REVIEWING THE RESOURCE ALLOCATION PROCESS OF STRATEGY.

A MULTIDISCIPLINARY COMPARISON: STRATEGY, FINANCE AND HUMAN RESOURCE MANAGEMENT.

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Preface

Although the discussion on the Resource Allocation Process (RAP) within the discipline of Strategy started long ago, remarkably enough many scholars within this discipline still do not agree upon the content of the Resource Allocation Process and upon the role it plays in affecting strategic decisions and actions. This research is an attempt to find synergies between the discipline of Strategy and other academic disciplines concerning the Resource Allocation Process, and will contribute to improve our understanding of the Resource Allocation Process within the discipline of Strategy itself.

The process of graduation consists of a set of hurdles which needs to be taken. This thesis is the final hurdle which I need to pass, before graduating from the Erasmus University Rotterdam, faculty Business Administration.

Although this is my third study, the though hurdles are never cleared alone. This time, as in past occasions, the final hurdle was overcome with the kind help of a few people that I would like to thank explicitly:

- Mrs. Dr. S. Latimer Spedale, coach, for helping me write this thesis and pushing me back to focus when I lost track of my own boundaries;
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Executive summary

This thesis describes and summarizes existing knowledge on the Resource Allocation Process (RAP) within the discipline of Strategy. A thorough review of the literature is conducted on the Resource Allocation Process within the disciplines of Strategy, Finance and Human Resource Management (HRM), enabling to find synergies between these disciplines concerning the Resource Allocation Process.

A comparison of the findings with cumulated knowledge on RAP within the disciplines of Finance and Human Resource Management shows significant differences and similarities as well. These could provide a good starting point for a future, interdisciplinary, research agenda.

Since the process of resource allocation within the discipline of Strategy is focused on exogenous influences, and the allocation of the accumulated resources of all disciplines; deals with qualitative and quantitative data, and is a continuous process, this discipline is more complex than others.

No tools or rules for the optimal allocation of resources stem specifically from the discipline of Strategy. All used tools and rules, utilized by practitioners in the field of strategy, are borrowed from other disciplines.

This research concludes that to focus on 'what' resources to allocate is of marginal importance compared to the focus on 'how' to allocate resources. The former will help explain the definition of the discipline of Strategy, the latter helps scientists and practitioners solve the problem of the unfamiliarity of the resource allocation process.

Introduction

In 1970, Bower started a discussion within the field of Strategy about the need to integrate existing knowledge on the Resource Allocation Process (RAP). He set out by describing the conceptual scheme of the RAP in the discipline of Strategy. His starting point was that "because 'resource allocation' is an all-encompassing phrase, it is not particularly operational as a subject for research" (Bower 1970, p. 3). In his book 'Managing the resource allocation process' he describes different findings, for example, from the field of capital budgeting, derived from monodisciplinary studies within Strategy. His attempt was to integrate knowledge and understanding of different disciplines. Unfortunately, this attempt was not continued by others within the discipline of Strategy. Only recently there has been a renewed call for picking up this challenge.

The interdisciplinary research in this paper maps the literature on the RAP within the discipline of Strategy since 1970 and compares this with contributions made in two other disciplines, namely, Finance and Human Resource Management (HRM). The findings will provide more insight in the RAP within the discipline of Strategy, by using accumulated knowledge about Resource Allocation Processes from the Finance and HRM disciplines. Potential differences and similarities between the three disciplines will be discussed, as well as potential synergies. This comparative critical analysis will, hopefully, contribute to improving our knowledge and understanding of the RAP within the discipline of Strategy.

Before entering into the core of the proposed analysis of the process of resource allocation, some definitions and assumptions used in this thesis will be clarified and addressed below.

Resources are defined as: "all 'available means' which is a source to supply, support, serve or otherwise assist in accomplishing an endeavour" (Site Location Assistance)¹.

With Resource Allocation is meant the decision of what resources to assign to what source. The Process of Resource Allocation is a process of assigning the available means to the sources.

An underlying assumption in this paper is that RAP is executed to gain optimal performance congruent the corporation goal(s). For example, one of the best known tools used in the RAP is budgeting, as described in the discipline of Finance. The resource, financial capital (i.e. money), is allocated through tools and rules offered by the discipline of Finance, executed by financial management as efficiently as possible with the final objective of maximizing profit—that is, the corporation's goal.

The definition of strategy used in this paper is adopted from Johnsons and Scholes: "the direction and scope of an organisation over the long term: which achieves advantage for the organisation through its configuration of resources within a changing environment, to meet the needs of markets and to fulfil stakeholder expectations" (Johnsons and Scholes, 1999, p. 10).

