
Literature Review

The primary object here is to review the relevant literature of the current state of marketing theories, applications of marketing strategies, intellectual property stipulations and the influences of the Internet to the digital content industry. The review eventually leads to inadequate resources: concepts, theories, and talents. In truth, there are still no generally accepted theories for planning intangible assets or IP for marketing or relevant decisions, and so certainly no mature systems and theories. Therefore, ultimately this research attempts to present possible solutions to this problem.

1. Marketing Theory

1.1 The Definition of Marketing

1.1.1 Social Definition

There are social and managerial definitions for marketing. Kotler, described by the American Marketing Association as "the most influential marketer of all time", with Armstrong²⁶ has adopted a social definition: "Marketing as a social and managerial process by which individuals and groups obtain what they need and want through creating and exchanging value with others, and marketing consists of actions taken to build and maintain desirable exchange²⁷ relationships with target audiences." This definition reaches human's the most primary mind—exchange for "needs" and so is a basis for this research.

1.1.2 Managerial Definition

²⁶ Kotler, P. (1972, April). A generic concept of marketing. *Journal of Marketing*, 36, 46-54.

Kotler, P. (2001). *A framework for marketing management*. Upper Saddle River, N.J.: Prentice Hall, p.4.

Armstrong, G. & Kotler, P. (2005). *Marketing: An introduction* (7th ed.). Upper Saddle River, N.J.: Pearson Prentice Hall, p.6 & p.10.

For a detailed look at the contributions of Peter Kotler, see <http://www.lib.uwo.ca/business/kotler.html>

²⁷ Exchange, is the act of obtaining a desired object from someone by offering something in return.

Kotler, P. & Armstrong, G. (2001). *Principles of marketing* (9th ed.). Upper Saddle River, N.J.: Prentice Hall, p. 9.

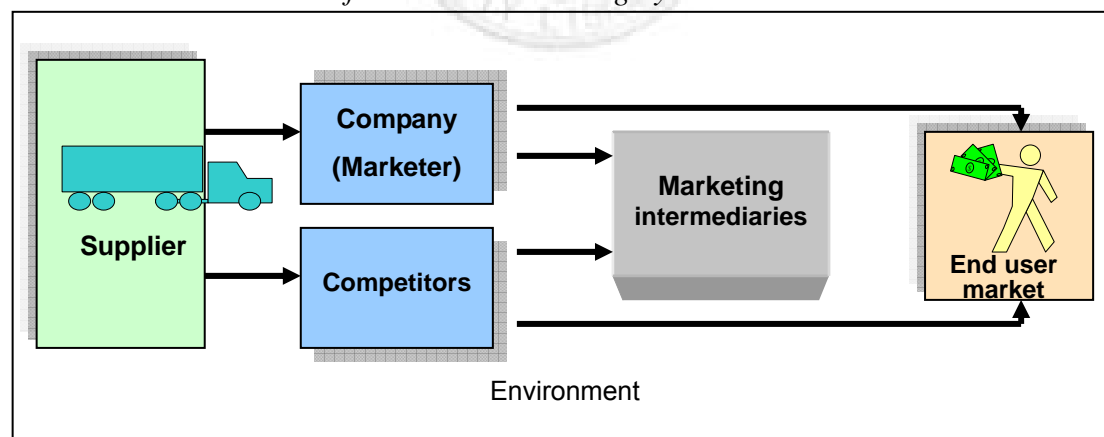
As for the managerial definition, marketing was described in the 60's as “the art of selling products.” Until 1985²⁸, the American Marketing Association (AMA) proposed a now widely accepted managerial definition which since then has been mentioned in much of the research and most textbooks: “Marketing is the process of planning and executing the conception, pricing, promotion, and distributing of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives.”²⁹ However, in American Marketing Association’s website, the definition has been modified to “Marketing is an organizational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders.”³⁰

1.1.3 A Modern Marketing System

Kotler & Armstrong (2001) provide a comprehensive figure that demonstrates the main elements in a modern marketing system which shows in the Figure 2.1. This figure indicates a common situation, in which marketing involves serving a market of end users in the face of competitors. The company and the competitors send their products and messages to end users, either directly or through marketing intermediaries. All of the players in the system are affected by major environmental forces, like demographic, economic, physical, technological, and social /cultural³¹.

Figure 2.1

Main Actors and Forces of a Modern Marketing System



(Kotler & Armstrong, 2001, p.11)

²⁸ Chaston, I. (2004). *Knowledge-Based Marketing: the Twenty-First Century Competitive Edge*. London; Thousand Oaks, Calif.: SAGE, p.22.

²⁹ Bennett, P. D. (Ed.) (1995). *AMA Dictionary of Marketing Terms* (2nd ed.). Chicago: The American Marketing Association.

³⁰ There is no information related to explain such change in the website.

The American Marketing Association (n.d.). *Dictionary of marketing terms*. Retrieved September 2, 2005, from <http://www.marketingpower.com/live/mg-dictionary-view1862.php?>

³¹ See Kotler, P. & Armstrong, G., supra note 27, at 10-11.

Each party of the system certainly adds value for the next level. Therefore, a company's success depends not only on its own actions, but also on how well the entire system serves the needs of end users³². For example, the iPod sales have been extraordinary³³, because Apple can offer high quality product for a desirable price. Its manufacturing partners certainly have the corresponding ability to fulfill Apple's requests.

1.1.4 A Marketing Mix

Commonly, some people mistake a marketing mix: the 4P's³⁴ (product, price, place, promotion) for the meaning of marketing. The correct message of 4P's is that 4P's are used as functional tools to help executing marketing strategies and eventually to facilitate the efficiency of an exchange³⁵.

1.2 General Theory of Marketing School

Alderson³⁶ never formally presented a general theory of marketing, but has become the source of inspiration for the following research³⁷. Meanwhile, the topic of a general theory of marketing didn't receive adequate attention until 1979 Adel I. El-Absary urged that marketing theorists should pay heed to this development. After

³² See Kotler, P. & Armstrong, G., *supra* note 27, at 10.

³³ Net sales of iPods rose \$955 million or 373% during the first quarter of 2005 compared to the year-ago quarter.

Moore, C. M. (2005, February). *Apple (AAPL)10-Q financial report highlights and analysis*. Retrieved September 2, 2005, from

[http://www.applelinks.com/p5/index.php/more/apple_aapl10_q_financial_report_highlights_and_analy](http://www.applelinks.com/p5/index.php/more/apple_aapl10_q_financial_report_highlights_and_analysis/)

³⁴ The 4P's was originated from:

See McCarthy, J. E. (1960). *Basic marketing: A managerial approach*. Homewood, Illinois: Richard D. Irwin, Inc.

³⁵ Chiou, Jyh-Shen (2001). *Strategic marketing analysis: Framework and practical applications*. Taipei: Bestwise. [Text in Chinese]

Godin, S. (2003). *Purple cow: Transform your business by being remarkable*. NY: (Penguin) Portfolio.

³⁶ Wroe Alderson, 1898 – 1965, was one of legacy of mid-19th century marketing scholars and a nationally-known professor of marketing at the University of Pennsylvania's Wharton School of Finance and Commerce.

The American Marketing Association (n.d.). *Legacy of Mid-19th century marketing scholars*. Retrieved September 2, 2005, from <http://www.marketingpower.com/content17355.php>

The University Archives and Records Center, University of Pennsylvania (n.d.). *Guide to the Wroe Alderson, 1898 - 1965, papers*. Retrieved September 2, 2005, from

<http://www.archives.upenn.edu/faids/upt/upt50/aldersonw.html>

For more details about the contributions of Wroe Alderson, see

Lichtenthal, J. D. & Beik, L. L. (1984). A history of the definition of marketing, research in marketing. Sheth, J.N. (ed.), *JAI Press*, 7, 133-163.

³⁷ Sheth, J. N., Gardner, D.N., Garrett, D.E. (1988). *Marketing theory: Evolution and evaluation*. New York: John Wiley & Sons, p.16.

all, there have been reviews and presentations for elements of a general theory of marketing³⁸ but these studies still have not resulted in an agreement.

However, in the marketing school of thought, Sheth, Gardner, & Garrett's research not only classifies school of marketing into twelve distinctive bodies of knowledge (schools), but also sorts out the most common factors and proposed well-defined components for a general theory of marketing. In brief, their research also indicates that in order to ensure the general theory of marketing gains the respect of the scientific community; it must be strong on three criteria: syntax, the semantics, and the pragmatics metatheory. In other words, it must score high on structure and specification, on testability and empirical support, and finally on richness and simplicity³⁹. Even so, none of these most respected twelve distinct schools take intangible assets or intellectual property as the primary relevant variables in their research or major objectives of study⁴⁰.

1.3 The Core Concept of Marketing

Aside from the above, the following marketing scholars, such as Kotler⁴¹ and Bagozzi⁴² based on Alderson's research⁴³ consider "exchange⁴⁴" as the core concept of marketing and such opinion is supported by most researchers.

According to these scholars' opinions, marketing mainly handles the problems of

³⁸ See Sheth, J. N., Gardner, D.N., Garrett, D.E., supra note 37, at 15-18.

³⁹ 1. Marketing is a study of market behavior rather than marketer behavior or buyer behavior.
2. Market behavior is measured by a fundamental unit of analysis called the market transaction.
3. Need to focus on the dynamic nature of marketing.
4. Marketing as a study of market behavior must include constraints on that behavior.
5. The raison d'être of marketing is to create and distribute values.

For more details, see

See Sheth, J. N., Gardner, D.N., Garrett, D.E., supra note 37, at 200-201.

⁴⁰ Lin, Chin-Feng (2002). The development and evaluation of marketing research in Taiwan – based on Marketing School of Thought. *Commerce & Management Quarterly*, 3(2), 135-160. [Text in Chinese]

See Sheth, J. N., Gardner, D.N., Garrett, D.E., supra note 37.

⁴¹ See Kotler, P., supra note 26, at 46-54.

See Kotler, P. & Armstrong, G., supra note 27, at p.8.

⁴² Bagozzi, R. P. (1979). Toward a formal theories of marketing exchanges. In O.C. Ferrell, S. W. Brown, & C.W. Lamb (Eds.), *Conceptual and theoretical developments in marketing* (pp.431-447). Chicago: American Marketing Association.

See Chiou, Jyh-Shen, supra note 35, at 21. [Text in Chinese]

⁴³ Alderson (1957): "Marketing is the exchange which takes place between consuming groups and supplying groups."

The other scholar takes the lead in this viewpoint with Alderson is William McInnes.

For more details about McInnes's perspective, see

McInnes, W. (1964). A conceptual approach to marketing. In R. Cox, W. Alderson, & S. J. Shapiro (Eds.), *Theory in marketing* (pp.51-67). Homewood, Illinois: Richard D. Irwin.

⁴⁴ A process facilitated by the marketing function in which two or more parties provide something of value to the other.

exchange, not of transaction. In an exchange, there may be no money involved, for instance a political candidate wants votes. Exchange is a process, when an agreement is reached, a transaction takes place⁴⁵. Thus, a transaction is one marketing's unit of measurement because a transaction means a trade between two parties that involves at least two things (the exchange objects) of value, agreed-upon conditions, a time of agreement, and a place of agreement⁴⁶. In addition, the concept of exchange and relationships leads to the concept of a market. A market is the set of actual and potential buyers of a product⁴⁷. Meanwhile, there are five conditions which must be satisfied before an exchange can occur⁴⁸:

- (1) There are at least two parties.**
- (2) Each party has something that might be of value to the other party.**
- (3) Each party is capable of communication and delivery.**
- (4) Each party is free to accept or reject the offer.**
- (5) Each party believes it is appropriate or desirable to deal with the other party.**

Major economic activities are Business to Business (B2B) or Business to Consumer (B2C), but between Business and Consumer the exchange direction can be Consumer to Business (C2B), which means a consumer provides information or labor service to a manufacturer and the manufacturer gives money/rewards to the consumer. For example, a record company uses a song and needs to pay the song writer (an individual may buy an album) back. The most common exchange relationships are shown as below:

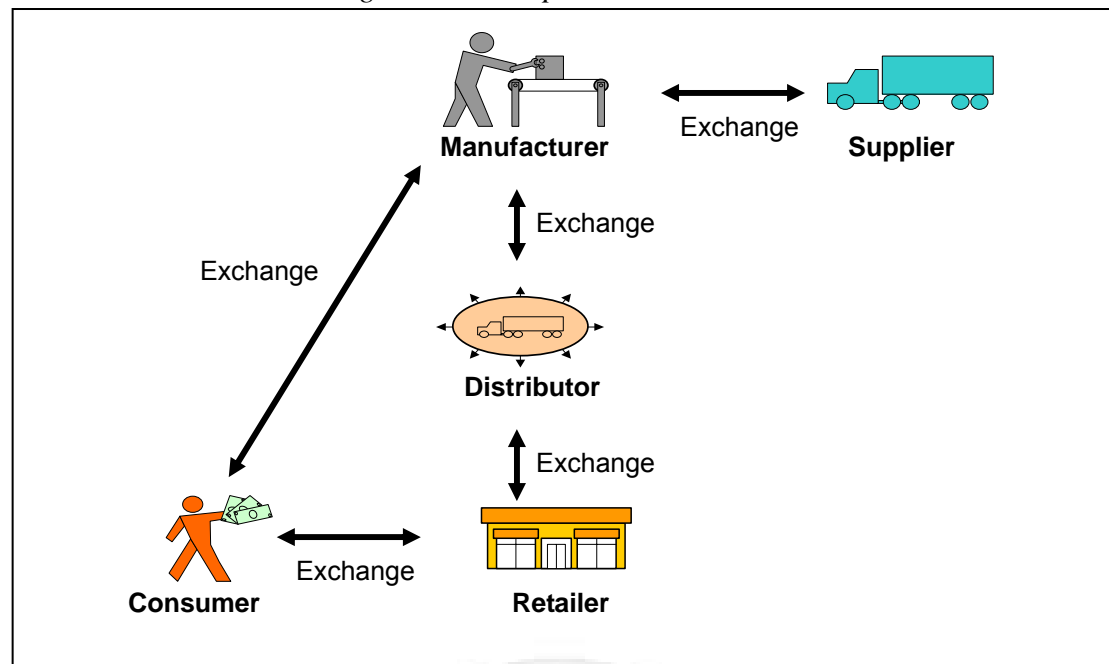
⁴⁵ Kotler, P., Ang, S.H., Leong, S. M., & Tan, C. T. (1999). *Marketing management: An Asian perspective*. Singapore; New York: Prentice Hall, p.11.

See Chiou, Jyh-Shen, supra note 35, at 6. [Text in Chinese]

⁴⁶ See Kotler, P. & Armstrong, G., supra note 27, at.8.

⁴⁷ See Armstrong, G. & Kotler, P., supra note 26, at 6 & 10.

⁴⁸ See Kotler, P., Ang, S.H., Leong, S. M., & Tan, C. T., supra note 45, at 11.

Figure 2.2*The Most Common Exchange Relationships*

(Chiou, 2001, p. 9) [Text in Chinese]

After all, marketing is meant to enhance the efficiency of an exchange, solve the problems in an exchange and increase frequency of an exchange. A simple example can be to find out the reasons why a product with otherwise market-demanded qualities is unpopular.

1.4 Transaction Cost Analysis

The function of marketing is to solve the problems during an exchange. Two questions arise⁴⁹: (1) why do people and companies engage in exchange relationships? and (2) how are exchanges created, resolved, or avoided? There has been much research on this subject, such as intentions/loyalty of buyers. However, Coase (1937) introduces the most influential concept: transaction cost is the necessity for the occurrence of the exchange⁵⁰. Following that, Williamson (1975)⁵¹ has developed the first significant structure of transaction cost analysis. He points out the transaction cost is created by the joint effect of human factors and environmental factors which are the major influences on the efficacy of an exchange. Williamson's explanation is

⁴⁹ Bagozzi, R. P. (1975, October). Marketing as exchange. *Journal of Marketing*. 39 (4), 32-39.

