Abstract. The paper highlights the fact that brand and product divestiture does not receive much attention from top management and only passively taken when a firm's current business is under difficulty. This inactive practice is considered to take away firms' shareholder value. Though receiving more attention by firms recently, brand and product divestiture is not a simple decision. The paper then reviews the existing literature in related areas - a number of product portfolio management models, brand portfolio management models, and current research works relating directly to brand and product divestiture in M&A context. As the result of the review and analysis, the paper finds out the gap for the matter of brand and product divestiture – i.e. the comprehensive set of causes, strategies, decisional criteria, consequent processes, and detailed guidelines. Based upon the gap the paper raises several future research directions as its recommendations.

Keywords: Brand, Product, Divestiture, Portfolio, Management, Process, Strategy, Guidelines, Criteria.

BRAND AND PRODUCT DIVESTITURE: A LITERATURE REVIEW AND FUTURE RESEARCH RECOMMENDATIONS

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1. The importance of brand and product divestiture

Globalisation is a source of demands for firms to enter new markets or to exploit various opportunities of the existing markets. Its pressure drives firms to spend enormous efforts and resources in launching new product and service offerings from time to time. Firms tirelessly widen product and brand portfolio to meet individual needs of customers. This management approach results in the fact that firms' product and brand strategies become more complicated gradually – mostly aiming at recruiting more customers. In parellel with this firms also carry out divesting off their brands and products.

Divestiture decision normally associates with business underperformance and is, therefore, perceived as a signal for failure. Consequently, divestiture is largely not the focus of most firms' strategy. It does not receive much attention from top management and only passively taken when a firm's current business is under turbulence. This inactive practice is considered to take away firms' shareholder value (Dranikoff et al., 2002).

However, practitioners have recently started realizing the importance of actively and properly forming divestiture strategy within a firm's corporate and business strategy for creating a stronger growth and enhancing value for the remaining businesses (Munk, 1999; Grocer, 2004; Badenhausen, 2005; Harding and Tillen, 2005). For instance, Forbes.com stresses that "breaking up is good to do" and "companies like IBM are cutting underperforming business segments loose" which resulted in better stocks (Badenhausen, 2005). Grocer (2004) also provides another example in a Mergers and Acquisitions Report that "hoping to return its operating margins to double digits, Teleflex Inc. (the \$2 billion market capitalization company) said it will sell its automobile pedal system unit (APS) as part of larger restructuring program." At the same time Teleflex carried out its acquisition strategy to expand its business in such areas as medical products.

However, the brand and product divestiture is not a simple decision. Firms very often face with either they run a great risk of losing market and significant revenues which come from the divested brands and products or end up selling the divested brands and products at far lower value than its actual value. If firms have right strategies, decisional criteria, processes, and specific implementation guidelines, they can minimize the risks while possibly creating value through their brand and product divestiture decision.

2. The concept of brand and product

The focus of this paper is on product and product brand rather than service brand, corporate brand, people brand or place brand.

Fundamentally, there are two opposite approaches towards "product" and "brand" concepts up to date. The first approach consdiders a "product" is formed by a number of elements including features, physical functions/ attributes, trademark, logo, advertising etc. to satisfy a specific need of

customers (AMA, 1960; Kotler, 2001; Aaker and Joachimsthaler, 2001). Brand – as a name, symbol, logo or trademark – is consequently only an extension of the product. The other approach considers "brand" more complicated. A part from quality and price, a "brand" also includes image and imegery of the product or service. Brand, therefore, comprises of both physical attributes of product AND feeling/emotion, identity, characteristics, culture, customer relationship etc. (Arnold, 1992; Bratianu and Orzea, 2010; Davidson, 1997; de Chernatony and McDonald, 1992; de Chernatony and Riley, 1998; Farquha, 1990; Gardner and Levy, 1955; Kapferer, 1997; Keller, 1998, 2008; Park et al., 1986; Upshaw, 1995).

In this paper the author adopts the concept of "product" and "brand" given by Vu et al. (2010): "a product as the purely functional entity (to meet functional needs) that an organization produces and/or sells and a brand as the development of this, through marketing activity, into a complex percept in the mind of the product's potential users". When referring to the term "brand" it includes a product (that meets purely functional needs) as its most basic form and added emotional attributes such as feelings, imagery, relationship, culture, personality and so on". Due to firms use both terms "product" and "brand" interchangeably in practice this paper uses both terms to fit with different situations.

3. Literature review on brand and product divestiture

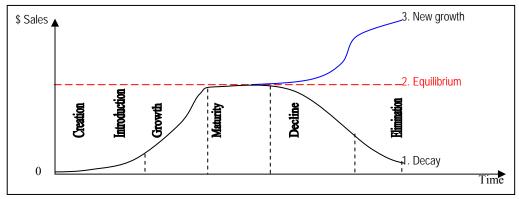
3.1. Product portfolio management

A number of portfolio management models has been proposed. Whilst the BCG Matrix (Day 1977), The Shell and GE Matrices (Kotler et al., 2001), and The Product Performance Matrix (Wind and Claycamp, 1976) mainly concentrate on managing existing product portfolio, The Aggregate Project Plan (Wheelwright and Clark, 1992), Financial Method (Cooper et al., 2001), Strategic Bucket (Matheson and Menke, 1994), Bubble Diagram or Portfolio Map (Roussel et al., 1991), Scoring Model (Hall and Naudia, 1990), and Check List Model (Hall and Naudia, 1990) recommend techniques for the management of in-development product portfolio. Considering product portfolio is certainly an important aspect for understanding brand and product divestiture.

