

giving a decrease in culture products, increasing the number of larvae and their percentage in the last of each brood, while also increasing the percentage. The author then makes an extended consideration of the various structures used to estimate the density of each brood, and concludes that it is best to use a combination of the following: egg-samples, total numbers, and mean numbers. This author develops a new synthesis of the field of breeding, which includes three important elements: first, the artificially and conveniently obtained breeding series with systematic and easy observations; second, the systematic estimation of breeding efficiency; third, a harmonized series of data from all of the stages. Third, it proposed a treatment of 12 problems that should affect breeding efficiency in his country. The author's conclusions are definitely and clearly expressed and his proposed technique is well presented for application with greatest accuracy, in further research.

anything in the air it has to move required products in a package. This strategy by postulators in business today is also known as a ribbon. In the case of the Post, their continued growth after 1990 is due to advertising revenue. However, the postulated revenue was forty percent of total traffic and sales were 30% over another six years, anything, and do not receive a change. Where Railroads are concerned especially of building, the original plan of construction must take into account the location of cities, and the needs of citizens are represented by the location of cities. The original plan of building must be based on these criteria and right now, right now, the government is working hard to implement this

Participants of seminars also had a chance to meet and discuss their interests. Besides the seminar participants there were several younger people who are a part of the project, most of whom are students of Faculty of Education. The seminar was organized around two main topics: the first one concerned the practical application of the theoretical concepts of the seminar, the second one concerned the practical application of the theoretical concepts of the seminar.

The following table illustrates certain properties of various nonferrous and aluminum alloys which are of interest in aircraft construction and maintenance, including their strength, weight, electrical, thermal and physical and their cost per unit weight in one market.

These examples show the importance and strategy involved in tailoring truth used to lead to building the largest number of the target persons imagined. For example, the author has written about aspects of the politics of the Cold War against the branding in Washington and elsewhere. Unlike the U.S. Congress, has a long history of legislating or bending laws, and has 150 Department of Justice prosecutorial motions to issue on federal authority. The Justice Department has persecuted individuals who do not agree. For example, the number of individuals charged between 1976 and 1979 is approximately double the number of cases it handled in 1970-1974.

The theoretical literature on handling has examined the optimality of handling (Bekkers and Brynjolfsson 1979, 2002; Björnerem, Mårtensson, and Åberg 1993; Giuliano 1987; Wilson 1969), and done little consumer evaluation of handling (Cronquist, Sternsma, and Baum 1999; Evans and Nearyville 2001; Evans 1996, 1997; Fager and Riedman 1993), and there is little cost or price theory of handling (Fager, Edlund, and Lichtenberg 1991; Jones 1998 and personal communication 1998). However, there is one Neoclassical cost function (Fager 1997); Venkatesan and Venkateswaran (2002) demonstrate how much of value is the optimality of handling for neoclassicalists (Adams and Tolosa 1979; Fujimoto 1996; Fujimoto, Fukui, and Reidman 1993; Fager 1996; Jones, Lichtenberg, and Weyant 1998; Fager and Tolosa 1998; Gersbach and Gersbach 1992; Weyant, Fager 1993; Weyant 1997), equilibrium theories of handling (Chen 1997; Fager 1997; Lichtenberg and Weyant 1992) and the welfare implications of handling (Dwyer and Lichtenberg 1998; Fager 1993; Tolosa 1995; Tolosa 1997).

The identity of following items of equipment is also to be established: Hoses, fire extinguishers as defined, and

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காலத்திலே காலத்திலே காலத்திலே காலத்திலே காலத்திலே

It is also important to note that the results of the study indicate that the use of the term "disability" in the context of the study was not limited to physical disabilities. The participants also reported mental health issues such as depression and anxiety, which they described as "disabilities" due to their impact on their daily functioning. This suggests that the term "disability" may have a broader meaning than just physical impairment, and that it can include both physical and mental health issues.

the following year beginning the month of August, and continuing through the month of October. The first meeting will be held at the home of Mr. and Mrs. John C. H. Smith, 1000 N. 10th Street, on Saturday evening, August 11, at 8 o'clock. Subsequent meetings will be held at the same place on the following Saturday evenings, excepting the month of September, when the meetings will be held on the first Saturday of each month.

The present situation is one of great uncertainty. It is not known whether the new government will be able to implement its policies or whether it will be able to maintain its grip on power. The future of the country is uncertain and unpredictable.

These findings suggest that the relationship between the number of hours worked and the risk of depression is complex and may vary by gender and other demographic factors.

1996-00000000000000000000000000000000

For example, the following fragment from the *Principia Mathematica* illustrates the use of the Axiom of Reducibility:

...and the other two were the same as the first, except that they had been converted into the form of the first.

Während die ersten beiden Jahre eines 18-jährigen Studiums im Fachgebiet der Medizin und Naturwissenschaften verlaufen, kann der Student im dritten Jahr eine andere Fakultät besuchen. Dies ist in der Regel der Fachbereich für Sozialwissenschaften, jedoch kann der Student auch einen anderen Fachbereich auswählen, wie zum Beispiel den Fachbereich für Betriebswirtschaftslehre oder den Fachbereich für Rechtswissenschaften.

... and destined to perpetuate, and now understand their true and proper meaning, and to ascertain what the author intended by them.

Consequently, the first stage in this study involved the collection of responses to a questionnaire designed to explore the views of young people about their experiences of the transition from compulsory education to post-compulsory education. The second stage involved the analysis of the responses to the questionnaire, and the third stage involved the development of a model of the process of transition. The fourth stage involved the validation of the model by means of a pilot study, and the fifth stage involved the refinement of the model. The sixth stage involved the application of the model to the development of a programme for the support of young people during the transition from compulsory education to post-compulsory education. The seventh stage involved the evaluation of the programme, and the eighth stage involved the dissemination of the findings of the study.

and therefore from the beginning, there was nothing to do but to go on with the work. The English, who had been sent to the country to help in the work, were very anxious to get away again, but the Americans were equally anxious to stay and help. They had been told that they would be allowed to go home when they had finished their work, but they had not been told when that would be. They had been told that they would be allowed to go home when they had finished their work, but they had not been told when that would be.

10. The following table shows the number of hours worked by each employee.

“**ప్రాణికి విషాదం కలుగుతే అందులో విషాదం ఉన్నాడు**” అన్నాడు.

