the relative contribution margin and the stronger economies of scope and scale are. Thus, services or goods with high development costs, such as high-tech products, generally have more to gain from price bundling than do goods with high marginal costs, such as consumer durables or industrial goods. We find that product bundling of existing products may be optimal because it ensures added value for consumers, cross-sell and create differentiation in highly competitive markets. We also argue that bundling a new product with an existing product is an ideal introduction strategy because it allows extraction of more consumer surplus at equal sales levels. In addition, price bundling will increase the visibility and trial of the new product, which are important in new product adoption by consumers. Product bundling may also improve consumers' perceptions of the functionality of the new product when it is bundled with existing complements.

This discussion suggests that firms that exploit opportunities offered by bundling will enjoy increases in market share and profits. Thus, developing expertise in designing bundled strategies may be of prime importance in achieving long-term success. The guidelines we provide in this article may be the first step in attaining managerial insights on the mechanics of bundling.

Choose mixed or pure bundling? Prior research generally finds mixed bundling as at least weakly superior to pure bundling. Our discussion shows that this literature may be misguided because it assumes that pure bundling can never be optimal. In contrast, we propose that mixed bundling is superior to pure bundling only in highly competitive situations in which consumer reservation prices vary to large extent. Moreover, we argue that for new products, pure bundling strategies tend to outperform mixed bundling strategies, since bundling strategies necessarily bring all consumers of an existing product in contact with the new product, so they gain aware of it and can easily try it out. Thus, developing expertise on the proper choice between pure bundling and mixed bundling is important for using bundling strategies profitably.

Limitations and Further Research

This article has several limitations that further research should address. First, product bundling is relatively new, and so it is in high-tech markets can benefit from further

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REFERENCES

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Bundling Strategies, Competition and Market Structure in the Digital Economy

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■ Introduction

In 1998, AT&T unveiled a daring strategy aimed at transforming its long-distance company into the first one-stop shop for household communications services in the US when it acquired TCI, the country's no.2. cable TV provider. AT&T's goal was to win back the access network that it had lost in 1984 following the dismantling of its monopoly and the creation of the regional Baby Bells through the successive acquisition of cable operators and local phone companies (amounting to total of over $100 billion). The overall vision put forward by CEO M. Armstrong was "to bring the first integrated package of communications, electronic commerce, and video entertainment services". The expected benefits from a bundled offer are twofold: to attract new consumers because the more services in the bundle, the greater the consumer's satisfaction and the savings, and at the same time, to reduce churn, which is very high in the long-distance business and inevitably dents margins.

However, only two years later, in October 2000, AT&T announced that the company was to be split into four separately traded stocks: wireless, broadband, consumer and business. It was claimed that a formal separation would ease strategic internal conflicts and improve each component's ability to raise debt and conduct mergers or acquisitions with its own stock currency. To many analysts, this spectacular U-turn also meant the undeniable failure of an attractive theory (bundling and its marketing expression, "one-stop shopping") that was never really put into practice. What's more, this trend was reported to be general, making reference to the present worldwide wave of divestitures amongst the main telecom players. In the UK, the incumbent telco BT, confronted with growing pressure from the financial markets during the year 2000, has finally announced a similar

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decision to dismantle its company and partially float its Internet, businesses services and wireless division separately.

This story illustrates one of the most striking features of the digital economy emerging around Internet and electronic commerce: the generalized use of bundled goods and services (the proliferation of flat-rate access to all kinds of services and a very large aggregation of information goods). At some point, marketing and management pundits asserted that bundling was an essential condition for a successful e-business model, and put this forward as the central explanation for the massive wave of mergers and acquisitions experienced in the IT industries throughout the 1990s. However, while the potential for transaction cost savings and economies of scale offered by the Internet is widely acknowledged and investigated, much remains to be learned about new associated competitive strategies such as bundling. This paper is an attempt to explore some of the implications of bundling strategies on competition and market structure within and around telecom markets. In particular, we will point out the role of bundling telecom services with conventional goods or services as an entrance strategy for a non-telecom firm coming from an independent market with a large installed customer base.

The underlying motivation for this paper is twofold. First of all, bundling is likely to play a major role in the future competitive and industrial landscape of telecommunications, although it will probably not be the one that has been widely expected, hoped or feared. For example, moving away from a bundling approach that is strictly restricted to information goods, we will demonstrate its role as a powerful entry device in telecom markets for an outside firm. In any case, we clearly need to rigorously review the economic rationale of this bundling strategy which was touted as being the marketing "killing solution" only a short while ago and is now severely criticized. Taking into account the particular characteristics of current competition and the industrial structure in telecoms, we are able to suggest an alternative rationale for incumbent telecom providers' bundling. Over and above cost savings, entry barriers or price discrimination, its primary objective is to raise customers' switching costs. Bundling can therefore be viewed as a strategy to escape from what may be called the telecoms economic dilemma: huge capital investment but low switching costs giving poor market control and successful commoditisation, entry and reselling strategies. The telco stock market turmoil of the year 2000 actually hides a more fundamental issue: the global liberalization of markets in this sector combined with fast technological change makes it possible for new firms to enter at almost every level of the value chain. In upper segments, this means increasing

pressure on prices, and eventually, commoditising capacity and transport services. In retail markets, on account of low switching costs and fast technological change, telecom companies find it very difficult to retain their customers, who are easily able to take out subscriptions with other providers offering cheaper or more attractive services - and this gives these firms control over the all-important customer interface. As a result, traditional telecom operators are torn between these two forces: their network infrastructure no longer guarantees control over their final products and customers, but since it is still their major asset, they have to continuously invest huge amounts of capital to upgrade it and keep up with the innovations introduced by the last market entrant. Various strategies have been pursued to avoid this situation: external growth (to achieve economies of scale and to add new services), the diversification of mobile services to better capture customers, the creation of complementary services such as a portal and Internet access, and finally, the bundled offering. From this perspective, bundling is central to the analysis of competition, market entry and market structure in telecommunications.

Our second motivation is to investigate the micro foundations of the so-called "convergence" process in IT industries. It is widely considered that the most important development in telecommunications is the "convergence" and the integration of voice, video, and data into one communications technology. Traditionally separate industries such as computers and software, telecommunications, Internet, and cable TV are now quickly evolving into a single communications industry. So far, this concept is chiefly based on technological considerations which illustrate the scope of convergence quite convincingly: voice telephony on the Internet, broadband access through cable networks, or video delivered on an ordinary residential copper line... However, the economic dimension of this process has yet to be systematically explored. The lack of rigorous and homogeneous data at industry or firm level is a major obstacle for empirical IO and econometrics studies for the moment. A regional approach is therefore interesting as an aggregate proxy. The study of IT employment evolution across the US suggests the existence of Jacobs-type diversity externalities, where the co-location of IT industries (telecom, cable, ISP, data processing, computer system, software) fosters employment growth (LE BLANC, 2000). Besides, IT cluster creation and development are increasingly examined from a theoretical and empirical perspective (PORTER, 1999; QUAH, 2000, 2001). This paper also intends to contribute to this debate by exploring how bundling could drive convergence at industry level. When looking for an economic explanation for IT convergence, bundling is actually a logical candidate.

Moreover, since it basically boils down to production cost differences and the distribution of individual preferences, it provides a practical way of isolating "pure" market effects. However, there is a priori no reason to limit its scope to IT firms. In order to specify the effective role played by bundling in IT convergence, we therefore need to push our analysis one step further. This gives an outside firm another reason for considering bundling strategies as a means of entering IT markets such as phone, Internet access or cable television.

The paper is organized as follows: the next section surveys economic and marketing literature on bundling to specify the changes introduced by the Internet and e-commerce. Basic models of bundling commodity products with information goods are then described, and the implications for price and competition are presented. Then we examine empirical cases of bundling in telecommunications and Internet markets. Two different approaches come to the fore: i) the bundling of a comprehensive range of communication services by telecom firms in order to retain their customers and to protect their core markets, ii) the bundling of phone or Internet services with a core product by outside service companies to successfully enter the telecom market. The conclusion summarizes the general implications of pervasive bundling strategies in the digital economy, and in particular, the ensuing challenges for the existing regulatory framework, be this sector-based regulation or competition law.

■ Economic Motivation for Bundling: a Survey

Bundling consists in the sale of two or more differentiated products in fixed combination in a single package. It can be considered as a sub-category of tie-in sales, which apply to situations where the sale of one product is somehow made conditional on the purchase of another. There is no need to illustrate the prevalence of this practice in business life: consider, for example, travel companies bundling flights, a hotel, car rental and accommodation in a vacation package; restaurants where you choose between a set dinner and an *à la carte* menu; computer offers combining a central processing unit, software, display, and a printer at a single price; and of course, Microsoft Office and its software applications. Bundling raises a number of interesting questions. The first of these is undoubtedly: why? In other words, what is the motivation behind bundling two or more goods? After this we may wonder whether or not it will be beneficial to society. Should the government interfere with the process by regulating and possibly

forbidding such transactions? If so, on what legal grounds and on the basis of what kind of economic evidence and arguments? The main concern here is that bundling could be used as an instrument for extending market power, for foreclosure and for monopolizing new markets. These questions have spawned a vast array of theoretical and empirical literature.

We do not intend to systematically review economic literature dealing with the causes and consequences of bundling in this section. Rather, we suggest investigating how various economic models apply to the development of the digital economy, and in particular, how their assumptions and main hypotheses fit the case of telecom services and information goods. Furthermore, since we are mostly interested in the consequences on competition and market structure, there will be no review of the large number of (conflicting) results on the welfare effects of bundling in this section either.

First of all, it should be noted that there is no shortage of economic explanations for bundling. On the contrary, many alternative and/or complementary theories are available. The following list gives us an idea of some of the incentives that have been put forward for a firm to bundle:

- to leverage its market power in other markets, reduce rivals' profits and drive them out of the market,
- to achieve better price discrimination,
- to save production and transaction costs,
- to deter entry and/or to harm entrants' profitability,
- to credibly commit to aggressive innovative investment and cost-cutting R&D,
- to exploit forms of complementarity between components.

However, these various explanations actually refer to a wide range of different models. If we wish to get a clearer picture, we need to look closely at the assumptions used. Particular attention should be paid to the following three points: i) the market structure of each of the goods forming the bundle (in each case, monopoly, oligopoly or perfect competition, and then every possible combination between them), ii) the correlation in terms of the consumers' values for these goods (independent, positively or negatively correlated), iii) whether or not complementarity exists in the bundle, be it with regard to consumption (system goods, etc.) or production (economies of scope).

The first group of contributions is based on the bundling of goods in a monopolistic environment, and explores the so-called "leveraging market power theory". Basically, this notion, which was developed from a long line

of law cases (mostly in the 1940s and 50s), claims that bundling is a mechanism used by a firm with monopoly power in one market to monopolise a second market. However, due to the lack of convincing and rigorous theories to back up this suspicion, the validity of the leverage theory was later questioned and successfully discredited by The Chicago School's criticism (POSNER, 1976; SCHMALENSEE, 1982). They argue that it is not in a monopoly's interest to incite some of its customers to buy the competitively supplied product through a bundled offer, when they would not have acquired it separately because they value it for less than its production cost. Since the tied market is perfectly competitive, the product is sold at marginal cost. This means that the bundle can simply be evaluated by just evaluating the goods that are supplied monopolistically: does the customer value it more than the difference between the price of the bundle and the price of the tied goods sold separately? In short, this criticism was publicised as: you cannot make two monopoly profits out of one monopoly. Accordingly, the motivation for bundling must be found elsewhere and first of all, in price discrimination.