In using the above definitions, and for the specific purpose of this research, some aspects discussed in the literature on RAP are given less emphasis. For example, in the discussion of optimal allocation of resources, one could argue that the sequence of allocating resources is an important factor. However, the sequence of allocation is left out in the discussion of RAP within this research, since this has only little influence on the process of allocation de facto. In classical war, for example, there are some options of whom to send first to the battlefield. Without going into detail, one can choose to first send in the weakest troops, to tire the enemy, but an equally valid course of action could be to send in the strongest first, to prevent losing lots of people. In this example, the sequence of

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¹ www.sitelocationassistance.com/wantum.htm; Consulted at September 6, 2003

allocation is of great influence. However, given that this paper only discusses the theoretical aspects of RAP, i.e. the process, and does not focus on the outcome, the sequence will not be taken into account.

The RAP is influenced by many factors. Exogenous factors such as the market, governments, economy, competitive advantage, laws, etc. have its influences on the RAP. Also endogenous influences such as resources itself, leadership-style, path-dependence, biased views, cognitive maps, strategy, support of management, culture, relations, competitive advantage, resource allocation rules, etc. have influences on the process of resource allocation. The intensity of the influence differs per disciplines; some resources highlight stronger or weaker influences on a single discipline than others. However, there are no specific influences related to a single discipline.

The choice of Strategy, Finance & Human Resource Management

As maintained by Bower -1970 and more recently- and confirmed by the preliminary reading and analysis of the Strategy literature for this research, there is still no unitary vision and approach within the discipline of Strategy regarding the issue of the RAP. More effort is needed to come to a unitary vision. This comparative research into the disciplines of Strategy, Finance and HRM, will hopefully provide more insight into potential synergies, similarities and differences of the different approaches to RAP within these disciplines.

In the literature, interdisciplinary boundaries are to a certain degree unclear. Boundaries between the discipline of Finance and Strategy, and between HRM and Strategy seem blurred. The disciplines of Finance and HRM deal specifically with key organizational resources; the discipline of Finance deals with financial capital (i.e. money) and the discipline of HRM deals with human capital (i.e. people). When dealing with RAP, the discipline of Strategy, often mentions financial capital and human capital as important resources and refers to Finance and HRM as interlinked disciplines. This supports the idea of significant importance of the discipline of Finance and HRM.

Christensen and Bower (1996) confirmed this importance by asserting that most innovative proposals, or having new ideas of doing things, require human and financial resources. Gilbert (2001) asserts that the process of resource allocation is based on financial and operational grounds. King (1975) argued that the discipline of Finance is closely linked to managerial activities. Daum (2001) goes even further by stating that Human Resources, which he refers to as human capital, have already replaced financial capital as the most scarce resource for businesses. Huczynski and Buchanan (2001), simply state that Human Resources are the most important capital in an organization.

Multiple scholars argue that the RAP concerns the process of finding the optimal allocation of scarce resources. Some authors, such as Marosy (2002), argue that money is

not a scarce resource, but from a Corporate Finance perspective, money can be seen as a scarce resource. This was confirmed by various authors; Boehme (2003) argued that from this perspective invested capital, i.e. money, is a scarce resource; Gorton and Kahl (1999) come to the same conclusion.

Financial capital and human capital are, according to these authors, the most important resources for a corporation. Because the significant importance of the disciplines of Finance and HRM within the allocation processes of corporations, multiple studies have been done into these disciplines. Comparing the disciplines of Finance and HRM, concerning the RAP, with the discipline of Strategy, a better understanding of the RAP within the discipline of Strategy can be provided.

Also from the preliminary readings on the RAP within the disciplines of Finance and HRM, it appears that scholars are bridging their knowledge towards the discipline of Strategy. These disciplines are, according to the history, chronologically building towards a more integral view, which can be labelled Strategy.

Research method

This research is theoretical in its nature, aiming to enhance knowledge and understanding of the RAP within the discipline of Strategy. By integrating the existing knowledge on RAP within the discipline of Strategy and across the disciplines of Strategy, Finance and HRM, this better understanding will be possible. Following a preliminary analysis of the Strategy literature —which leads to renew the call for integration mentioned above— a thorough analysis and review of the literature will give the best insight of commonalities and differences between these disciplines.

The conceptualizations of the RAP according to the disciplines of Finance and HRM will be compared with the conceptualization of the RAP within the discipline of Strategy. Knowledge on the RAP within the discipline of Strategy is fragmented across many isolated contributions. Therefore there is only little integrated knowledge on the RAP within the discipline of Strategy itself. This research contributes to the knowledge and understanding of RAP within the discipline of Strategy. The Basis for comparison of the discipline of Strategy, with the discipline of Finance and HRM, is a set of researches initiated by Bower in 1970. An overview of these researches is given in Appendix I.

This thesis starts with a description of the RAP within the three chosen disciplines of Finance, HRM and Strategy. Based on the descriptive parts, comparisons will be made between the different conceptualizations of the RAP offered by the disciplines of Strategy, Finance and HRM. For each discipline, the descriptive part will be structured similarly.

First, the main focus of the discipline will be outlined, therefore introducing the core perspective of the discipline. Second, the issue of the type of resources to be allocated will be elaborated on, explaining what resource(s) are at the centre of the RAP for each of the investigated disciplines.