3.1.1. Product Life Cycle (PLC)

Perhaps product life cycle (PLC) concept is one of the widest-discussed issues in academic literature. The PLC uses the concept of evolution from biology to describe stages that each product has to pass through which make up its life cycle. Generally, the PLC consists of four stages that are linked with sales or revenue,

beginning with slow sales growth at introduction stage, continuing with a sharp rise in sales during the growth stage, remaining constant sales at maturity stage, and falling sales during decline (Figure 1).



Sources: Combined from Kotler (1972, pp. 432-433) and Levitt (1965, pp. 86-87).

Figure 1. Continuous Product Life Cycle

Levitt (1965) brings the issue of subsequent extensions of life cycle through the example of "*Nylon's Life*". The revolution sales life of nylon has been repeatedly from primarily use in military to make parachutes, thread or rope to entry into knit market and its consequent domination of the women's hosiery business. This revolution has raised a possibility of extending classical PLC to new growth when products enter maturity or decline stages (also see Figure 1)

Besides the most popular classical PLC, Cox (1967) and Pessemier (1966) find the other ten patterns, including "Cycle-Recycle", "Cycle-Half Recycle", "Increasing Sales", "Decreasing Sales", "Growth Maturity", "Innovative Maturity", "Growth-Decline-Plateau", "Rapid Penetration", "High and Low Plateau", and "Stable period". The characteristics of each stage of the life cycle of these patterns vary from one to others and with the classical one's (Swan and Rink, 1982). Several implications for management are drawn from the findings of new patterns such as "stability not necessarily saturation", "decline as an adjustment period" and "growth is short and maturity prolonged" (Polli and Cook, 1969). A firm needs to examine its own situation to best understand the pattern its products or services belong to.

The PLC concept is widely applied to business. The significance of the PLC model has been highlighted as a fundamental for product planning and control (Forrester, 1958). The PLC is also a good paradigm of sales behavior in particular market situations and of marketing planning and sales forecasting (Polli and Cook, 1969). In addition, the implication of the PLC can be a guideline for designing and implementing marketing strategy (Dhalla and Yuspeh, 1976; Doyle, 1976), product engineering, and manufacturing and production strategy (Moore and Pessemier, 1993) following each stage of the life cycle.

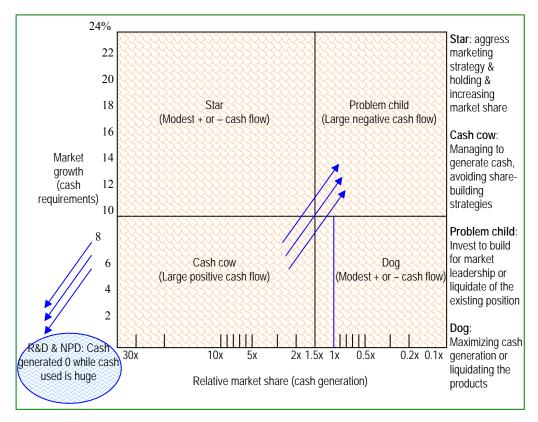
In the focus of this work the PLC concept addresses portfolio management method as it is found as one of particularly suitable resource allocation optimization methods in a multi-product firm whose presence is in a variety of market structures (Cox, 1967). The PLC allows the firm scrutinizing the product evolution from the past to future in comparison with its other products and competitors' ones and consequently helps the firm to optimize its resource allocation. The implication for product divestiture is that firms can consider reaping, divesting off or extending life cycle of products when they enter the decline stage. However, the PLC does not offer processes and detailed guidelines to implement product divestiture.

Although the classical PLC concept is widely accepted, academia strongly questions about its validity. Day (1981) claims that the simplicity makes the classical PLC concept susceptible to criticism and the classical PLC fails to predict when the changes that can affect to the stages of life cycle such as advertising effort occurs or succession of one stage to another. Dhalla and Yuspeh (1969) condemn that little validity is attached to the classical PLC concept because there is no life cycle for brands and many products sustain a lengthy and well-off maturity phase like Scotch whisky or French perfumes. To some extents the PLC concept is more harmful than good because it drives managers to "kill off brands that could be profitable for many more years" in the sense they believe these products or brands reach the elimination stage but not in the sense of the alteration of customer values or tastes and to lay excessive weight on new products simultaneously.

3.1.2. Boston Consulting Group (BCG) Growth/Share Matrix

BCG Growth/Share matrix is popularly recognized as a product portfolio framework. The notion behind the matrix is that cash generated from different products can support one another and resources are given priority for products in a fast growing market. Cash flow, therefore, is supposed to be a medium to gauge success and is a function of market share and growth rate as two basic dimensions. The cash quadrant approach to BCG that both market growth and market share are interpreted into cash requirement and cash generation respectively is mentioned by Day (1977) and illustrated in Figure 2. These two dimensions help a firm to classify its products into four groups with different marketing strategies comprising of (1) high market share and high market growth products, (2) high market share and low market growth, (3) low market share and high market growth, and (4) both low market share and growth.