करने की विधि अपनी विधि का बोलना चाहिए। यह विधि अपनी विधि का बोलना चाहिए। यह विधि अपनी विधि का बोलना चाहिए। यह विधि अपनी विधि का बोलना चाहिए।

कर्तव्य विद्या के अनुभव से उत्पन्न होने वाली विद्या है। इसका अर्थ यह है कि जब एक व्यक्ति अपने विद्यार्थी के लिए अपनी विद्या का अध्ययन करने का उपरांत विद्या का अनुभव करता है तो वह विद्या का अनुभव करने वाला व्यक्ति विद्या के अनुभव के विद्यार्थी हो जाता है। इसका अर्थ यह है कि जब एक व्यक्ति अपनी विद्या का अनुभव करता है तो वह विद्या के अनुभव के विद्यार्थी हो जाता है। इसका अर्थ यह है कि जब एक व्यक्ति अपनी विद्या का अनुभव करता है तो वह विद्या के अनुभव के विद्यार्थी हो जाता है।

the first time, and the author's name is missing from the title page. The book is bound in red cloth, which is slightly worn at the corners and edges. The spine is also red and features the title "The History of the English Language" in gold lettering. The front cover has gold lettering that reads "The History of the English Language" and "By J. R. Green". The back cover has gold lettering that reads "London: Macmillan & Co. Ltd. 1903". The book is in good condition, with some minor wear and discoloration.

For more information about the study, please contact Dr. Michael J. Koenig at (314) 747-2146 or via email at koenig@dfci.harvard.edu.

Consequently, the following steps must be followed to identify and reduce the risk of failing to meet the requirements of the new legislation:
1. Identify the requirements of the new legislation.
2. Assess the potential risks and opportunities associated with the new legislation.
3. Develop a plan to address the identified risks and opportunities.
4. Implement the plan and monitor its effectiveness.
5. Review and update the plan as necessary.

“**ప్రాణి విషయంలో కొన్ని విషయాలు ఉన్నాయి అందులో కొన్ని విషయాలు ఉన్నాయి**” అన్నాడు.

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and the public interest in the matter. When all is said and done, the best way to handle such a situation is to keep it out of the public eye. This can be done by keeping the information confidential and not sharing it with anyone outside of your organization.

When you do decide to share information about a sensitive issue, it's important to be careful about who you share it with. You should only share it with people who have a legitimate need to know. For example, if you're sharing information about a sensitive issue with your boss or a colleague, make sure they understand the importance of keeping it confidential. If you're sharing it with someone outside of your organization, make sure they understand the potential consequences of sharing it with others. It's also important to be aware of the laws and regulations that govern the handling of sensitive information. For example, if you're sharing information about a sensitive issue with a client, make sure you understand the laws and regulations that govern the handling of sensitive information in that industry.

Finally, it's important to remember that sharing sensitive information can be a privilege, not a right. You should only share it with people who have a legitimate need to know, and you should always be careful about who you share it with.

Conclusion

Sharing sensitive information can be a valuable tool for your organization, but it's important to do so in a responsible and ethical manner. By following these tips, you can help ensure that your organization remains compliant with relevant laws and regulations while still being able to effectively communicate sensitive information to those who need to know.

Remember, the key to handling sensitive information is to keep it confidential and only share it with people who have a legitimate need to know. By doing this, you can help protect your organization's reputation and ensure that your sensitive information remains safe and secure. It's also important to be aware of the laws and regulations that govern the handling of sensitive information, and to follow them closely to avoid any legal issues. By taking these steps, you can help ensure that your organization remains compliant with relevant laws and regulations while still being able to effectively communicate sensitive information to those who need to know.

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This article has been written to serve as your guide. It will help you understand the importance of keeping sensitive information confidential and only sharing it with people who have a legitimate need to know. It will also help you understand the laws and regulations that govern the handling of sensitive information, and how to follow them to ensure that your organization remains compliant with relevant laws and regulations while still being able to effectively communicate sensitive information to those who need to know.

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Category	Definition	Example
Confidential	Information that must be kept secret and not disclosed to unauthorized persons.	Financial records, medical history, and personnel files.
Sensitive	Information that requires special handling or protection due to its nature or potential impact.	Trade secrets, classified documents, and political campaign plans.
Internal	Information that is used internally within an organization for operational purposes.	Employee payroll data, customer databases, and financial reports.
External	Information that is shared externally with external parties, such as customers, suppliers, and regulators.	Product specifications, service agreements, and compliance reports.

Finally, it's important to remember that sharing sensitive information can be a privilege, not a right. You should only share it with people who have a legitimate need to know, and you should always be careful about who you share it with. By doing this, you can help protect your organization's reputation and ensure that your sensitive information remains safe and secure. It's also important to be aware of the laws and regulations that govern the handling of sensitive information, and to follow them closely to avoid any legal issues. By taking these steps, you can help ensure that your organization remains compliant with relevant laws and regulations while still being able to effectively communicate sensitive information to those who need to know.

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protection. Preliminary, without final or complete review of the
objectionable legislation, it would be well to state the chief ob-
jects that particularly merit attention. Following the best of logic
and reason, the following points are submitted as worthy of con-
sideration by those who are interested in the welfare of the
country and the people. Whether or not the proposed legislation
is good, it is certain that it is bad. It is bad because it is
designed to give power and influence to those who are
in rebellion, it is bad because it is designed to injure the
people of the South, and it is bad because it is designed to

That first visit will be important for the reason that it will introduce the child to the concept of the doctor as a medical professional. This visit should be brief, and the doctor should be sure to let the child know that he or she is there to help the child feel better. The doctor should also let the child know that they are there to help the child feel better.

In 1970, the National Cancer Institute began a program to study the effects of various substances on the immune system. This program has been expanded to include studies of the effects of various substances on the immune system. The results of these studies have shown that some substances can stimulate the immune system, while others can suppress it. These findings have led to the development of new treatments for cancer and other diseases.

Importance of modern technology regarding the study of the planetary systems can be seen in the classification of exoplanets. The first exoplanet was discovered in 1992 by two Belgian astronomers Michel Mayor and Didier Queloz at the Geneva Observatory. They used the radial velocity method to detect the presence of an exoplanet around the star 51 Pegasi. This was the first discovery of a "hot Jupiter" which has a very short orbital period of only 4 days. Since then, many more exoplanets have been discovered using various methods such as the transit method, the radial velocity method, the direct imaging method, and the microlensing method. These methods have led to the discovery of thousands of exoplanets, including Earth-like planets and even multi-planet systems. The study of exoplanets has opened up new avenues for scientific research and has also provided valuable insights into the formation and evolution of our solar system.

and a more refined pleasure which comes from the enjoyment of the object in itself. We distinguish between the two kinds of pleasure in the pleasure of taste in painting and book design. In the first kind of pleasure, beauty is the chief element; in the second, pleasure arises from the arrangement of the material elements themselves. This second kind of pleasure is called "the pleasure of taste." The pleasure of taste is the pleasure of arrangement, or "the arrangement of beauty," in fine art, in architecture, and in music. It is the pleasure of arrangement that makes the pleasure of taste in the arrangement of beauty (P. 17). However, we cannot deny that the pleasure of taste is the same as the pleasure of arrangement, because the pleasure of arrangement is often enough to merge with pleasure of taste, while the pleasure of arrangement need not always be present.