⁵⁰ Coase R. H. (1937). The nature of the firm. *Economic N. S.*, 4, 386-405.

⁵¹ Williamson, O. E. (1975). *Markets and hierarchies, analysis and antitrust implications: A study in the Economics of internal organization*. New York: Free Press, pp.8-10, 20-40, & 248-263.

shown as below⁵²:

(1) Human factors

- A. Bounded rationality: human's limited abilities to process enormous amounts of information and figure out all complex problems, therefore human may result in making decisions that are not objectively "rational".
- B. Opportunistic behavior: human may behave opportunistically whenever such a behavior is possible and brings benefits.

(2) Environmental factors

- A. There are various origins of environmental uncertainty and complexity, such as multiple cultures and political boundaries.
- B. The availability of channel partners⁵³ is the other crucial reason for this factor.

In addition, if there are not enough competitors, that would make transaction cost substantially higher because those companies would tend to behave opportunistically.

Furthermore, an essential variable in transaction cost analysis is "information impactedness" which is the condition that would occur when one party has information that is not available to others or is difficult for others to acquire.

Williamson also divides the transaction into two portions of costs⁵⁴:

- (1) Ex-ante transaction** is the transaction cost happens before the agreement. The cost is spent for searching information, negotiating conditions and et cetera.
- (2) Ex-post transaction** on the other hand that happens afterwards. Also the cost is spent for service guarantee, monitoring and et cetera.

After all, when people decide to satisfy needs and wants through an exchange, transaction cost analysis plays as an essential role.

1.5 A Total Cost Analysis Structure

An analytical structure of transaction cost is tremendously essential for marketing activities, and so the classification of transaction cost shall be the basis of such structure. Chiou (2001) has developed a total cost analysis structure: 4C (cost) structure⁵⁵ based on opportunism classification made by Barney & Ouchi and "Exchange Structuralism"⁵⁶, which includes two categories: "Explicit Unit-Utility

⁵² Williamson, O. E. (1985). *The economic institutions of Capitalism: Firms, markets, relational contracting*. New York: Free Press.

⁵³ For example, distributors or retailers.

⁵⁴ Williamson, O. E. (1979). Transaction cost Economics: The governance of contractual relations. *Journal of Law and Economics*, 22, 223-260.

⁵⁵ See Chiou, Jyh-Shen, supra note 35. [Text in Chinese]

⁵⁶ Chiou, Jyh-shen (n.d.). Strategic marketing analysis website — 4C structure. Retrieved September 2, 2005, from <http://140.119.76.100/NewPage/class/market/factor.htm>

Cost” and “Implicit Exchange Cost”, the former cost indicates a cost-utility ratio and the latter one includes “Information Search Cost”, “Moral Hazard Cost” and “Holdup Cost”. Those four kinds of cost form a total cost analysis structure which influence the success of an exchange.

1.5.1 Explicit Unit-Utility Cost

The founder of Exchange Structuralism, sociologist Blau (1964)⁵⁷ has pointed out:

Processes of social association can be conceptualized, following Homans' lead⁵⁸, "as an exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons."⁵⁹ Social exchange can be observed everywhere once we are sensitized by this conception to it, not only in market relations but also in friendship and even in love, as we have seen, as well as in many social relations between these extremes in intimacy...

The pervasiveness of social exchange makes it tempting to consider all social conduct in terms of exchange, but this would deprive the concept of its distinctive meaning. People do things for fear of other men or for fear of God or for fear of their conscience, and nothing is gained by trying to force such action into a conceptual framework of exchange.

Social exchange differs in important ways from strictly economic exchange. The basic and most crucial distinction is that social exchange entails unspecified obligations. On the contrary, the prototype of an economic transaction rests on a formal contract that stipulates the exact quantities to be exchanged⁶⁰.

Blau also comments that an exchange occurs when the parties involved expect the exchange action will furnish greater benefit (utility⁶¹) to oneself. This is so-called advantageous exchange, which is when one obtains more than one pays out. Since there are numerous exchange parties, people strive to minimize costs and maximize rewards. In a market, under the similar benefit (utility) a customer certainly carries on the exchange with the exchange party who let him/her pay the lowest cost, or under the similar cost carries on the exchange with whom he/she can gain the highest benefit (utility).

The above analysis can then be expressed as a cost-utility ratio. In the 4C

Chiou, Jyh-shen (1995). The organization and efficiency of marketing flows and functions. In S. L. Grossbart and D. Lasco (Eds.), *Proceedings of the 1995 macromarketing conference* (pp.50-57). Richmond, Virginia: University of Richmond, p.52.

⁵⁷ Blau, P. (1964). *Exchange and power in social life*. New York: Wiley, pp. 88-97.

⁵⁸ George C. Homans was born in Boston, Massachusetts August 11, 1910, died in May 29, 1989. He was the founder of "Behavioral sociology" & the exchange theory. Retrieved September 2, 2005, from <http://www.asanet.org/page.wv?section=Presidents&name=George+C.+Homans>

⁵⁹ Homans, G. C. (1961). *Social behavior: Its elementary forms*. New York: Harcourt, Brace & World, p.13.

⁶⁰ See Blau, P., supra note 57, at 88-97.

⁶¹ Utility means the want-satisfying potential of a good or service.

structure this is called “Explicit Unit-Utility Cost”. Putting the influence of product brand image and company holdup leverage aside, the total cost which a buyer (end user/company) needs to pay out divides the total benefit (utility) that obtains from a product, as expressed as below:

(Total) Cost

(Total) Utility

Therefore, the cost includes all outlays for obtaining the product, For instance, when buying an iPod through an ATM transfer account method on a website, at least the buyer needs to pay for the product, a shipping fee and an ATM transfer fee; to spend time to inform the seller (e.g. writing an email); and to spend time to get used to using the product.

Furthermore, the utility contains two aspects: one is tangible benefit which is product functions; the other is intangible benefit which provides psychological functions such as conspicuous feeling, social class recognition and et cetera.

The most important characteristic of Explicit Unit-Utility Cost is to be seriously valued which means this cost needs to be estimated as early as possible. In other words, a company evaluates a product’s (perhaps, a prototype’s) Explicit Unit-Utility Cost before it invests amount of resources. Also, a company must not wait till the product hit the market to do so.

There are two directions for lowering Explicit Unit-Utility Cost:

- (1) **Cost structure of the product:** reducing the total production cost from bringing down the cost of product design, manufacture, channel, promotion and relevant elements.
- (2) **Product utility to a buyer (end user/company):** increasing the product utility by using marketing analysis to estimate functional characteristics of buyers’ needs, such as possible benefits after using the product.

On the other hand, there are only three exceptions that a company allows a product without competitive Explicit Unit-Utility Cost go to the market: (1) this company has competitive advantage in dealing with Implicit Exchange Cost; (2) the difference of Explicit Unit-Utility Cost is little in that specific industry where this company is in, and the source of competitive advantage comes from the company’s ability in dealing with Implicit Exchange Cost; (3) the industry where this company is in, the buyer’s utility is produced depends entirely on the product image which is occurred after the product goes to the market, especially, if it is difficult to assess the level of psychological benefits before the product goes to the market.

After all, the primary principle is: before a product goes to the market, the company must know whether the Explicit Unit-Utility Cost of this product is

competitive or not.

1.5.2 Implicit Exchange Cost

A buyer (end user/company) purchases a product considering not only “Explicit Unit-Utility Cost” but also the other factors, such as the risk of deception or search effort, etc. These other costs are called “Implicit Exchange Cost” in the 4C structure.

Barney and Ouchi (1986)⁶² divide the source of opportunism into three categories: (1) Adverse selection, which occurs when there is any information asymmetry between two parties. Because of this, the buyer needs to spend time or money to search necessary information to make sure if the product is worth buying; (2) Moral hazard, which arises when one party can not directly observe the other’s actions. Parties to an exchange, therefore, have strong incentives not to meet agreed upon standards or avoid their responsibilities in some ways; (3) Holdup, when the presence of asset specificity induces incentives for opportunism.

Based on the above, Chiou (2001) has defined “Information Search Cost”, “Moral Hazard Cost” and “Holdup Cost” in the category of Implicit Exchange Cost.

(1) Information Search Cost, which occurs before the transaction, exchange parties (buyer and seller) involve in a process of finding adequate exchange parties⁶³. That process is influenced by the correlation of a buyer’s “perception” and “level of involvement”. Also, people perceive the same situation differently.

Perception⁶⁴ indicates the process by which people select, organize, and interpret information to form a meaningful picture. Level of involvement means the level of a buyer’s caring for discovering, evaluating, acquiring, consuming, and attaching behavior to a product. A buyer’s level of involvement is influenced strongly by (1) economic risk, which means when money cost is high, a buyer’s level of involvement is high; (2) social psychology risk, which indicates image of other people’s perception of oneself buying this product; and (3) functional performance risk, which is when different brands’ products provide various functions, a buyer’s level of involvement would be high in order to avoiding poor product functions.

Obviously, Segmentation, Target Market and Positioning (STP)⁶⁵ are the most

⁶² See Chiou, Jyh-shen, supra note 56, at 52.

Barney, J. B., & Ouchi, W. G. (1986). *Organizational economics: Toward a new paradigm for understanding and studying organizations*. San Francisco: Jossey-Bass.

⁶³ See Williamson, O. E., supra note 52.

⁶⁴ Kotler, P., & Armstrong, G. (2001). *Principles of marketing* (9th ed.). Upper Saddle River, N.J.: Prentice Hall, pp.147-149.

⁶⁵ Segmentation: Subdividing a market into subsets of customers who behave similarly.

Target Market: Selecting subset(s) of customers on which are best to focus resources, and then design marketing mixes for those segments.

Positioning: Designing a marketing program (including marketing mix) that is consistent with how the

relevant elements to lowering Information Search Cost in the marketing strategy decision⁶⁶. First, having segmented a market, the task is then to determine which segments are profitable to serve. A company can adopt one of three market segmentation strategies: (1) undifferentiated marketing—in which the business attempts to go after the whole market with a product and marketing strategy intended to have mass appeal; (2) differentiated marketing—in which the business operates in several segments of the market with offerings and market strategies tailored to each segment; (3) concentrated marketing—in which the business focuses on only one or a few segments with the intention of capturing a large share of these segments⁶⁷. In order to identify a target market, marketers can use income, demographics, life style characteristics of a market, and census information of small areas to identifying the most favorable locations. When analyzing “positioning”, marketers need to know that in some markets, a “position” is achieved by associating the benefits of a brand with the needs or life style of the segments. More frequently, “positioning” involves the differentiation of a company's offering from the competition by making or implying a comparison in terms of specific attributes⁶⁸.

Therefore, Chiou (2001) points out, in order to lower Information Search Cost⁶⁹, a company needs to (1) carry out a clear-cut positioning; (2) define distinct product positioning; (3) have long-term identical positioning; (4) integrate marketing mixes; (5) exploit various communication channels; (6) take advantage of the Internet; (7) make a comparable creative product; (8) balance traditional and modern communication channels; (9) increase Information Search Cost for making the comparison to various brands more difficult.

- (2) **Moral Hazard Cost**, which is described previously, is a buyer’s degree of trust to a seller/product. If a product or seller’s actions have the characteristics of not being direct observed or supervised, the Moral Hazard Cost is higher. Therefore, intangible service providers and new-found/not-yet-established-renom companies need to strive solving higher Moral Hazard Cost. To lower Moral Hazard Cost⁷⁰, such companies need to (1) establish representative cases; (2) provide transparent relevant actions to lower buyers’ watch-over cost; (3)

organization wants its products perceived distinguish from other brands.

⁶⁶ See Chiou, Jyh-Shen, supra note 35, at 101. [Text in Chinese]

⁶⁷ The American Marketing Association (n.d.). Marketing terms dictionary - *Market segmentation*. Retrieved February 1, 2006, from

<http://www.marketingpower.com/mg-dictionary.php?Searched=1&SearchFor=market%20segmentation>

⁶⁸ The American Marketing Association (n.d.). Marketing terms dictionary - *Positioning analysis*. Retrieved February 1, 2006, from <http://www.marketingpower.com/mg-dictionary-view2453.php>

⁶⁹ See Chiou, Jyh-Shen, supra note 35, at 119-130. [Text in Chinese]

⁷⁰ See Chiou, Jyh-Shen, supra note 35, at 144-156. [Text in Chinese]

cooperate with companies whose image has good spillover influence; (4) offer limited warranties and unconditional return of purchases.

In general, to lower Moral Hazard Cost, all kind of companies must (1) live up to one's words; (2) take customer's benefit as the most important consideration; (3) maintain company's image; (4) care for buyers' needs; (5) let buyers trust the company, not specific employees; (6) develop a solid product master plan.

- (3) **Holdup Cost**⁷¹, which comes into existence right after the transaction is done, due to Holdup asset is established. This asset causes “Switching Cost” if a buyer switches to the other exchange relationship. Also, Holdup asset can be tangible or intangible, and such an asset is valuable if the transaction is continuing. When each side of an exchange party terminates the transaction, Holdup asset immediately loses its value. Establishing Holdup asset is very important if a company can have the ability to retain customers which has a great influence on a company's profit.

There are two aspects which a marketer can study buyers' cost level: (1) if a buyer has already used the product, switching to the other brand product will cause a loss of holdup value; (2) if a first-time buyer, usually this buyer will try to find an exchange without high Holdup Cost. Thus, a company faces a dilemma, which establishes Holdup asset (“Switching Cost”) and at the same time does not give the impression of possible high Holdup Cost. In other words, because a first-time buyer has not built the trust to the company/product, this buyer certainly wants an easy way to let go of this product without extra pay out. However, a company wants to add elements which let a first-time buyer become a repeatable buyer.

Chiou (2001) also divides Holdup asset into six categories: (1) distinctive use knowledge; (2) unique physical equipment, software or service; (3) special preferential benefit for loyal consumers; (4) intangible asset, such as communication efficiency; (5) psychological identification; and (6) particular social pressure.

Much research indicates customer satisfaction would lead to repetitive purchasing behavior, and that eventually becomes customer loyalty⁷². However, in the 4C structure, customer loyalty has more meanings with, customer satisfaction just being a part of it. A customer may not be most satisfied with the product, but he/she still keeps purchasing it purely due to the value which is Holdup asset. Holdup asset makes this customer unable to extricate himself from using the product and such “loyalty” is called behavioral loyalty.

⁷¹ See Chiou, Jyh-Shen, *supra* note 35, at 160-185. [Text in Chinese]

⁷² Customer loyalty basically includes attitudinal loyalty and behavioral loyal.

1.6 The Differences between Traditional Management School and the 4C Structure

Kotler, Jain, & Maesincee (2002) propose that companies need to institute a more holistic marketing process for exploring, creating, and delivering value in order to continuously renew their markets. However, as in the previous review, there is no particular theory applied to including intellectual property for marketing and relevant decisions.

After all, among numerous marketing theories and tools, this writer chooses the 4C structure as a main application in this research because the 4C structure is based on not only TCA but also exchange theory that forms the core concept of marketing. Most marketing structures follow marketing textbooks written by McCarthy or Kotler, which include a process from environmental analysis to STP and then to 4Ps. The described above implies the major differences between the 4C structure and Traditional Management School. The 4C structure applies marketing exchange theory integrating marketing activities; it obligates marketers to handle Explicit Unit-Utility Cost and Implicit Exchange Cost before/during/after the process of an exchange; and then marketers apply the most adequate marketing tools to solve those problems based on the analysis result of the 4C structure.