However, over the last ten years, a number of contributions have re-examined and revived the idea of leveraging monopoly power through bundling. First, WHINSTON (1990) points out how bundling can be used to alter the market structure of tied goods, whenever it departs from the perfectly competitive structure devoid of economies of scale that is assumed in the critical works mentioned above. When economies of scale and strategic interaction (oligopolistic markets) exist, bundling actually turns out to be a profitable strategy. In the Whinston model, this is obtained by excluding rivals from the bundled market through foreclosure - bundling makes it unprofitable for competitors to stay in business and they eventually have to exit the market. Some form of credible commitment is needed here to sell the goods in bundle form only. The rival firm does not have to be excluded when the bundling monopolist is able to strategically exploit its anticipated reactions to the introduction of a bundled offer. For example, in the case of Cournot-type competition, bundling alone generates a favourable response from the rival firm, thereby increasing monopolist profits (CARBAJO et al., 1990).

The second group of results shows that bundling can also work as a facilitating device, in a completely opposite way. Its potential to reduce competition through differentiation is emphasized: creating a bundle enables head-on price competition to be avoided in the duopoly market (CARBAJO et al., 1990; CHEN, 1997). Here, bundling amounts to dividing the market

between the two firms according to the customers' values for the competitive product.

Finally, CHOI (1996, 1998) highlights the importance of considering the role of innovation in the analysis of bundling. This is illustrated by the recent antitrust case involving Microsoft where the claimed negative impact of tying on innovation was one of the main debated issues. Leaving aside the traditional allegation regarding monopoly power leverage, competitors and the DOJ's antitrust division actually argue that Microsoft's bundling strategies (such as an operating system with an Internet browser) stifle innovation. In this context, Choi notes that most existing studies are inadequate because they focus on static price competition. By adding an R&D investment stage in the competition game (to reduce cost production in the final stage), he demonstrates that tying could prove profitable as a result of its effect on innovation, and the dynamic rents it offers the monopolist. Bundling increases R&D incentives in the tied goods market because the gained market share enables R&D costs to be spread over a larger scale of production. At the same time, an ensuing strategic effect of bundling is the lowering, or even eliminating, of a rival firm's incentive to invest in R&D (the market foreclosure mechanism thus encompasses R&D and the innovation market). As a consequence, the bundling firm is able to capture a larger share of the rents created through R&D than its rivals and these dynamic gains will make bundling a profitable strategy if they exceed the losses generated by stiffer price competition in the bundled market. In this case, CHOI (1998) underlines that the exclusion of the rival firm is not necessary.

Following the criticism on the monopoly leverage idea, focus was put on the role of bundling as an instrument for price discrimination. Taking STIGLER's (1963) first discussion further, ADAMS & YELLEN (1976) offered a seminal contribution which points in the same direction, and through intuitive remarks contains most of the key findings demonstrated in later literature. In this paper, the authors basically compare separate sales with pure bundling (the two goods are only sold in the bundle) and mixed bundling (both the bundle and the individual goods are offered) for a multiproduct monopolist. Using stylised examples, they show how bundling strategies for two goods can be profitable, even in the absence of cost savings. The idea is that bundling helps to sort consumers into groups according to their reservation prices and reduces the heterogeneity in their valuations. This last point typically prevents a firm charging one price from perfectly capturing consumer surplus. In addition, the optimal response of pure price discrimination has to face several legal obstacles as well as hindrances related to implementation (data on individual reservation prices). Bundling

can thus be seen to be a very efficient way of putting price discrimination into practice. Since it induces consumer self-selection, it is far less information-demanding (only the joint distribution of reservation prices among the population is required) than the theoretical solution where you have to collect the individual customer's willingness to pay for each of the goods. At the same time, it also avoids regulations forbidding explicit discriminatory pricing (a single price for the package).

However, if bundling is to be effective, the resale of components among buyers has to be prohibitively costly or prevented in some way. The firm must actually prevent any reselling from markets with the highest elasticity of demand where it is forced to price at a lower level, if it is to be free to charge the profit-maximizing price in inelastic markets. When comparing the three alternative pricing strategies, Adams and Yellen found several cases where mixed bundling is preferred to pure bundling. The reason for this is the basic inefficiency of pure bundling, offering a less complete degree of exclusion. There is actually a trade-off between the better extraction of surplus and complete exclusion. This is particularly the case when production costs are high, because there is more of a risk of supplying customers with goods for which their reservation price is below that of cost. There is no unique optimal result however: the superiority of each strategy depends on the level of costs and the distribution of reservation prices. The paper also suggests that bundling works best when there is a negative correlation between the reservation prices for the individual components of the package. The reason is obvious: here, the estimated worth of the bundled offer will actually be uniform among consumers and the firm will capture the entire surplus.

SCHMALENSEE (1984) formalized this finding and demonstrated that it still holds true when demands are uncorrelated and even positively correlated. He also explicitly developed this classical interpretation of bundling as a means of reducing the diversity of buyers' valuations, which helps to extract more surplus from the consumers. McAFEE, McMILLAN & WHINSTON (1989) examine the conditions under which bundling is an optimal strategy for a multiproduct monopolist. One of their main findings is that mixed bundling is always an optimal strategy when reservation values for the various goods are independent. Focusing on the case of pure bundling, SALINGER (1995) introduced the role of cost savings to interact with demand effects and proposed a graphical analysis of the economic properties of bundling. He explores how bundling profitability depends on the complex interaction between demand effects (correlation of reservation prices), the cost of each good offered in the bundle, and the savings it allows. He demonstrates that the scope of profitable bundling must be extended beyond the classic purely

demand-based scenario (low production costs and demands negatively correlated): if bundling entails costs savings and component costs are high, bundling becomes more profitable when individual demands are highly positively correlated.

Extending the case of an oligopolistic environment examined by WHINSTON (1990), NALEBUFF (1999) introduces a third role of bundling: to deter the entry of a one-product rival. The bundling strategy is effective in a base model with independent valuations and zero marginal costs, even if deterrence fails and entry occurs. Selling a bundle makes entry less profitable without lowering the incumbent's profits if entry is deterred. And should entry occur, the loss to the incumbent is reduced with bundling compared to the independent pricing case. Nalebuff demonstrates that the gains from entry-deterrence (whether the entrant effectively enters or not) largely exceeds those from price discrimination. And unlike price discrimination, these entry-deterrence effects work best when the bundled goods are positively correlated in value. Here market power serves to protect the firm's position in its non-monopoly markets, by deterring entry and mitigating the impact of an entrant or existing one-product rival.

We conclude this review by looking at the specific cases of complementary goods (ECONOMIDES, 1993; NALEBUFF, 2000) and system goods (MATUTES & REGIBEAU, 1992). Price discrimination plays a minor role here because the goods are highly positively correlated in value. The effects on competition are far more decisive, however. Given the existence of a price externality between the complementary goods, the bundling of different components provides an advantage over separate component sellers; the first firm to bundle increases its market share and its profits once there are four or more products in the bundle. It is then extremely difficult for rival firms to create an alternative bundle because the competition between bundles is ruinous and would harm them even more. These main motivations and effects of bundling are summarized in the following table.

Adams and Yellen introduced the basic conditions for bundling efficiency that later shaped the research agenda on this topic. On the one hand, the relationship between the distribution of preferences for each component is crucial (negative correlation works best) and on the other, marginal costs need to remain low in order to limit the allocative inefficiency imposed by a bundled offer which results from oversupplying or undersupplying a number of customers. As a consequence, research has logically focused on types of production that have zero or low marginal costs such as information goods or software (NALEBUFF, 1999; BAKOS & BRYNJOLFSSON, 1999). In this paper,

we look at bundling strategies between information goods and commodities and examine cases where one of the production costs is significant and valuations independent or positively correlated.

Table 1. The economic analysis of bundling

Motivation	Effects of the bundling strategy	References
Leveraging market power	- foreclosure of the bundled market (*exclusionary device*) - reduction of competition in the oligopoly tied market dynamic - incentives to engage in cost-cutting R&D	WHINSTON, 1990 ; CHOI, 1996 CARBAJO et al., 1990 ; CHEN, 1997 CHOI, 1998
Price discrimination	extraction of the full consumer surplus	ADAMS & YELLEN, 1976 ; SCHMALENSEE, 1984 ; McAFEE et al., 1989
Entry deterrence	- *reduces entrant's potential profits* - mitigates the impact of an effective entry on the incumbent	WHINSTON, 1990 NALEBUFF, 1999

How does the dramatic growth of the Internet, Web users and data traffic affect the bundling strategies described above? If we consider digital information goods, three key points can be put forward. Firstly, it facilitates and simplifies the arrangement of a bundle offer and its real-time dynamic monitoring. Secondly, it allows the consumers to easily define the sub-bundle they prefer themselves (McKIE-KASON, RIVEROS & CAZZALE, 1999). Thirdly, it significantly extends the scope of attractive bundling beyond the traditional boundaries described in the above-mentioned works. BAKOS & BRYNJOLFSSON (1999, 2000) explore this last issue when considering the bundling of a large number of information goods by a multiproduct monopolist. They find that this is a very profitable strategy for a broader set of conditions than expected in literature. If a very large number of goods are included in the bundle, consumer surplus can actually be extracted in a more accurate and finely-tuned manner - in an infinite bundle, the law of large numbers even ensures perfect discrimination. To cope with differences in consumers' valuations between some market segments, they introduce the idea of a menu of bundles aimed at each segment. Their paper provides us with a good starting point for analyzing the role of bundling strategies in telecom and Internet markets. They build on the multiproduct monopolist approach using the price discrimination stance for bundling as a backdrop. While this may be appropriate for explaining the bundling of a telecom firm's entire range of its services, we need to introduce oligopolistic structures in some of the bundled goods to take into account the competition present in these markets. Secondly, Bakos and Brynjolfsson take care to make clear that their findings do not extend to physical goods, where marginal costs of

production are too high and would destroy the benefits of the large-scale bundling. However, we believe that the bundling of a commodity with significant marginal cost with information goods is a particularly interesting and challenging topic to study. In any case, this approach is essential for exploring new emerging pricing practices in telecom industries.

■ Bundling Commodities with Information Goods

We will now consider the case of a firm (A) which has the monopoly of product 1 and sells another good (2) in competition with a rival firm (B). The two products are independent and indivisible and the consumer purchases one unit of each good at the most. Preference distributions for the two goods are perfectly correlated. Consumers' reservation prices are uniformly distributed on the interval [0.1]. There is no complementarity in bundle consumption (i.e. the value of a package containing one unit of each good is equal to the sum of the separate values of each good alone), nor on the production side ($c_{bundle} = c_1 + c_2$).

A produces good 1 at marginal cost c ($0 \leq c \leq 1$) and good 2 is an information good produced at zero marginal cost. The game is as follows: firm A first decides whether or not to bundle goods 1 and 2; then the price and quantity of each good and the bundle, if there is one, are determined according to the competitive situation existing between firms A and B (Bertrand, then Cournot). Following in the footsteps of Carbajo and al. (1990), only pure bundling is considered here. In view of the preference assumptions, these authors argue that pure bundling is the most profitable strategy. Another point to be added is that while mixed bundling is virtually almost always superior to pure bundling (McAFEE et al., 1989), in practice, re-trading among buyers either has to be impossible or forbidden. This is particularly difficult to enforce in our case of an information good which can easily be copied and resold. If firm A decides to bundle, it then charges price p for the package formed from one unit of each of the goods 1 and 2. If it does not, it offers the goods separately with prices p_1 and p_{2A}. Firm B sells good 2 at price p_{2B}. It should first be noted that if it decides not to bundle, firm A, which has the monopoly for good 1, typically supplies:

$q_1 = \frac{1}{2}(1-c)$ at price $p_1 = \frac{1}{2}(1+c)$, regardless of what happens in market B.