Based upon the continuity of function and behavior
between the various levels of organization, it is clear that the
different functional entities together form an organic whole
and that the laws of control and regulation are distributed over
all levels of organization. In addition, a number of important
regularities can be observed. Control is often more effective
when it is exerted at the level of the system as a whole, and
when it is exerted at the level of the system as a whole, and
when it is exerted at the level of the system as a whole, and

type, different risk appetites, and incentives. For this to take place, the firm needs to have a clear idea of what it wants from its customers. This includes the need for standardizing their catalog in the future. Finally, it is important to understand the firm's brand. Defining the nature of the firm's brand is also extremely useful, which would be easier to build trust and higher satisfaction in others, such as the customers that they can count on more. This is important to note that the company must align with the brand positioning.

Generalities and Limitations of Findings

In a previous discussion on the importance of customer segmentation in decision making, factors such as age, gender, and income seemed to work well in the literature. We further discuss the following recommendations based on our analysis of this research. The findings presented in this section are based on a study conducted by Chonko et al. (1972) and Jepsen (1976). Additionally, in this study, we also analyzed other dimensions of firms, such as culture of innovation, a firm's size, strengths, and weaknesses of business, as well as the factors that affect the probability of buying products, promotional offers, and price comparisons of different categories, such as food, clothing, and electronic devices. The authors found that the strongest factor affecting the likelihood of buying products was promotional offers, followed by price comparisons of different categories, such as food, clothing, and electronic devices. The results of this study suggest that consumers are more likely to buy products if they are offered promotional offers. However, the duration of promotional offers has no significant effect on consumer behavior. The findings of this study support the maximum strategy. The maximum limit, according to this study, is 10%. Thus, the maximum risk capacity of the consumer is 10%, and above this level, the consumer is more likely to buy products. This finding is consistent with the findings of this study, as the authors found that the maximum limit is 10% for all categories of products. This finding is consistent with the findings of this study, as the authors found that the maximum limit is 10% for all categories of products.

The conclusions of this study were never been confirmed or denied subsequently, although at least one other researcher has independently shown that a firm's price sensitivity is negatively correlated with the duration of the promotional offer. In addition, all of these researchers, as far as we are concerned, did not consider the effect of promotional offers on the probability of buying products. Therefore, we believe that a related study could be conducted for a competitive market. Although the approach will not directly compare the marketing of consumer products with other products, it is interesting that consumers use promotional offers to increase the probability. The use of promotional offers can bring significant benefits to the consumer in terms of price, as well as to the manufacturer in terms of profit. Therefore, it is better to compare the two approaches and find out which one is better. This is because we can use the best approach, and adapt it to our situation in detail.

Conclusion

We discussed the results of our investigation, which compared two approaches (see Tables 1 and 2). These approaches give the optimal strategy for a firm's price for various types of consumers of promotional products, which is based on the approach. In general, this approach, we developed a program that takes into account a firm's promotional offers, the consumer's price sensitivity, and the consumer's brand perception. This is a powerful tool for a firm's promotional products, which is based on the approach.

would be based on an invariable general algorithm. It applies the information stored in Figure 10 (Table 1), which shows the relationship between a consumer's new "marketing" and previous consumer program data.

Figure 1 provides a summary of our program. It contains 10 steps, starting from the firm's strategy to management.

- a. The firm must first specify its target market size and the characteristics of target customers for a product and pricing.
- b. The user then specifies strategy for the product that the program uses to determine:
- c. Based on these inputs, the program decides whether a consumer segment requires a new "marketing" or previous consumer program.
- d. Based on these programs, the program decides whether the consumer needs a promotional offer or not.
- e. The user specifies the type of promotional offer and the amount of promotional offer, as well as the duration of the promotional offer.
- f. The user specifies the type of promotional offer and the amount of promotional offer, as well as the duration of the promotional offer.
- g. The user specifies the type of promotional offer and the amount of promotional offer, as well as the duration of the promotional offer.
- h. The user specifies the type of promotional offer and the amount of promotional offer, as well as the duration of the promotional offer.
- i. The user specifies the type of promotional offer and the amount of promotional offer, as well as the duration of the promotional offer.
- j. The user specifies the type of promotional offer and the amount of promotional offer, as well as the duration of the promotional offer.

The resulting file (see Fig. 1) is used to initialize variables in step 1 by setting values to zero. It is subject to certain constraints. The basic constraint specifies the minimum (the smallest promotional offer) and maximum (the largest promotional offer) values that Area 1 can take. These constraints are not required, but they ensure a faster convergence to the optimum (as shown in Fig. 1) and the performance program we available from the authors.

The program easily determines the optimal prices for a variety of pricing mechanisms, segments, segments, and credits. As such, it is easier and more flexible than any program available in the literature. It has three benefits. First, it can generate infinite examples with minimal computation effort, for papers demonstrating a competitive advantage. Second, it can help managers determine which strategy is optimal in specific situations. Third, it can be used to calculate the influence of various promotional offers. The last generates graphics that explain the behavior of a particular promotional offer.

We are grateful to discuss the procedures under each one of the four levels. Different conditional reservation prices, improved by the firm's competition, cost, and consumers' perceptions, which are appropriate, are included because of the situation based on the different environment of the firm.

ACKNOWLEDGMENT AND FUNDING SOURCES

An important factor is determining which strategy to adopt in the distribution of conditional reservation prices. We also explain the basic principles behind the importance of conditional reservation prices. We then discuss and validate the propositions. When we is the real world case, a base case in which only price sensitive are possible, and an extended case in which price insensitive are possible.

Motivation of customers' reservation prices. Many researchers have suggested the importance of conditional reservation prices is an important factor in determining the probability of buying strategies. However, the heterogeneity-

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1976-1977 学年第一学期期中考试高二历史试题

For more information about the 2010 Census, visit www.census.gov.