However, the 4C structure is not meant to deny traditional marketing structure but is meant to reform one based on many traditional concepts which are mentioned above. The differences between Traditional Management School and the 4C Structure are described in the following table:

Table 2.1

The Differences between Traditional Management School and the 4C Structure

Item	Traditional Management School	4C Structure
Structure	Process-oriented <ul style="list-style-type: none"> ● Environmental analysis → STP → 4Ps(or more Ps) 	Theory <ul style="list-style-type: none"> ● Explicit Unit-Utility Cost and Implicit Exchange Cost
Marketing Activities	Focus on: Before an exchange	Focus on: Before/during/after the process of an exchange
Resource	The process is lack of cost concept	The analysis tells you to

Exercise	<ul style="list-style-type: none"> There is no clear specified linkage between STP and the purpose of exercising one of the Ps. That makes applying a marketing mix or tool without a consistent theory based analysis. Therefore, it is hard to invest resource in solving exchange problems efficiently. 	invest where actually needed <ul style="list-style-type: none"> Analyze which Cost (one of 4C) is the source of problem, and then invest resource in solving that specific Cost
Cause-Effect Training	The process is lack of Cause-Effect training <ul style="list-style-type: none"> Follow the whole structure, Environmental analysis → STP → 4Ps, usually can not recognize which marketing tools solving what kind of marketing problems. 	The structure provides Cause-Effect Training <ul style="list-style-type: none"> Through the 4C structure, it is easy to understand which marketing activity is solving which kind of problem/Cost.
Scope	Micro concept <ul style="list-style-type: none"> There are numerous and diversified tools such as positioning methods, and product classification in this structure. Therefore, it is not easy to get a complete picture of applying adequate tools effectively. 	Macro concept <ul style="list-style-type: none"> Through the 4C structure, it is easy to understand where exchange problems are, then choose adequate marketing tools.

Source: Chiou, Jyh-Shen (2001). *Strategic marketing analysis: Framework and practical applications*. Taipei: Bestwise, pp. 67-71. [Text in Chinese]

1.6.1 The Relationship between the 4C Structure and 4Ps⁷³

Since the 4C structure is a macro concept, the process of finding out where exchange problems are will eventually help to make a strategic decision to use 4Ps. Therefore, it is essential to explain what the relationship is between the 4C Structure and 4Ps.

(1) Product strategy

There are two directions for planing a product strategy:

A. Develop Adequate Core Benefit

As mentioned before, the definition of “product” in marketing means the aggregate of providing satisfaction and benefits in all of or some

⁷³ See Chiou, Jyh-Shen, supra note 35, at 190-204. [Text in Chinese]

combination of physical performance, psychological factors, service impression and symbolic meanings. The key benefit or purpose for which a consumer buys a product varies from consumer to consumer. Harrel and Frazier (1999) provide an easy categorization, they divide a product into three dimensions: core product, which indicates a product's basic function and benefit; branded product, which means the view of a product's packaging, characteristics, quality, style and brand image; third, augmented product, including not only its core benefit and physical being, but also adding other sources of benefits such as shipping service, warranty, returns, product liability, product recall, and et cetera.

Therefore, designing a product strategy should depend on whether the core benefit comes either from the physical good or service performance, or from the augmented dimensions of the product.

B. Utilize the Relation between the Product Classification and Implicit Exchange Cost

According to Commodity School, the consumer products are categorized into convenience goods, shopping goods and specialty goods⁷⁴. "Level of involvement" is the key to understanding the high or low of Implicit Exchange Cost for the above classification. For examples, first, a convenience goods buyer is facing with a choice between, this buyer would choose a brand which has a long-term identical positioning. Because such brand product reduces Information Search Cost, that is convenience for this buyer who is with low involvement. Since a shopping goods buyer is willing to spend some time looking through information, Information Search Cost is not as low as for a convenience goods buyer. Therefore, if a brand has a clear-cut positioning, at least it will make this kind of buyer call to mind going through its information. Last, a specialty goods buyer has high involvement—Moral Hazard Cost and Holdup Cost instead becoming the major consideration in a product strategy. The distribution ratio of Implicit Exchange Cost versus the consumer product classification is shown in Figure 2.3.

⁷⁴ Copeland, M. T. (1923). The relation of consumers' buying habits to marketing methods. *Harvard Business Review*, (1), 282-289.

Copeland categorized consumer products into convenience goods, shopping goods, and specialty goods, and the above product classification is popular and acceptable in marketing disciplines.

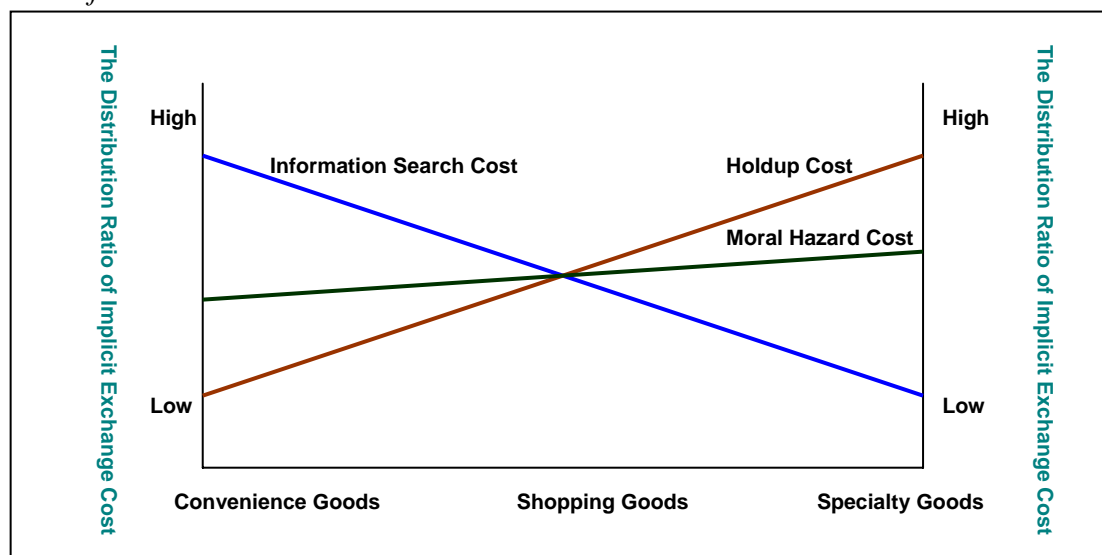
1. Convenience goods: Consumers purchase frequently and with minimal effort, such as shopping for daily life goods. Also "convenience" is the key for consumers.

2. Shopping goods: Consumers are willing to spend some time to do some comparison with other goods, for instance buying a television or clothes.

3. Specialty goods: Consumers are willing to spend lots amount of time to do extensive comparisons with other goods and a lengthy information search, such as purchasing a car or jewelry.

Figure 2.3

The Distribution Ratio of Implicit Exchange Cost Versus the Consumer Product Classification



(Chiou, 2001, p. 195) [Text in Chinese]

On the other hand, there is the other product classification developed by Philip Nelson, experience goods and search goods. Experience goods mean a product or service is difficult to be observed in advance (before the purchase) such as quality of this product/services. Search goods indicate a product or services with features and characteristics easily observable before the purchase. Most digital content products are experience goods such as on-line game or music.

As for business products, which are purchased by various types of businesses, are categorized into capital product, production product and component/subassemblies. Capital product includes installations such as office buildings, factories, and distribution centers, equipment such as computers, desks, and robots. Production product includes two types: raw materials, such as gas, water, wheat; and processed materials, such as plastic, refined oil, and aluminum. Component/subassemblies, includes operations products such as computer chips, transmissions, and switches; operations services such as accounting, waste removal, and consulting; and operating supplies such as pens, paper, and file folders.

In fact, organizational and consumer buying behavior have two similar features: a purchase is the usual outcome of the process and the decision is a result of decision-making activities. However, besides this superficial similarity, organization buying must be handled differently from consumer buying for the

following reasons. First, organizational demand is derived demand. Products are purchased by organizations (companies and nonprofit organizations) to meet the need of their customers. Impulse buying is far less common. Second, more than one individual and, often, many individuals are involved in the purchasing-decision process. Third, the purchasing process may take a long time due to the large sums of money involved, the number of individuals affected, and the technical nature of the products under consideration. Therefore, to make effective use of industrial-marketing resources requires an understanding of (1) who is involved in the purchasing process; (2) how they buy (e.g. what the stages of the process are); and (3) why they buy (what the forces influencing the decisions are and what the relative significance of those forces is)⁷⁵.

The marketers for business products certainly need to concern themselves with more complex issues. Two types of models of organizational buying have appeared in the literature: models of elements of organizational buying, and integrative models of organizational buying. The complexity of organizational buying has led many researchers to focus on a single aspect of it⁷⁶, such as supplier selection and loyal source. On the other hand, despite the various study results or theories, the core concept of marketing is to accelerate exchange efficiency. Thus, the 4C structure is certainly applicable for organizational buyers. After all, the relation between that product classification and Implicit Exchange Cost certainly influences a product strategy.

(2) Price strategy

Besides product strategy, price strategy is the other influential marketing tool to Explicit Unit-Utility Cost. For instance, if price decreases, the result of cost divides utility will go down. Companies from a newly developed country must compete with international corporations usually utilize low-price strategy to make up deficient product utility in a target market.

Meanwhile, according to Kotler & Armstrong (2001), the objectives of pricing are for market survival, sales growth, profitability, competitive pricing, and quality & image enhancement⁷⁷. There are abundant pricing methods in practice or studies matching one or combinations of these objectives. Thus, to utilize the 4C structure's viewpoint in analyzing a specific price strategy is very significant. For example, marketing-penetration pricing is to set a low initial price in order to penetrate the market quickly and deeply, and so attract a large number of buyers

⁷⁵ Lilien, G. L., & Kotler, P. (1983). *Marketing decision making: A model-building approach*. New York: Harper & Row, pp. 258-259.

⁷⁶ See Lilien, G. L., & Kotler, P., supra note 75, at 259-288.

⁷⁷ See Kotler, P., & Armstrong, G., supra note 64, at.300-347.

quickly and win a large marketing share. If a company set up a market standard, the other peripheral products have to follow. Then, Holdup assets are formed solidly.

(3) Place (Channel) strategy

In general, there are two main kinds of place (channel) strategy: “push” and “pull”. A “push” strategy uses a company's sales force and trade promotion activities to create consumer demand for a product. The promotion process is the product producer promoting the product to wholesalers, the wholesalers promoting it to retailers, and finally the retailers promoting it to consumers. On the other hand, a “pull” strategy requires high spending on advertising and consumer promotion to build up consumer demand for a product. If the strategy is successful, consumers will ask their retailers to order the product, the retailers will order the product from the wholesalers, and finally the wholesalers will order it from the product producer⁷⁸.

A distribution channel function is to move goods and services from producers to consumers. If a company chooses an adequate distributor, this certainly helps in settling Information Search Cost and Moral Hazard Cost effectively.

In addition, there is a superabundant of information on the “Internet”, which makes more difficult for an Internet user finding the needed information, thus the Internet is not a necessary tool to solve Information Search Cost. However, if a company owns a long-term identical brand image, the Internet certainly is useful as a communication platform between the company and the customers.

(4) Promotion strategy

Marketing communications also called promotion mix, which include the various communication techniques such as advertising, personal selling, sales promotion, and public relations/product publicity available to a marketer, are combined to achieve targeting audiences in an attempt to influence attitudes and behaviors. The ultimate response, of course, is purchase and satisfaction.

The AIETA model⁷⁹ shows the buyer as passing through the stages of awareness, interest, evaluation, trial, and adoption. Either high or low involvement buyers will experience this process. This model simply explains a buyer's behavior from becoming aware of the product, having the interest, evaluating the product, giving a try, and then if satisfied, adopting the product. Based on this model Chiou (2001) has suggested the key point of promotion strategy for each stage in

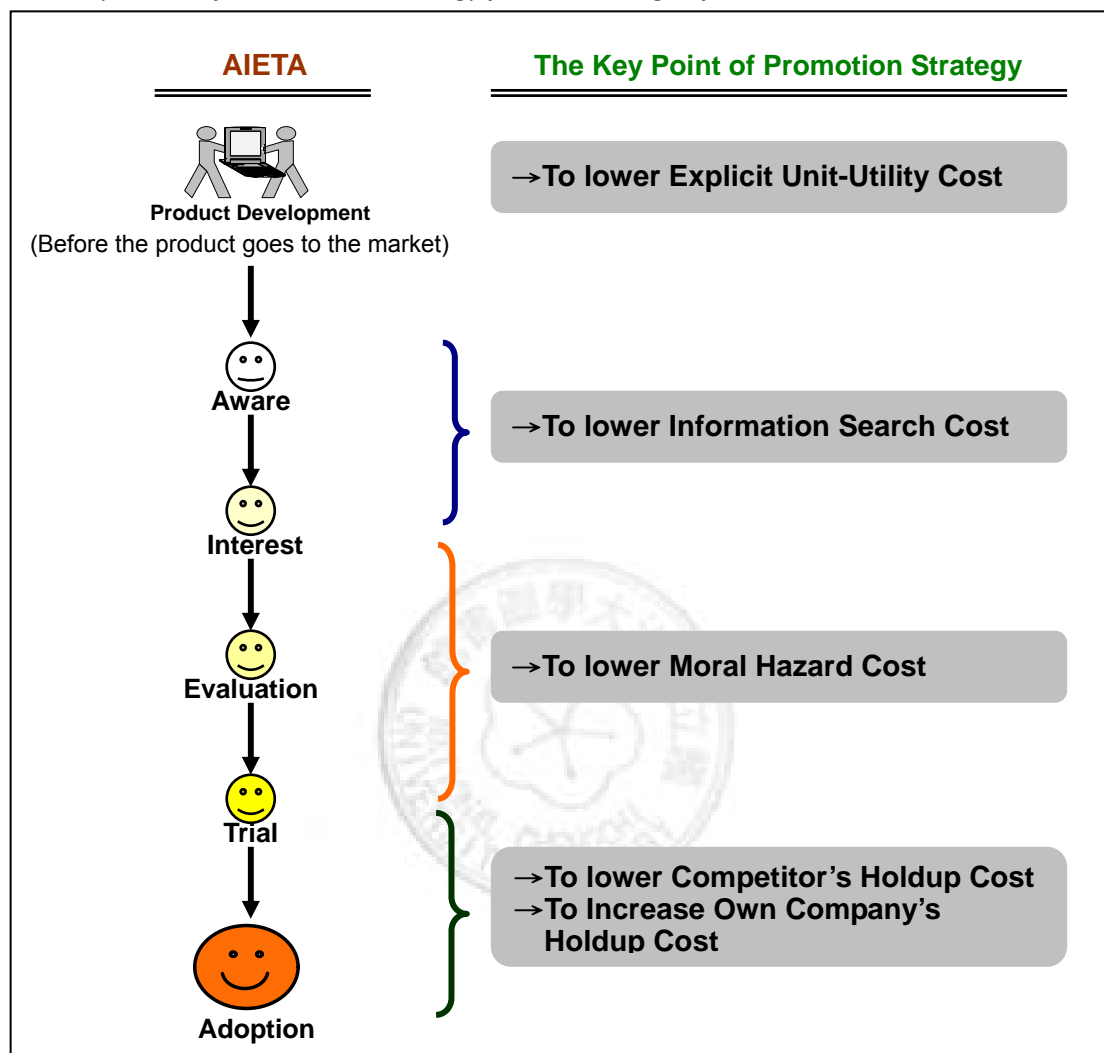
⁷⁸ Harrel, G. D. and Frazier G. L. (1999). *Marketing: Connecting with customers*. Upper Saddle River, N.J.: Prentice Hall.