There is a requirement for balancing products in the BCG growth/share concept in order to transfer cash from cash cows to nourish problem child and star products, to fund research and development activities and to enhance new product development. Missing one of these products might lead to unbalancing portfolio management. R&D and new product development is therefore highlighted and given priority.



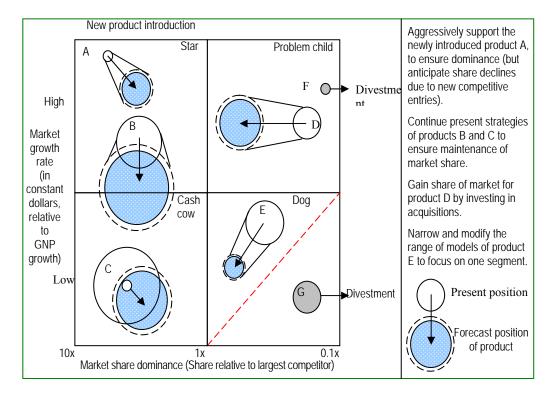
Source: Day (1977, p. 32).

Figure 2. The Cash Quadrant Approach to Describing the Product Portfolio

Although BCG growth/share model is widely accepted as an approach to portfolio management, its limitations cannot be neglected. The first problem is that profitability, forecasted performance, risk, and cost of operation are not clearly considered. Despite market share can be a proxy to profitability or higher market share normally generates higher return on investment (Schoeffler et al., 1974; Buzzell et al., 1975), this does not necessarily mean a company makes profit with high market share (Fruhan, 1972; Bloom and Kotler, 1975). Based on the assumption of high market share can generate high cash flow, BCG does not take into account these factors. Day (1977) develops new approach to BCG matrix in which he considers profitability and forecasted performance (Figure 3).

Another problem is the lack of consideration of many other factors but not only market growth and market share (Day, 1977). For instance, when comparing competitors in BCG matrix, the firm might be inexperience that its competitors may gain advantages through MandAs, licensing, technology, offshore production or outsourcing with lower cost. Sometimes, the firm might be confused whether to keep

or eliminate a product in "dog" position to reduce vulnerability. It also might acquire a product in "dog" position just because of knowledge intelligence. Therefore, strategic objectives need to be taken into account. Other factors like government regulation, contribution rate, sales cyclicality, promotions and so forth need to be considered as well. In spite of pointing out product divestment as an alternative strategy for portfolio management, the model does not offer specific strategies, processes and a set of guidelines to settle the issue.



Source: Consolidated from Day (1977, pp. 31, 34).

Figure 3. Balancing the Product Portfolio

3.1.3. The Shell Directional Policy Matrix (DPM)

The Shell DPM Matrix is another product portfolio model that based upon two parameters of *profitability of sector* and *competitive capability of the company* who operates in the sector (Figure 4). Each parameter is divided into three levels of strong, average and weak. Basically, the positions of either the company product portfolio or competitors' ones can be mapped in the DPM matrix. Although Shell divides its DPM into nice quadrants with greater flexibility, the general labels fall into the four main

groups similar to the BCG matrix and, therefore, is considered a refinement of BCG model. Individual quadrants imply different strategic actions the firm can take for individual products in their portfolio.

	<i>Prosp</i> e Unattractive	ects for sector p Average	,	<u>Profitability</u> : is determined by market growth and market quality.
Weak	Disinvest	Phased withdrawal Custodial	Double or quit	Capturing a dominant share of a market is likely to mean enjoying the highest profits of any of the companies service that market (Schoeffler and Buzzell, 1974; Buzzell and Gale 1975).
Company's competitive capabilities Average	Phased withdrawal	Custodial Growth	Try harder	<u>Competitive position</u> : measures the relative competitive strength of the business or the product. It is composed of 3 factors: market position (determined by market share), production capability (firm's competitive advantage with respect
Strong	Cash generation	Growth Leader	Leader	competitive advantage with respect to its products), and product research and development (firm's competitive advantage with respect to its various R&D activities).

Source: Kotler et al. (2001, p. 87).

Figure 4. The Shell International Directional Policy Matrix

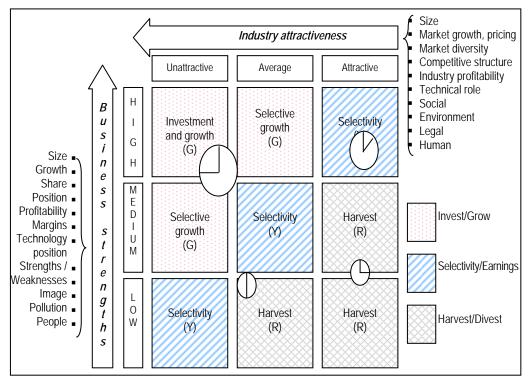
Particularly, the Shell DPM Matrix does imply different ways for divesting off a business or an SBU and, therefore, applicable for products. For instance,

- The "divestment" cell suggests divesting off the SBU or product which runs loss with uncertain cash flows: assets should be liquidated or moved to others as fast as the firm can.
- The "phased withdrawal" cell recommends to phase out gradually the weak SBU or product in a low growth market.
- The "double or quit" cell puts forward quiting the business or product on one hand.
- The "custodial" cell advises to milk the business or product and not to commit any more resources.