We begin by assuming that firms act as Bertrand price-setters in the duopoly market. Without bundling, we obtain a monopoly output for good 1 (see above) and the price of good 2 is driven down to the marginal cost, i.e. zero. $p_{2A} = p_{2B} = 0$. Equilibrium profits are:

$$\pi_A = \frac{1}{4}(1-c)^2 \text{ and } \pi_B = 0.$$

If firm A now decides to offer a bundle comprising a unit of each good,

$$P = \frac{4}{7}(1+c) \text{ and } p_{2B} = \frac{1}{7}(1+c).$$

Consumers are split up into three groups according to their reservation values: when they have high value, they buy the bundle; those with medium reservation prices buy good 2 from B; the rest is excluded from the market. This division allows firm B to raise its price above the nil marginal cost and to make positive profits. In return, the same differentiation allows firm A to set a price for the bundle which is higher than the price of the separate components when no bundling is used. The output for monopolist good 1 also increases. Profits become:

$$\pi_A = \frac{1}{49}(4-3c)^2 \text{ and } \pi_B = \frac{2}{49}(1+c)^2.$$

Bundling brings about an increase in the price and the profits of firm B (though the volume of its sales is reduced if $c \leq 0.75$). For firm A, the difference in equilibrium profits with or without bundling is:

$$\partial\pi_A = \frac{1}{49}(4-3c)^2 - \frac{1}{4}(1-c)^2 = \frac{1}{196}\left(15+2c-13c^2\right),$$

which is always positive since $c \leq 1.15$. Interestingly enough, in this particular case, the change in aggregate welfare:

$\partial W = \frac{1}{392}\left(9-10c-19c^2\right)$ *is ambiguous; it will remain positive while* $c \leq 0.47$.

Let us now consider Cournot-type quantity competition in the goods 2 market without bundling. Cournot duopoly outputs are:

$$q_{2A} = q_{2B} = \frac{1}{3} \text{ and } p_{2A} = p_{2B} = \frac{1}{3},$$

which means that equilibrium payoffs are $\pi_A = \frac{1}{4}(1-c)^2$ and $\pi_B = \frac{1}{9}$.

If firm A decides to bundle, we obtain the following equilibrium output levels:

$$Q = \frac{1}{7}(3-2c),\ q_{2B} = \frac{1}{7}(2+c).$$

Package price $P = \frac{3}{7}(2+c)$ and $p_B = \frac{1}{7}(2+c)$.

With bundling, $\pi_A = \frac{2}{49}(3-2c)^2$ and $\pi_B = \frac{1}{49}(2+c)^2$.

Bundling is profitable for firm A if $\partial\pi_A = \frac{1}{1764}\left(11+18c-153c^2\right) \geq 0$.

This condition is satisfied for $c \leq 1/3$.

In this case, $\frac{1}{7}(3-2c) \leq \frac{1}{2}(1-c)$;

bundling reduces the output for monopoly good 1. However, its main effect here is to increase firm A's production of good 2:

$$q_{2A} = Q = \frac{1}{7}(3-2c) \geq \frac{1}{3}.$$

The typical Cournot response for firm B is to reduce its output. Finally, for $c \leq 1/3$, overall production rises in the bundled market:

$$\left(Q_2 = p_{2A} + q_{2B} = \frac{1}{7}(5-c) \geq \frac{2}{3}\right)$$

and the price goes down. As a result, bundling is profitable for firm A because it gives it a greater share of the larger duopoly market. It also significantly reduces the rival firm's profits at the same time. These points can be illustrated by a simple numerical example. With $c = 0.1$, bundling raises firm A's profits by only 2 percent but firm B's profits fall by 20 percent, from 0.11 to 0.09. Depending on the level of fixed and sunk costs, it may no longer be profitable for firm B to stay in the market. What we have here is the strategic dimension of bundling in the presence of sunk costs, making it unprofitable for the current rival to stay in business. Thus the competitor is either driven out of the market (WHINSTON, 1990), or market entry is deterred by lowering its potential profits below entry costs (NALEBUFF, 1999).

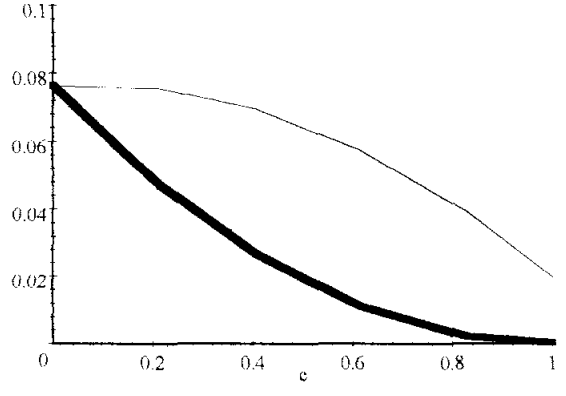
The results of this basic bundling-with-an-information-good-model are as follows: With Bertrand-type competition in the duopoly market, bundling is always profitable for both firms. Bundling actually works as a differentiating mechanism here for the monopolist's product, enabling both firms to avoid head-on price competition and to raise their price above cost. The mechanism is different in the case of Cournot competition, and involves, as always with these competition assumptions, the question of credible quantity pre-commitment. Bundling gives off this kind of signal because where duopoly products are concerned, the monopolist's announced output is higher than that of given output for its rival. We do not need to refer to the sunk costs associated with the design and advertising of a bundled offer here, nor the adjustment of the production process (WHINSTON, 1990; CARBAJO et al., 1990; CHOI, 1998). This in fact happens logically when the duopoly product's Cournot output is lower than the sales volume of the monopoly good. But since the quantity of packages produced for equilibrium will be set between these two levels, it implies that the monopoly will try to sell more of the duopoly than before. To sum up, these two bundling approaches are quite the opposite: in the first Bertrand case, it is possible to reduce the intensity of competition on the bundled market through differentiation, while in the Cournot case, bundling is chosen by firm A in order to credibly pre-commit itself to a higher production level in this market.

To better understand the changes brought about by this specific kind of bundling, we will now compare it with the case where duopoly good production cost is c, which is equal to the monopoly good cost. With Bertrand competition assumptions, this means that the gain from bundling is:

$$\partial \pi_A = \frac{15}{196}(1-c)^2.$$

When $c \leq 1$, this is always lower than what firm A gains by bundling with an information good. Figure 1 below compares the increase in profits resulting from bundling with an information good (thin line), and with a good that has the same marginal cost c (thick line). Moreover, measured as a fraction of the former profit level, the gain is constant and equal to 30% in the latter case. On the other hand, information good bundling profitability increases with high production costs (e.g. 100% with $c = 0.5$). This finding supports new bundling strategies very strongly because it extends their viability beyond the usual limits of very low production costs.

Figure 1. Information good bundling profitability compared with commodity bundling Bertrand competition)

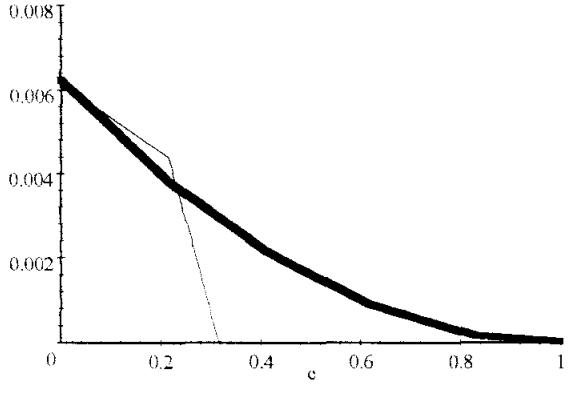


In a Cournot environment,

$$\partial \pi_A = \frac{11}{1764}(1-c)^2 .$$

The situation is different here since bundling is always profitable for firm A when goods' production costs are equal. On the contrary, bundling with an information good will only be profitable, as we saw before, if $c \leq 1/3$. Therefore, firm A will only be better off if it bundles its monopoly good with an information good rather than with a good of equivalent cost where $c \leq 0.24$ (see the figure below with the same conventions as before).

Figure 2. Information good bundling profitability compared with commodity bundling (Cournot competition)



To sum up, if the production cost of the monopoly good is not too high, bundling this good with an information good dominates the strategy of bundling with a good of similar cost.

As we have seen, the key factor concerning the outcome of a bundling strategy is how the demands for the separate goods are transformed into a demand for the bundle. To better understand this, SALINGER (1995) introduced the interesting idea of the "aggregated components" demand curve (vertical sum of the demand curves for each good forming the bundle), which allows a direct graphical analysis of the competitive effects of bundling. Let us consider once more two goods 1 and 2 that might be bundled with consumers' reservation prices uniformly and independently distributed on the interval [0.1]. The individual demand curves for each good are linear:

$$q_i = 1 - p_i,\ 0 \leq p_i \leq 1$$

The bundle demand (one unit of each good and only pure bundling considered) is:

$$Q_{bundle} = 1 - \frac{1}{2}P^2,\ 0 \leq P \leq 1 \text{ and } Q_{bundle} = \frac{1}{3}(2-P)^2,\ 1 \leq P \leq 2\,.$$

The aggregated components demand curve is obtained by setting

$$q_1 = q_2 = Q_{aggr.} \text{ and}$$

$$P_{aggr.} = p_1 + p_2\,. \text{ Then } Q_{aggr.} = 1 - \frac{1}{2}P_{aggr.},\ 0 \leq P_{aggr.} \leq 2\,.$$

Comparing these two curves helps us understand the benefits of bundling for the firm by directly comparing the quantities it would sell (and then the revenues it would get by selling components separately) for a given bundle price. In the case of independent linear demands, there are two segments: in the first one, large quantities, the bundle demand curve is above the aggregated components demand curve; then the curves intersect and we have the opposite result for smaller outputs. For bundling to be profitable, we must logically be in the first region. However, we must also check that the sum of the separate profit-maximizing prices for each good does not fall in the range where aggregated component demand exceeds the demand for the bundle. If this were to happen, the firm would prefer to sell the two goods separately. Salinger demonstrates that bundling is profitable if the common marginal cost of the goods remains low ($c \leq 0.14$). This finding can be extended even further to explore the role of cost savings in the profitability of bundling. Actually, when the reservation prices for each

good are positively correlated, the two curves described above almost coincide; any small cost saving from bundling then automatically makes this strategy profitable for the firm. And this even holds true with higher production costs.

While the first basic model presented in this section may be useful for examining a telecom firm's bundling of information services with its core services, the second Salinger model appears to be particularly suited to the case of bundling different telecom services where demands are likely to be somehow positively correlated and production costs are definitely not zero. We are already able to point out that the success of this kind of bundling crucially hinges on the effective achievement of cost savings in bundle production and sales.

■ The Case of Telecoms and Internet Access

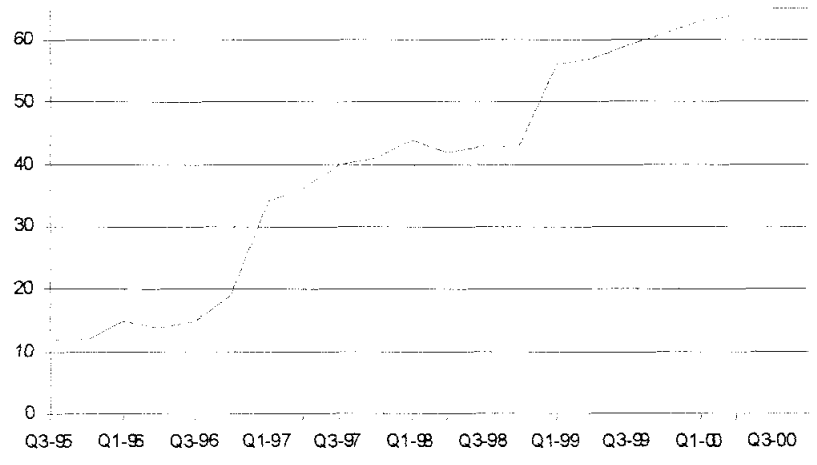
In this section, we examine the practical use of bundling communications services by telecom (and non telecom) firms. We focus on two distinct cases: the bundling of telecom providers' entire range of services to offer one-stop communications shopping, and outside service companies (e.g. utilities) bundling phone and Internet services with their core product. The first strategy is aimed at regaining customer control (giving continuous access to usage data, preferences, records), reducing churn, increasing switching costs, leveraging market power (in so far as presented above) and deterring new entrants in the bundled markets. The second one uses bundling as a tool for entering the telecom market, and is indicative of a radical change in the strategies used by utilities in that field. Up until now, the latter's telecoms activities were in fact focused on the infrastructure side and the development of their electricity, gas or pipelines network through the deployment of fibre-optic capacity. A retail telecom offer bundled with utility supply works on an entirely different model, and requires no investment in a proprietary network. In order to be able to do this, utilities have negotiated large wholesale contracts with major telecom providers (exploiting their huge customer base as a potential outlet) and resell the services to their customers in a bundle.