⁷⁹ Kotler, P. (2006). *Marketing management* (12th ed.). Upper Saddle River, N.J.: Pearson Prentice Hall.

the following Figure 2.4.

Figure 2.4

The Key Point of Promotion Strategy for Each Stage of AIETA Model



(Chiou, 2001, p. 206) [Text in Chinese]

2. Intellectual Property

According to the World Intellectual Property Organization's (WIPO) interpretation⁸⁰, "intellectual property is the name given to property arising out of

⁸⁰ "The World Intellectual Property Organization (WIPO) is one of the specialized agencies of the United Nations (UN) system of organizations. The "Convention Establishing the World Intellectual Property Organization" was signed at Stockholm in 1967 and entered into force in 1970. Initially there were two secretariats (one for industrial property, one for copyright) for the administration of the two conventions, but in 1893 the two secretariats united.

The main mission of WIPO is to promote through international cooperation the creation, dissemination, use and protection of works of the human mind for the economic, cultural and social progress of all mankind." An extract from WIPO (n.d.). *Introduction*. Retrieved February 1, 2006, from

human intellectual efforts.” In other words, intellectual property is the legal rights that result from intellectual activity in the industrial, scientific, literary and artistic fields⁸¹. In brief, as Landes & Posner (2003) indicate, all potentially valuable human product (broadly, “information”) has an existence separable from a unique physical embodiment, whether or not the product has actually been “propertized”, that is, brought under a legal regime of property rights⁸².

Intellectual property comes primarily in the form of patents, trade secrets (know-how), trademarks, and copyrights. As mentioned previously, although patents and trade secrets are more crucial intellectual property rights for high-tech industries, it is not quite so for the digital content industry.

IPRs are territorial, which means they are only protected in the country or region where protection has been applied for and obtained. In most countries, the “IPRs owners” are those who apply for or register first, not who use the intellectual property first. Therefore, if a product is to have the same protection benefit, it is crucial that companies take IP protection actions abroad.

2.1 The Definition and Protection of Intellectual Property

Intellectual property law aims at safeguarding creators and other producers of intellectual goods and services by granting them certain time-limited rights to control the use made of those productions. Certainly those rights do not apply to the physical object in which the creation may be embodied⁸³. In brief, intellectual property should include rights relating to⁸⁴:

- (1) literary, artistic and scientific works;**
- (2) performances of performing artists, phonograms and broadcasts;**
- (3) inventions in all fields of human endeavor;**
- (4) scientific discoveries;**
- (5) industrial designs;**
- (6) trademarks, service marks and commercial names and designations; and**
- (7) protection against unfair competition.**

<http://www.wipo.int/about-ip/en/iprm/index.htm>

International Trade Centre, & World Intellectual Property Organization (2003). *Marketing crafts and visual arts: The role of intellectual property—a practical guide*. Geneva: ITC/ WIPO, pp.7-8.

⁸¹ World Intellectual Property Organization (2004). *WIPO intellectual property handbook: Policy, law and use* (2nd ed.). Geneva: WIPO, p.3.

⁸² Landes, W. M., & Posner, R. A. (2003). *The economic structure of intellectual property law*. Cambridge, Mass.: Harvard University Press, p.1.

⁸³ See World Intellectual Property Organization, *supra* note 81, at 3.

⁸⁴ The Convention founding the World Intellectual Property Organization (WIPO), concluded in Stockholm on July 14, 1967 (Article 2(viii)).

Moreover, intellectual property in general is divided into two branches⁸⁵: (1) **Industrial property**, which includes inventions, industrial designs, trademarks, service marks and commercial names and designation; and (2) **Copyright** and its related rights. The former is the right granted to literary, artistic and scientific work; the latter are rights neighboring on copyright. More details will be described shortly after.

2.1.1 Patent⁸⁶

(1) Definition

A patent is a legal document granting its owner the exclusive rights, this document is issued upon application, by a government office (or a regional office acting for several countries), which describes an invention and creates a legal situation in which the patented invention can normally only be exploited (manufactured, used, sold, imported) with the authorization of the patent owner. Basically, “invention” means a solution to a specific problem in the field of technology. An invention may relate to a product or a process. Therefore, a patent provides an invention’s inventors or owners protection for a limited period.

The “patent” in most countries is classified into the following three categories⁸⁷:

- A. invention patents (patents, utility patents)** indicate, an invention is a creation of technical concepts that reflect on the application of an article or a method;
- B. utility model patents (petty patents⁸⁸)** mean, a utility model is a creation

⁸⁵ See World Intellectual Property Organization, supra note 81, at 3.

⁸⁶ European Patent Office (n.d.). *Patent in general*. Retrieved January 3, 2006, from http://www.european-patent-office.org/gr_index.htm

See International Trade Centre, & World Intellectual Property Organization, supra note 80, at 90-94.

See World Intellectual Property Organization, supra note 81, at 17.

⁸⁷ For examples, see

State Intellectual Property Office of the People’s Republic of China (SIPO) (2002). *Patent Law of the People's Republic of China*. Retrieved January 3, 2006, From

http://www.sipo.gov.cn/sipo_English/flfg/zlflfg/t20020327_33872.htm

Taiwan Intellectual Property Office (TIPO) (2005). *Basic information about patents*. Retrieved January 3, 2006, From <http://www.tipo.gov.tw/eng/howto/procedures-p1.asp#2>

European Patent Office (n.d.). *Patent information*. Retrieved January 3, 2006, From

<http://www.european-patent-office.org/index.en.php>

Patents are classified differently in various countries such as there are utility patents, design patents, and plant patents in the U.S. patent system. **Utility patents** refer to an inventor invents or discovers any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof; **design patents** refer to an inventor invents a new, original, and ornamental design for an article of manufacture; and **plant patents** refer to an inventor invents or discovers and asexually reproduces any distinct and new variety of plant.

For more information on the U.S. patent application, see

<http://www.uspto.gov/smallbusiness/patents/types.html>

⁸⁸ “Utility model” is also named as “petty patent” or “utility innovation”. The conditions for the registration of utility model are usually less strict because maybe only a less significant inventive step

of technical concepts that reflect the innovation of a form, construction, or installation of an article that possesses a new purpose or improved efficacy; and

- C. design patents (industrial design patents)** indicate, a design uses the shape, pattern, color, or combination of an article to enhance its quality, affinity, and value through visual effects in order to increase market competitiveness and visual contentment.

In addition, in most countries, “utility model” are protectable just through the registration, and in comparison with invention patents the fees are lower, the duration of protection is shorter, but otherwise the rights under the utility model or short-term patent are similar⁸⁹.

In short, a patent is the right granted by the State to an inventor to exclude others from commercially exploiting the invention for a limited period, in return for the disclosure of the invention, so that others may gain the benefit of the invention.

(2) The exclusive rights of the patent owner

The exclusive right granted a patentee (a patent owner) is the right to prevent others from making, using, selling, offering to sell or importing the claimed invention. The rights given to the patentee do not include the right to make, use, or sell the invention themselves. Also, the patentee may have to comply with other laws and regulations to make use of the claimed invention⁹⁰.

(3) Protection

As described above, a patent owner has the right to exclude others from making, using, offering for sale, selling or importing for a period of time, generally 20 years for invention patents, 10 years for utility model patents and 12 years for design patents from the date filing the patent application.

The first step in securing a patent is the filing of a patent application to a national patent office for a country or, in some regions, by a regional patent office for several countries, such as European Patent Office and the African Regional Industrial Property Organization. The WIPO-administered Patent Cooperation Treaty (PCT⁹¹) provides the mechanism for filing one patent application

is required. Also the procedure for registration is faster.

For more information, see http://www.wipo.int/sme/en/ip_business/utility_models/where.htm

⁸⁹ See World Intellectual Property Organization, *supra* note 81, at 17.

⁹⁰ WIPO (n.d.). *Patentscope*. Retrieved January 3, 2006, from

http://www.wipo.int/patentscope/en/patents_faq.html#rights

⁹¹ “The national patent system requires the filing of individual patent applications for each country for which patent protection is sought. Filing of patent applications under the national system means that every single Patent Office with which an application is filed has to carry out a formal examination of every application filed with it. Where Patent Offices examine patent applications as to substance, each Office has to make a search to determine the state of the art in the technical field of the invention and has to carry out an examination as to patentability.

targeting several national and regional patent offices⁹².

When a patent expires, the protection immediately ends, and this invention becomes the public domain, that means the owner no longer holds exclusive rights to the patent and this invention becomes available for commercial exploitation by others⁹³.

2.1.2 Copyright

(1) Definition

A. Copyright

Copyright includes literary works such as novels, poems and plays, films, musical compositions; artistic works such as drawings, paintings, photographs and sculptures, and architectural designs; and scientific works. Also in most countries, the generally accepted principle is computer programs should be protected by copyright, whereas apparatus using computer software or software-related inventions should be protected by patent⁹⁴.

B. Related Rights

There are rights related to, or neighboring on, copyright, generally called “related rights” or “neighboring rights”, which includes three kinds of rights: performances of performing artists, phonograms, and broadcasts⁹⁵. The related rights are granted increasingly in more and more countries to protect interests of performers, producers of phonograms and broadcasting organizations.

(2) The exclusive rights of the copyright owner⁹⁶

In order to overcome some of the problems involved in the national system, In 1966, the Executive Committee of the International (Paris) Union for the Protection of Industrial Property invited BIRPI (the predecessor of WIPO) to start a study of solutions to reduce the duplication of the effort both for applicants and national Patent Offices. In 1970 at the BIRPI meeting, adopted a treaty called the Patent Cooperation Treaty. The Patent Cooperation Treaty or “PCT” entered into force and became operational in 1978, with an initial 18 Contracting States.” An extract from WIPO (n.d.). *The Patent Cooperation Treaty*. Retrieved February 1, 2006, from <http://www.wipo.int/about-ip/en/iprm/index.htm>

⁹² See International Trade Centre, & World Intellectual Property Organization, supra note 80, at 92.

⁹³ WIPO (n.d.). *Patentscope*. Retrieved January 3, 2006, from http://www.wipo.int/patentscope/en/patents_faq.html#rights

⁹⁴ “Copyright law and patent law provide different types of protection. Copyright protection extends only to expressions, and not to ideas, procedures, methods of operation or mathematical concepts as such, whereas a patent is an exclusive right granted for an invention, which is a product or a process that provides a new way of doing something, or offers a new technical solution to a problem.” An extract from WIPO (n.d.). *Copyright and Related Rights*. Retrieved January 3, 2006, from <http://www.wipo.int/copyright/en/faq/faqs.htm#rights>

⁹⁵ See World Intellectual Property Organization, supra note 81, at 3.

⁹⁶ See Industrial Development Bureau Ministry of Economic Affairs, supra note 1. [Text in Chinese] WIPO (n.d.). *Copyright and Related Rights*. Retrieved January 3, 2006, from <http://www.wipo.int/copyright/en/faq/faqs.htm#rights>

Copyright is often called a "negative right", as it serves to prohibit people from doing something, rather than permit people to do something. Copyright protection includes moral rights and economic rights. Moral rights indicate the right to claim authorship of the work, that is the right to indicate its name, a pseudonym, or no name on the original or copies of the work, or when the work is publicly released. The other moral right is to oppose changes to the work that may damage the creator's reputation, which is the right to prohibit others from distorting, mutilating, modifying, or otherwise changing the content, form, or name of the work, thereby damaging the author's reputation⁹⁷. In addition, the author has the same right to a derivative work based on its work.

About economic rights, in most countries, stipulating several similar exclusive rights to the copyright owner as described in the following table:

Table 2.2

The Exclusive Rights of the Copyright Owner

Rights	Interpretation
The Right of Copy/Reproduce the Work	<ul style="list-style-type: none"> • Produce copies or reproductions of the work and to sell those copies, such as electronic copies
The Right of Import or Export the work	<ul style="list-style-type: none"> • Import or export the work from where it created
The Right of Adaptation	<ul style="list-style-type: none"> • Create derivative works which are the works adapting the original work*
The Right of Making the Work Public**	<ul style="list-style-type: none"> • Perform or display the work publicly
The Right of Assignment	<ul style="list-style-type: none"> • Sell or assign these rights to others

* The right to adapt a work means to transform the way in which the work is expressed, such as developing a film script from a novel or translating a story.

** In some countries, "right of making the work public" can be categorized into several rights. For examples, "Public recitation", "Public broadcast", "Public presentation", "Public performance", "Public transmission", "Public display", and "Public release"⁹⁸.

⁹⁷ In short, the moral rights include two major rights that are the right not to have the work altered or destroyed without consent (integrity rights), and the right to be attributed as the author of the work (attribution rights).

WIPO (n.d.). *Copyright and Related Rights*. Retrieved January 3, 2006, from <http://www.wipo.int/copyright/en/faq/faqs.htm#rights>

See Landes, W. M., & Posner, R. A., supra note 82, at 270-271.

⁹⁸ "Public recitation" means to communicate the content of a work to the public by spoken words or other means.

"Public broadcast" means to communicate to the public the content of a work through sounds or images by means of transmission of information by a broadcasting system of wire, wireless, or other equipment, where such communication is for the purpose of direct listening reception or viewing

The exclusive right means that only the copyright owner is free to exercise these rights, and others are forbidden from using them without the consent of the copyright owner. Meanwhile, according to the relevant WIPO treaties, these economic rights have a limited time of 50 years after the creator's death.

(3) Protection

A created work is automatically protected by copyright as soon as it exists, without any special registration. However, some countries, such as the United States, Canada and India, provide the possibility to register or deposit. Even though this registration is not needed for owing the copyrights, it still helps prove that copyright subsists in the work and the person, in whose name it is registered and who is the rights owner⁹⁹. Meanwhile, most copyright law defines the acts, including copying or reproducing the work; performing the work in public; making a sound recording of the work; making a motion picture of the work; broadcasting the work; translating the work; and adapting the work, in relation to a work that can not be performed by other than the copyright owner without the prior authorization.

Although, there is not exactly such a thing as “international” copyright protection, several international treaties have covered copyright matters¹⁰⁰. Among these, two treaties are specific for copyright and related rights, the Berne Convention and the Rome Convention. The most influential and oldest treaty is the Berne Convention for the Protection of Literary and Artistic Works¹⁰¹. The goal of this

reception by the public.

"Public presentation" means to use single- or multiple-unit audiovisual devices, or other methods of transmitting images, to simultaneously communicate the content of a work to the public at the place of transmission or at a specified place outside the place of transmission.

"Public performance" means to act, dance, sing, play a musical instrument, or use other means to communicate the content of a work to a public that is present at the scene.

"Public transmission" means to make available or communicate to the public the content of a work through sounds or images by wire or wireless network.

"Public display" means to display the content of a work to the public.

"Public release" means public issue by the rights holder of the content of a work to the public through publication, broadcast, presentation, recitation, performance, display, or other means.

Taiwan Copyright Act (2004, September). Retrieved September 27, 2005, from

<http://www.tipo.gov.tw/eng/laws/e1-4-1an93.asp>

⁹⁹ For example, more details on the U.S. copyright registration, see

<http://www.copyright.gov/circs/circ1.html>

¹⁰⁰ Related treaties under WIPO administration are Berne Convention for the Protection of Literary and Artistic Works (1886), Film Register Treaty (1989), Phonograms Convention (1971), Rome Convention (1961), WIPO Copyright Treaty (WCT) (1996), and WIPO Performances and Phonograms Treaty (WPPT) (1996). Also, WCT and WPPT commonly are referred to as the “Internet Treaties”.