However, the Shell DPM Matrix does not help answer how to divest off products in details e.g. a process and a detailed guideline for each possible strategic direction (way).

3.1.4. The Strategic Business Planning Grid (GE/McKinsey)

The strategic business planning grid, similar to the Shell's DPM, is introduced by General Electric (GE). The GE grid includes nice cells built up from two dimensions of "industry attractiveness" which consists of three tiers of attractive, average and unattractive and "business strength" which is divided into high, medium and low levels. Generally, the products or businesses fall into three zones: dotted for invest to grow, left-handed streak for medium in overall attractiveness, and cross streaks low attractiveness. The two dimensions are made up and rated of many other factors as listed in Figure 5.



Source: Kotler et al. (2001, p. 87).

Figure 5. The McKinsey/GE Business Screen and Multi-Factor Assessment

Different zones imply different strategies applied for each SBU:

- The dotted cells cover strong SBUs in which the company needs to allocate resources to invest for growth.
- The company should uphold its level of investment in the left-handed streak zone, where the overall attractiveness is medium.
- Critical consideration either to divest or liquidate should be decided by the company for SBUs in cross streak zone.

The circles denote different SBUs of the company. The size of the circles represents the relative sizes of the SBUs' industries proportionally. Market share of each product or business is also indicated in each circle by the percentage.

The GE grid does suggest two possible directions for firms to divest off their businesses or products:

- First, the businesses or products which fall under the bottom right of GE Matrix (indicated by both *low/medium business strength* and *low/medium industry attractiveness* cell *harvest*) have a great potential for divestiture and, therefore, receive no resource allocation.
- Secondly, the businesses or products which fall in between (cell "selectivity") can be treated either to be divested off or to receive more resources

Although the GE grid helps analyze and decide which SBUs or products should no longer be retained as mentioned above, it also has limitations similar to other methods. Market share and growth might be very difficult to gauge. In addition, this business model is used to diversify and invest in only business that GE can become the market leader where it might be not applicable for other companies to plunge into unrelated businesses with little management experience that will give poor return on investment consequently. Moreover, GE grid also fails to guide future planning as it only concentrates in current businesses. Finally, this model (though mentioning product divestiture directions/ways) neither quantifies the evaluation to rank SBU in relative quadrants nor offers processes and detailed guidelines of divesting off products. The divestiture strategies are not comprehensive enough.

3.1.5. The Product Performance Matrix

The product performance matrix (Wind and Claycamp, 1976) attempts to be a guideline for product portfolio management based upon stages of the product life cycle, industry sales, company sales, profitability and market share of SBUs (Figure 6). This model is slightly different from the GE grid by allowing management to see profitability of each SBU and it also helps to predict future change for the SBU as well.

Similar to other models, identifying the stages of PLC of each SBU and industry sales might be difficult. Further, it does not allow to plot competitors' products in the same matrix. New product development is not reflected in the model either. Limiting to the scope of this research, the model is less relevant and offers a little implication (strategies, processes, detailed guidelines) when considering divesting off products.

	Company sales		Decline			Stable			Growth	
Industry	Profitability Market share	Below target	Target	Above target	Below target	Target	Above target	Below target	Target	Above target
Growth	Dominant Average Marginal									
Stable	Dominant Average Marginal		2C)		¥سسرر →	2CF 2P				
Decline	Dominant Average Marginal	1C 1C	P '▲ 1'CI	 7	→ 1"CF					

Source: Wind and Claycamp (1976, pp. 5-6).

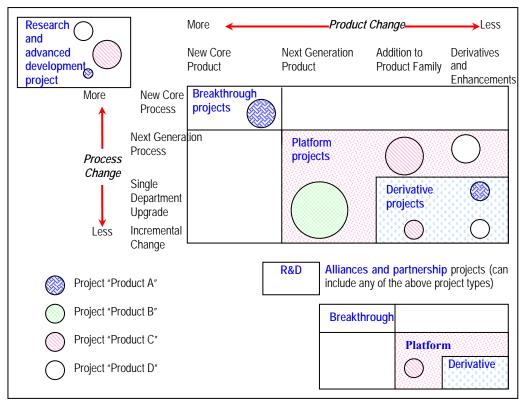
Figure 6. A Product Performance Matrix

3.1.6. Aggregate Project Plan

A main concern in new product development (NPD) projects is the value is under-delivered as planned. As pointed out by Wheelwright and Clark (1992), a number of companies is facing with the situation that many on-going projects are no longer to mirror the market needs. In addition, many NPD projects are far more than what an organization can support because of resource constraint. In many cases, executives are confused with management of many on-going and upcoming NPD projects because companies might have no documented process for selecting among development projects. The delay and ineffectiveness in these NPD projects are, therefore, inevitable. The *Aggregate Project Plan* is proposed to manage the set and mix of NPD projects more effectively (Figure 7).

The matrix is fundamentally based on two dimensions of the degree of change in the product and the degree of change in the manufacturing process. Any NPD project can be categorized into one of five types: derivative, breakthrough, platform, R&D, and alliances & partnership.