The bundling of utilities' services by telecom firms is well illustrated by the AT&T story described in the introduction. This is clearly not an isolated case. In 2000, most of the telcos contemplated offering their customers the broadest possible bundled service offering at some point or other: fixed telephony, mobile, cable TV and Internet access in a single connection. For instance, in spring 2000, Qwest Communications began selling unlimited

dial-up Internet access bundled with long distance telephony, online conferencing, and "a whole suite of Web-enabled services" under the "Total Package" brand name. So far, these packages have only enjoyed mixed success, well below initial enthusiastic expectations. A US survey in 2000 (Yankee Group) found that only 24% of consumers get local and long-distance services from the same company (which would be the expected basic level of bundling), 3% have bundled telephone and cable, and only 1% have bundled telephone, cable and Internet access. This may only be a temporary transitional period, but still it is interesting to compare this result with other experiences of bundling within a single telecom service that have proved quite successful.

Bundling was actually introduced in telecoms at roughly the same time in Europe and in the US via mobile phones (monthly subscription including a given number of hours of communication) and flat-rate Internet access respectively. Interestingly enough, the argument put forward to explain its success is quite different from the traditional reasons for bundling discussed previously and involves the consumer's preference for simple pricing. While theory claims that usage-sensitive (time in the case of communications) pricing is more effective and efficient, the fact that all the main US ISPs switched to flat-rate subscriptions in 1996 allows us to think otherwise. In less than a year, Internet usage per person tripled, and this pace could have even been more dramatic had there not been capacity constraints restricting potential demand (see the following figure based on Odlyzko, 2000 and AOL company data).

Figure 3. AOL users' average consumption (minutes per day) 1995-2000



International reviews shows that flat rates have played a key role in stimulating usage and pushing Internet penetration everywhere. Europe experienced a similar situation in 1999-2000 following intense lobbying by companies and consumers associations ("Free the Net" campaign by the *Times* in the UK in autumn-winter 1999 and "*Arrêter les compteurs*" (Stop the Clock) campaign by AOL one year later in France). The reason for the flat rate's success appears to be linked to a strong consumer preference for simplicity and previsibility. The flat rate actually helps reduce information asymmetry (fear of being cheated by the access service provider), saves mental transaction costs, and provides a guarantee against a sudden and uncontrolled rise in consumption. This suggests that the current bundled approach is perhaps still incomplete or premature in the telecoms sector, and should first try to generate similar changes in consumers' evaluations to stimulate demand (see JOHNSON et al., 1999 for interesting insights from the car market). In this respect, convergence should not be mistaken as being a mere aggregation of various communication services into one bill. A more sophisticated integration, customization and pricing of these services is needed to meet specific customer needs. This may eventually turn out to be telecom providers' sole comparative advantage in a market where service price and reliability no longer give a decisive edge because competitors are all offering pretty much the same thing.

This conclusion is reinforced by the parallel move observed in the utility sphere where players are entering the telecom market as bundle resellers. Bundling supports a new entry strategy in this instance. Utilities' involvement in the telecom market is not new, but their focus was initially on the deployment of transmission capacity and the wholesale of bandwidth. The case of Williams, one of the largest gas-pipeline companies in the US, is particularly instructive. Williams first entered the telecommunications market in 1986 by placing fibre cables in decommissioned petroleum and gas pipelines. A new company called WilTel was created and the network was rapidly expanded through new construction projects and the acquisition of several local fibre-optic networks until it became the country's fourth largest long distance network. Other energy companies like Enron and Duke Energy soon followed in the pioneer's footsteps and made the move from energy to a fibre network. In 1995, the telecom venture was sold to the retail provider LDDS, which became WorldCom, and Williams only kept a segment of the network (refocused on video transmission) and its business services activity. In 1998, when the three-year non-compete agreement with WorldCom expired, Williams Communications re-entered the wholesale telecom market as a "carrier's carrier" with the largest US broadband network project

(33,000 fibre route miles connecting 125 cities by 2001, new generation optical networking technologies and equipment to carry any combination of Internet, voice, data and video services). Customers include long distance telcos, CLECs, Internet service providers, media companies, and utilities. In 2000, the energy group generated more than 20% of its revenues from telecommunications. While focusing exclusively on the wholesale market and the supply of network services to telecom carriers, Williams also saw a major opportunity for growth in helping utilities enter the telecoms sector. It holds a minority interest in UtiliCom Network, a company that specializes in supporting and managing electric and gas utilities' telecom diversification, and leveraging their brand and customer base to successfully enter this market.

This is exactly the same strategy that British Gas implemented in the UK in 2000. In autumn 2000, the company introduced a comprehensive telecom services offering combining fixed telephony, mobile and Internet access. Its objective is to duplicate utilities' successful entry into the deregulated electricity market in 1998-1999 (3 million customers in 2000) and British Gas aims to attract one million customers by the end of 2001. Technically, this offer is based on a set of strategic alliances with major providers: Vodafone for mobile services, Torch Telecom (Kingston Communications) and Cable & Wireless for residential phone and Internet services. In this specific offer, bundling takes the form of lower rates which are conditional to subscription to other British Gas services: free minutes of voice communications every month for electricity customers (which both stimulates the demand for telecoms as well as electricity services), lower Internet charges and a shorter minimum term contract for fixed phone customers (e.g. 3 months instead of 12) using a mobile. However, the company plans to experiment with wider bundles in the future, and thus make the most of its entire range of services.

■ Conclusion

This preliminary research allows us to define the questions and topics that require further analysis more precisely in order to better understand bundling's potential in telecoms and Internet services. First of all, the differences between the relative failure of communications bundles in 2000 and the success of earlier experiences in mobile and Internet access services must be carefully examined. Is this the result of the poor economic and financial environment for telecom firms at that time? Or are there more

fundamental issues at stake? One direction for research is certainly to examine the impact of bundling on production costs (potential for economies of scale and scope) and consumer evaluation. With regard to this last point, the role of the psychology of consumer judgment should not be underestimated and mental accounting principles could prove to be a fruitful approach for exploring when and how bundling offers might modify consumers' uses and preferences. Secondly, it would be interesting to model the mechanism for leveraging a large customer base (significantly captured through high switching costs). This actually turns out to be a central element in utilities' telecom market entry strategy, rather than the usual monopoly capacity to determine price and quantity.

Lastly, the pervasive bundling strategies associated with the digital economy raise two significant and complex issues for regulators and policy makers: i) the juxtaposition of services typically offered by traditionally monopolistic, regulated industries with those offered by unregulated competitive companies, with the added risk of mixing several sector-based regulations in packaged offerings and business activities (with utilities or banks selling telecom services), ii) the possible leverage of monopoly power in new emerging competitive markets (especially of information goods) by companies enjoying, or close to enjoying, a monopoly in one segment of the telecom markets\ (incumbent phone providers in local telephony, backbone Internet providers, vertically integrated cable companies). In any case, this discussion illustrates how bundling will undoubtedly play a crucial role in the analysis of competition, market entry and market structure in telecommunications and Internet-related industries.

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PENGARUH *BUNDLING STRATEGY* TERHADAP KEUNGGULAN BERSAING
(Studi pada Industri Percetakan di Kota Semarang)

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Abstraksi

Bundling Strategy merupakan salah satu alternatif populer dalam strategi pemasaran. Agar potensi bundling strategy dapat berdaya secara optimal, maka anteseden dan karakteristik strategi tersebut harus dipahami dan dikelola dengan baik. Tulisan ini mengupas permasalahan kekaburan pemahaman dan kesenjangan hasil penelitian pengaruh penerapan bundling strategy dan hal yang melingkupinya terhadap keunggulan bersaing perusahaan. Inkonsistensi definisi, temuan, dan hasil penelitian tentang pengaruh bundling strategy telah menimbulkan kesimpangsiuran persepsi pelanggan pada product bundle itu sendiri. Padahal persepsi penghematan akan nilai bundle menjadi sebuah jembatan emas dalam menuju pemenangan persaingan pasar yang berkelanjutan.Uji empirik dilakukan dengan kuesioner kepada 100 manajer perusahaan percetakan di Kota Semarang dengan menggunakan teknik analisis Structural Equation Modeling.Dan ternyata ditemukan fakta bahwa secara umum terdapat pengaruh signifikan antara kinerja bundling strategy terhadap persepsi penghematan pelanggan dalam mewujudkan keunggulan bersaing. Pada bagian akhir, direkomendasikan sebuah kerangka kerja bundling strategy dalam pasar kompetitif.

Kata Kunci: Bundle - Persepsi Konsumen - Keunggulan Bersaing

Semakin besarnya ekspektasi pelanggan, semakin kerasnya pasar, dan semakin seringnya perubahan bergulir di berbagai bidang telah memaksa perusahaan (dan para pemasar) menerapkan strategi yang kreatif untuk dapat berkompetisi. Sebagai konsumen, kondisi ini tentu sangat menguntungkan karena kebutuhan dan keinginannya semakin terpenuhi.

Penulis adalah seorang wirausahawan di bidang jasa peercekatan dan distribusi produk herbal.

Saat ini, konten (apa yang ditawarkan) hanyalah strategi dasar dalam persaingan pasar. Konteks (bagaimana menawarkannya) adalah formula pemenangan pasar yang sesungguhnya (Kartajaya, 2002). Pemasar harus membuat konsumen merasa nyaman *(feel good)*, atau bahkan merasa dahsyat *(feel great)*, untuk membuat pikiran positif di benaknya. Oleh karena itu, produk atau konten yang baik harus dilengkapi dengan

konteks yang baik pula dalam memenangkan persaingan.

Formulasi strategi pemasaran mengalami banyak penyesuaian sebagai reaksi atas kondisi faktual yang ada. Bauran pemasaran yang dalam banyak buku teks dikategorikan dalam level strategis, dalam perkembangannya mengalami degradasi level, dan kecenderungan yang banyak dikembangkan saat ini menempatkannya dalam tingkatan taktis. Paham ini bisa disimpulkan dari perkembangan pemikiran Kotler dalam tulisanya bersama Hermawan Kartajaya *"Repositioing Asia: from Bubble to Sustainable"* yang berbeda dengan teorinya dalam buku *"Marketing Management"* terbitan Prentice Hall pada beberapa edisi awal.

Strategi *bundling* adalah salah satu alternatif populer dalam strategi pemasaran (Johnson et al, 1999,p.129). Dalam bahasan teori, *bundling strategy* berada dalam wilayah teori strategi produk ataupun harga. Definisinya sendiri bervariasi. Stremersch dan Tellis (2002, p.56) mengurai inkonsistensi definisi strategi *bundling* dengan mengutip beberapa paparan, seperti: Adams dan Yellen (1976, p.475) yang mendefinisikan *bundling* sebagai menjual barang dalam paket, Guiltinan (1987, p.74) yang mengartikan *bundling* sebagai praktek pemasaran dua atau lebih produk dan atau jasa dalam satu paket dengan harga khusus. Kemudian Yadav dan Monroe (1993, p.350), mengartikan penjualan dua atau lebih produk dan atau jasa dengan harga tunggal.