Third, the process aspects of resource allocation will be discussed, elaborating on the nature of the process, the actors involved, and the other characteristics of the process. Fourth, the criteria for Resource Allocation will be discussed, elaborating on the tools and rules each discipline provides. Finally, a multidisciplinary view will be highlighted, showing the existence of researches bridging towards the discipline of Strategy.

The comparison will be followed by findings and conclusions, after which limitations of this study will be discussed. The research ends with recommendations for further research.

Description of the disciplines

Finance

Main focus of the discipline of Finance:

The discipline of Finance is mainly concerned with finding the optimal way of allocating financial resources to the different organizational units. The basic concept of the theory of Finance is that the required returns on investments are positively related with the degree of risk to be faced in undertaking an investment (Tomkins 1991). Other concepts of this theory are: providing insight into the outcome of previous decisions to corporate management; calculating the maximum profit of different projects to support managerial decisions; and, helping the management to make exit decisions.

The discipline of Finance is the body of knowledge, providing tools and rules to enable the theory of Finance to be executed efficiently by practitioners. It is one of the best studied disciplines, and is also known to be one of the oldest disciplines.

Although the main concept has always been maximizing profit, alternative approaches for allocating resources within the discipline of Finance exist. Until the 1960s, a simplistic way of allocating resources based on detached decisions was used, although earlier efforts were made to research the possibility of corporate financial decision-making. Dewing is known to be the first to write about detached decisions in 1919, and again in 1953. This research was largely put to one side with the arrival of the 'economic science' of Modigliani and Miller in the late 1950s. In the words of Dempsey: "They offered a more rigorous, mathematically formulated basis, offering a new impact: namely, the belief that a theory should be 'unified'" (Dempsey 1996, p. 8). As a consequence, the humanity of business expansion was abandoned, at least in the short term, so that the theory might be built around the paradigm of 'equilibrium in perfect financial markets'.

"Perfect financial markets meant no taxes, no transaction or bankruptcy costs, all information available to all market participants without costs, complete alignment among participants as the probabilities attached to all possible outcomes consequent on such

information, and perfect alignment of the incentives of managers and shareholders" (Dempsey 1996, p. 10).

Only after the 1960s a more integrated view of disciplines was adopted, whereas the view of the discipline of Finance became more mixed with the discipline of Strategy. Within the discipline of Finance recurring calls were made so that Management Accounting be more closely aligned with the operations and strategies of organizations (Horngren et al. 2002).

Within the discipline of Finance there are two distinct areas focused upon, respectively, Financial Accounting and Management Accounting. The former focuses on external reporting that is directed by authoritative guidelines, whereas the latter supports management decisions by calculating the predicted returns of investments and projects. The RAP is to be found within the Management Accounting area of the discipline of Finance, while Financial Accounting has merely the formal function of external reporting.

Management Accounting has three functions (Horngren et al. 2002):

- Scorekeeping, which is accumulation of data and the reporting of reliable results to management;
- Attention directing, which attempts to make opportunities and problems visible;
- Problem solving, which is a comparative analysis to identify the best alternatives congruent firm's goals.

In this definition there is no clear reference to the RAP. Although the authors discuss tools and rules for allocating resources, their definition does not include a clear conceptualization of this process. These authors put emphasis on budgeting when referring to issues of Resource Allocation and include it within the umbrella of Management Accounting.

Somewhat related, but to a certain degree different concept of 'allocation' is that of cost allocation. Smart (2002) describes the discipline of Finance as consisting of two parts: (1) investments and financial markets, and (2) the financial management of companies. In explaining the latter one, Smart covers what is left out in the definition of Horngren et al (2002), namely, cost allocation. "Cost allocation is the assigning of indirect costs to the

chosen cost object" (Horngren et al. 2002 p. 35).

To sum it up, within the discipline of Finance, the RAP is found, mainly within the area

To sum it up, within the discipline of Finance, the RAP is found, mainly within the area of Management Accounting. Therefore this research focuses on contributions from Management Accounting. To enable an unbiased comparison of disciplines, a simplistic² way of allocating resources based on detached ³ decisions is assumed.

<u>Issues of the types of the resources to be allocated:</u>

The discipline of Finance deals with research into the allocation process of financial capital, i.e. money. Financial capital is one of the most important resources for corporations; therefore much research is done within the discipline of Finance, trying to find the optimal way of allocating this capital. In this research capital is considered as a scarce resource. Research into the optimal allocation of financial capital is therefore of significant importance.

Process aspects of resource allocation:

The public expenditure management handbook of The World Bank (June 1998), states that budgeting within discipline of Finance plays a key-role, though it is part of a broader set of governing institutional and management arrangements. The process of resources allocation itself, according to this handbook, is fundamentally political; meaning that it is influenced by non-rational decisions. In the more traditional view, the RAP is mostly rational with a few highlighting political influences.

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² Simplistic in the sense that the financial resources are allocated according to the traditional RAP of the discipline of Finance.

³ Detached in the way that the discipline of Finance has clear boundaries.