Derivatives projects are the ones that involve (1) incremental product changes with minor or no change in manufacturing process like new packaging or new feature; (2) incremental process changes with slight or no change in product like adoption of new materials or cost improvement; and (3) incremental changes on both product and process. Breakthrough projects are the projects that entail major changes to existing products and processes that are derived from new technologies or materials used. This project type normal creates a revolutionary manufacturing process. Standing in the middle between derivative and breakthrough projects are platform projects that engage in both product and process changes but not discover new technologies and materials like breakthrough projects do. R&D projects are another type that creates new materials and technologies and are pioneer to product & process development. Finally, alliance & partnership projects, including M&As involve in all types of the forefront projects.



Source: Combined from Wheelwright and Clark (1992, pp. 70-82).

Figure 7. Aggregate Project Plan in New Product Development

It is crucial for the company to trace whether the set of projects evolve with its business strategy and to create its development capabilities by these projects. To do this, company might record and evaluate the product mix through either *project sequence* – keeping track of each project revolution – or *secondary wave planning* –

improving and advancing the next generation projects based on the feedbacks from the market. Eight steps are recommended to follow to utilize the *Aggregate Project Plan* including (1) definition of project types, (2) identification and classification of existing projects, (3) time and resource estimation for each project type, (4) identification of existing resource capability, (5) determination of desired mix or set of projects, (6) estimation of number of projects based on resource capability, (7) selection of projects, and (8) improvement of development capabilities.

Allocating resources of the organization among mix of projects or new product developments is the main objective of the *Aggregate Project Plan*. However, difficulties in implementing pose the dilemma to the model. First, the classification of project types might be difficult and overlapping. For instance, there might be a project that needs substantial resource but not fall into *Breakthrough* type. Second, mapping the project types are uneasy task and very time-consuming. Regarding to the focus of this paper, there is a little indication for product divestiture.

3.1.7. Financial Methods

One of the most popular approaches to portfolio management and project selection is the use of financial method such as Net Present Value (NPV), Internal Rate of Return (IRR), or Return on Investment (ROI). While NPV is the subtraction of present values of cash inflows to cash outflows by taking inflation and returns into account, IRR is the interest rate that makes NPV of all cash flows equal zero that is the return a company would earn if it expanded or invested in itself rather than investing that money elsewhere. In capital budgeting, NPV and IRR are used to analyse the profitability and to evaluate feasibility of an investment or a project. For example, if the NPV of a prospective project is positive, the project should be feasible and vice versa.

NPV =
$$\sum_{t=1}^{T} \frac{C_t}{(1+r)^t} - C_o$$

Evans (1996) and Matheson et al. (1994) delineate another method namely *The Productivity Index* but it seems to be identical with NPV or IRR.

The financial methods are widely used to evaluate a project through NPV, IRR or ROI indicators. Those can be also applied to financially evaluate product performance and from that to decide which products / brands to keep or to delete. However, these methods are not used singly and only play a minor role to evaluate a project because they do not provide enough information to build up an overall picture an investment or a project.

3.1.8. Strategic Bucket Method

Strategic Bucket Method is another method used to allot money for various project types (Matheson and Menke, 1994). Projects are classified into different groups, called buckets, to which money is allocated. Various dimensions generated

from business vision, goals, objectives, or strategy are used to categorize these *buckets* such as by region, by product line, by market or by nature of project types. In each bucket, individual projects are ranked and allocated the resources according to their proportion. Resource of each bucket will be disbursed to individual projects within the bucket until it reaches the total. Ranking methods can follow financial index or a scoring model (Table 1).

Table 1
A Sample of Strategic Bucket Method

New Products: Product Line A Target Spend: \$8.7m	New Products: Product Line B Target Spend: \$18.5m	Maintenance of Business: Product Line A & B Target Spend: \$10.8m	Cost Reductions: All Products Target Spend: \$7.8m
Project A 4.1	Project B 2.2	Project E 1.2	Project I 1.9
Project C 2.1	Project D 4.5	Project G 0.8	Project M 2.4
Project F 1.7	Project K 2.3	Project H 0.7	Project N 0.7
Project L 0.5	Project T 3.7	Project J 1.5	Project P 1.4
Project X 1.7	Gap = 5.8	Project Q 4.8	Project S 1.6
Project Y 2.9		Project R 1.5	Project U 1.0
Project Z 4.5		Project V 2.5	Project AA 1.2
Project BB 2.6		Project W 2.1	-

Source: Matheson and Menke (1994).

One of the advantages using the "Strategic Bucket" method is that business strategy is reflected in the spending of all projects. However, this method can cause bias in resource allocation and use. Managers might be either unintentionally or rationally forced to use all the funds allocated to them as they think that the allocated funds are limited already although it might be not necessary. Generally, in order to rank projects effectively, criteria should be reviewed carefully. This method does not contribute significantly for analyzing the divestiture of products or brands – the strategies, processes and detailed guidelines are not given.