Retrieved November 23, 2005, from <http://www.wipo.int/treaties/en/>

¹⁰¹ Berne Convention for the Protection of Literary and Artistic Works (1886) stipulates two specific provisions on the enforcement of rights, Article 16(1) and (2) provides that infringing copies of a work are subject to seizure in any country of the Berne Union where the work is protected, even when the

Convention is “to protect, in as effective and uniform a manner as possible, the rights of authors in their literary and artistic works.” In other words, once the work is created, initially in one of the contracting parties’ territory, it will be immediately protected in all other member countries¹⁰² to the Convention. In short, if a creator is a national or resident of a country party of the Convention, or has published the work initially in one of the member countries, his/her copyright will be automatically protected in all other countries that are party to the Berne Convention. The other important international treaty, the Rome Convention, was accepted by members of the World Intellectual Property Organization on October 26, 1961, the agreement extends copyright protection for the first time from copyright to related rights, which is to protect the rights of performers, producers of phonograms, and broadcasting organizations¹⁰³.

In addition, a proper notice may deter potential copiers and, in case of infringement, the copiers will not be able to argue that he/she acted innocently. Thus, placing a notice for visually perceptible copies and phonorecords of sound recordings is important. For the former, a copyright owner needs to include the symbol © (the letter C in a circle), the word "Copyright," or the abbreviation "Copr."; the year of first publication of the work; and the name of the owner of copyright in the work, such as © 2006 Google. For the latter, a copyright owner needs to include the symbol ○ (the letter P in a circle); the year of first publication of the sound recording; and the name of the owner of copyright, such as ○2006 SONY BMG Music Entertainment¹⁰⁴. Some countries such as U.S.A., may recommend that the author or copyright owner of unpublished work place a copyright notice on the work, such as “Unpublished work © 2006 Audrey Kuan”.

copies come from a country where the work is not or no longer protected, and Article 13(3), which provides for seizure of copies of certain recordings of musical works imported without permission of the author or other owner of copyright in the country of importation.

For more details on Berne Convention for the Protection of Literary and Artistic Works, see http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html

¹⁰² At the date of retrieving this information for this research, 160 countries are belonged to the Berne Convention. Retrieved February 1, 2006, from http://www.wipo.int/treaties/en/ShowResults.jsp?country_id=ALL&start_year=ANY&end_year=ANY&search_what=C&treaty_id=15

¹⁰³ The Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (1961), see <http://www.wipo.int/treaties/ip/rome/index.html>

¹⁰⁴ United States Copyright Office (2004, December). *Copyright basics*. Retrieved October 1, 2005, from <http://www.copyright.gov>

Table 2.3

Forms of Notice for Visually Perceptible Copies and Phonorecords

Work Types	Elements of the Notice	Examples
Published Works		
Copies	<ol style="list-style-type: none"> 1. The symbol © (the letter C in a circle), or the word "Copyright," or the abbreviation "Copr." 2. The year of first publication of the work 3. The name of the owner of copyright in the work 	© 2006 Google
Phonorecords of sound Recordings	<ol style="list-style-type: none"> 1. The symbol ○ (the letter P in a circle) 2. The year of first publication of the sound recording 3. The name of the owner of copyright 	○2006 SONY BMG Music Entertainment
Unpublished Works		
Copies or Phonorecords	<ol style="list-style-type: none"> 1. Besides the above elements, need to place "unpublished work" in front of the symbol © or the word "Copyright" 	Unpublished work © 2006 Audrey Kuan

Moreover, for a software work copyright and patent protection can be obtained at the same time. Patent protection is superior to copyright protection because copyright only protects against copying of the protected source code, screen display, and command sequence. It does not protect against reverse engineering. However, patent protects against reverse engineering no matter what source code is applied¹⁰⁵.

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2.1.3 Trademark

(1) Definition

A trademark is any distinctive sign that identifies the products and services of a particular business and distinguishes them from those sold or provided by others. A trademark may be a word, letter, numeral, picture, drawing, shape or any combination thereof¹⁰⁶.

When a trademark becomes widely recognizable, then it shall have licensing value, so one subject to consider when evaluating a company is which trademarks are owned by that company and how well those trademarks are

¹⁰⁵ See Glazier, S. C., supra note 25, at. 181.

¹⁰⁶ See International Trade Centre, & World Intellectual Property Organization, supra note 80, at 73.

recognized and positioned.

(2) The exclusive rights of the trademark owner

The exclusive rights of a trademark owner are to use the mark to identify goods or services, and authorize another to use it in return for payment. In other words, two rights are granted to a trademark owner, the right to use the trademark and the right to exclude others from using it.

(3) Protection

A trademark can be protected through either its registration at a trademark office or use of the trademark, these two approaches have developed in various countries, but commonly trademark protection systems combine both factors. The Paris Convention has required contracting countries under the obligation to provide for a trademark register. Thus, most countries provide for a trademark register. Indeed, a trademark is fully secured only when the trademark is registered.

In those countries that have traditionally based trademark protection on usage, the registration of a trademark only confirms the trademark right that has been acquired by use. However, under such situation the first user has priority in a trademark dispute, not the one who first registered the trademark.

The period of protection is different in countries (10years in general) and the protection mark is ® (the trademark is registered) or “™” (the trademark has not been registered), but a trademark can be renewed indefinitely beyond the time limit on payment of additional fees.

2.1.4 Trade Secret

(1) Definition

Indeed, any information or know-how that is related to business or has commercial value can qualify as a trade secret.

(2) The exclusive rights of the trade secret owner

Obviously, since a trade secret is the crucial information or know-how of a business to be kept out of public disclosure, which should not be a public domain. Therefore, the trade secret owner should take extra means to protect such intellectual property. Once a trade secret is known by other than the owner, the value of this trade secret is gone.

(3) Protection

Trade secret protection must rely on the information owner. It is not like protection of other IPRs forms (patent, trademark, and copyright). Trade secrecy is maintained basically as long as the information is kept confidential and time of the ownership is unlimited. If the information is known by others than the

information owner, trade secret protection ends. Therefore, usually the use of non-disclosure agreement (NDA)¹⁰⁷ is the necessary means for the protection of trade secret.

2.2 Conditions of Intellectual Property Protection

While some details of intellectual property law continue to change in many countries, the primary requirements for obtaining IPRs usually have remained the same, and the concept is very similar in most countries. Therefore, this section provides information on major conditions of IP protection which are established by most countries.

Generally speaking, copyright law protects the creative or artistic expression of an idea, patent law protects inventions, trademark law protects distinctive signs which are used in relation to products or services as indicators of origin, registered design law protects the look or appearance of a manufactured or functional article and the law of confidential information protects secret or sensitive knowledge or information that is related to business¹⁰⁸.

2.2.1 Conditions of Patentability

An invention must fulfill certain specific criteria to be patentable, thus the invention to be patented must¹⁰⁹:

(1) Be a patentable subject matter

An invention must fall with the scope of patentable subject matters, which is established by statute. Also it is commonly defined in terms of the exceptions to patentability¹¹⁰.

¹⁰⁷ A formal agreement signed between two parties that one party agrees to give a second party confidential information about its business or products and the second party agrees not to share this information with anyone else for a specified period of time.

TechTarget (n.d.). *Non-Disclosure Agreement*. Retrieved May 6, 2006, from http://searchsecurity.techtarget.com/sDefinition/0,,sid14_gci214435,00.html

¹⁰⁸ Knight, H. J. (2001). *Patent strategy for researchers and research managers* (2nd ed.). Chichester, West Sussex, England; New York: John Wiley & Sons, p.36.

¹⁰⁹ See World Intellectual Property Organization, supra note 81, at 17-20.

Knight, H. J. (2002). Intellectual Property “101”- What Executives and Investors Need to Know About Patent Rights and Strategy. In Berman, B. (Ed.), *From Ideas to Assets: Investing Wisely in Intellectual Property* (pp. 3-25). New York: Wiley.

There are different names which describe the same meanings as mentioned in this research for the conditions of patentability, such as the three criteria for patentability are defined by European Patent Office are: novelty, inventive step, and industrial applicability. For more information, see European Patent Office (2001). *How to obtain a European patent*. Retrieved January 3, 2006, from <http://www.european-patent-office.org/epo/obtain.htm>

¹¹⁰ See Article 27.1 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement.

“The World Trade Organization (WTO)’s TRIPS Agreement came into effect on January 1, 1995, and is

(2) Be new, not previously publicly known (Novelty)

In general, the invention must never have made public in any way before the date on which an application for a patent is filed. However, “novelty” is not something which can be proved or established; only its absence can be proved. Meanwhile, an invention is new if it is not anticipated by the “prior art”¹¹¹. The determination of prior art commonly should be made against a background of only what is known in the protecting country.

(3) Be non-obvious extension or involve an inventive step (Non-Obviousness)

This condition indicates the invention must meet the requirement of inventive step and should not be obvious to someone with a general knowledge and experience of the subject, the so-called “person skilled in the art”.

(4) Be industrially applicable (Utility)

An invention must be a kind which can be applied for practical purpose, not be purely theoretical. In other words, an invention must take the practical form of an apparatus or device, a product such as new material or substance or an industrial process or method of operation.

2.2.2 Conditions for Obtaining Copyright Protection

Copyright law protects only the form of expression of ideas, not the ideas themselves. Patent claims apply to and cover future inventions not fully considered by the inventor, but copyrights protect the expression of ideas by preventing exact copying from the expressive work.

To be qualified for copyright protection, a work must be an original creation, so called “Originality”. Originality can be difficult to determine, but court cases often resolve the question by investigation whether a work has been copied, even in part, from another work.

2.2.3 Conditions for Obtaining Trademark Protection

Any distinctive sign meets government guidelines and not in conflict with

the most comprehensive multilateral agreement on intellectual property, covering: copyright and related rights, trademarks including service marks, geographical indications including appellations of origin, industrial designs, patents including the protection of new plant varieties, layout-designs of integrated circuits and undisclosed information including trade secrets and test data. The TRIPS Agreement sets minimum standards of protection to be provided by Members, specifies domestic procedures and remedies for enforcement of intellectual property rights, and makes disputes about TRIPS obligations subject to WTO dispute settlement mechanisms.” An extract from World Intellectual Property Organization (WIPO) (2002, December). *Intellectual property on the Internet: A survey of issues* (WIPO/INT/02). Geneva: World Intellectual Property Organization, p.32. For more information on the TRIPS Agreement, see http://www.wto.org/english/tratop_e/trips_e/trips_e.htm

¹¹¹ “Prior art” is all the knowledge which existed prior to the relevant filing or priority date of a patent application, either existed by the way of written or oral disclosure.

previous trademarks can be registered in individual country. General speaking, two kinds of requirements exist in practically all nations' trademark laws. A trademark must¹¹²:

(1) Be distinguishable among different products (Requirement of Distinctiveness)

The first basic function of a trademark is to distinguish the products or services of one enterprise from the products or services of other enterprises.

(2) Follow Public Interest (Exclusions from Registration on other Grounds: Public Interest)

A trademark must have no misleading character such as deceiving the public as to the nature, quality or any other characteristics of the goods or their geographical origin do not, or be not violating public order or morality¹¹³.

2.2.4 Conditions for Obtaining Trade Secret Protection

Generally speaking in most countries, a trade secret¹¹⁴ means:

- A. The information must be confidential or secret, in other words not generally known or not protectable;
- B. The information must have commercial value; and
- C. The information owner must have taken methods to keep it confidential or secret.

2.3 Fair Use

“Fair use”¹¹⁵, is an exception to the copyright principle of copyright ownership¹¹⁶,

¹¹² These two requirements also appear in Article 6quinquies B of the Paris Convention where it is stated that trademarks enjoying protection under Article 6quinquies A may be denied registration only if “they are devoid of any distinctive character” or if “they are contrary to morality or public order and, in particular, of such a nature as to deceive the public.” An extract from WIPO (n.d.). *Field of Intellectual Property Protection*. Retrieved February 1, 2006, from <http://www.wipo.int/about-ip/en/iprm/index.htm>

¹¹³ See World Intellectual Property Organization, *supra* note 81, at 76.

¹¹⁴ See International Trade Centre, & World Intellectual Property Organization, *supra* note 80, at 88.

¹¹⁵ In some countries such as United Kingdom, Australia, and Hong Kong (China), they use “fair dealing” to indicate the rights to copy parts of a copyrighted work. “Fair use” is an open-ended system which is more flexible because it does not impose a scope, but “fair dealing” is an exclusive system which indicates clearly where the scope of fair dealing is such as research and private study; criticism, review and news reporting, for use of works in library and school are permitted. For more information, see International Trade Centre, & World Intellectual Property Organization, *supra* note 80, at 61. For example, see

Intellectual Property Department (The Government of the Hong Kong special Administrative Region of the People's Republic of China) (2004, May). *Are there any Copyright exceptions?* Retrieved February 1, 2006, from http://www.ipd.gov.hk/eng/faq/copyrights/cpr_general.htm

¹¹⁶ In practice, there is no “fair use” for the other forms of intellectual property (patent, trademark, and trade secret). Although in some publications may use “fair use” to imply a strategy such as design

based on the belief that the public is entitled to freely use portions of copyrighted work for purposes such as criticism, comment, news reporting, teaching, scholarship, and research. In most countries, there are four factors to be considered in verifying whether or not a particular use is fair¹¹⁷:

Table 2.4

Four Factors for Measuring Fair Use

Factors	Interpretation
The Purpose and Character of the Use	<ul style="list-style-type: none"> ● This is the transformative factor, and generally is considered as being a primary indicator of fair use. ● If the use is for informative or nonprofit educational purposes, it is more likely to be excused as a fair use because the work is the subject of review or commentary. ● The purpose of the use is not for entertainment or commercial purpose.
The Nature of the Copyrighted Work	<ul style="list-style-type: none"> ● If copy from a factual or statistic copyrighted work, it is more likely to be considered fair use. ● A stronger case of fair use if the copyrighted work is a published work not an unpublished work, because the author of the unpublished work has the right to control the first public presence of his/her expression. Thus, the scope of fair use is narrower for unpublished works.
The Amount and Substantiality of the Portion is Used	<ul style="list-style-type: none"> ● This factor indicates the amount and substantiality of the portion is used in relation to the copyrighted work as a whole ● In general, the less copying, the more likely will be considered as a fair use. However, an exception is the copying may not be a fair use if the portion taken is the most memorable aspect of the work.
The Effect of the Use upon the	<ul style="list-style-type: none"> ● If the copying deprives income of the copyright owner or undermines the value of a new or potential market for the

around for applying others' intellectual property legally, but that use of the term does not have the legal meaning as well as copyrights do in the IP legal system.

¹¹⁷ See International Trade Centre, & World Intellectual Property Organization, supra note 80, at 61-62. U.S. Copyright Office (2005). *Fair use*. Retrieved February 1, 2006, from <http://www.copyright.gov/fls/fl102.html>

There are two kinds of copyright pirate include plagiarists and copyright infringers, the former indicates a person is trying to take the copied work as his/her own work, the later means a person is trying to pirate the value of the copied work that has been generated by the copyrighted owner. If the infringer suggests his/her copy is an original work, this infringer is also a plagiarist.

See Landes, W. M., & Posner, R. A., supra note 82, at.60-70.

Potential Market	copyrighted work, the use is less likely to be considered as fair use. The former usually is the reason to trigger a lawsuit, even if the copying not competing directly with the original work.
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Although “fair use” is commonly measured by these four factors in the most countries or by the judge or jury, fair use involves subjective judgments and are often affected by personal factors such as personal sense of right or wrong.

2.4 Collective Management Organization¹¹⁸

In reality, it is difficult for a copyright owner to control all various uses of his/her copyrighted work and to assure efficient management of his/her rights. On the other hand, it is hard for a person who wishes to copy the copyrighted work finding out the copyrighted owner and obtains the authorization for the desired copying or reproductions. Therefore, there are so-called collective management organizations found to be the intermediary between the rights owners and users. According to the definition from WIPO, “collective management is the exercise of copyright and related rights by organizations acting in the interest and on behalf of the owners of rights.” Collective management organizations ensure owners of rights to receive payment for the use of their works.