To prevent getting into a mixture of disciplines, this thesis will focus on the traditional part of Finance, in a detached view, enabling the comparison with the other disciplines.

Within the discipline of Finance, a cost-benefit approach is assumed, whereas costs are to be minimized and profit is to be maximized. This leads to a criterion for choosing among alternative projects and investments, on a financial base. Although this is a rational-economic behavioural perspective, and called simplistic by several authors, this perspective is used in a significant part of the literature within this discipline (Haugen 2001).

Seeing profit maximizing and risk minimizing as the goal, cost allocation is basically a mathematical tool to distribute costs to projects, in such a manner that the costs are proportional to the benefit received. Although all allocation processes of finance are roughly considered the same, it differs upon a closer look. This thesis limits itself to the general processes of allocation.

Corporations utilize tools and rules, offered by the discipline of Finance, to develop the optimal allocation process. The actual process of allocation is executed by human beings utilizing these tools and rules. Decisions for allocating financial resources are made by decision makers within the Financial department. Most likely these decision makers are financial managers, account managers or controllers.

Criteria for Resource Allocation:

Despite this change towards the discipline of Strategy over time, the resource allocation rules and tools remain largely unchanged.

Giving an exact definition of Resource Allocation within the discipline of Finance is difficult, because the boundaries with other disciplines, such as the discipline of Strategy, are not sharply defined. Tomkins defines Resource Allocation in Finance as: "Resource allocation is interpreted as relating to the distribution of the main funds for investment over competing claims" (Tomkins 1991, p. 6).

Within the discipline of Finance, resources are allocated on the basis of return. Invested capital should eventually profit the corporation as return of the investment. Thus, decisions within the discipline of Finance can serve as a tool for management. Predictions are made by calculating the return of an investment or by calculating the optimal allocation of resources.

Westbury (2002) defines Resource Allocation Models (RAMs), in his study on Resource Allocation in Finance. In his words, "... a RAM is a model by means of which institutional funds are distributed according to pre-wet criteria represented by a number of formulas and variables..." (Westbury 2002, p. 14). Again this describes a rule-based method of allocating resources within the discipline of Finance. Therefore one could state that the discipline of Finance, at least for the greater part, is executed according to rule-based methods.

Finance can be considered as strictly risk decisions on investments. As predominantly in the 1960s, however, it is clear that Net Present Value (NPV) is adopted as the proven and accepted valuation criterion for any asset. The NPV compares the value of capital at present versus the value of capital in the future. The NPV theory suggests that one should concern the 'cost of capital', the time-value of money, namely interest and return.

A more developed modern theory is the portfolio theory, based on the idea that shareholders do not hold a single asset, but hold a portfolio of them. Investments in (corporate) finance are more than the buying and selling of assets only. Firms also invest in projects. Projects, here, are activities to invest money into, having the goal to increase the invested money when the project is finished. This increase of invested money is called the required return. To measure the required return of financial resources, the discipline of Finance offers multiple tools. The most often used are Return On Investment (ROI), Net Present Value (NPV) and the Payback Period.

However, many different opinions exist among scholars which of these tools are best for the optimal allocation of Resources. The current dominant theory is the Capital Asset Pricing Model (CAPM). This defines portfolio-risk as a variance for standard deviation of expected returns associated with a given portfolio. Whereas ROI, NPV and the Payback Period are mostly used for single projects, the CAPM is used for portfolio-investments projects.

Most tools and techniques used for allocating resources within the discipline of Finance are rule-based techniques which show that the allocation of resources is executed by rules. To elaborate on the given examples, a 'go, no-go' decision is made on the outcome of the expected returns calculated by ROI, NPV or by the duration of payback period. For example, the ROI divides the "increase in expected average annual operating profit [by the] net initial investment" (Horngren 2002). The CAPM provides a solution for an investment portfolio, but the decision is made on the outcome of the calculation or graphical representation.

The process of resource allocation within the discipline of Finance is mostly rule based. Such rules can be time-based rules (for example 10 years payback will be used to make the decision); result-based rules, (for example the project with the highest NPV of ROI will be chosen); or based on risk, (for example the optimal CAPM is not allowed to be higher than a certain amount of risk). The purpose of these tools and rules is to optimize the distribution of the financial capital across the different projects to invest into, according to firms goal(s).

Towards a multidisciplinary view:

A modern approach of Management Accounting is classified as Strategic Management Accounting (SMA). The Chartered Institute of Management Accountants defines Strategic Management Accounting as: "A form of management accounting in which emphasis in placed on information which relates to factors external to the firm, as well as non-financial information and internally generated information" (CIMA 2000, p. 50).

The main difference between the Conventional Management Accounting (CMA) and the SMA is that the former adopts a historical orientation coupled with a focus on single decisions and periods, and the latter is oriented towards macro- and micro-level activities and short- and long-term decisions (Wilson and Chua 1993). Some examples of SMA are: target costing, product life cycle costing, customer profitability analysis, activity-based management and the balanced score card. Thus, the process of the accounting system is connected with the strategy; the final decision of the allocation is based on the outcome.