3.1.9 Bubble Diagram or Portfolio Map Method

Bubble Diagram or Portfolio Map is widely used to graphically plot company's all projects together (Roussel et al., 1991). Originally conceptualized from revision of BCG growth matrix, Bubble Diagram uses two axes to categorize four zones or quadrants that a company's projects fall into. For instance, pearls, oysters, white elephants, and bread-and-butter are used instead of question mark, star, cash cow, and dog. The labels or factors of axes fall into five categories including reward, business strategy fit, strategic leverage, probability of commercial success and probability of technical success. Those labels divide bubble diagram into seven types (Table 2).

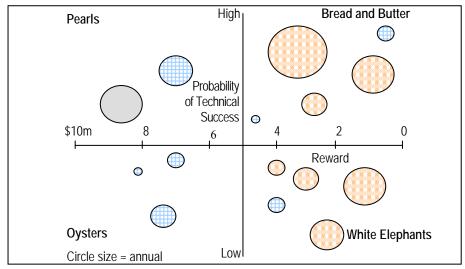
Table 2

Types of Chart for Bubble Diagrams

No	Type of Chart	Description	Axis
1	Risk vs. Reward	Reward: NPV, IRR, benefits after years of launch; market value	Probability of success (technical, commercial)
2	Newness	Technical newness	Market newness
3	Ease vs. Attractiveness	Technical feasibility	Market attractiveness (growth potential, consumer appeal, general, attractiveness, life cycle)
4	Strengths vs. Attractiveness	Competitive position (strengths)	Attractiveness (market growth, technical maturity, years to implementation)
5	Cost vs. Timing	Cost to implement	Time to impact
6	Strategic vs. Benefit	Strategic focus or fit	Business intent, NPV, financial fit, attractiveness
7	Cost vs. Benefit	Cumulative reward	Cumulative development costs

Source: Roussel et al. (1991).

In the diagram, projects are drawn like bubbles. Different colors, sizes and shapes indicate different projects and resource allocation (Figure 8). Nineteen rating questions are given to rate each factor or label of an axis. Each rating question is on the scale of 1 to 10 with its interpretation of the given score. Weighted scores of the five factors are made of individual rating results which are used to give prioritization to projects.



Source: Roussel et al. (1991).

Figure 8. A Sample of Bubble Diagram – Risk-Reward Type

The bubble diagram differs from the BCG growth matrix in the axes and in the purpose of use for projects like NPD instead of the current business units. The bubble diagram is very useful to plot all projects at the same time. However, information seems to be graphically displayed only rather than being given prioritization to a list of projects. The bubble diagram has not yet improved the limitations of the BCG matrix for the product divestiture analised above.

3.1.10. Scoring Model and Checklist Model

Decision to go for a project can be made either by rating or answering a number of questions (Hall and Naudia, 1990). In the *Scoring* model, new projects are rated or scored on a scale such as 1 to 10 or low to high or poor to extremely good. A number of questions or criteria are given and the total or project score yields from the sum of each scale of each question. Greater importance is reflected whether certain questions are weighted more throughout and heavily or not. Therefore, *Scoring* model is viewed as a ranking tool.

The dimensions rated and scored are normally strategic fit / leverage core competencies, financial reward pay-off, risk and probability of success, timing, technological capability, commercialization capability, profitability, synergy between projects and other criteria. Projects are rated against one another by using those dimensions.

In the *Checklist* model, evaluation of a project is based upon answering of a set of Yes/No questions. In order to be approved or selected, the project must obtain a certain number of "Yes" or in many cases all. Unlike *Scoring* model, decision is rarely made to rank the project when using the *Checklist* model. It is used to decide whether or not to proceed the project and regarded as a supporting tool. *Checklist* is used for individual projects rather than to rank different projects against one another. Although it offers criteria for divesting off in-development products (projects), the strategies, processes and detailed guidelines are not given.

3.2. Brand Portfolio Management

Similar to product portfolio approach, brand portfolio management aims to (1) allocate resources such as R&D or manufacturing and production facilities to individual brands in the portfolio, (2) create synergy within the brand portfolio by achieving economies of scale in both manufacturing and communications, (3) obtain growth especially by product or brand development and acquisition to fill in unserved market needs, (4) leverage brand utilization by identifying best brands for extension, and (5) clarify of product offerings (Aaker and Joachimsthaler, 2001). If brand portfolio deals with number of brands in the portfolio, brand architecture is the relationship structure that indicates how individual brands in the portfolio are related and differentiated from one another. Brand architecture is an important element of brand portfolio management.

Researchers define several different roles of brands and offer different ways to brand individual products in a portfolio in order to manage the portfolio:

- Based on the work of Olins (1989), Laforet and Saunders (1994) offer six ways to classify brand names in a portfolio: corporate brands, house brands, dual brands, endorsed brands, mono brands, and furtive brands.
- Aaker and Joachimsthaler (2000) define four types of brand roles in a portfolio strategic brands, linchpin brands, silver bullets, and cash cow brands. In addition they offer different ways to brand products in a portfolio endorser/subbrands, benefit brands, co-brands, and driver roles.
- Riezebos (1995) hypothesises four types of brand in a portfolio model: Bastion Brand, Flanker Brand, Fighter Brand, and Prestige Brand.
- Kapferer (1997) suggests a number of different roles for brands within a portfolio the product brand, the line brand, the range brand, the umbrella brand, the source brand, and the endorsing brand. Six models of relationship structures or branding strategies among individual brands within a portfolio are revealed by Kapferer (1997). Certain roles, status and relationship of brands with the products they encompass are denoted (Table 3).
- Similarly, Keller (2008) suggests a number of different roles for brands within a portfolio flankers, cash cows, low-end entry-level and high-end prestige brands.