• 1886-1887

10. **What is the primary purpose of the study?** To evaluate the effectiveness of a new treatment for hypertension.

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10. **What is the name of the person who is responsible for the care of the patient?**

The following table gives the results of the experiments.

1. **What is the primary purpose of the study?**
2. **What are the key variables being measured?**
3. **How will the data be analyzed?**

17. *Phragmites australis* (Cav.) Trin. ex Steud.

There is no evidence of any other species of plant life in the area.

and the other two were the same as the first. The last was a very large one, and contained a number of small pieces of wood, which were all broken off from a single piece of wood, and were all of them of the same size and shape.

Such a large-scale transition may have been driven by a desire to increase the efficiency of the system, as well as to reduce costs. The introduction of a new technology or process can often lead to significant improvements in productivity and cost-effectiveness. In this case, the shift from a traditional to a modern system likely involved the adoption of more advanced equipment, better quality control measures, and more efficient operational procedures. This transition would have required significant investment and planning, but it ultimately resulted in a more efficient and cost-effective production process.

1. *Wiederholung* der *Wiederholung* ist die *Wiederholung* der *Wiederholung*.
2. *Wiederholung* der *Wiederholung* ist die *Wiederholung* der *Wiederholung*.
3. *Wiederholung* der *Wiederholung* ist die *Wiederholung* der *Wiederholung*.
4. *Wiederholung* der *Wiederholung* ist die *Wiederholung* der *Wiederholung*.

Such a system of government is not only the best form of government, but it is also the most perfect system of government that can possibly exist in this world.

Another important consideration in the development of language is the presence of children. The following observations of the author's own children, aged 3½ and 5 years, illustrate this point. In the first instance, the author's wife, who had been away from home for a week, returned home to find her 3½ year old son, who had been speaking only simple words up to that time, was now able to speak in short sentences. In the second instance, the author's 5 year old son, who had been speaking only simple words up to that time, was now able to speak in short sentences. In the second instance, the author's 5 year old son, who had been speaking only simple words up to that time, was now able to speak in short sentences.

comes, the objective is creating a space with a culture, a purpose and meaning, where repetition does not necessarily interfere with the originality of the work.

and the other side of Sugihara to him to the north
of the river bridge. This was apparently the first, or earliest, of many
such scenes during the course of his occupancy of the castle town. His
advice, however, did not go unheeded, and the chief roads were made
more firmly by the Japanese, who were responsible. The result was that
the castle town became a great centre of commerce. Therefore,
as soon as possible he had a market town to the south of the castle
town, where they could buy various supplies to their little
settled life and stand at the meeting of the two roads, so that
they could get to the castle town by the shortest route. This
was the beginning of the town of Nagoya, which has since
grown into a large city. In the early days, however, it was
nothing more than a small village, and the castle town was
the only town in the neighbourhood. The castle town was
surrounded by a high wall, and the castle itself was built
upon a hill, so that it could be easily defended. The castle
was built of stone, and the walls were very thick, so that
it could withstand any attack. The castle was
the residence of the lord of the castle, and the castle
was the centre of the castle town. The castle
was the most important building in the castle town,
and the castle town was the most important town in the
neighbourhood. The castle town was the most
important town in the neighbourhood, and the castle
was the most important building in the castle town.

பொறுத்து கொண்டு வரும் பாலின் சிரியை விட்டு விடுவதே நடவடிக்கையாக இருக்கிறது.

The implementation capability of the system is dependent on the quality of the data and the quality of the data analysis. The system must be able to handle large amounts of data and analyze them quickly. Data mining techniques can be used to extract valuable information from large amounts of data. Data mining is a process of extracting useful information from large amounts of data. It involves several steps such as data cleaning, feature selection, model building, and evaluation. The final output of the system is a set of recommendations based on the analyzed data. The system can also provide recommendations to users based on their previous interactions with the system. This allows the system to learn from user behavior and provide more personalized recommendations. The system can also provide recommendations to users based on their interests and preferences. This allows the system to provide recommendations that are tailored to the user's needs and interests.

For "Buddhist" see *Appendix* to this *Encyclopaedia*.
For "Confucianism" see *Confucius*.

自古以來，中國人對「孝」的尊崇，是無與倫比的。

1. *Georgian* (1735-1750).
2. *French* (1750-1770).
3. *Italian* (1770-1790).
4. *Spanish* (1790-1810).
5. *Portuguese* (1810-1830).
6. *Swiss* (1830-1850).
7. *Austrian* (1850-1870).
8. *French* (1870-1890).
9. *English* (1890-1910).
10. *Spanish* (1910-1930).
11. *French* (1930-1950).
12. *Spanish* (1950-1970).
13. *French* (1970-1990).
14. *Spanish* (1990-2010).

the first time, and the author has been unable to find any reference to it in the literature. The author wishes to thank Dr. J. C. G. L. van der Horst for his help in the preparation of the manuscript.

Fig. 24. The same as Fig. 23, but with the following changes: (1) The horizontal axis is divided into three equal parts by two vertical lines, and the first part is subdivided into four equal parts by two diagonal lines. (2) The vertical axis is divided into three equal parts by two horizontal lines, and the first part is subdivided into four equal parts by two diagonal lines.

the first time, and the author's name is given as "John Smith". The book is described as being bound in red leather with gold tooling, and it is noted that the title page is slightly faded.

在於此，故其後人之學，亦復以爲子思之傳。蓋子思之學，實出於孟子，而孟子之學，又實出於孔子。故子思之傳，實出於孟子，而孟子之傳，又實出於孔子。故子思之傳，實出於孟子，而孟子之傳，又實出於孔子。

and the other, the greater the probability of a given type of mutation occurring. The second factor is the rate at which mutations occur. This is determined by the number of mutations per unit time per unit genome. The third factor is the probability that a given mutation will be expressed as a change in phenotype. This is determined by the nature of the mutation and the environment in which it occurs. The fourth factor is the selection pressure exerted by the environment on the mutated individuals. This is determined by the fitness of the mutated individuals relative to the unmutated ones. The fifth factor is the mutation rate itself, which is determined by the number of mutations per unit time per unit genome.

The traditional perspective offers two categories for communication differences in which one population with a language can be either dominant or subordinate. In the former state, linguistic and cultural dominance is exercised by one group over another. In the latter state, the dominant group is itself dominated by another. The former state is often associated with colonialism, and the latter with imperialism. The former state is often associated with colonialism, and the latter with imperialism. The former state is often associated with colonialism, and the latter with imperialism.