The SMA bridges the discipline of Finance towards the discipline of Strategy. This makes the separation of distinct disciplines more difficult. Blur boundaries between the discipline of Strategy and the discipline of Finance, used in the SMA-view, will make comparison complex. Therefore, within this study, the traditional view is chosen, offering the best information for comparison of the resource allocation process with other disciplines.

Human Resource

Main focus of the discipline of Human Resource Management:

HRM is a relatively new discipline, though already accepted in most economies. The acceptance shows the shared ideas of importance of this discipline. The acceptance was the result of radical changes in work in and for organizations (Beardwell and Holden 1997). In the 1800s, employment was handled according to the traditional methods, which are not accepted anymore. Automation, with the milestone at the first of April 1913 when Ford introduced the automated assembly line, has had a lot of influences in the Personnel Management, which is now called Human Resources Management (HRM).

Less autonomy for the employees led to a dominant management-view, namely efficiency and control (Seth and Thomas 1994). Due to this change the influence of the employee shrank contrary to the influence of the manager. The difficulty to supervise, the changing position of power between employee and employer and the difficulty to protest due to the weaker position of employee, led to the foundation of labour unions. These unions collectively looked after the interest of the employees, protecting them through the coordination of a collective voice. To be able to deal with such a stakeholder, and other new coming stakeholders (stockholders, NGO's, government, etc.), organizations began developing a unit specialized in representing these stakeholders. These units are now known as Human Resource Management.

There is no univocal definition of HRM. Storey (1989) distinguishes two versions of HRM. The first has its accent on the management of Human Resources, focusing on optimal allocation of human capital, controlling, hiring and firing, judging, etc. The second focuses on the social aspect of Human Resources, taking care of employees, training, motivating, accompanying returnees, etc.

Within the literature a there is also third version of HRM present, focusing on commitment. Here, the labour-relation focuses on a harmonious cooperation between management and employee (Kluytmans 1999). If the employees and management cooperate, a win-win situation can be created.

Huczynski and Buchanen (2001) give two definitions which can contribute to a better understanding of the discipline of HRM and its boundareis. The first one is: "Human Resource Management is that part of the management process that specialises in the management of people and work organisations. It is a new set of methods reflecting the changes to work and over the past two decades" (Huczynski and Buchanen, 2001. p. 9). This definition stresses the importance of the personnel management, as the early HRM was called. One could argue if this encompasses both the management of HRM and the social aspect of HRM defined by Storey (1989).

The second definition of Huczynski and Buchanen is: "Human Resource Management is a body of knowledge and set of practices to regulate the employment relationship. The main practices are: staffing, employee motivation, employee development, employee maintenance (safety, health) and employee relations" (Huczynski and Buchanen, 2001. p. 11).

DeCenzo and Robbins (1988) define management as: "...the process of efficiently getting activities completed with and through other people. The management process includes the planning, organizing, leading and controlling activities that take place to accomplish objectives" (DeCenzo and Robbins 1988, p. 17). Human Resource Management, according to these authors, is management concerned with the 'people' dimension in management. Their definition shows a match with other writers' definitions of HRM. To make the definition complete, DeCenzo and Robbins (1988) add that HRM is a process consisting of four functions: acquisition, development, motivation and maintenance.

The second definition of Huczynski and Buchanen is a more complete definition in spite of the ambiguousness of the first part, more or less explained by the examples. This definition also merely focuses on the employee side of the HRM. This thesis will apply the latter definition of Huczynski and Buchanen (2001) and focus on the management aspect of HR, described by Storey (1989).

Issues of the types of the resources to be allocated:

The discipline of HRM deals with research into the allocation process of human capital, i.e. people. Human capital is one of the most important resources for corporations (Bower 1970); therefore much research is done within the discipline of HRM, trying to find the optimal way of allocating this capital.

Process aspects of resource allocation:

The complexity of HRM to coordinate and control human resources makes the allocation process, or rather planning, difficult. Many tasks of the HRM are executed by middle-management, because they observe the employees; HRM is depending on these observations. Nadiminti et al. (2002) explain that the benefit of the use of human resource is only known to the observer and not to top management. This makes the RAP of human capital a fundamentally political process, based on non-rational decisions.

The allocation process is executed by top management. The needed quantity of people emanates from the complexity of the business and the quality of the human capital. Within corporations human capital is reimbursed through the payment of money. Since money can be seen as a scarce capital, the optimal allocation of human capital should be done as efficiently as possible.

Optimal allocation of human capital is complicated. Input and output of this capital is needed to measure or calculate optimal allocation. Unfortunately, the input and output of human capital is highly flexible, considering the differences between people and the fluctuations of the individuals. Optimal allocation is executed according tools used by decision makers.

Because human capital is not quantifiable, gut-feeling of the decision maker also influences the allocation process. The mindset of the decision makers, politics, nepotism, etc, has their influence on the optimal allocation process (Gilbert 2001).