Inkonsistensi ini menjadikan legalitas *bundling* menjadi kabur dan bisa berdampak pada implikasi yang kurang menjurus. Perbedaan pengertian produk dan *bundle* pun muncul di kalangan peneliti terdahulu. Salinger (1995, dalam Stremersch dan Tellis (2002, p.56)) memperlakukan sepasang sepatu sebagai sebuah *bundle* sepatu kanan dan sepatu kiri. Telser (1979, dalam Stremersch dan Tellis (2002, p.56)) menyebut sebuah mobil sebagai sebuah *bundle* bagian-bagian yang berbeda, seperti mesin, roda, dan yang lainnya.

Tujuan dari implementasi *bundling strategy* juga bermacam-macam. Menurut Simon & Fassnacht (1993, p.403) adalah mengeksploitasi potensial profit dan memaksimalkan profit dalam perusahaan (multi produk). Pendapat tersebut menyiratkan kepentingan dan fungsi strategi *bundling* yang biasa diimplementasikan dalam kerangka waktu yang relatif berjangka pendek dan dalam lingkup yang (juga) relatif sempit. Kemudian Ansari dkk (1996, p.86) yang meneliti praktek *bundling* dalam perusahaan non profit menyinggung tujuannya untuk memaksimalkan pemakaian suatu subjek agar tidak defisit. Dorothy (1993, p.29) secara lebih luas menyatakan manfaatnya untuk kinerja perusahaan melalui keunggulan bersaing. IBM mem-*bundle* produknya untuk sebuah tujuan *positioning* (Bowen, Scannell, & Gardner, 1999, p.8). Produk/jasa yang relatif sulit didiferensiasi (misalnya perangkat keras untuk komputer pribadi) dapat pula menggunakan strategi *bundling* semata-mata untuk tujuan reduksi biaya kepemilikan (Jaikumar, 1995, p.39).

Di sisi lain, kesesuaian strategi pemasaran dalam dimensi waktu maupun tahapannya harus menjadi sebuah sinergi. Strategi *bundling* yang dalam banyak penelitian memanfaatkan keputusan transaksi sebagai objek pengamatannya haruslah diperdalam lagi pengaruh atau hubungannya dalam lingkup yang lebih berjangka panjang. Apakah hasil-hasil penelitian terdahulu mempunyai kesesuaian bila dihubungkan dengan kerangka waktu yang berbeda? Tentu

suatu penelitian lanjut sangat perlu untuk dilakukan.

Bundling strategy menghasilkan profit yang lebih tinggi dibandingkan *unbundling* (Guiltinan, 1987, p.82). Tetapi menurut Koschat dan Putsis Jr, (2002, p.262) justru sebaliknya, *unbundling* justru lebih menguntungkan karena menghasilkan pendapatan yang lebih tinggi. Mahajan & Venkatesh (1993, p.505), Schamalensee (1984, dalam Mahajan & Venkatesh, 1993, p.505), serta Ansari dkk (1996, p.90) menemukan fakta bahwa *pure bundling* memang lebih baik dari *unbundling*, tetapi *mixed bundling* merupakan strategi terbaik. *Bundling strategy* yang dalam banyak penelitian pada *end-user* dapat memberikan profit, ternyata memberikan pengaruh negatif terhadap perilaku konsumsi (Soman & Gouville, 2001, p.42).

Penelitian tentang pengaruh *bundling* terhadap kinerja pemasaran secara umum telah banyak dikupas Dan seperti yang telah diuraiakan di atas, temuannya bervariasi. Hanya saja, sebagian besar mengambil pengguna akhir sebagai objek penelitian. Kemudian banyak pula yang sekedar memfokuskan pada hierarki penjual-pembeli tanpa memperdalam bahasannya dalam latar kompetisi. Dan dari telaah awal atas kesenjangan fakta serta hasil penelitian di atas, dapat disimpulkan bahwa urgensi penelitian pengayaan relatif layak dan mendesak untuk dilakukan. Tentunya untuk mendukung integrasi perencanaan dan manajemen pemasaran stratejik yang semakin berkualitas.

Oleh karena itu, tulisan ini mengambil fokus bahasan pada permasalahan kaburnya pemahaman dan kesenjangan hasil penelitian pengaruh penerapan strategi *bundling* dan hal yang melingkupinya terhadap keunggulan bersaing suatu perusahaan. Kemudian tujuan umum dari penelitian ini adalah menganalisis optimalisasi penggunaan *bundling strategy* dalam pasar kompetitif.

Telaah Pustaka dan Hipotesis

Karakteristik Bundling Strategy

Stremersch&Tellis (2002, p.57) mengklasifikasikan *bundling strategy* dalam dua dimensi kunci. Yang pertama adalah *bundling focus*, di mana kontennya adalah *price* dan *product bundling*. Kemudian yang kedua adalah *bundling form* yang bisa berupa *pure bundling, pure unbundling*, atau *mixed bundling*. *Price and product bundling* adalah strategi independen, dimana perusahaan dapat *mix* dan *match* untuk menyikapi permintaan konsumen. Sedangkan *mixed bundling* merupakan kombinasi dari *pure bundling* dan *pure unbundling strategy*.

Rangkuman istilah, definisi, dan contoh *bundling* tampak dalam tabel 1 di bawah ini:

Tabel 1
Istilah, Definisi, dan Contoh *Bundling*

Istilah	Definisi	Contoh
Bundling	Penjualan dua atau lebih produk terpisah dalam satu paket	Kompute r
Price Bundling	Penjualan dua atau lebih produk terpisah dalam satu paket dengan harga diskon, tanpa integrasi produk	Berbagai kemasan sereal
Product Bundling	Integrasi dan penjualan dua atau lebih produk terpisah dalam satu paket dengan satu atau beberapa harga	*Multimed ia PC, Sound System*
Pure Bundling	Strategi di mana perusahaan hanya	*Bundling of*

Istilah	Definisi	Contoh
	menjual secara *bundle* dan tidak (semua) produk secara terpisah	*tabulating machines*
Mixed Bundling	Strategi di mana perusahaan selain menjual secara *bundle* juga menjual (semua) produk secara terpisah	*Telecom Bundles*

Sumber: Stremersch&Tellis (2002, p.57)

Persepsi Penghematan

Meski segmen menengah ke atas seringkali tidak begitu memperhatikan harga dalam perilaku pembeliannya, namun secara umum tentu pelanggan akan memilih produk yang lebih memberikan penghematan atas pembelanjaanya jika kualitas produk yang ditawarkan produsen relatif setara. Kemudian merujuk teori penawaran klasik, di mana jika harga tinggi maka kuantitas permintaan pasar akan turun, maka produsen tidak bisa main-main dengan kebijakan harga yang diterapkannya. Apalagi suasana persaingan sekarang semakin keras bahkan semakin tidak terlihat (Kartajaya, 2002, p.22).

Pengertian penghematan dalam konteks penelitian ini didasarkan pada konsep dasar yang berupa nilai yang didapat dari hasil bagi keuntungan total dan pengorbanan total dalam setiap transaksi. Dari telaah pendahuluan serta konsep yang ditulis Yadav & Monroe (1993), Kartajaya (2002), dan Lambert & Burduroglu (2000) dapat ditelaah beberapa inti dari persepsi penghematan yang relevan dalam penelitian ini.

Setidaknya ada tiga dimensi yang dapat melatarbelakangi persepsi penghematan konsumen. Yang pertama adalah penghematan dari harga *bundle* dibandingkan harga produk terpisah. Kemudian yang kedua adalah penghematan atas biaya total untuk mendapatkan produk tersebut (yang berarti harga hanya menjadi salah satu komponennya). Dan yang ketiga penghematan dalam mendapatkan produk tersebut dalam latar persaingan (bisnis).

Keunggulan Bersaing

Ajaran Porter (1980) tentang strategi generik untuk keunggulan bersaing yang terdiri dari: keunggulan biaya, diferensiasi, dan fokus masih relevan untuk dijadikan acuan utama konstruk penelitian ini. Keunggulan bersaing adalah jantung kinerja perusahaan dalam pasar bersaing. Bila perusahaan kemudian mampu menciptakan keunggulan melalui salah satu dari ketiga strategi generik tersebut, maka ini berarti keunggulan bersaing didapatkannya (Aaker, 1998).

Istilah keunggulan bersaing menurut Day dan Wensley memiliki setidaknya dua arti berbeda namun berhubungan (Droge dkk, 1995, p.669). Arti pertama berfokus pada keunggulan *(superiority)* dalam *skill* dan atau sumber daya *(resources)*, sedangkan arti kedua adalah mengenai keunggulan dari hasil kinerja *(performance outcomes)*. Ketrampilan dan sumberdaya ini merefleksikan pola investasi masa lalu untuk mempertinggi posisi kompetitif. Kelangsungan posisi unggul ini membutuhkan usaha untuk menciptakan hambatan agar tidak mudah ditiru. Karena usaha peniruan itu secara terus menerus dilakukan oleh pesaing, maka perusahaan harus terus berinvestasi untuk mempertahankan atau meningkatkan keunggulannya. Jadi, penciptaan keunggulan bersaing ini merupakan proses yang berlangsung terus-menerus. Kemudian, keunggulan bersaing seharusnya dipandang sebagai proses dinamis ketimbang sebagai hasil akhir.

Aspek-aspek dasar dari keunggulan bersaing berkelanjutan yang disajikan

dalam literatur manajemen stratejik (Hall, 1994 dalam Ferdinand 2002) adalah sustainabilitas dari atribut kunci sebuah produk dan durabilitas daripada superioritas sumber daya *intangible* atas apa yang dimiliki pesaing Maka dimensi dari keunggulan bersaing berkelanjutan adalah durabilitas (daya tahan lama), imitabilitas (tingkat kesulitan untuk dapat ditiru), dan tingkat kemudahan untuk menyamai aset-aset stratejik yang dimiliki perusahaan

Product Bundling Strategy dan Persepsi Penghematan

Secara lebih mendalam, Stremersch dan Tellis (2002) mengulas hasil penelitiannya tentang beberapa perbedaan *price* dan *product bundling* dalam hubungannya dengan persepsi penghematan. Bahwa manajer dapat menggunakan *price bundling* dengan mudah untuk durasi waktu pendek. Sedangkan *product bundling* lebih merupakan strategi diferensiasi jangka panjang. Dengan kata lain, resiko dan persepsi yang muncul dari konteks *bundling* bisa berbeda sama sekali

Item sebuah bundel mempengaruhi evaluasi bundel secara keseluruhan (Gaet et al, 1990). Hal ini dapat diartikan bahwa hanya *bundle* yang benar-benar bernilai atau memberikan penghematan yang signifikanlah yang akan dipilih konsumen di era kompetisi seperti sekarang ini

Peneliti lain dalam waktu yang hampir bersamaan mengembangkan rekomendasi strategi *pricing bundle* untuk *bundle* yang berbasis pada segmen keuntungan dalam *given market* (Hanson dan Martin, 1990). Di mana untuk membuat persepsi penghematan yang signifikan, harga *at discount* diyakini akan meningkatkan keuntungan melalui pendongkrakan volume penjualan Namun bagaimanapun, persepsi yang baik akan terbangun lebih abadi bila nilai sesungguhnya (konten) produk dan harganya memang signifikan. Maka Eppen, Hanson, dan Martin (1991) mengingatkan bahwa perusahaan sebaiknya tidak menggunakan *bundle* hanya sebagai tipu muslihat pemasaran belaka.

Persepsi penghematan dalam *bundle items* jika dibeli secara terpisah dan persepsi penghematan tambahan dalam *bundle* akan ditunjukkan oleh pembeli sebagai dua penghematan yang terpisah, dan setiapnya secara signifikan berpengaruh positif terhadap nilai transaksi total (Yadav&Monroe,1993).

Persepsi penghematan pembelajaan produk *bundle* lebih besar daripada persepsi penghematan pembelajaan produk tunggal. Pengaruh setiap penghematan juga ditentukan oleh besarnya penghematan yang lain. Reduksi harga penjualan *item* individual untuk meningkatkan persepsi penghematan dapat dilakukan tidak hanya dari *item*-nya tapi dari *bundle*nya. Dan sesungguhnya, keuntungan penjual bisa didapat dari *bundle* dan *unbundle* sama bagusnya.