The first stage of the process is the identification of the potential sites for the construction of the new bridge. This stage involves the collection of data on the existing infrastructure, the topography of the area, and the environmental factors that may affect the construction. The second stage is the design of the bridge, which involves the selection of the appropriate bridge type, the determination of the dimensions and materials required, and the development of the engineering plans. The third stage is the construction of the bridge, which involves the procurement of the necessary equipment and materials, the assembly of the bridge components, and the final commissioning of the bridge.

Geologists have difficulty in distinguishing between certain sedimentary rocks, particularly those which contain no fossils. The best way to do this is to study the mineral composition of the rock. If the rock contains a large amount of sand, it is likely to be a sandstone. If it contains a large amount of silt, it is likely to be a siltstone. If it contains a large amount of clay, it is likely to be a shale. If it contains a large amount of organic material, it is likely to be a coal.

As a result of this process the author developed a general model of how
research outcomes may change over time, reflecting the development of the
field under study. Some of the findings in this paper may be considered broader
than the specific field of information systems research, as they apply to other
fields of research. The following section discusses the general model of research
outcomes and its implications for research management. This is followed by a discussion
of the results from the case studies, and a brief summary of the main research
conclusions. Finally, some implications for research practice from the results
are discussed. These recommendations suggest an integrated research
environment where research output can function as a catalyst for
the development and the implementation of research findings.

Although initial estimates suggested a significant role of other variables, including prior wealth or assets, which is to be interpreted as the benefits of ownership are not linear, initial results indicate that there is no significant effect of other variables because the other variables might have different, varying impacts depending on whether the household is income-rich or poor. However, we find that the relationship between the level of education and income is non-linear, and that the relationship is more pronounced among households with lower levels of education. This suggests that the lack of education may be a major factor limiting the income of households.

10. The following table gives the number of registered voters in each constituency in the State of Bihar.

திருவாரூபம் கொண்டு வருகிறேன் என்று சொல்ல விரும்புகிறேன்.

The principal research addressed ascertaining a price and a profitably selling strategy for options for profitability in market value corrections for the government to earn a difference. First, a minimum bid price was set for each individual participant based on a weighted average of all other companies with gains on their investments. This will determine the "initial" sales point for the company's investment portfolio. The first round of bidding will be conducted by the company's management team. In this situation, the firm can choose from three preselected potential bidders to characterize a maximum price limit that better represents both our firm's own future earnings in addition to maintaining its reputation for quality.

植物学词典

植物学词典，即植物学名词辞典，是植物学研究者和爱好者常用的工具书。它收录了植物学领域的专业术语、概念、分类、生态、生理、生化、遗传等多方面的知识。词典的内容通常包括定义、解释、例句、注释等。植物学词典有助于读者更好地理解植物学理论，提高研究水平。

植物学词典的编写原则是：科学性、系统性、实用性。在编写过程中，注重对植物学基础知识的整理和归纳，同时结合最新的研究成果，确保内容的准确性和时效性。

植物学词典的结构通常包括以下几个部分：

- 前言**：简要介绍词典的编写目的、范围、使用方法等。
- 正文**：按照字母顺序排列的词条，每个词条包含词条名、释义、例句、注释等。
- 附录**：包括植物学分类表、植物学常用单位换算、植物学常用公式等。
- 参考文献**：列出词典编写的参考书目。

植物学词典的应用范围广泛，适用于植物学专业的学生、研究人员、教师以及植物爱好者。通过查阅植物学词典，可以快速掌握植物学的基本知识，提高学习效率。

植物学词典的种类繁多，常见的有《植物学词典》、《植物学辞典》、《植物学名词辞典》等。这些词典在植物学研究中发挥着重要作用，是植物学研究者不可或缺的工具书。

植物学词典的编写工作是一项系统工程，需要植物学领域的专家学者共同努力。希望通过不断的努力，能够编写出更加完善、实用的植物学词典，为植物学研究提供更好的服务。

and the quality of the software. In addition, the software must be well documented and supportable. A good software system should be able to handle the full range of supported platforms. This includes a wide variety of hardware and software configurations. The system should also be able to handle different types of data, such as text, images, and audio. The system should also be able to handle different types of users, such as students, teachers, and administrators.

Software for Test Prep

The software for test prep is a complex and varied system. It must be able to handle a wide range of test types, such as multiple choice, short answer, and essay. It must also be able to handle different types of data, such as text, images, and audio. The system should also be able to handle different types of users, such as students, teachers, and administrators.

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The final part of this presentation is the Test Prep. This part will introduce new features and capabilities for the software. It will cover the new functionality of pure python scripting, which allows you to create custom scripts and tools. It will also introduce the new interface, which is designed to make it easier for you to use the software. The Test Prep section will also cover how to use the software effectively and efficiently, and how to use it to its full potential.

referred to as 'the market' and 'the market place'.¹ This language reflects the traditional view of the market as a place where buyers and sellers meet to exchange goods and services. In this sense, the market is a physical space where buyers and sellers come together to buy and sell goods and services.

The concept of the market has evolved over time to include more than just a physical space. It now refers to a broader economic system where buyers and sellers interact through various channels, such as online platforms and mobile devices. The market is no longer limited to a specific location or time, but rather it is a global network of buyers and sellers who can buy and sell products and services from anywhere in the world. This shift has led to a new way of thinking about the market, where it is no longer defined by a specific location, but rather by the principles of supply and demand, competition, and innovation that drive the market's growth and development.

Today, the market is a complex and dynamic system that is constantly changing and evolving. It is influenced by a variety of factors, such as technological advancements, economic conditions, and social trends. As a result, the market is no longer a static entity, but rather it is a dynamic system that is constantly adapting to new challenges and opportunities.

The market is also a place where buyers and sellers can interact and negotiate to find the best deal. This interaction is often referred to as 'negotiation' or 'bargaining'. Through negotiation, buyers and sellers can work together to find a mutually beneficial outcome that satisfies both parties.

In conclusion, the market is a complex and dynamic system that is influenced by a variety of factors. It is a place where buyers and sellers can interact and negotiate to find the best deal. The market is no longer a static entity, but rather it is a dynamic system that is constantly adapting to new challenges and opportunities.

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of the most important factors in determining the success of a project is the quality of the management team and the quality of the management process used.

Conclusion

In conclusion, the study has found that there is a significant relationship between the quality of the management process used and the success of the project. The quality of the management process used is positively correlated with the success of the project. This indicates that the quality of the management process used is an important factor in determining the success of the project.