The resource itself, human capital, is a fluctuating resource; people have their own opinions, which can prevent an optimal allocation of resources through one single mindset. This is quite different from the discipline of Finance, where Financial capital itself has no influences on the optimal allocation process. Besides the problem of observation, as described by Nadiminti et al. (2002), the gut-feeling and the influences of human capital itself makes the RAP fundamentally political, meaning that it is influenced by non-rational decisions.

Criteria for Resource Allocation:

The descriptions of tools available for HRM vary throughout the literature. Doz and Prahlad (1984) elaborate on 'how' instead of 'what' decisions to make. They describe three tools for HRM, namely: management of data, management of managers and management of conflicts. They refer to relationship management in the same way as Welbourne (2003) does. The advantages of the tools are described as: "Managers management tools are there to set norms and standards of behaviour as well as personal objectives that are consistent with the desired strategic direction" (Doz and Prahlad 1984 p. 60).

Seth and Thomas (1994) also provide tools for HRM. They borrow their tools from the principle-agent theory, based on monitoring, bonding and incentives. These tools can help managers to manage the human capital through checking them (monitoring), letting them be a part of the system by providing shares (bonding) and motivate them through giving promotion after good results etc. (incentives). The transaction cost theory (Williamson 1981), which assumes opportunism and bounded rationalism, uses a more hierarchical arrangement, control. Das and Teng (1998) elaborate on the need for balance between trust and control in relation to confidence.

Allocation of human resources is very difficult to put in a theoretic tool or rule. The tools mentioned in this discipline more or less offer ideas, and no clear description of the allocation process itself.

Allocation, within this discipline, is depending on multiple factors. Price (2003). elaborates on the global business environment, where human resources are depending on comparative issues such as international competitiveness and productivity factors which itself also depend upon a wide range of variables.

If all determinants could be quantified, Linear Programming could offer the solution of optimal allocation. Bénard and Versluis (1974) offer a planning model for the simultaneous formulation of an economic plan, a manpower plan and an education plan. The outcome of the model shows the optimised functions and limiting constraints, whereas the constraints describe as well the interrelations among variables as the limits of the values. This model, however, describes a simplified allocation problem of school resources, maximizing the human capital stock and limiting the budget. In this case all resources are quantifiable and known. The model is not generalizable to different cases.

In the literature about HRM, no real generalizable model for solving the allocation problem exists. Although Bénard and Versluis (1974) and Ritzen and Winkler (1979) come with a model which enables the calculation of optimal allocation through Linear Programming. No sufficient generalizable model of allocation of human capital is offered, because they limited their scope to the quantified data. Quantifying the data might not be possible in other cases, because of different kinds of influences.

Most models of human resource merely, provide a dim tool, or refer to the external influences when trying to find a generalizable solution for the optimal allocation problem of the discipline of HRM.

Taylor (1911) introduced the idea of merit payment, coupling prestige to wage. By introducing the merit payment, he found a tool for motivation and improving the harmonious cooperation between management and employee.

Also in 1911 Taylor introduced the principle of vertical division of labour, the separation of operational and non-operational labour, and the principle of horizontal division of labour, cutting complex labour into smaller easier to handle pieces. He was one of the early writers dealing with the subject of Human Resource, trying to simplify it, not by introducing a tool, but by trying to find a solution on the HR planning process.

DeCenzo and Robbins offer the concept of Human Resource planning, they describe it as: "Human Resource planning is the process by which an organization ensures that it has the right number and kinds of people, at the right places, at the right time, capable of effectively and efficiently completing those tasks that will help the organization achieve its overall objectives." (DeCenzo and Robbins 1988 p. 79). Human Resource planning translates the objectives into the needed amount of workers per unit of an organization; thereby helping the overcoming the allocation problems of human capital.

Human Resource planning is deducted from corporate plans. Therefore, Human Resource planning offers no real alternative tool or rule, because corporate plans are liable to changes. Human Resource planning rather an alternative way of handling the complexity of the problem like Taylor did in 1911 by introducing the principle of vertical division of labour. Without such a clear-cut planning, allocation of Human Capital would be guesswork.

Towards a multidisciplinary view:

Welbourne (2003) discusses the question if HRM should limit itself to the employees only or should take all stakeholders into account. In her article she raises the question if it is better to change the name of HRM into Human Relationship Management, since relations cannot be controlled. However in this thesis only the employees will be taken into account, because these are the only resources to be allocated by the decision makers.

Although the modern HRM is relatively young compared to other accepted disciplines, this discipline started to bridge towards Strategy through the Strategic HRM (SHRM) in 1984. "HR systems and organizational structure should be managed in a way that is congruent with organizational strategy" (Devanna et al. p. 37). The cognition change, as a

consequence of the radical change, resulted in the situation where employees want to work together with management to the same goals (Fombrun et al. 1984). Beardwell and Holden (1997) call this unitarism: "[U]nitarism assumes that conflict or at least different views cannot exist within the organization because the actors -management and employee- are working to the same goal of the organization's success." They support the view of Kluytmans (1999) that the harmonious cooperation between management and employee can lead to a win-win situation congruent organizational strategy.