Dari uraian tersebut, hipotesis yang dirumuskan adalah

Hipotesis 1 Semakin tinggi intensitas aplikasi product bundling strategy, maka semakin tinggi pula penghematan yang dipersepsikan pelanggan

Mixed Bundling Strategy dan Persepsi Penghematan

Bundling adalah produk baru, pasar baru, dengan resiko yang rendah (Garry D. Eppen et al, 1991). *Bundling* adalah sistesis baru untuk marketing (Stefan Stremersch & Gerard J. Tellis, 2002). *Bundling up for succes* (Larry Chambers, 1992) Dan masih banyak lagi tesis yang

memuji pemakaian *bundling startegy*. Namun bagaimana konsumen memandang dimensi bentuk *bundling strategy* dalam hubungannya dengan penghematan yang mereka dapatkan?

Untuk menguji nilai penghematan atas transaksi *bundle*, terlebih dulu harus diingat tipe atau bentuk *bundling*, yakni *pure* atau *mixed* (Adams dan Yellen, 1976). Dalam *pure bundling*, hanya sebuah *bundle* dari *items*-lah yang ditawarkan untuk dijual, dan pembeli tidak mempunyai kesempatan (pilihan) untuk berbelanja dalam kemasan satuan. Dalam strategi *mixed bundling*, di lain sisi, pembeli dapat menentukan untuk membeli harga *bundle* ataupun harga satuan (Adams dan Yellen, 1976 dan Schamelensee, 1984).

Menurut Yadav & Monroe (1993), *bundling* dipersepsikan memberikan penghematan pada pembeli daripada pembelian satuan. Akan tetapi efeknya masih dipengaruhi besarnya penghematan yang lain. Karena dari sebuah perspektif metodologikal, pengaruh yang lebih besar dari penghematan *bundle* bisa juga dihasilkan dari perbedaan dalam kekuatan manipulasi eksperimental si penjual. Ini berarti persepsi penghematan yang telah dirasakan pembeli sewaktu-waktu dapat berubah, bahkan mungkin drastis, bila *bundle* tidak dikemas untuk sebuah paket 'nilai' dan hanya untuk tujuan transaksi sesaat.

Temuan Yadav (1994) mengatakan bahwa pembeli akan secara terus menerus (meskipun tidak selalu secara sistematis) menguji setiap *item* dalam *bundle* apakah 'nilai' yang didapatkannya benar-benar memberikan keuntungan maksimal atau tidak. Maka tampak jelas bahwa persepsi penghematan atas *bundle* adalah kunci keberlanjutan sukses *bundling* yang banyak direkomendasikan untuk tujuan kinerja pemasaran.

Keuntungan awal dari sebuah *bundling strategy* dalam bisnis *software* hasil penelitian yang dilakukan oleh Craig (1995) adalah lebih murah, lebih mudah dibeli, di-*instal*, dan di-*test*. Jaikumar (1995) menyimpulkan fakta penelitiannya bahwa produk/jasa yang relatif sulit didiferensiasi (misalnya *hardware* untuk PC) dapat pula menggunakan *bundling strategy* semata-mata untuk tujuan *reducing cost of owning*

Beberapa uraian di atas menempatakan persepsi penghematan pelanggan atas pembelian *bundle* sebagai sesuatu yang substansial. Oleh karena itu, hipotesis yang dirumuskan adalah :

Hipotesis 2 : Semakin tinggi intensitas aplikasi mixed bundling strategy, semakin tinggi pula penghematan yang dipersepsikan pelanggan.

Product Bundling Strategy dan Keunggulan Bersaing

Salinger (1995) mempresentasikan sebuah analisis *bundling* yang mengkombinasikan pengaruh biaya dan jumlah permintaan sekaligus. Dan ternyata, *bundling* memang menjadi lebih menguntungkan, bila mampu mereduksi biaya yang lebih rendah.. Ketika permintaan untuk komponen - komponen yang tidak dibundle relatif tinggi, dan konsumsi biaya untuk komponen yang *unbundled* memang lebih tinggi. Temuan ini tentunya secara kontras berbeda dengan analisis bundling yang berbasis permintaan murni, di mana praktek bundling akan lebih profitable ketika biaya per komponennya rendah dan permintaannya pun berkorelasi negatif.

Sebuah studi yang dilakukan oleh Bakos dan Brynjolfsson (2000) menunjukkan bahwa *bundling* dapat menguntungkan bila biaya marjinalnya memang sangat rendah, bahkan dalam lingkup jaringan sekalipun. Lebih lanjut kedua peneliti itu memetakan tipe kompetisi yang berbeda, termasuk di

dalamnya lingkup kerja hulu dan hilir produksi, yakni pada latar persaingan antara penjual *bundle* dan penjual satuan, serta persaingan antar penjual *bundle*. Dalam pasar kompetitif, strategi *mixed price bundling* lebih dominan daripada strategi *pure price bundling*. Kemudian ketika berbicara *product bundling* dalam pasar kompetitif, maka *mixed bundling* tidak hanya mendominasi *pure bundling*, namun juga *unbundling*. Hal ini sangat beralasan karena muncul dengan dilatarbelakangi kondisi di mana objek penelitian yang dilakukan di tingkat *suppliers* (hampir) tidak mungkin menjalankan praktek *unbundling pricing strategy*.

Hasil penelitian Matutes & Regibeau (1992, dalam Stremersch dan Tellis, 2002) menjelaskan bahwa perusahaan tidak dapat mendiferensiasikan dirinya dari kompetitor dalam pasar yang kompetitif dari oligopoli ke kompetisi sempurna dengan *price bundling*. Jika *pure price bundling* lebih *profitable*, strategi ini akan mendorong kompetitor untuk menawarkan *bundled* dan *unbundled* sekaligus. Strategi *mixed bundling* ini lebih atraktif untuk konsumen dan tentunya secara konsekuen akan mengambil alih pangsa pasar perusahaan yang masih mengandalkan praktek *pure price bundling*. Dari uraian di atas, hipotesis yang dirumuskan adalah:

Hipotesis 3 Semakin tinggi intensitas aplikasi product bundling strategy, maka semakin tinggi pula keunggulan bersaing perusahaan.

Mixed Bundling Strategy dan Keunggulan Bersaing

Bundling merupakan satu dari tujuh perilaku usaha yang dapat 'mengacaukan kemapanan bisnis' (Smith, 2000). Paun (1993) membagi tiga tipe implementasi perusahaan yang berkenaan dengan *bundling strategies*, yakni *pure bundling*, *unbundling*, dan *mixed bundling*. Hal-hal yang mempengaruhi keputusan inisial untuk mem*bundle* atau tidak, adalah fungsi *customer*, lingkungan, perusahaan, dan faktor produksi.

Alasan logis dibalik strategi *bundling* adalah kemampuan meningkatkan kinerja perusahaan dalam menciptakan *competitive advantage* dan kemudian pertimbangan ekonomis dalam aplikasi *bundling strategy* untuk mendapatkan keuntungan dari diskriminasi harga, peningkatan diferensiasi produk, peningkatan *customer value*, dan peningkatan *entry barriers*.

Peneliti yang cukup tegas menunjukkan perbedaan pengaruh *price* dan *bundling strategy* Stretemersch dan Tellis (2002). Bahwa dalam pasar kompetitif, sebuah strategi *mixed price bundling* lebih dominan daripada strategi *pure price bundling*. Kemudian ketika berbicara *product bundling* dalam pasar kompetitif, proposisi yang diajukan adalah bahwa *mixed bundling* tidak hanya mendominasi *pure bundling*, namun juga *unbundling*. Hal ini sangat beralasan karena proposisi tersebut muncul dengan dilatarbelakangi kondisi di mana objek penelitian yang dilakukan di tingkat *suppliers* (hampir) tidak mungkin menjalankan praktek *unbundling price strategy*.

Bundle dapat mengeliminasi biaya informasi optimalisasi suplai, sedang *unbundle* dimungkinkan dapat mereduksi biaya bila biaya informasi optimalisasi suplai kompetitif. Beberapa hal yang menentukan tujuan regulatori yang lain, kuantitas variabel, biaya yang mengikutinya, proporsi variabel, dan kondisi kompetisi. Pilihan suplai *bundle* atau *unbundle* tidak dapat ditentukan hanya dari unsur biaya/keuntungan yang didapatkan secara general. Ada beberapa faktor yang disebutkan dalam temuan

penelitian yang ikut menetukan pilihan terbaik (Gilbert dan Riordan 1995)

Hasil penelitian Matutes & Regibeau (1992, dalam Stremersch dan Tellis 2002) menjelaskan bahwa perusahaan tidak dapat mendiferensiasikan dirinya dari kompetitor dalam pasar yang kompetitif dari oligopoli ke kompetisi sempurna dengan *price bundling*. Jika *pure price bundling* lebih *profitable*, strategi ini akan mendorong kompetitor untuk menawarkan *bundled* dan *unbundled* sekaligus. Strategi *mixed bundling* ini lebih atraktif untuk konsumen dan tentunya secara konsekuen akan mengambil alih pangsa pasar perusahaan yang masih mengandalkan praktek *pure price bundling*.

Unbundling strategy lebih baik daripada *pure bundling strategy*, namun *mixed bundling* adalah strategi terbaik Tidak ada relevansi antara *mixed bundling* sebagai strategi terbaik dengan pengembangan kanibalisasi satu produk dengan yang lainnya. Untuk memaksimalkan *profit*, *mixed bundling strategy* dapat diterapkan oleh perusahaan. *Mixed bundling* hanyalah cara penyajian ke pelanggan, dan oleh karenanya tidak dapat menggantikan produk sebagai konten (Mahajan dan Vijay, 1993).

Pada *non profit organization*, *pure bundling* lebih menguntungkan penerapannya, dibandingkan *pure component*. Hal ini berkebalikan dengan temuan di *profit organization*, dimana *pure component* lebih baik daripada *pure bundling*. Namun baik di *profit* maupun *nonprofit organization*, *mixed bundling* menjadi pilihan strategi terbaik. Ada perbedaan dan persamaan pengaruh penerapan *bundling strategy* di *profit organization* dan di *non profit organization* (Ansari, Siddarth, dan Charles, 1996)

Bagi perusahaan generalis, inkompatibitas dengan *pure (product) bundling strategy* lebih baik diterapkan bila satu komponen *less differentiated* dengan yang lain. Namun bagi perusahaan spesialis yang tidak menerapkan *product bundling*, inkompatibilitas lebih memberikan keleluasaan dalam strategi harga, bila satu komponen *undifferentiated* dengan yang lain. Perbedaan optimalisasi pengaruh positif penerapan kompatibilitas / inkompatibilitas dan *pure bundling / unbundling strategy* dalam memenangkan persaingan adalah terletak pada diferensiasi produk dan sifat perusahaan, spesialis atau generalis (Denicolo,2000).

Anderson dan Leruth (1993) menyajikan beberapa keuntungan perusahaan yang mentransformasi *unbundling* ke *mixed bundling strategy* dalam lingkungan kompetitif yang tinggi. Karena *mixed bundling* mampu menyajikan banyak keleluasaan kepada pelanggan untuk membeli produk / jasa secara *bundle* ataupun satuan, dan tidak semua perusahaan mempraktekkannya dengan komposisi harga yang sama, maka hipotesis yang dirumuskan adalah sebagai berikut :

Hipotesis 4 . Semakin tinggi intensitas aplikasi mixed bundling strategy, maka semakin tinggi pula keunggulan bersaing perusahaan.