The purpose of earliest collective management organizations was meant for the music industry. The first collective management organization of copyrights in the world, “Bureau de législation dramatique” was established in 1777 by Pierre-Augustin Caron de Beaumarchais (1732-1799)¹¹⁹. Then, this organization transformed to Sociétedes auteurs et compositeurs dramatiques (SACD) which is an association for play writers and composers.

In 1850, the first collective management organization of copyrights and related rights, Société des auteurs, compositeurs et éditeurs de musique (SACEM)¹²⁰ in France was found, and is still very active, the original purpose of this organization is to manage public performance rights of the musical work collectively. In the following 150 years period, work types are protected by the copyright system have

¹¹⁸ See International Trade Centre, & World Intellectual Property Organization, supra note 80, at 64. WIPO (n.d.). *Collective Management of Copyright and Related Right*. Retrieved February 1, 2006, from http://www.wipo.int/about-ip/en/about_collective_mngt.html#P67_8306

¹¹⁹ Ficsor, M. (2003). *Collective management of copyright and related Rights*, Geneva: WIPO, p.18.

¹²⁰ The International Bureau of WIPO (2002, January). *Introduction to collective management*. Paper presented at the meeting of WIPO International Forum on “Intellectual Property and Traditional Knowledge: Our Identity, Our Future”, Muscat, The Sultanate of Oman.

For more information, see the official site of SACEM. Retrieved February 1, 2006, from <http://www.sacem.fr/portailSacem/jsp/ep/home.do?tabId=0>

been increased, and so in Europe and the U.S. collective management is no longer only for music, but has expanded to cover writing, photography, the fine arts, etc.

Basically, all owners of copyright and related rights such as authors, composers, publishers, writers, photographers, musicians, or performers can be members of collective management organizations. However, although broadcasting organizations have certain rights in their broadcasts, they are not included in the lists of such organizations and are still considered users.

Collective management organizations most commonly deal with the following rights:

Table 2.5

The Most Common Rights that Collective Management Organizations are Dealing with

Rights	Interpretations
The Right of Public Performance	Music played or performed in discotheques, restaurants, and other public places
The Right of Broadcasting	Live and recorded performances on radio and television
The Mechanical Reproduction Rights in Musical works	the reproduction of works in CDs, tapes, vinyl records, cassettes, mini-discs, or other forms of recordings
The Performing rights in dramatic works	theater plays
The Right of Reprographic Reproduction of Literary and Musical works	Photocopying
Related rights	the rights of performers and producers of phonograms to obtain remuneration for broadcasting or the communication to the public of phonograms

Source: WIPO (n.d.). *Collective Management of Copyright and Related Right*. Retrieved February 1, 2006, from http://www.wipo.int/about-ip/en/about_collective_mngt.html#P67_8306

Based on work types (music, literary, dramatic works, etc.), there are various collective management organizations that manage different kinds of right collectively. In practice, currently there are three main types of collective management organizations¹²¹:

¹²¹ WIPO (n.d.). *Collective Management of Copyright and Related Right*. Retrieved February 1, 2006, from http://www.wipo.int/about-ip/en/about_collective_mngt.html#P67_8306

Table 2.6

Three Main Types of Collective Management Organizations

Types of Collective Management Organizations	Interpretations
“Traditional” Collective Management Organizations	<ol style="list-style-type: none"> 1. These organizations act in the interest and on behalf of their members, to <ul style="list-style-type: none"> ● negotiate rates and terms of use with users; ● issue licenses authorizing uses; and ● collect and distribute royalties. 2. The individuals (owners of the rights) do not get involved in any of the above steps directly.
Rights Clearance Centers	<ol style="list-style-type: none"> 1. The Centers grant licenses to users, and such licensing should reflect <ul style="list-style-type: none"> ● the conditions for the use of works; and ● the remuneration terms set by individual members of the centers (the owners of the rights). 2. Therefore, these centers act as an agent for owners of the rights who remains directly involved in setting the terms of use of his works.
“One-Stop-Shops”	<ol style="list-style-type: none"> 1. These “shops” are a kind of coalition of different collective management organizations that can provide users a centralized source.

Among these three types of collective management organizations, the number of “One-Stop-Shops” is growing because increasing popularity of “multimedia” products. This kind of products such as computer software usually either composed of or created from several types of work, therefore the users need to obtain different authorizations at the same time. “One-Stop-Shops” provide a centralized source that is more convenient for the users in comparing rather than using services from the other two types of collective management organizations. Now there are several well-renown collective management organizations such as the International Federation of Reprographic Reproduction Organizations (IFRRO), the Association of European Performers Organizations (AEPO), and the International Federation of the Phonographic Industry (IFPI).

2.5 Creative Commons¹²²

Constantly, there are debates on the subject of “creative control”. Two visions commonly come out, one found in the current copyright law system is a vision of total control—the use of three words are regulated in the copyrighted work which is “all rights reserved”; the other one is a belief that indicates a vision of anarchy—creators should enjoy a wide range of freedom. The obvious extreme of two visions does not help restore the balance of creativity and protection. Therefore, in order to build a layer of reasonable, flexible copyright rules in the face of increasingly restrictive default rules, Creative Commons was found in 2001 with the support of the Center for the Public Domain, and it is led by a Board of Directors that includes experts from various fields such as cyberlaw and intellectual property experts Boyle, and Lessig, MIT computer science professor Abelson, lawyer-turned-documentary filmmaker-turned-cyberlaw expert Saltzman, etc.¹²³.

In 2002 Creative Commons released the first project—a set of copyright licenses free for public use. This project was inspired by the Free Software Foundation's GNU General Public License (GNU GPL), besides Creative Commons has developed a Web application that helps people devote their works to the public domain or retain their copyright while licensing them as free for certain uses. Yet, the goal of this organization differs from the GNU because Creative Commons licenses are not designed for software, but rather for other kinds of creative works: websites, scholarship, music, film, photography, literature, courseware, etc.

Creative Commons currently is located in San Francisco, and has completed the process and developed licenses for jurisdictions in 30 countries.

2.6 The Value of Intellectual Property¹²⁴

“Quantity” must not be the main goal of strategic intellectual property management—“quality” must be. For instance, accumulating patents as many as

¹²² Creative Commons is a nonprofit organization that provides flexible copyright licenses for “copyrighted” works (creative works). This organization uses private rights to create public goods which means creative works can be used freely for certain uses. So instead of “all rights reserved”, this organization offers methods to protect creators’ works and encouraging certain uses of them, use “some rights reserved” in the copyrighted work. For more information, see <http://creativecommons.org/>

¹²³ Creative Commons (n.d.). *About us*. Retrieved February 1, 2006, from <http://creativecommons.org/about/history>

¹²⁴ Marco, L. D., Findlay, B., & Miller B. (2003, May 1). Commercialisation – discovering hidden value. *Issues @ btw*. Retrieved February 5, 2006, from

<http://www.bdw.com.au/publications/issues/articles/issues-03-14.pdf>

Jou, Y. P., & Kuan, Audrey H.Y. (2006). A study on intellectual property business model and marketing mechanism of Taiwan Non-Profit R&D organizations. *NCCU Intellectual Property Review*, 4(1), 63-90. [Text in Chinese]

possible is an approach which has misled many people/companies. Indeed, a patent has no value, unless it can be used as a tool to produce benefits for a company¹²⁵. As mentioned previously, quality and valuable intellectual property¹²⁶:

- (1) should be the indispensable technology in a specific (technical) field;
- (2) can not be replaced by other substitutive technology; and
- (3) is unable to let the others design around.

Perhaps, the above definitions can not apply to trademark, copyright and related rights, but these at least can provide applicable ideas in a practical level.

However, for years among all types of intellectual property the focus of research or discussions is mostly on “patent”, perhaps the secondary is on “copyright”. Keep in mind, intellectual property is valuable not because of “patent” or “copyright”. Sometimes goodwill¹²⁷, trade secret and know-how¹²⁸ of an invention have the influential impact.

In the aspect of intellectual property appraisal, the appraisal theories are still mainly based on Accounting and Finance¹²⁹, and have not been able to appraise the value through the quality of intellectual property and the role of this IP in an industrial structure.

After all, after the intellectual property is created, IP must be penetrated into the world through designed marketing strategies in order to achieve the goal of obtaining economic profit.

2.5.1 The Actions for Exercising Intellectual Property

Also commonly most people take “licensing” as the only method to profit from intellectual property. However, the value of intellectual property comes from actions

¹²⁵ See Glazier, S. C., supra note 25, at p.3.

Jou, Y. P. (2006). *Beyond IP: Intelligence resources planning*. Taipei: Commonwealth Publishing Group. [Text in Chinese]

¹²⁶ See Y. P. Jou, at p.4 of this research.

See Foxconn, supra note 7.

¹²⁷ Goodwill is an intangible asset that provides a company with above average earnings power such as a company's brand name and reputation. Also, goodwill is an important accounting concept that describes the value of a business entity not directly attributable to its tangible assets and liabilities. Staffordshire University (n.d.). *Learning more about Goodwill*. Retrieved February 1, 2006, from <http://www.staffs.ac.uk/schools/business/bsadmin/staff/s5/mscproj/defgood1.htm>

The McGraw-Hill Companies Inc. (2000). *Goodwill*. Retrieved February 1, 2006, from <http://bwnt.businessweek.com/Glossary/definition.asp?DEFCode=G17>

¹²⁸ Know-how is knowledge and experience of a technical, commercial, administrative, financial or other nature, which is practically applicable in the operation of an enterprise or the practice of a profession such as skill and knowledge of the workforce and the talents.

The International Association for the Protection of Intellectual Property (1974). *The know-how - definition - legal regime*. Retrieved February 5, 2006, from www.aippi.org/reports/resolutions/Q53A_E.pdf

¹²⁹ For example, see,

King, K. (2003). *The value of intellectual property, intangible assets and goodwill*. Retrieved February 5, 2006, from http://www.wipo.int/sme/en/documents/value_ip_intangible_assets.htm

of two categories: “actualization” and “exchange”, and these are the process of moving inventions from the workbench to the global market. Also the result of these actions can be used to evaluate intellectual property management achievement within a company¹³⁰.

Actualization includes “productization” and industrialization; the former action indicates the primary goal of R&D and intellectual property management strategies for a company (the IP owner). This action is to utilize intellectual property creating a new product. The latter action means forming a new industry. In the final analysis of these actions, revenue is the key for evaluating the performance of these two activities.

On the other hand, “exchange” means utilizing intellectual property as a tool or medium to obtain or create profit. This category includes eight activities:

- (1) Technology service: using intellectual property as the foundation of value-added services (intangible service) which deliver technology solutions or relevant knowledge, such as technology transfer;
- (2) Management service: this is the other type of value-added services, but provides administrative activities/services in the relevant fields of its intellectual property;
- (3) New venture (start-up or spin-off): this is based on intellectual property to establish a new trading entity;
- (4) Joint venture¹³¹: the intellectual property owner establishes a new entity with collaborative parties that are usually complementary resources;
- (5) Stock acquisition: using the deployment of intellectual property globally to pursue the opportunities for investment, utilizing IP as an investment tool in order to obtaining a company’s stock and then may get involved in its management
- (6) IP litigation: this is one means to force the (potential) infringer to pay royalty or to be pushed out of the market;
- (7) Licensing: obviously, this is by licensing IPRs to a third party in order to obtain royalty and possibly to expand their own market share; and
- (8) IPRs assignment: making profit to a third party worldwide by selling (“assign” or “transfer”) either all or part of rights to different people, for different geographical areas and for different periods of time. For example, an assignment of copyright must be in writing and must be signed by the copyright owner to

¹³⁰ See Jou, Y. P., & Kuan, Audrey H.Y. supra note 124, at 63-90. [Text in Chinese]

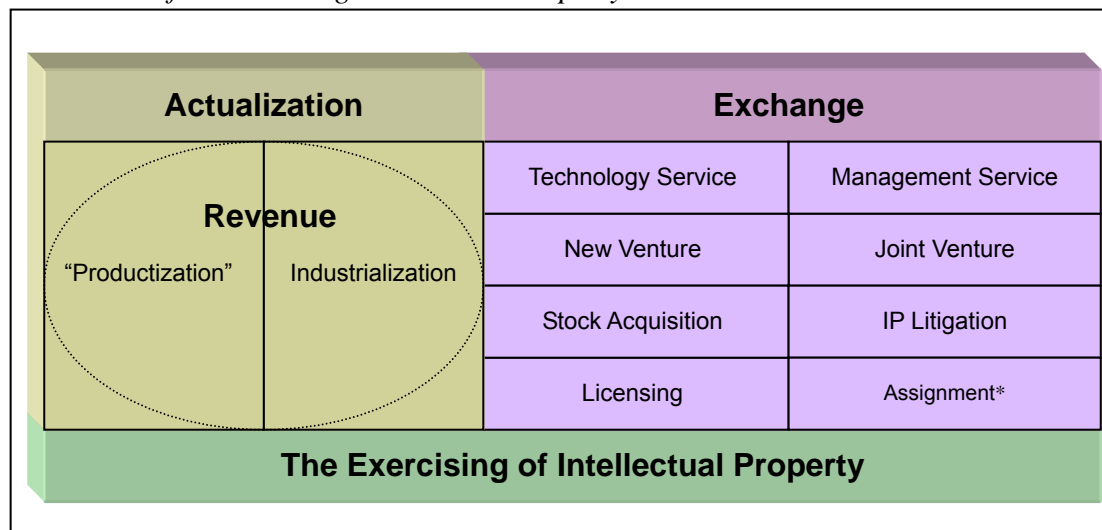
¹³¹ A contractual agreement joining together two or more parties that agree to create a new entity together by both contributing equity, and then share in the revenues, expenses, losses and control of the enterprise.

WebFinance (n.d.). *Joint venture – Definition*. Retrieved May 6, 2006, from http://www.investorwords.com/2671/joint_venture.html

transfer the copyright. In general, the IP owner has little or no involvement of the assignee’s commercialization.

Figure 2.5

The Actions for Exercising Intellectual Property



(Jou & Kuan, 2006, p.68) [Text in Chinese]

* Generally speaking, in law an assignment is a type of transfer of one kind of intellectual property rights from one party to another

Although there are several methods to exercise intellectual property, “productization” is the most common (mostly, the only method) exercising method for a company. Licensing is possibly the second kind of commonly used tool. On the other hand, since the goal of a nonprofit organization is not making profit through producing a product, they can utilize intellectual property in a more flexible manner.

After all, the value and quality of intellectual property should be examined through the result of its being exercised. For example, if a patent can not stand up strongly in the process of IP litigation, the value and quality of this patent is questionable. In other words, the action of “creating value” is achieved through the use of intellectual property combined with marketing strategies worldwide.

2.7 Marketing Law

This section introduces the general perspectives of marketers and lawyers towards the relationship between laws and marketing.

In most countries, there is no general term given to an overview of various aspects of business law practice in marketing, but in the United States of America, the United Kingdom, and et cetera, that is called “Marketing Law”. Marketing Law

indicates the rules of marketing are designed to protect both consumers and marketers¹³². It is important to keep up-to-date regarding the legal responsibilities as marketers and conduct campaigns and promotions that conform to the law and to learn how to make the best use of them. There are several common areas of marketing law¹³³ in most articles: promotions/advertising, trademarks, and copyrights¹³⁴. “Advertising” is merely one means of promotion, but it is the main promotion method in the market. Also there have been lots of issues or lawsuits because of advertising. Therefore, national law, law firms and most articles discuss this subject separately, such as for the U.S. Federal Trade Commission (FTC), “advertising” means more than traditional broadcast and print communications. It includes infomercials, product packaging, statements in product manuals, and in-store and online promotions¹³⁵. Therefore, FTC provides general advertising principles under Federal Trade Commission Act, so marketers/advertisers have the standard to follow.