In conclusion, the discipline of HRM cannot be seen in isolation because of the external context, the contingencies attaching management, the development of competitive strategies and the organizational context (Huczynski and Buchanen, 2001).

Strategy

Main focus of the discipline of Strategy:

According to the literature there is no clear view of the RAP, concerning what specific resources are studied, within the discipline of Strategy. Due to the different contributions scholars have made to the discipline of Strategy, it remains an ill-defined discipline. The preliminary reading and analysis of the Strategy literature for this research also does not offer an exact description of the discipline of Strategy. Boundaries within the discipline of Strategy, the delineation of this discipline with other disciplines, are not clearly defined. For example, Bower (1996) refers to the measurement on financial basis. This does not a cover all possible options, because not all processes are based on the assumptions of the discipline of Finance. Although parts can be evaluated on economic terms, he argues that measurement in organizational terms usually is more apparent. In this example the measurement on financial basis requires crossing the boundary of the discipline of Strategy into the discipline of Finance. Most contributions to the RAP within the discipline of Strategy consist, at least partly, of knowledge of other disciplines. Whereas the discipline of Finance focuses on financial capital, the discipline of HRM has its focus on human capital. The focus of the discipline of Strategy, on the other hand. exists of accumulated knowledge of capital studied in other disciplines, here called corporate capital. So, Strategy is concerning man different types of capital.

Looking at the definition of Strategy used in this research, "the direction and scope of an organisation over the long term: which achieves advantage for the organisation through its configuration of resources within a changing environment, to meet the needs of markets and to fulfil stakeholder expectations" (Johnsons and Scholes, 1999, p. 10), Strategy is an embracing discipline utilized in a higher level of analysis. Defining the boundaries of the discipline of Strategy is difficult because of this embracing effect and different level of analysis.

Bower (1970) argues that the logic underpinning the optimal RAP of scarce resources can be found by determining what forces influence the capital investment process. In a way Bower describes this process in the same way as porter did in 1991. Porter (1991) describes the concept of 'drivers', elaborating on the fact that "[d]rivers constitute the underlying sources of competitive advantage, and make competitive advantage operational." Capacity, according to Bower, is not a resource to invest into, but the underlying 'driver' that improves the capacity. In his study those 'drivers' are 'plant' and 'equipment'. Bower progressively states that "[t]o make further progress it is necessary to go beyond the financial model" (Bower 1970).

There is a dichotomy between views of the discipline of Strategy. There is the separate and distinct disciplinary view, seeing the discipline of Strategy as one of the many disciplines; and there is the umbrella view, seeing the discipline of Strategy in an embracing view.

One could argue that Strategy is one of the separated and distinct disciplines; enabling comparison of the discipline of Strategy with other disciplines like Finance, HRM etc. This creates difficulties in defining boundaries between Strategy and other disciplines.

On the contrary, one could also argue that Strategy is an all encompassing concept, described by Richard, D'Cruz and Wilson (1997). These authors suggest that strategy covers all other disciplines as an umbrella. Here Strategy is not considered a separate and distinct discipline, but more as being a complete picture of the firm, the coordinator of the different disciplines.

The concept used in this research is the former one, the separated and distinct view, trying to find differences and similarities with other disciplines. By using the ideas of studies within other disciplines, a better knowledge and understanding of the distinct and separated view of the discipline of Strategy is intended.

When assuming the discipline of Strategy being of a higher level of analysis, i.e. the umbrella-view, this research becomes obsolete. In that case, the RAP can be described as accumulation of all processes of resource allocation within all disciplines. Although there

is a lot to say for agreeing on this dogma, this research aims to find a RAP within the discipline of Strategy, and therefore needs to define Strategy as an separate and distinct discipline, equal to Finance, HRM etc.

As a result of the comparison between the disciplines of Finance and HRM with that of Strategy, either the boundaries of the discipline of Strategy will become more clear, or it becomes clear that Strategy is an umbrella-like discipline.

Issues of the types of the resources to be allocated:

The discipline of Strategy concerns the allocation of corporate resources. However, there is no unitary vision on what corporate resources exactly are. The earlier discussed dichotomy offers two possibilities. On the one hand, the allocation process of corporate resources within the umbrella-view concern the allocation of all resources, bearing in mind all exogenous influences on the corporation, to other disciplines at a lower level of analysis. These disciplines at a lower level of analysis will allocate the specific resources in an optimal way according to their specific tools and rules.

On the other hand, within the separated and distinct view, corporate resources should be defined first. There is no specific resource yet known to be researched within the discipline of Strategy. In this case, scholars come with ideas of allocation from other disciplines. The definition of what resources should be studied within this discipline is needed before enhancing the knowledge and understanding of the RAP within the discipline of Strategy, seen in the separated and distinct view.