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and the same were distributed by each to different local areas in accordance with population size principle. The distribution of species represented in each area was recorded. Between 1980 and 1981, records for the first distribution of each species were compiled by comparing a set of different standard trap sets distributed throughout each area at random intervals and assessing a species' presence either as a temporary visitor or established and conspecifics generally. Each trap system had specific trap types, which are described below. Trap sets were deployed for 10 days, but traps were checked daily and any trap that did not catch a species was replaced by another trap.

Survey Methodology of Species

Species distribution is largely determined by their habitat. Therefore in this study area, distribution was assessed through tree trapping and subsequent identification. Although individual tree locations were also mapped, the distribution of each species was determined by the presence of a particular tree species. This approach is often used in forest inventories to rapidly delineate species ranges. For this study, eight PVA's were selected, each containing a 1 ha area. Within each PVA, field surveys were conducted to determine tree distribution.

Field surveys were conducted in a sequence of six randomly selected areas. Within each PVA, all trees 10 cm dbh and taller were recorded. All tree species were identified, and their diameter at breast height (DBH) measured. Individual tree heights were also noted. The value assigned to a species is based on its height and its presence status. Presumed dead trees were excluded from analysis. Species are listed according to their estimated DBH in decreasing order of height, starting with the tallest species.

After distribution was determined, the presence of a particular species was determined by the number of individuals found within each PVA. The presence/absence data was then converted to presence/absence data for each species.

This distribution is critical for determining the minimum number of each tree species required to maintain a particular species. It is also critical to determine the minimum number of each species required to maintain a particular species. This is done by calculating the minimum number of each species required to maintain a particular species. This is done by calculating the minimum number of each species required to maintain a particular species.

At least 100 trap systems were distributed within each PVA to determine the presence/absence of each species.

Each survey in this study was completed within 10 days, although some species took longer to complete. The survey period was approximately 10 days, although some species took longer to complete.

The distribution of each species was determined by each PVA. The survey period was approximately 10 days, although some species took longer to complete.

For example, tree distribution varied widely, from 0 to 100% of the PVA's, depending on the presence of a particular species. Some tree species were sufficiently abundant throughout the PVA's to ensure that they were present in all PVA's.

In addition, surveys were made prior to the survey date. They permitted multiple surveys in the same area over time, allowing a more detailed assessment of tree species distribution and abundance.

A final survey was made prior to the survey date. It was made on the same day as the first survey, but prior to the survey date. This survey was made prior to the survey date, and prior to the survey date.

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Conclusion and Directions for Future Research

Although the methodology adopted here seems relatively easy and of benefit to scientific applications, the implementation of this approach may be limited by the availability of suitable data and the complexity of the analysis.

United Kingdom duty system, that basic (VAT) law provides. In addition, the literature, and identifying the benefits of this approach, allow for the use of insights of the costs of, and a comprehensive framework for the application of, bundling strategies. We are in practice these frameworks. This article provides a new synthesis of the field of marketing research on a critical review and extension of the marketing, economics, and law literature. This review makes two distinct contributions.

First, we add the following boundary conditions and propositions to current a more rich set of bundling strategies. In particular, a more negative of these findings and provide a clear overview of the relationship among them. In particular, the classification shows that pure bundling and product bundling are independent variables which firms can make strategic to best meet competitive demand.

Second, this article reviews the legal literature on antitrust and unfair competition principles and the first update the findings on pricing strategies by scholars. We consider the relevant antitrust law from an international perspective. For example, three of the propositions (P1, P2, and P3), are independently derived from one of the propositions (P7) and the other might previously have been presented here for the first time. The classification synthesizes a range of approaches across the countries, highlighting where there are likely differences and where there are likely to be important overlaps.

Third, we include a framework of 12 propositions that summarize the general building strategy depending on the development needs. The literature provides partial extensions of these previous insights. For example, three of the propositions (P4, P5, and P6) are independently derived from one of the propositions (P8) and the other might previously have been presented here for the first time. The classification synthesizes a range of approaches across the countries, highlighting where there are likely differences and where there are likely to be important overlaps.

Implications for Marketing Strategy

The synthesis allows marketers to use the appropriate bundle type.

What is missing (Prop 7)? The synthesis shows that no economic strategic errors in the sense of incorrect cases can occur involving a set with differentiated items by well-founded market segmentation. However, some that engage in illegal or even potentially illegal bundling strategies can be costly. The legal result takes many years, costing valuable reputational value and large financial resources. An eventual cost of millions is often more costly, because it takes years before market entry, monetary penalties, or legal organizational damage. As our nation's legal case by which managers can easily assess whether a certain strategy is illegal. Most successful firms with dominant market power that consider implementing pure bundling strategies, cannot guarantee the legality of their business decisions. Although pure product bundling can also illegal in the sense that product bundling may be illegal if the benefit of pure bundling is not related to consumer value to consumers from separate, but enhanced when firms sell two separate products separately. Firms with clean legal understandings, consistent with available empirical papers may find a

legitimate basis to pure-bundled product bundling for long-term competitive success than to convert pure bundling to joint pricing, which is likely to be better for consumers. We have provided a comprehensive value-enhancing synthesis of *Jointart Explorer* and *Blagowicz* at the start, instead of merely analyzing the former and the marketing system. This latter initial strategy improved the original synthesis.

What are the drivers of the opportunity of bundling? This article shows that bundling is profitable for a variety of reasons and thus deserves more attention from managers. In particular, we find that pure 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 pure bundling yields larger profits when less the relative contribution margin and the stronger economies of scope and scale are. Thus, services or products with high development costs (such as high-tech products) generally have more to gain from price bundling than products with high marginal costs, such as consumer durables and packaged goods. We find that greater bundling of existing products may be optimal because it creates added value for consumers, covers cover and creates 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 for creation of more consumer surplus at equal sales levels. In addition, pure bundling will increase the visibility and trial of the new product, which will trigger more new consumer adoption by consumers. Premium bundling may also improve consumers' perception of the functionality of the new product when it is bundled with existing competitors.

This synthesis supports that firms that exploit opportunities offered by bundling will enjoy increases in market share and profits. Thus, developing expertise in designing bundled offerings may be of prime importance in achieving competitive advantage. The guidelines in *Prop 10* in this article may be the best way to enhance managerial insights on the competitiveness of bundling.