Persepsi Penghematan dan Keunggulan Bersaing

Customer satisfaction, customer value added, total cost, profitability, strategic profit, dan *shareholder value* adalah faktor-faktor yang secara signifikan mempengaruhi *value of logistic*. *Value of logistic* sendiri mempengaruhi *economic value added* pada empat wilayah: pendapatan, biaya operasi, modal kerja, dan aset tetap. Manajer harus memahami karakteristik setiap dimensi yang mempengaruhi *value of logistic* agar tujuan memperoleh *economic value added* yang optimal dapat terpenuhi (Lambert &

Burduroglu, 2000). Uraian di atas tampak relevan dengan persepsi penghematan yang dirasa analog dengan *customer value added* dimana *spread*-nya berpengaruh positif terhadap *spread of economic value added.*

Yadav dan Monroe (1993, hal: 356) menjelaskan bahwa *bundle strategy* dapat mereduksi biaya. Jika dihubungakn dengan tori klasik Porter (1980) dan Aaker (1998), kondisi ini mengindikasikan sebuah modal keunggulan bersaing. Meski terdapat perbedaan dalam dasar dan kerangka pikir hasil-hasil penelitian di atas, namun persepsi penghematan yang lebih mengacu pada konten dan konteks produk lebih dipandang sebagai sebuah keputusan taktikal manajemen pemasaran. Sedang penelitian Yadav dan Monroe (1993, hal: 356) dan Denicolo (2000) yang memandang dalam kerangka stratejik secara senada mengisyaratkan persepsi penghematan sebagai nilai dalam keunggulan bersaing.

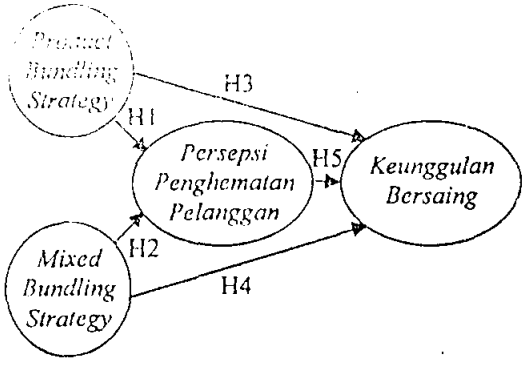
Maka hipotesis yang diajukan adalah :

Hipotesis 5 : Semakin tinggi penghematan yang dipersepsikan pelanggan, maka semakin tinggi pula keunggulan bersaing perusahaan.

Model Penelitian

Kerangka model teoritis yang akan dikembangkan dalam penelitian ini tampak dalam gambar 1. Kerangka model teoritis tersebut menyajikan suatu pengembangan model pengaruh *product bundling strategy* terhadap persepsi penghematan dan keunggulan bersaing, serta pengaruh orientasi *mixed bundling* terhadap persepsi penghematan dan keunggulan bersaing.

Gambar 1: Model Penelitian



Tabel 2
Dimensi penelitian

Variabel	Indikator	Simbol
Product Bundling Strategy (PBS)	Daya saing harga	X1
	Jaminan kualitas dan kompatibilitas	X2
	Optimalisasi *bundle item*	X3
Mixed Bundling Strategy (MBS)	Keleluasaan memilih	X4
	Keleluasaan subsitutif	X5
	Spec-up/down	X6
Persepsi Penghematan (CS)	Harga *item bundle*	X7
	Biaya	X8
	Komparasi pesaing	X9
Keunggulan Bersaing (CA)	Durabilitas	X10
	Imitabilitas	X11
	Kemudahan menyamai	X12

Untuk mengukur setiap variabel pada model, maka konstruk diindikasikan dalam tiga dimensi-dimensi pengukuran. Adapun secara lengkap, dimensi konstruk dalam penelitian ini disajikan dalam tabel 2.

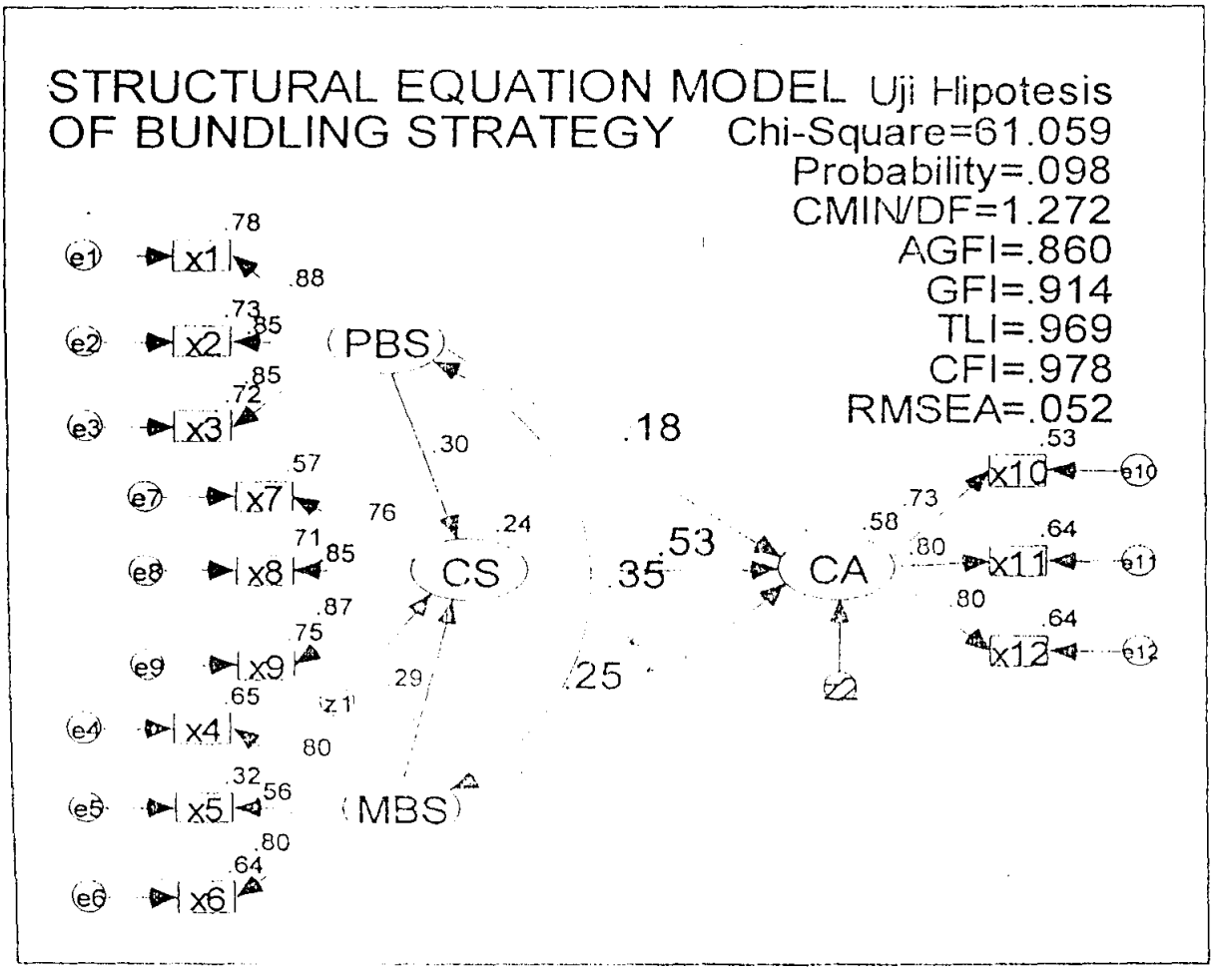
Pengujian Hipotesis

Matrik kovarian digunakan sebagai matrik input. Sedangkan teknik estimasinya adalah *maximum likelihood*. Dari hasil analisis faktor konfirmatori dapat diketahui, bahwa setiap indikator mampu menjelaskan variabel yang diwakilinya.

Kemudian dari uji model penuh dalam SEM diketahui bahwa hipotesis 1,2,4,dan 5 terbukti signifikan.

Sedangkan hipotesis 3 tidak terbukti, sehingga kalimat hipotesis ditolak. Adapun *goodness of fit*-nya mampu memenuhi syarat *cut of value*-nya, kecuali nilai AGFI yang marjinal. Kesesuaian model pun dapat dibuktikan dengan parameter estimasinya yang mempunyai nilai critical ratio di atas ±1,96. Secara grafis, *output* dari aplikasi AMOS 4.01 tersaji dalam gambar 2.

Gambar 2
Keluaran Uji Model Struktural



Dari hasil uji asumsi normalitas data, evaluasi *outliers*, evaluasi *multicollinearity* dan *singularity*, serta *goodness of fit* dapat dipastikan tidak terdapat kemungkinan munculnya masalah identifikasi. Model penelitian pun dapat dikatakan *representative* karena nilai *standard residual covariace*-nya yang kecil, kemudian *reliable* karena nilai *cut of value*-nya yang lebih besar dari 0,70 dan *variance extract* yang lebih besar dai 0,50.

Temuan dan Kesimpulan

Penelitian ini telah menghasilkan temuan yang cukup penting. Secara umum, intensitas aplikasi *bundling strategy* berpengaruh positif terhadap persepsi penghematan pelanggan dan derajad keunggulan bersaing. Detilnya adalah sebagai berikut:

1. Terdapat pengaruh positif intensitas aplikasi *product bundling strategy* terhadap persepsi penghematan pelanggan. Hasil ini mendukung penelitian yang telah dilakukan sebelumnya oleh Estelami (1999) pada objek penelitiannya di pasar komputer pribadi, di mana *personal computer bundle* secara signifikan mempengaruhi persepsi penghematan pelanggan. Penerimaan hipotesis ini pun selaras dengan temuan Yadav dan Monroe (1993), di mana persepsi penghematan dalam pembelanjaan *product bundle* lebih besar daripada persepsi penghematan atas pembelanjaan produk terpisah.

   Harga *at discount* yang menjadi salah satu ciri khas dari *product bundle* juga menjadi dimensi pendukung dari rekomendasi yang dikembangkan Hanson dan Martin (1990), di mana konten produk yang dikemas dengan harga yang murah diyakini akan meningkatkan keuntungan perusahaan melalui pendongkrakan volume penjualan. Adapun volume penjualan ini diasumikan sebagai tingginya respon pelanggan pada kepuasan produk / jasa, yang salah satunya adalah kepuasan pada penghematan yang diperolehnya. Dan pendapat Stremersch dan Tellis (2002) yang menempatkan persepsi pelanggan dan penghematannya sebagai kunci keberhasilan *product bundling* juga terbukti dalam penelitian ini.Temuan dalam penelitian ini sekaligus membantah temuan Koschat dan Putsis Jr (2002) yang menyatakan bahwa *unbundling* menghasilkan pendapatan yang lebih tinggi.

   Oleh karena itu, berdasar hasil uji empirik, secara meyakinkan dapat disimpulkan bahwa semakin tinggi intensitas aplikasi *product bundling strategy* maka semakin tinggi pula penghematan yang dipersepsikan pelanggan.

2. Terdapat pengaruh positif intensitas aplikasi *mixed bundling strategy* terhadap persepsi penghematan pelanggan. Hasil ini mendukung penelitian yang telah dilakukan sebelumnya oleh Craig (1995), yang meneliti pada produk *software* komputer, dan Jaikumar (1995) pada produk *hardware* komputer. Bahwa *mixed bundling strategy* yang menawarkan penjualan secara satuan dan *bundle* sekaligus akan semakin memperketat persaingan harga karena sulitnya karakter produk didiferensiasikan.

   Jika konsep dalam *mixed bundling strategy* mendasarkan pertimbangan pendekatan *cost-benefit* yang dirasakan oleh konsumen, maka perilaku konsumen untuk membeli *bundle* secara otomatis relatif terdongkrak. Akan tetapi dapat diartikan pula, bahwa pembelian satuan pun, bila ditata atau ditawarkan dengan mempertimbangkan pendekatan *cost-benefit*, maka pelanggan akan tetap menterjemahkannya sebagai sebuah

bentuk penghematan. Efek yang lebih jauh lagi, citra produk / jasa yang dijual secara *bundle* dan satuan scara bersama-sama akan terangkat bersamaan.