Companies should also know that many countries have established laws that apply to electronic commerce (e-commerce)¹³⁶ and telemarketing campaigns, such as Taiwan Electronic Signatures Act¹³⁷. Every day new legislative and regulatory

¹³² The American Marketing Association (n.d.). *Marketing law*. Retrieved February 1, 2006, from <http://www.marketingpower.com/content24637.php>

¹³³ Retsky, M. L. (2001). *Marketing law overview*. Retrieved February 1, 2006, from <http://www.marketingpower.com/content1011.php>

Osborne Clarke Alliance (n.d.). *Marketing law*. Retrieved February 1, 2006, from <http://www.marketinglaw.co.uk/default.asp>

McNamara, C. (1999). *U.S. Laws regarding advertising and marketing*. Retrieved February 1, 2006, from <http://www.managementhelp.org/legal/advrtze/advrtze.htm#anchor380521>

¹³⁴ For example, see, U.S. Federal Trade Commission (n.d.). *General advertising policies*. Retrieved February 1, 2006, from <http://www.ftc.gov/bcp/conline/pubs/buspubs/ad-faqs.htm>

¹³⁵ In U.S., any company that creates advertising materials at least should know how the Federal Trade Commission and the National Advertising Division of the Council of Better Business Bureaus regulate their industry.

Perkins Coie LLP (n.d.). *Marketing and advertising law*. Retrieved February 1, 2006, from <http://www.perkinscoie.com/area.cfm?id=196>

¹³⁶ The commercialization of the Internet in the 1990s started a revolution in the use of information technology for conducting business and two terms were created for such new business model: electronic business (e-business) and electronic commerce (e-commerce).

E-business can be any business process that relies on an automated information system, usually includes e-commerce and so is more than just e-commerce. It involves business processes that may include the entire value chain such as supply chain management, customer services.

E-commerce basically includes elements of distributing, buying, selling, marketing, and servicing of products (physical products and services) over electronic systems such as the Internet and other computer networks. The information technology industry might see it as an electronic business application aimed at commercial transactions.

McNurlin, B. C., & Sprague, R. H. (2002). *Information systems management in practice*. Upper Saddle River, N.J.: Prentice Hall.

¹³⁷ Taiwan Electronic Signatures Act was announced at Nov. 14, 2001.

Article 1: This Act is enacted to encourage the use of electronic transactions, ensure the security of electronic transactions, and facilitate the development of electronic government and electronic commerce. For matters not provided in this Act, the provisions of other applicable laws shall govern.

Taiwan Electronic Signatures Act (2001). Retrieved February 1, 2006, from <http://db.lawbank.com.tw/Eng/FLAW/FLAWDAT01.asp?lsid=FL011349>

initiatives arise, addressing subjects from privacy, to security and identity risks that surely accompany electronic campaigns.

However, “Marketing Law” should not mainly include promotions/advertising, trademarks, and copyrights, other IPRs also should be included. For example, the design of product appearance can be applied for a design patent. As mentioned at the beginning of this research, the role of intellectual property generally has not received much attention in the marketing field’s education system. Therefore, because of the lack of experience in this field, there is a great room for growth in the applications for intellectual property and developing the associated rights. Since most marketers are not trained in intellectual property, they can not utilize IP through work experience or educational heritage.

3. The Influence of the Internet on Intellectual Property and Marketing

What has shaken the world of marketing and intellectual property? There are extensive research papers and opinions that can be drawn on. Armstrong & Kotler (2005) indicate many forces changing the world economy, such as technology, globalization, environmentalism, and others¹³⁸. WIPO in May 2000 published a research, “Intellectual Property on the Internet: A Survey of Issues”, defined issues and questions for the exploitation and protection of intellectual property that are raised by the Internet.

The World Wide Web was first developed in the 1990s and it transformed the Internet from a technical infrastructure to a network linking various communities and peoples all over the world. The Internet is now commonly known as the World Wide Web and has been on an exponential growth curve since 1994 (Network Wizards 2005¹³⁹; Rutkowski 1998¹⁴⁰), corresponding with the introduction of NCSA¹⁴¹’s graphically-based software interface Mosaic for “browsing” the World Wide Web (Hoffman, Novak, and Chatterjee 1995¹⁴²)¹⁴³. The influence of the Internet on almost

¹³⁸ See Armstrong, G. & Kotler, P., supra note 26, at 480-484.

¹³⁹ Network Wizards (2005, July). *Internet domain survey*. Retrieved September 2, 2005, from <http://www.isc.org/index.pl?ops/ds/>

¹⁴⁰ Rutkowski, A. M. (1998, February). *Internet trends*. Center for Next Generation Internet, Washington, D.C. Retrieved September 2, 2005, from <http://www.ngi.org/trends.htm>

¹⁴¹ The National Center for Supercomputing Applications (NCSA) is created by the National Science Foundation (NSF) and the state of Illinois in 1986, has been a leader in the development and deployment of new computing and software technologies for the scientific and engineering community. Retrieved September 2, 2005, from <http://www.ncsa.uiuc.edu/AboutUs/>

¹⁴² Hoffman, D. L., Novak T. P., & Chatterjee P. (1995). Commercial Scenarios for the Web: Opportunities and Challenges. *Journal of Computer-Mediated Communication*, Special Issue on

every human activity and behavior is apparent, everyday this horizon is expanding

According to a new survey released by the firm eMarketer, in late 2005 one billion people worldwide had Internet access and nearly 250 million households had broadband. Also, the firm estimated that of these people, 845 million used the Internet regularly. The U.S.A. was still number one in terms of numbers of Internet users with 175 million. However, Asia-Pacific was the region which had the largest number (315 million) of the Internet users and was the largest broadband center containing nearly 40 percent of the world's broadband households. In addition, Latin America was the fastest growing broadband region worldwide, reaching 70 percent subscriber growth, with currently 70 million people using Internet access¹⁴⁴.

3.1 The Migration Facts of Intellectual Property to the Internet

As a result of such Internet development over the last few years, and more digitization of works of intellectual property, the transfer of protected works over the network has increased dramatically. Certainly, the Internet has already affected both the form and the substance of intellectual property rights. Therefore, the migration of intellectual property to the Internet can be seen in each type of rights (Table 2.7).

Furthermore, intellectual property increasingly becomes the value of companies which are established based on the Internet, such as the enormous database of customer information¹⁴⁵.

Table 2.7

The Migration Facts of Intellectual Property to the Internet

Rights	Migration Facts	Objectives
Patent	<ul style="list-style-type: none"> ● Patenting online business methods/models 	<ul style="list-style-type: none"> ⊙ Protection ⊙ Payback
Copyright	<ul style="list-style-type: none"> ● Forming a new industry: e-publishing industry ● More works are created by digital 	<ul style="list-style-type: none"> ⊙ Meeting the growing demand of digital works

Electronic Commerce, 1(3).

¹⁴³ Novak, T. P., & Hoffman, D. L. (1998, February). *Bridging the digital divide: The impact of race on computer access and Internet use*. Vanderbilt University. Retrieved September 2, 2005, from <http://www.observatory.com/digital.htm>

¹⁴⁴ AFP (Washington) (2006, May 18). One billion people have Internet access. *AFP*. Retrieved May 20, 2006, from http://news.yahoo.com/s/afp/20060518/tc_afp/afplifestyleinternet_060518163500

¹⁴⁵ See World Intellectual Property Organization (WIPO), supra note 110, at 19-28.

	technologies	
Trademark	● Most businesses use their trademark or trade name as their domain name	◎ Domain names perform as an identifying function
Trade Secret	● Emphasizing technological measures for information security	◎ Protection

In the field of patent, due to increasing investment in the research and development for the digital technology and environment, companies, nonprofit organizations and even individuals start patenting their online business methods for protection and possible payback.

Copyright has also been impacted. Not only the ease with which works of literature, film, art, and computer programs can be digitized, but also the quickly expanding availability of new utilities software¹⁴⁶, have both lead to an exploding worldwide pirating rate. It is estimated 35 percent of personal computer (PC) software worldwide was pirated in 2004, at a cost to the industry of USD 31 billion (Business Software Alliance, & International Data Corporation, 2005)¹⁴⁷.

Yet, the noticeable growing demand of e-publications such as e-books and e-magazines, and the need of fee-based database has established a new industry–e-publishing industry. In addition, more and more works are created by digital technologies.

Furthermore, collective rights management organizations like much of the intellectual property system, are organized on the basis of territoriality. Since the Internet can make a copyrighted work immediately globally accessible, some have argued that information technology and the Internet are a threat to such organizations. In an effort to solve this problem, some collective management organizations have been working towards enabling their system of mutual representation to make global Internet licenses¹⁴⁸ available to users.

“Trademark” traditionally works as an identification of products which are produced by a certain company or a nonprofit organization. In other words, “branding” achieved through the use of trademarks combined with advertising and marketing strategies. Because of the Internet where consumers can only have little or

¹⁴⁶ Systems software in general includes utilities software and operating systems, the former provide programs that make the digital networks very useful for the users, the later enable computers to operate.

¹⁴⁷ Although this report shows the worldwide piracy rate of PC software in 2004 decreased by one percentage point to 35 percent, this happened regardless of an influx of new PC users from high piracy market sectors (consumer and small business), and the increasing availability of unlicensed software on Internet P2P file-sharing sites.

Business Software Alliance (BSA), & International Data Corporation (IDC) (2005, May). *BSA and IDC global software piracy study*. Retrieved September 2, 2005, from <http://www.bsa.org/usa/research/>

¹⁴⁸ See World Intellectual Property Organization (WIPO), supra note 110, at 62-63.

no physical contact to products or sellers, consumers have become even more cautious and relied on strong brand awareness and brand performance for the “trust” to engage in a deal (e-commerce). Identity on the Internet has exceeded the trademark system, due to domain names (the Internet addresses) which people and search engines operate in and most businesses use their trademark or trade name as their domain name. Domain names now perform an identifying function similar to that of a trademark¹⁴⁹. From this trend, the business of “cybersquatting”¹⁵⁰, appeared.

About trade secrets, the popularization of free software – online Instant Messenger¹⁵¹ (such as Microsoft MSN, Yahoo Messenger, Skype, AOL Instant Messenger, Tencent QQ¹⁵², Google Talk, and ICQ) has brought a crisis to the protection of trade secrets. This type of real-time communication provides the Instant Messenger (IM) users an online virtual zone, where the IM users can send and receive information or files from others instantly. Because of the design of this software, it is hard to trace back the contents of communications; especially as an IM user can delete them anytime. Therefore, more and more companies forbid the usage of IM by blocking the access to the IM programs. Certainly, the protection of trade secrets on the digital networks relies heavily on technological measures for information security, especially if a trade secret has been stolen and posted on the Internet.

According to a research by iResearch (2005) indicates the top online activities IM users perform include send/receive email, online chatting, software downloading and using search engines. See the following figure¹⁵³:

¹⁴⁹ See World Intellectual Property Organization (WIPO), *supra* note 110, at 22-23.

Laura Rush (2002, July 30). Top E-Commerce companies analyzed. *Internet.com/Ecommerce Guide.com* (Jupitermedia Corporation). Retrieved October 29, 2005, from <http://www.ecommerce-guide.com/news/trends/article.php/1433221>

¹⁵⁰ Cybersquatting means the act of registering a popular domain name (Internet address) which usually is a company name and with the intent of selling it to its rightful owner.

¹⁵¹ Most online Instant Messengers (IM) are free of charge, and can be downloaded online at any time. However, the IM users need to pay a fee if require value-added services such as a package of animated characters.

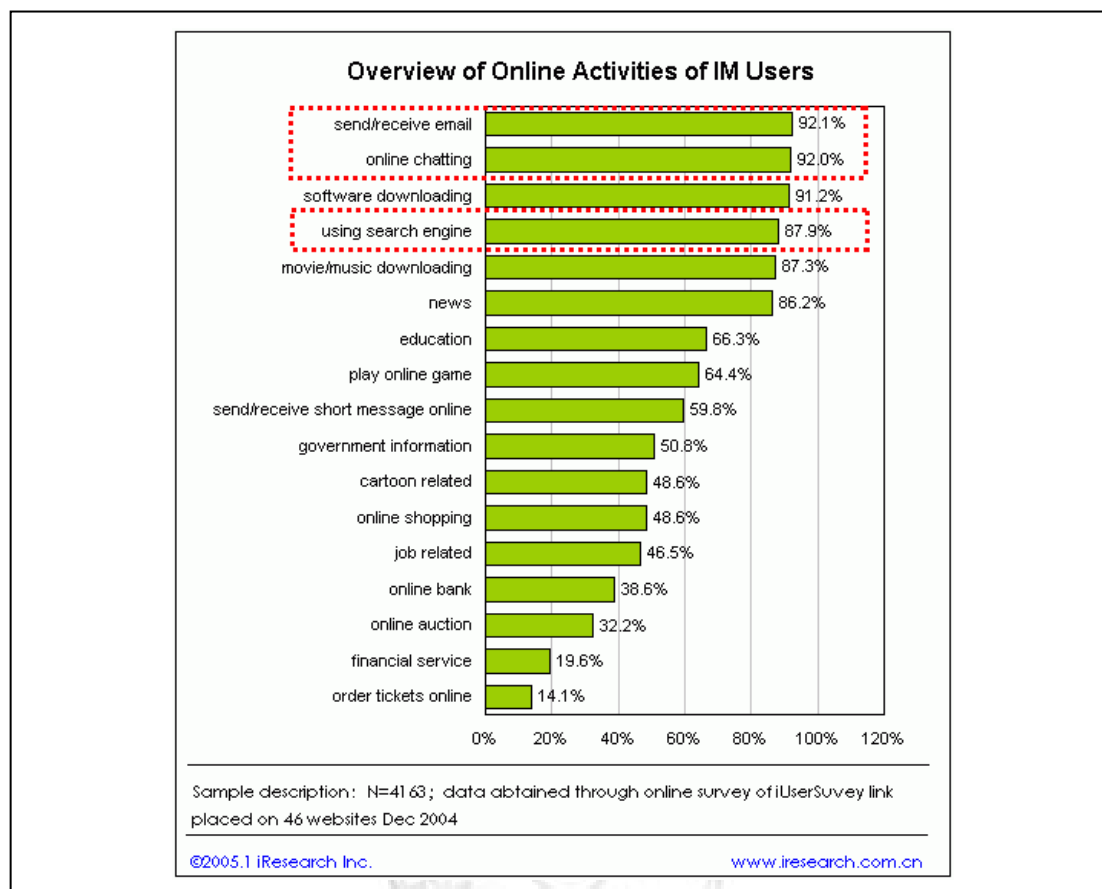
For more information, see <http://www.ntia.doc.gov/> and <http://english.iresearch.com.cn/>

¹⁵² The original name of QQ was OICQ (Open ICQ) and initially developed by Tencent Inc. in February 1999. However, because of the possible trademark infringement with another instant messenger, ICQ, Tencent changed its name to QQ. Now it is the most popular free instant messaging software in China, yet outside of China, QQ is not as popular as MSN or Yahoo Messenger. For more information, see <http://www.qq.com/>

¹⁵³ iResearch (2005, July). *Overview of online activities of IM users*. Retrieved October 1, 2005, from http://english.iresearch.com.cn/instant_messenger/detail_views.asp?id=5985

Figure 2.5

The Overview of Online Activities of IM Users



(iResearch, 2005)

The key challenge for an intellectual property system is the expectation of most of the Internet users which is the information and intellectual property from the Internet should be free of charge. Thus, many online companies have relied on advertising revenue or valued-added service charges to “support” their free products and information. For fee-based products such as music or subscription services (e.g. news), these are more likely dependant upon the efficient management of rights.