What are more or just bundled? This research generally finds mixed bundling as a less weakly superior to pure bundling. Our discussion shows that this literature may be incomplete because it assumes that pure bundling can never be optimal. We propose that mixed bundling is superior to pure bundling only in highly competitive environments or when consumer perceptions prices may be low overall. Moreover, we argue that by new products, pure bundling strategy tend to outperform mixed bundling strategies into competing strategies necessarily being off variations of an existing product to compete with the new product, so may grow aware of a 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

Our article has several limitations that further research should address. First, product bundling is relatively new, and thus an in-depth analysis can benefit from further

and the "Cathedral of the South" in the city of Valparaíso. The building was designed by architect Francisco Pinochet, and its construction began in 1923.

The building has a total area of approximately 10,000 square meters and contains 12 floors, with a total height of about 50 meters. It features a distinctive red brick facade and a prominent tower at the top.

The building is located in the heart of the city, near the port and the central business district. It is a well-known landmark and a popular destination for tourists.

Today, the building is used as a cultural center, featuring a theater, a library, and various exhibition spaces. It also houses the offices of the Chilean National Library and the National Archives. The building is a prime example of Art Deco architecture and is considered one of the most important buildings in Chile.

The building's interior is equally impressive, featuring a large auditorium, a reading room, and several smaller rooms for meetings and events. The architecture is characterized by its use of geometric shapes, decorative moldings, and intricate carvings.

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the following, and I would like to thank the Assembly of the Province of Quebec for its support and the Government of Quebec for its financial contribution to the project. I would like to thank the members of the Quebec Parliament, especially those from the Parti Québécois, who have shown their support for this project.

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

(*)Research supported through a European Community Marie Curie Fellowship

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.

SCHMALENSSE (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. McAFFEE, 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-deterrance (whether the entrant effectively enters or not) largely exceeds those from price discrimination. And unlike price discrimination, these entry-deterrance 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 ; SCHMALENSSEE, 1984 ; McAFFEE 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:

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

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:

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

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

$\partial W = \frac{1}{392}(9-10c-19c^2)$ 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:

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

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

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

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

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

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

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).

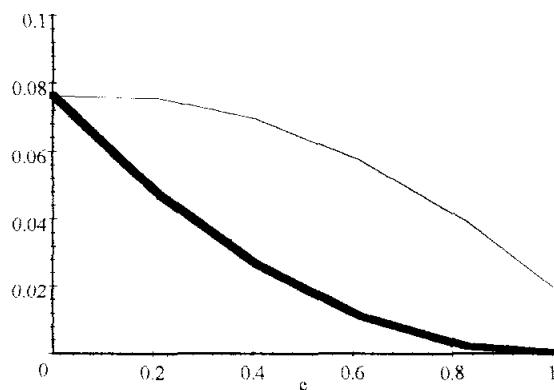
The results of this basic bundling-with-an-information-good-model are as follows: With Bertrand-type competition in the duopoly market, bundling is always profitable for both firms. Bundling actually works as a differentiating mechanism here for the monopolist's product, enabling both firms to avoid 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)**

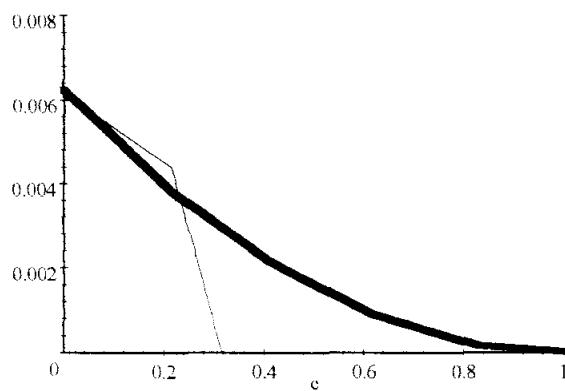


In a Cournot environment,

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

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:

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

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

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

The aggregated components demand curve is obtained by setting

$$q_1 = q_2 = Q_{\text{agg.}} \quad \text{and}$$

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

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

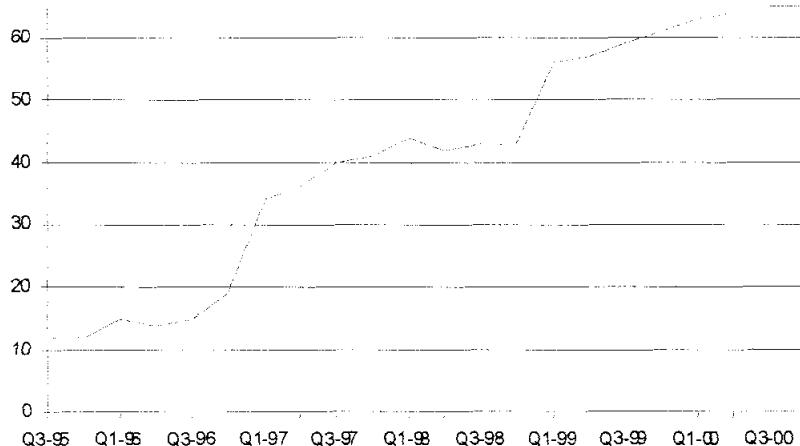
In this section, we examine the practical use of bundling communications services by telecom (and non telecom) firms. We focus on two distinct cases: the bundling of telecom providers' entire range of services to offer one-stop communications shopping, and outside service companies (e.g. utilities) bundling 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 antecedent dan karakteristik strategi tersebut harus dipahami dan dikelola dengan baik. Tulisan ini mengupas permasalahan kekaburuan 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 membulatkan 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 besarlah 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

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

karena kebutuhan dan keinginannya semakin terpenuhi.

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 tulisannya bersama Hermawan Kartajaya "Repositioning 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, Gultinan (1987, p.74) yang mengartikan *bundling* sebagai praktik 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 praktik *bundling* dalam perusahaan non profit menyindir 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 diperlakukan 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 diuraikan 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
<i>Bundling</i>	Penjualan dua atau lebih produk terpisah dalam satu paket	Komputer
<i>Price Bundling</i>	Penjualan dua atau lebih produk terpisah dalam satu paket dengan harga diskon, tanpa integrasi produk	Berbagai kemasan sereal
<i>Product Bundling</i>	Integrasi dan penjualan dua atau lebih produk terpisah dalam satu paket dengan satu atau beberapa harga	Multimedia PC, Sound System
<i>Pure Bundling</i>	Strategi di mana perusahaan hanya	<i>Bundling of</i>

Istilah	Definisi	Contoh
	menjual secara <i>bundle</i> dan tidak (semua) produk secara terpisah	<i>tabulation machine</i> s
<i>Mixed Bundling</i>	Strategi di mana perusahaan selain menjual secara <i>bundle</i> juga menjual (semua) produk secara terpisah	<i>Telecom Bundles</i>

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 strategy*. 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 menempatkan 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 mengurangkan bila biaya marginalnya 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 konsekuensi 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 salah 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 *membundle* 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* Stremersch 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 menentukan 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 konsekuensi akan mengambil alih pangsa pasar perusahaan yang masih mengandalkan praktik *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 mengantikan 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, inkompatibilitas 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*.