Pemikiran mendesaknya *mixed bundling strategy* untuk diterapkan dalam perusahaan seirama dengan peringatan yang disampaikan Yadav (1994) yang menyatakan bahwa pembeli akan secara terus menerus (meskipun tidak selalu secara sistematis menguji setiap *item* of *bundle* apakah 'nilai' yang didapatkannya benar-benar memberikan keuntungan (penghematan) yang optimal atau tidak.

Oleh sebab itu, secara umum dapat disimpulkan bahwa semakin tinggi intensitas aplikasi *mixed bundling strategy,* maka semakin tinggi pula penghematan yang dipersepsikan pelanggan.

3. Tidak terbukti secara statistik, pengaruh intensitas aplikasi *product bundling strategy* terhadap keunggulan bersaing. Kesimpulan ini diambil dari fakta statistik yang menunjukkan kecilnya pengaruh *mixed bundling strategy* terhadap keunggulan bersaing secara langsung dengan derajat kepercayaan yang juga rendah (*margin of error yang tinggi).* Meski demikian, temuan ini memang tidak bisa dikatakan berseberangan secara kontroversial dengan pendapat Stremersch dan Tellis (2002), di mana menurut mereka, aplikasi *product bundling strategy* menjadi salah satu elemen kunci dalam memenangkan persaingan pasar yang semakin sempurna.

   Dalam model penelitiannya, Stremersch dan Tellis (2002) menempatkan pengaruh langsung *product bundling strategy* terhadap keunggulan bersaing yang sejajar dengan pengaruh langsung persepsi penghematan pelanggan terhadap keunggulan bersaing. Ini tentu berbeda dengan model yang dikembangkan dalam penelitian ini. Maka wajar saja bila dalam analisis pengaruh langsung persepsi penghematan terhadap keunggulan bersaing tidak signifikan, namun pengaruh tak langsungnya melalui variabel *intervening* persepsi persepsi pelanggan menjadi signifikan.

   Temuan ini menjadi semakin menarik, karena hasil penelitian ini secara lebih tegas berseberangan temuan Bowen, Scanell, dan Gardner (1999) pada studi kasusnya di IBM, di mana implementasi *product bundling strategy* merupakan jalan menuju *positioning.* Bila kinerja pemasaran menjadi variabel *intervening* pengaruh *bundling strategy* terhadap keunggulan bersaing dalam perspektif kebijakan produk dan harga, terbukti pengaruhnya relatif cukup signifikan. Temuan peneliti lain yang juga tidak signifikan adalah hasil penelitian yang ditelurkan Guiltinan (1987), di mana praktek *bundling strategy* berpengaruh secar positif terhadap kinerja pemasaran. Justru penelitian ini relatif senadadengan temuan Koschat dan Putsis Jr. (2002) yang menempatkan *unbundling strategy* sebagai indikator keberhasilan kinerja pemasaran daripada *bunding strategy.*

   Oleh karena itu, berdasar hasil uji empirik, dapat disimpulkan bahwa intensitas aplikasi *product bundling strategy* ternyata tidak dapat mempengaruhi keunggulaan bersaing perusahaan secara langsung.

4. Terdapat pengaruh positif intensitas aplikasi *mixed bundling strategy* terhadap keunggulan bersaing perusahaan. Hasil ini mendukung penelitian yang telah dilakukan sebelumnya oleh Matutes dan Regibeau (1992) yang menjelaskan bahwa *mixed bundling strategy* lebih atraktif untuk konsumen dan oleh karenanya secara konsekuen akan

mengambil alih pangsa pasar perusahaan yang masih mengandalkan praktek *pure bundling strategy*. Hal ini sangat relevan dengan kecenderungan fakta bisnis secara makro bahwa pasar yang semakin kompetitif dari oligopoli ke persaingan sempurna telah memaksa para kompetitor untuk menawarkan produk *bundled* dan *unbundled* sekaligus. Dan kondisi ini pun secara meyakinkan juga senada dengan pernyataan sebagai sebuah kecenderungan yang 'mengacaukan kemapanan bisnis' (Smith, 2000).

Menurut Gibert dan Riordian, 1995), pilihan suplai *bundled / unbundled* tidak dapat ditentukan hanya dari unsur biaya / keuntungan yang didapatkannya secara general. Ini berarti bahwa faktor-faktor yang lain yang disebutkan dalam pnelitian mereka juga menjadi penentu keputusan pilihan atas pembelian. Oleh karena itu, penawaran produk / jasa dengan *mixed bundling* dapat diyakini cukup efektif digunakan sebagai sarana untuk memenangkan persaingan di lintas ceruk pasar yang ada.

Denicolo (2000) memang tidak secara tegas menomorduakan pilihan aplikasi *mixed bundling strategy*, namun dalam sudut pandang jaminan kualitas dan kompatibilitas bagi perusahaan spesialis, *pure bundling strategy* yang menjadi kontra *mixed bundling strategy* lebih direkomendasikan. Akan tetapi bagi perusahaan generalis, plihan *mixed bundling strategy* memang dapat diandalkan dalam usaha memenangkan persaingan pasar.

Secara umum, berdasar hasil uji empirik, dapat disimpulkan bahwa semakin tinggi intensitas aplikasi *mixed bundling strategy* maka semakin tinggi pula keunggulan bersaing perusahaan.

5. Terdapat pengaruh positif persepsi penghematan pelanggan terhadap keunggulan bersaing perusahaan. Hasil ini mendukung penelitian yang telah dilakukan sebelumnya oleh Yadav dan Monroe (1993) serta Denicolo (2000) yang memberikan kesimpulan dalam kerangka stratejik, di mana persepsi penghematan pelanggan merupakan nilai dari keunggulan bersaing.

Hasil penelitian dalam uji hipotesis ini relevan dengan teori Porter (1980) tentang konsep keunggulan bersaing yang dapat didapatkan dengan keunggulan biaya, yang tercermin pada kebijakan harga jual yang lebih murah. Kemudian hasil dalam penelitian ini juga relevan dengan bahasan *value of logistic* yang dengan sendirinya mempengaruhi *economic value added*, yang merupakan indikasi keunggulan stratejik perusahaan dibanding pesaing dalam perspektif sustanaibilitas bisnis (Lambert dan Burduroglu, 2000).

Droge dkk (1995) juga menegaskan bahwa superioritas atau keunggulan dalam hasil kinerja meupakan salah satu petunjuk keunggulan stratejik perusahaan dalam kancah persaingan. Dengan penghematan yang dirasakan oleh pelanggan sebagai salah satu hasil aplikasi sebuah stategi, maka perusahaan akan sangat diuntungkan oleh citra korporat yang positif.

Dari uraian di atas, dapat ditarik sebuah kesimpulan bahwa semakin tinggi penghematan yang dirasakan pelanggan, maka akan semakin tinggi pula keunggulan bersaing perusahaan.

Implikasi

Dari temuan dan kesimpulan atas hasil penelitian ini, maka dapat diimplikasikan beberapa hal sebagai berikut :

1. Melihat positifnya pengaruh *product bundling strategy* terhadap persepsi penghematan pelanggan, maka perusahaan harus benar-benar dapat

menyusun sebuah bentuk penawaran produk / jasa yang mempertimbangkan niali penghematan pelanggan. Dalam perspektif ini, secara otomatis keunggulan bersaing perusahaan akan menjadi *outcomes* dengan proses yang sinergis.

2. Perusahaan akan kurang mendapatkan keberhasilannya dalam memenangkan persaingan pasar melalui pencitraan penghematan pada pelanggan, semata-mata hanya dengan penawaran bentuk *bundle* belaka. Bagaimana cara menyampaikan penawaran *product bundle* kepada pelanggan tetaplah menjadi bagian yang tidak terpisahkan dalam proses pemenangan pasar. Hal ini dapat dicermati sebagai sebuah bentuk antisipasi kecenderungan persaingan pasar yang semakin sempurna. Oleh karena itu, menawarkan produk / jasa kepada pelanggan dengan cara *bundled* dan *unbundled* sekaligus harus diyakini dapat membentuk respon positif dari pelanggan, yang ujung-ujungnya akan menjadi kekauatan utama dalam usaha memenangkan persaingan pasar.
3. Konsepsi isi *product bundle* tidak seharusnya serta merta mempertimbangkan faktor-faktor pemenangan pasar secara langsung, karena berdasar hasil penelitian terbukti tidak signifikan. Pembangunan persepsi penghematan pelanggan adalah sebuah tahapan yang tidak boleh dilewatkan dan harus dikaji secara serius oleh manajer pemasaran perusahaan dalam rangka memenangkan persaingan pasar yang semakin ketat. Jika tahapan ini telah dilakukan, maka umpan baik dari pelanggan yang berupa respon atas persepsi penghematan yang dirasakannya dapat dikelola sebagai dasar yang akurat untuk tujuan sebuah keunggulan bersaing.
4. Berbeda dengan tahapan penyusunan *product bundling*, di mana keunggulan bersaing menjadi tahapan yang tidak perlu diperhatikan secara langsung, maka dalam cara penyampaian ke pelanggannya, sebuah *product bundling* harus memperhatikan pembangunan persepsi penghematan pelanggan dan keunggulan bersaing sekaligus sebagai dua tujuan yang dipertimbangkan bersamaan. Meski persepsi penghematan secara otomatis akan menghasilkan keunggulan bersaing perusahaan, namun kajian pemenangan pasar tetap harus dilakukan pada tahapan yang lebih dini. Hal ini dilakukan dalam rangka menyusun sebuah akumulasi kekuatan yang lebih besar dalam menghadapi pesaing dengan tetap memberikan kepuasan atas penghematan yang didapatkan pelanggan.
5. Keseluruhan proses dalam usaha pemenangan pasar harus dipandang sebagai sebuah sinergi strategi yang sistematik dan tidak terputus. Dan salah satu cara agar optimalisasi proses dapat berimbas secara penuh pada optimalisasi hasil, pembelajaran yang terus-menerus pada perkembangan bisnis secar mikro dan makro harus dilakukan dengan serius, tanpa mengesampingkan faktor-faktor eksternal yang relevan dengan misi dan tujuan bisnis.

Keterbatasan Penelitian

Hasil penelitian ini mempunyai potensi bias karena tidak menggunakan objek penelitian dalam sektor produk fisik seperti beberapa peneliti terdahulu. Kemudian proporsi ukuran perusahaan yang dapat dipandang timpang, karena jumlah perusahaan yang berskala besar yang menjadi objek penelitian sangat sedikit dibandingkan jumlah perusahaan berskala mengah dan kecil. sementara implementasi

strategi *product bundling* bisa jadi akan lebih dapat dipraktekan secara lebih disiplin dan akurat pada perusahaan besar.Selain itu, penelitian ini hanya memfokuskan bahasan pada tema hierarki *bundling strategy* - persepsi penghematan pelanggan - keunggulan bersaing. Bahkan persepsi pelanggan hanya merupakan pendekatan yang dilakukan penjualnya (perusahaan), sehingga preferensi manajer pemasaran secara pribadi dan dalam kerangka representasi perusahaan relatif sulit dihilangkan secara penuh dan tentu saja mengurangi kadar akurasi penelitian.

Agenda Penelitian Mendatang

Ada beberapa bahasan penelitian yang dapat dilakukan di masa yang akan datang. Misalnya saja, kondisi dimana faktor-faktor yang menjadi nilai bagi pelanggan tidak hanya penghematan yang didapatkannya. Kemudian, akan lebih komperehensif bila *intervening variable* dari pengaruh *bundling strategy* terhadap keunggulan bersaing adalah persepsi nilai yang dipertimbangkan pelanggan Fokus penelitian pada *price bundling* juga sangat penting untuk dilakukan di masa yang akan datang Berkenaan dengan objek penelitian, studi pada industri manufaktur yang berbasis produksi juga cukup penting untuk dilakukan. Sasaran penelitian pada perusahaan yang memfokuskan diri pada pasar korporat pun menarik untuk dilakukan

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