It is also very critical to adjust the legal system to respond to the new technological developments in an effective and appropriate way, such as the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT), as mentioned before, usually are referred to the “Internet Treaties” and were put into effect on the following dates respectively: the WCT on March 6, 2002, and the WPPT on May 20, 2002. These treaties were designed to update and supplement the existing international treaties on copyright and related rights, (the Berne Convention and the Rome Convention).

As described above, the advance of new digital and information technologies,

and the Internet, have had a significant impact on intellectual property. This impact has hit especially copyright and related rights, and the copyright industries such as music, film and software throughout the world.

3.2 The Influence of the Internet on Marketing

As the impact of the Internet expands, new business and marketing strategies evolve in supplying differentiated services and requirements. At current levels, the Internet and broadband penetration now rivals in many markets. Of course, as the usage of Internet and broadband grows, it may become the dominant media. No doubt, for past years most of marketers are used to follow the “trend”, taking the Internet as a necessary marketing tool in his/her marketing strategy, despite the actual fact is that the Internet is just one kind of mediums, any company uses the Internet as a marketing tool still needs to complete understand customers’ needs and achieve the cost-effect goals of his/her company¹⁵⁴.

Moreover, Ettenberg (2002) points out e-commerce plays a critical important role in the Economy and he believes the Economy will prove that e-commerce is not technology business, a database business, or even a product-based business, but a service business. However, more importantly he states the Internet is simply the communication component of this business, not a business in itself¹⁵⁵.

Therefore, back to the most basic question—the most important key in marketing is the ability to use and to interpret available “tools” and “information”.

4. Exclusive Summary

4.1 Marketing Theory

The summary of marketing theory is showed in the following table:

Table 2.8

The Exclusive Summary of Marketing Theory

Subjects	Summary
The Definition of Marketing	<ol style="list-style-type: none"> 1. The definition of marketing There are social and managerial definitions for marketing. 2. A modern marketing system A common situation, in which marketing involves serving a market of end users in the face

¹⁵⁴ Cohan, P. S. (1999). *Net Profit: How to invest and compete in the real world of Internet business*. San Francisco: Jossey-Bass, PP.267-289.

¹⁵⁵ See Ettenberg, E., supra note 24, at 5-21.

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	<p>of competitors. The company and the competitors send their products and messages to end users, either directly or through marketing intermediaries.</p> <p>3. A marketing mix</p> <p>Commonly, some people mistake a marketing mix: the 4P's (product, price, place, promotion) for the meaning of marketing.</p>
General Theory of Marketing School	<p>1. The topic of a general theory of marketing didn't receive adequate attention until 1979</p> <p>2. Sheth, Gardner, & Garrett's research not only classifies school of marketing into twelve distinctive bodies of knowledge (schools), but also sorts out the most common factors and proposed well-defined components for a general theory of marketing.</p> <p>3. None of these most respected twelve distinct schools take intangible assets or intellectual property as the primary relevant variables in their research or major objectives of study.</p>
The Core Concept of Marketing	<p>1. "Exchange" is the core concept of marketing</p> <p>2. Marketing is meant to enhance the efficiency of an exchange, solve the problems in an exchange and increase frequency of an exchange.</p>
Transaction Cost Analysis	<p>1. Williamson has developed the first significant structure of transaction cost analysis. He points out the transaction cost is created by the joint effect of human factors and environmental factors which are the major influences on the efficacy of an exchange.</p> <p>2. The transaction includes two types of costs: Ex-ante transaction is the transaction cost happens before the agreement. Ex-post transaction on the other hand that happens afterwards.</p>
A Total Cost Analysis Structure	<p>1. Chiou(2001) has developed a total cost analysis structure: 4C (cost) structure includes two categories: "Explicit Unit-Utility Cost" and "Implicit Exchange Cost"</p> <p>2. "Explicit Unit-Utility Cost" indicates a cost-utility ratio</p> <ul style="list-style-type: none"> ● An exchange occurs when the parties involved expect the exchange action will furnish greater benefit (utility) ● The cost-utility ratio: putting the influence of product brand image and company holdup leverage aside, the total cost which a buyer (end user/company) needs to pay out divides the total benefit (utility) that obtains from a product ● The utility contains two aspects: one is tangible benefit which is product functions; the other is intangible benefit which provides psychological functions ● The general rules of Explicit Unit-Utility Cost <p>(1) Before a product goes to the market, the company must know whether the Explicit Unit-Utility Cost of this product is competitive or not.</p> <p>(2) Otherwise, there are only three exceptions that a company allows a product without competitive Explicit Unit-Utility Cost go to the market:</p> <p>A. This company has competitive advantage in dealing with Implicit Exchange Cost;</p> <p>B. The difference of Explicit Unit-Utility Cost is little in that specific industry where this company is in, and the source of competitive advantage comes from the company's ability of dealing with Implicit Exchange Cost;</p> <p>C. The industry where this company is in, the buyer's utility is produced depends entirely on the product image which is occurred after the product goes to the market, especially, if it is difficult to assess the level of psychological benefits before the product goes to the market.</p>

	<ul style="list-style-type: none"> ● There are two directions for lowering “Explicit Unit-Utility Cost” <ol style="list-style-type: none"> (1) Cost structure of the product (2) Product utility to a buyer (end user/company) <p>3. “Implicit Exchange Cost” includes “Information Search Cost”, “Moral Hazard Cost” and “Holdup Cost”.</p> <p>A. Information Search Cost</p> <ul style="list-style-type: none"> ● This cost occurs before the transaction, exchange parties (buyer and seller) involved in a process of finding adequate exchange parties. ● That involves the correlation of a buyer’s “perception” and “level of involvement”. ● Segmentation, Target Market and Positioning (STP) are the most relevant elements to lowering Information Search Cost in the marketing strategy decision ● How to lower Information Search Cost <ol style="list-style-type: none"> (1) Carry out a clear-cut positioning (2) Define distinct product positioning (3) Have long-term identical positioning (4) Integrate marketing mixes (5) Exploit various communication channels (6) Take advantage of the Internet (7) Make a comparable creative product (8) Balance traditional and modern communication channels (9) Increase Information Search Cost for making the comparison to various brands more difficult <p>B. Moral Hazard Cost</p> <ul style="list-style-type: none"> ● This cost is a buyer’s degree of trust to a seller/product ● Intangible service providers and new-found / not-yet-established-renown companies need to strive solving higher Moral Hazard Cost ● How to lower Moral Hazard Cost for the above types of company <ol style="list-style-type: none"> (1) Establish representative cases (2) Provide transparent relevant actions to lower buyers’ watch—over cost (3) Cooperate with companies whose image has good spillover influence (4) Offer limited warranties and unconditional return of purchases. ● How to lower Moral Hazard Cost, all kind of companies <ol style="list-style-type: none"> (1) Live up to one’s words (2) Take customer’s benefit as the most important consideration (3) Maintain company’s image (4) Care for buyers’ needs (5) Let buyers trust the company, not specific employees (6) Develop a solid product master plan. <p>C. Holdup Cost</p> <ul style="list-style-type: none"> ● This cost comes into existence right after the transaction is done, due to Holdup asset is established. This asset causes “Switching Cost” if a buyer switches to the other exchange relationship. ● Holdup asset can be tangible or intangible ● When each side of an exchange party terminates the transaction, Holdup asset immediately loses its value
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	<ul style="list-style-type: none"> ● Two aspects from which one can study buyers' cost level: a buyer has already used the product and a first-time buyer ● Six categories of Holdup asset <ol style="list-style-type: none"> (1) Distinctive use knowledge (2) Unique physical equipment, software or service (3) Special preferential benefit for loyal consumers (4) Intangible asset, such as communication efficiency (5) Psychological identification (6) Particular social pressure
<p>The Differences between Traditional Management School and 4C Structure</p>	<ol style="list-style-type: none"> 1. The 4C structure is not meant to deny traditional marketing structure but is meant to reform one based on many traditional concepts 2. The Relationship between the 4C Structure and 4Ps <ol style="list-style-type: none"> A. Product strategy <ul style="list-style-type: none"> ● There are two directions for planning a product strategy: develop adequate core benefit and utilize the relation between the product classification and implicit Exchange Cost. ● Product strategy is the influential marketing tool to Explicit Unit-Utility Cost B. Price strategy <ul style="list-style-type: none"> ● Besides product strategy, price strategy is the other influential marketing tool to Explicit Unit-Utility Cost. ● For instance, if price decreases, the result of cost divides utility will go down. C. Place (channel) strategy <ul style="list-style-type: none"> ● There are two types of channel strategy: "push" and "pull" ● If a company chooses an adequate distributor, this certainly helps in settling Information Search Cost and Moral Hazard Cost effectively. ● There is a superabundant of information on the "Internet", so the Internet is not a necessary tool to solve Information Search Cost. D. Promotion strategy <ul style="list-style-type: none"> ● Both high and low involvement buyers will experience the AIETA model. ● The key point of promotion strategy for each stage of AIETA is shown in Figure 2.4.

4.2 Intellectual Property

4.2.1 The Definition of Intellectual Property

(1) The Definition of Intellectual Property

IP should include rights relating to:

- A. literary, artistic and scientific works
- B. performances of performing artists, phonograms and broadcasts
- C. inventions in all fields of human endeavor
- D. scientific discoveries
- E. industrial designs
- F. trademarks, service marks and commercial names and designations
- G. protection against unfair competition

(2) IP is divided into two branches:

- A. Industrial property, which includes inventions, industrial designs, trademarks, service marks and commercial names and designation; and
- B. Copyright and its related rights. The former is the right granted to literary, artistic and scientific work; the latter are rights neighboring on copyright.

Table 2.9

The Exclusive Summary of Intellectual Property Rights

Types Subjects	Patent	Copyright & Related Rights	Trademark	Trade Secret
Definition	<ol style="list-style-type: none"> 1. The "patent" in most countries is classified into the following three categories: <ul style="list-style-type: none"> ● Invention patents (patents, utility patents) ● Utility model patents (petty patents) ● Design patents (industrial design patents) 	<ol style="list-style-type: none"> 1. Copyright: literary works and scientific works. 2. Related rights: performances of performing artists, phonograms and broadcasts 	<ol style="list-style-type: none"> 1. Any distinctive sign that identifies the products and services of a particular business and distinguishes them from those sold or provided by others. 	<ol style="list-style-type: none"> 1. Any information or know-how that is related to business or has commercial value can qualify as a trade secret.
The Exclusive Rights	<ol style="list-style-type: none"> 1. The right to prevent others from making, using, selling, offering to sell or importing the claimed invention 2. The right to make, use, or sell the invention themselves 	<ol style="list-style-type: none"> 1. Copyright protection includes moral rights and economic rights 2. The Exclusive Rights of the Copyright Owner: The Right of Copy/Reproduce the Work, The Right of Import or Export the work, The Right of Adaptation, The Right of Making the Work Public, The Right of Assignment 	<ol style="list-style-type: none"> 1. The right to use the mark to identify goods or services, and authorize another to use it. 	<ol style="list-style-type: none"> 1. The trade secret owner should take extra means to protect such IP.

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<p>Protection</p>	<p>1. From the date filing the patent application</p> <ul style="list-style-type: none"> ● Invention patents: 20 years ● Utility model patents: 10 years ● Design patents: 12 years <p>2. Protection: patent number or application number</p>	<p>1. From the date creating the work and plus 50 years after the creator's death</p> <p>2. Protection: © or Ⓞ</p> <p>3. Unpublished: Unpublished work ©</p>	<p>1. From the date filing the patent application, 10 years in general</p> <p>2. A trademark can be renewed indefinitely beyond the time limit on payment of additional fees.</p> <p>3. Protection: ® or "™"</p>	<p>1. Trade secret protection must rely on the information owner.</p> <p>2. Time of the ownership is unlimited as long as the information is kept confidential</p>
<p>International Protection</p>	<p>The patent is issued upon application, by a government office (or a regional office acting for several countries)</p>	<p>1. There is not exactly such a thing as "international" copyright protection, several international treaties have covered copyright matters</p> <p>2. The Berne Convention and the Rome Convention</p>	<p>1. The trademark is issued upon application, by a government office (or a regional office acting for several countries)</p>	<p>1. Trade secret protection must rely on the information owner.</p>
<p>Conditions</p>	<p>1. Be a patentable subject matter</p> <p>2. Be new, not previously publicly known (Novelty)</p> <p>3. Be non-obvious extension or involve an inventive step (Non-Obviousness)</p> <p>4. Be industrially applicable (Utility)</p>	<p>1. Be an original creation (Originality)</p>	<p>1. Be distinguishable among different products (Requirement of Distinctiveness)</p> <p>2. Follow Public Interest (Exclusions from Registration on other Grounds: Public Interest)</p>	<p>The information:</p> <p>1. Must Be confidential or secret, not generally known or not protectable</p> <p>2. Must have commercial value</p> <p>3. The information owner must have taken methods to keep it confidential or secret.</p>

Application	Yes	No (some countries, such as the U.S., Canada and India, provide the possibility to register or deposit.)	Yes	No
Note	<ul style="list-style-type: none"> Computer programs should be protected by copyright, whereas apparatus using computer software or software-related inventions should be protected by patent 			

4.2.2 The Exclusive Summary of Fair Use, Collective Management Organization, and Creative Commons

Table 2.10

The Exclusive Summary of Fair Use, Collective Management Organization, and Creative Commons

Subjects	Summary
Fair Use	<ol style="list-style-type: none"> “Fair use”, is an exception to the copyright principle of copyright ownership, based on the belief that the public is entitled to freely use portions of copyrighted work for purposes. Four factors for measuring fair use: the purpose and character of the use, the nature of the copyrighted work, the amount and substantiality of the portion is used, and the effect of the use upon the potential market.
Collective Management Organization	<ol style="list-style-type: none"> Collective Management is the exercise of copyright and related rights by organizations acting in the interest and on behalf of the owners of rights. The most common rights that collective management organizations are dealing with: The Right of Public Performance, The Right of Broadcasting, The Mechanical Reproduction Rights in Musical works, and The Performing rights in dramatic works, the Right of Reprographic Reproduction of Literary and Musical works, and Related rights. Three main types of collective management organizations: “Traditional” Collective Management Organizations, Rights Clearance Centers, and “One-Stop-Shops”
Creative Commons	This is a nonprofit organization that provides flexible copyright licenses for “copyrighted” works (creative works).

4.2.3 The Exclusive Summary of the Value of IP, Marketing Law, and the Influence of the Internet on IP and Marketing

Table 2.11

The Exclusive Summary of the Value of IP, Marketing Law and the Influence of the Internet on IP and Marketing

Subjects	Summary
The Value of IP	<ol style="list-style-type: none"> 1. “Quantity” must not be the main goal of strategic intellectual property management—“quality” must be 2. The Actions for Exercising Intellectual Property: <ol style="list-style-type: none"> (1) “Actualization”: “productization” and industrialization (2) “Exchange”: Technology service, Management service, New venture, Joint venture, Stock acquisition, IP litigation, Licensing, IPRs assignment,
Marketing Law	<ol style="list-style-type: none"> 1. The general perspectives of marketers and lawyers towards the relationship between laws and marketing 2. The common areas of marketing law in most articles: promotions/advertising, trademarks, and copyrights

4.3 The Influence of the Internet on IP and Marketing

- (1) In late 2005 one billion people worldwide had Internet access and nearly 250 million households had broadband
- (2) The Migration Facts of Intellectual Property to the Internet is described in the Table 2.7.
- (3) The Influence of the Internet on Marketing