The discussions given above are important in terms of brand portfolio management. However, these provide a very little implication for brand divestiture (strategies, processes, detailed guidelines).

 ${\it Table~3}$ Relationship Structures among Individual Brands within a Portfolio

Brand-product relationship	Description	Example
The product brand	Involves the assignment of a particular name to one, and only one, product as well as one exclusive positioning. The result of such a strategy is that each new product receives its own brand name that belongs only to it	P&G: different brand names for soap market like Camay for seductive soap, Zest is a soap for energy, and Monsavon is a natural family soap
The line brand	Responds to the concern of offering one coherent product under a single name proposing many complementary products. These products are completely different for the producer makes no difference to the consumer, who perceives them as related	L'Oreal: uses the same brand name of "Studio Line" for hair products including gel, lacquer, a spray
The range brand	Bestows a single brand name and promote through a single promise a range of products belonging to the same area of competence	Food (Campbell or Heinz), cosmetic & textiles (Benetton or Lacoste), equipment (Caterpillar) or in industry (Steelcase, Facom): uses one brand name for all products

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Brand-product relationship	Description	Example		
The umbrella brand	Capitalizes on one single name and economies of scale on an international level	Canon or Yamaha or Mitsubishi uses only one brand name (corporate name) for all products in different industry		
The source brand	Identical to the umbrella brand strategy except for one key point – the products are now directly named. Within the source brand concept, the family spirit dominates even if the offspring all have their own individual names	Nestle brand name on the bars Yes, Nuts and Kit Kat and on Netcafe, Nesquick: corporate brand acts as a guarantor		
The endorsing brand	Easy to be confused with the source brand. It is placed lower down because it acts as a base guarantor. With the endorsing brand, the products are autonomous and have only the endorsing brand in common	GM: its brand Pontiac, Buick, Oldsmobile and Chevrolet are endorsed by GM brand but GM is support and assumes a secondary position when consumers buy their products		

Source: Consolidated from Kapferer (1997, pp. 188-205).

In the context of business divestiture Dranikoff et al. (2002) argue that active management of acquisition and divestiture strategy can help firms realise more shareholder value than passively hold on to their businesses. The authors suggests a five-step process in making the divestiture strategy a well-thought-out: (1) prepare the organisation, (2) identify the best candidates for divestiture, (3) execute the best deal, (4) communicate the decision, and (5) create new businesses. In the first step, firms are suggested to explain to employees the rationale for the divestiture and introduce mechanisms to ensure active consideration of divestiture from managers. In the second step firms then use four factors - the business unit's impact on the rest of the corporation, the corporation's impact on the business unit, the unit's ability to beat market expectations, and the corporation's overall portfolio – to analyse objectively to every unit in order to identify which to divest. After that, firms need to identify buyers and decide on structuring the sale of business unit in the third step. Firms are recommended to communicate the decision on the right time, concisely and simply. In the final step firms need to reinvest the funds and management efforts in attractive new growth opportunities.

The work provided by Dranikoff et al. (2002) is more suitable for the situation that a firm has different business units and actively search to divest itself one or few of them. It is not appropriate when the firm divest itself of overlapping brands as a condition for the merger required by the regulating authorities (antitrust issue). For instance, the firm might be ordered by the regulating authorities to dispose of a big brand in its core business like the case the Federal Trade Commission forced Diageo to dispose of Dewar's Scotch whisky brand to a third party. In such a case the suggested four criteria do not work because they are neither specific nor relevant.

Specifically to product brands, Kumar (2003) proposes 4 ways to liquidate brands – merging brands, selling brands, milking brands, and eliminating brands. Merging brands implies the transfer of product features, attributes, the value proposition, or the image of the marked brand to the retained one. A firm can choose to either sell brands to another firm or withdraw the brands from the market. They can also exploit brand value without investing further. In these cases decision making is suggested to be based upon the analysis of market segmentation. Although the author recommends different ways to liquidate brands, those are not comprehensive enough. Moreover, the work does not provide criteria and detailed guidelines for firms to carry out brand divestiture.

3.3. Brand and product divestiture in M&As

In the context of mergers and acquisitions (M&As) the existing literature firstly refers to business and asset divestiture rather than to brands. Capron et al. (2001) indicate that "asset divestiture" and "resource redeployment" are the two broad directions a firm can take in post-horizontal M&A integration: "acquisitions provide a means of reconfiguring the structure of resources within firms and that asset divestiture is a logical consequence of this reconfiguration process". Because "asset" and "resource" are general terms, they might be treated as the merging brands in the context of M&As. However, this work does not provide any guideline of how firms should divest themselves off assets in M&As.