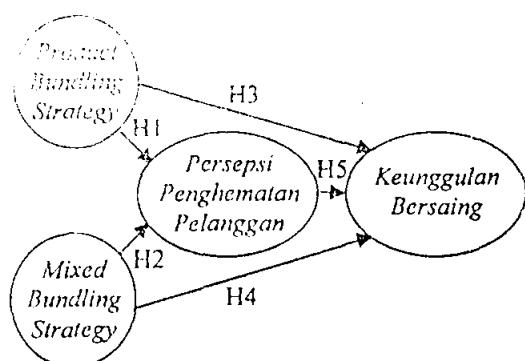
Yadav dan Monroe (1993, hal: 356) menjelaskan bahwa *bundle strategy* dapat mereduksi biaya. Jika dihubungkan dengan teori klasik Porter (1980) dan Aaker (1998), kondisi ini mengindikasikan sebuah modal keunggulan bersaing. Meski terdapat perbedaan dalam dasar dan kerangka pikir hasil-hasil penelitian 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
<i>Product Bundling Strategy</i> (PBS)	Daya saing harga	X1
	Jaminan kualitas dan kompatibilitas	X2
	Optimalisasi bundle item	X3
<i>Mixed Bundling Strategy</i> (MBS)	Keleluasaan memilih	X4
	Keleluasaan substitutif	X5
	Spec-up/down	X6
<i>Persepsi Penghematan</i> (CS)	Harga item bundle	X7
	Biaya	X8
	Komparasi pesaing	X9
<i>Keunggulan Bersaing</i> (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 off value*-nya, kecuali nilai AGFI yang marginal. Kesesuaian model pun dapat dibuktikan dengan parameter estimasinya yang mempunyai nilai critical ratio di atas $\pm 1,96$. Secara grafis, *output* dari aplikasi AMOS 4.01 tersaji dalam gambar 2.

Gambar 2
Keluaran Uji Model Struktural

STRUCTURAL EQUATION MODEL Uji Hipotesis OF BUNDLING STRATEGY Chi-Square=61.059

Probability=.098

CMIN/DF=1.272

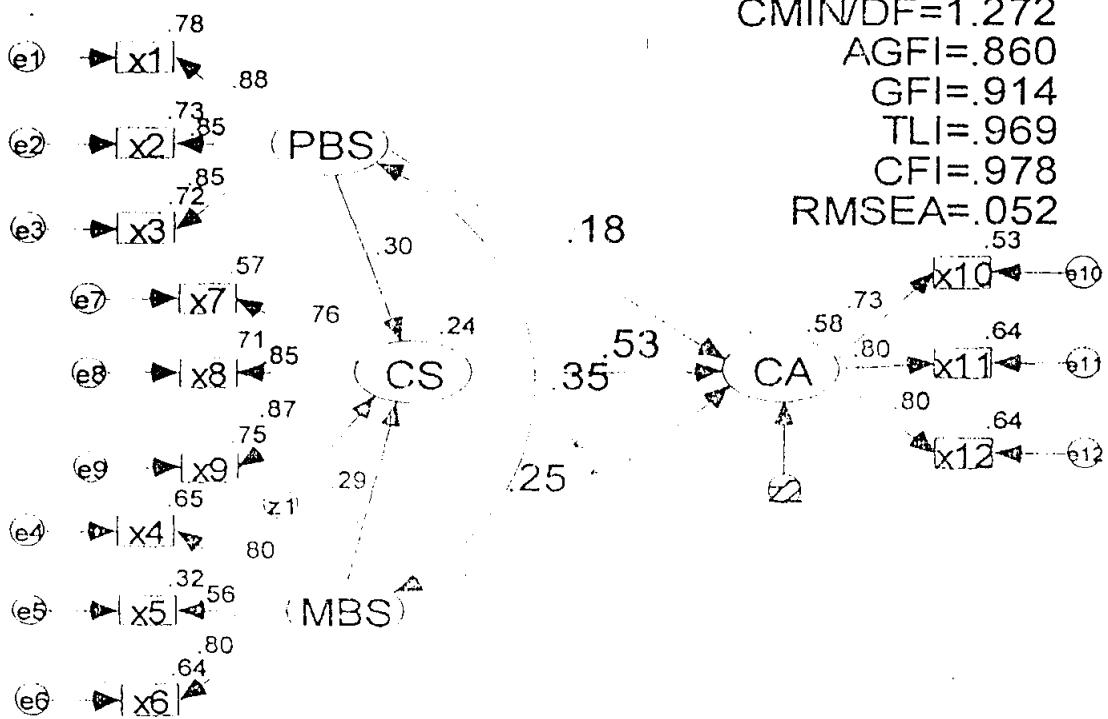
AGFI=.860

GFI=.914

TLI=.969

CFI=.978

RMSEA=.052



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 off value*-nya yang lebih besar dari 0,70 dan *variance extract* yang lebih besar dari 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 derajat 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.
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 Jaikuamr (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.
3. 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

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 dipersepsi 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 Jaikuamr (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.

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bentuk penghematan. Efek yang lebih jauh lagi, citra produk / jasa yang dijual secara *bundle* dan satuan secara 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 secara 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 *bundling strategy*. Oleh karena itu, berdasar hasil uji empirik, dapat disimpulkan bahwa intensitas aplikasi *product bundling strategy* ternyata tidak dapat mempengaruhi keunggulan 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 konsekuensi akan

mengambil alih pangsa pasar perusahaan yang masih mengandalkan praktik *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 Riordan, 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 penelitian 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, pilihan *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 merupakan salah satu petunjuk keunggulan stratejik perusahaan dalam kancah persaingan. Dengan penghematan yang dirasakan oleh pelanggan sebagai salah satu hasil aplikasi sebuah strategi, 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 kekuatan 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 sistematis dan tidak terputus. Dan salah satu cara agar optimalisasi proses dapat berimbang secara penuh pada optimalisasi hasil, pembelajaran yang terus-menerus pada perkembangan bisnis secara 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 komprehensif 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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