More specifically to brands Basu (2002) identifies four ways of merging brands in the post-M&A situation – "streamlining", "rationalising", "consolidating", and "reconfiguring". Streamlining indicates "choosing a form that presents little resistance to flow, increasing speed and ease of movement". Under this the post-M&A organization is recommended to define the business model of the future and divest of marginal and non-strategic brands. Rationalizing, an extreme form of streamlining implies the collapse of both multiple flows into just one and brands within the chosen flow. Under this the post-M&A organization is recommended to swing resources in favour of few global brands which also lead to a drastic reduction in brands. Consolidating refers to the consolidation of the market demands (e.g. Ford acquired Volvo, Jaguar and Aston Martin to consolidate the premium car division). Reconfiguring suggests "abandoning previous flows and discovering a new way of thinking about the business of the merged firm".

However, these four ways of merging brands do not all operate at the same level of granularity and are, therefore, not strictly comparable. First, the *streamlining* suggests to divest all non-core businesses but this is not a major issue of horizontal M&As which actually lies in the settlement of the overlaps. Secondly, the *rationalizing* recommends to build only few global brands and, therefore, to reduce the number of brands. However, this reveals only a side of the issue because many M&As involves small and medium sized firms whose brands operationalise in local or

regional markets. In addition, firms tend not to do this or do it (if any) flexibly if they possess some global brands. Thirdly, the *consolidating* implies the consolidation of the market demands but this seems to be a motive of the M&As rather than the way of merging brands. Fourthly, abandoning the previous flows is suggested by the *reconfiguring* but many M&As practically occur in order to acquire these flows. Last but not least, the work does not provide guidelines, processes and criteria for brand divestiture decision.

Another work is from Vu et al. (2010) who developed 4 strategies of integrating brands and products in M&A – Choice, Growth maximization, Hamonization, and Foundation. Each of these strategies includes a set of substrategies – the alternatives to implement the main strategies. Choice strategy relates directly to brand and product divestiture when there are overlaps among them. This includes withdrawal of and selling brands/products to a third party. Within the Harmonisation strategy, the authors also discuss the migrating sub-strategy – e.g. the transfer of product/brand features to another. This might lead to the removal of an existing product or brand. The authors further discuss the harvesting sub-strategy within the Growth maximisation strategy. These main and sub-strategies set a sound foundation for brand and product divestiture. However, these apply to the context of the M&As. Furthermore, the work does not provide processes, criteria and detailed guidelines for implementing brand and product divestiture.

4. Discussions and conclusions

Table 4 summarizes the literature review. The discussions mentioned above illustrate the necessity for brand and product divestiture. The existing literature only reflects some causes, strategies (i.e. ways / strategic actions) and criteria for brand and product divestiture — some for existing products and brands and some for indevelopment products (projects). However, these are not comprehensive enough. In addition processes, criteria and detailed guidelines for brand and product divestiture have not been revealed by the existing literature.

Summary of Literature Review

Table 4

Literature review	Brand and product divestiture					
	Strategies	Criteria -	Processes	Guidelines		
PLC	Divesting off	Based on sales and some other indicators	N/A	N/A		
BCG	Divesting offHarvesting	Market shareMarket growth rate	N/A	N/A		
The Shell DPM	DivestmentPhased withdrawalDouble or quitCustodial	Firm's competitive capability Prospects for sector profitability	N/A	N/A		

Brand and product divestiture: a literature review and future research recommendations

Literature review	Brand and product divestiture						
Literature review	Strategies	Criteria	Processes	Guidelines			
GE / McKinsey	Harvest Selectivity	Business strengths Industry attractiveness	N/A	N/A			
The product performance matrix	N/A	Little relevance	N/A	N/A			
Aggregate project	Little relevance	Product change	Little	Little			
plan		Process change	relevance	relevance			
Financial methods	N/A	Financial ratio	N/A	N/A			
Strategic bucket method	N/A	Resource availability	N/A	N/A			
Bubble diagram	Divesting off Harvesting	 Risk vs. Reward Newness Ease vs. Attractiveness Strengths vs. Attractiveness Cost vs. Timing Strategic vs. Benefit Cost vs. Benefit 	N/A	N/A			
Scoring model / Checklist model	Projects are selected / approved or not	Strategic fit / leverage core competencies Financial reward pay-off Risk and probability of success Timing Technological capability Commercialisation capability Profitability Synergy between projects Other criteria	• Scoring process	MA			
Brand portfolio management models	N/A	N/A	N/A	N/A			
Dranikoff et al. (2002)	Business divestiture as a direction	Segmentation	• 5 step process	Little relevance			
Kumar (2003)	 Merging brands Selling brands Milking brands Eliminating brands	N/A comprehensive	Incomplete	Little relevance			
Capron et al. (2001)	Asset divestiture	N/A	N/A	N/A			
Basu (2002)	StreamliningRationalizingAbandoning	N/A	N/A	N/A			
Vu et al. (2010)	Choice Harmonisation Growth maximisation	N/A	N/A	N/A			

These limitations and gaps of the existing literature lay the suggetions for some future research directions including:

- Stydying and synthesising a comprehensive set of causes for brand and product divestiture to help facilitate the understanding and realisation of firms for this critical and indispensable matter in the growing process of their business.
- Studying and developing different strategic alternatives / options for firms to rationally apply in various situations of brand and product divestiture (for both existing and in-development brands and products).
- Studying, synthesizing and building processes for individual brand and product divestiture strategies as well as detailed guidelines for firms to lessen the risks in liquidating their brands and products and at the same time to achieve better value.

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