Process aspects of resources allocation:

According to Burgelman (1991), resources can be allocated through a resource allocation rule, shifting the allocation of the resources to that product that has the best margin. So resources are allocated to the product offering the best profit. This is called the assumption of intraorganizational ecology of strategy, meaning that the strongest –here the product with the best profit margin– survives. Strategy is thus deducted from variation, selection and retention (i.e. the strongest survive).

Different authors in Strategy have highlighted different effects of RAP, mostly in connection with issues such as innovation, inertia and performance. For example, Christensen and Bower (1996) argue that patterns of resource allocation influence the types of innovation at which leading firms will succeed or fail.

In a way, changes (new initiatives) in ways things are done correspond to changes in the allocation process. New ideas demand rethinking the optimal process of resources allocation. Christensen and Bower warn managers of incumbent firms to not excessively allocate the resources to the powerful customers, since this will lead to failing business. Gilbert (2001) asserts that disruptive proposals do not fit the criteria of the existing RAP within an organization, so they are denied. The basis of allocation of resources is "...built to screen out proposals that do not fit the financial and operating criteria required to sustain the core business" (Burgelman 1991). By 'operating criteria' is meant the individual allocation of time and attention of operating managers throughout an organization (Noda and Bower, 1996). Gilbert (2000) adds that the RAP "...is not a onetime event, but a continuous process that extends throughout the life of the venture". According to Gilbert (2001), management cognition influences the RAP. The strategic process of allocating resources can be described as a deductive cascading process, whereas the real allocation of resources is repeatedly located in underlying (operational) business units.

According to the literature, the allocation of resources within the discipline of Strategy is fragmented across other disciplines. There is no clear opinion in the literature how to allocate resources with rules or tools within this discipline. Burgelman (1991 and 1994) talks about a resource allocation rule. According to that rule, decisions are based on margin and thus adapted from the discipline of Finance. Other authors use other disciplines directly, or indirectly, as an instrument for the resource allocation of strategic decisions (Sull, 1999; Gilbert, 2001, 2002; Noda and Bower 1996; Christensen and Bower, 1996).

Within the strategy literature there is no clear conceptualization of the process of allocating resources up to present, in spite of the fact that many scholars have done research into this area. This could be a result of the large complexity of the RAP within the discipline of Strategy.

Criteria for Resource Allocation:

Throughout the literature different tools are offered. Burgelman (1991, 1994) elaborates on the resource allocation rule. This rule shifts resources to that product that has the best margin (i.e. a financial tool). Burgelman (1983) uses the discipline of Finance as basis for the RAP in the discipline of Strategy.

Doz and Prahlad (1984) mention a tool known from the discipline of Human Resource, which they name managers' management. Others explain the RAP as an exogenous influence, such as different demand of different users (Christensen and Rosenbloom 1995) and the type of innovation (Christensen and Bower 1996). Another example of exogenous influence is Gilbert's assumption that threat (and opportunities) framing, is the required catalyst in the RAP (Gilbert 2001) and reactions of the firm to the environment (Gilbert 2002). Eisenmann (2002) states that ownership is of influence on risk taking; which influences of the RAP. Burgelman (1996) comes up with a diagnostic tool to draw top management's attention for Strategic Business Exits (SBE). This SBE-tool can be seen as one of the rare Strategic tools. Still it is diagnostic and not originated from the discipline of Strategy.

Towards a multidisciplinary view:

Maddox (1998) states that: "Policy-makers, managers and providers who face difficult resource allocation decisions may find distributive justice useful in making difficult decisions." This could be seen as a continuation of the idea Taylor offered, the horizontal principle of labour (Taylor 1911), which cuts complex situations into smaller pieces. The complex situation Strategic Decision Makers (SDM) face can be delegated to lower-level decision makers, facing a smaller rate of complexity in a more detailed level. He states that Strategy is not a discipline, but a rough first allocation of resources amongst different disciplines.

Towards a conceptual framework

To facilitate a comparison between the disciplines of Finance, Human Resource Management and Strategy on the issue of the RAP, the same structure used in analysing each individual discipline will be used. For a clear identification and understanding of the differences and similarities of the three disciplines, Table 1 summarizes the main findings.

	Finance	HRM	Strategy
Main focus of the discipline:			
Existence of discipline:	Ancient.	Relatively new.	New.
Focus:	Within the discipline.	Partly multidisciplinary.	Multidisciplinary.
Different views / dogmas:	Multiple, but comparable.	Multiple, but sequential staged.	Multiple, but opposite views.
Used view / dogma:	Traditional view.	HRM-view (following the traditional Personnel Management).	Separated and distinct view.
Issue of the type of resources to be allocated:			
Capital:	Financial capital (money).	Human capital (people).	Corporate capital (accumulated from other disciplines).
Availability:	Scarce.	Not scarce.	Scarce and not scarce.
Reusable:	No.	Yes.	Yes and no.

	Finance	HRM	Strategy
Process aspects of resource allocation:			
Scope of influence:	Many disciplines.	Many disciplines.	All disciplines.
Influenced:	Only endogenous.	Partly exogenous and endogenous.	Largely exogenous.
Optimal allocation:	Individual discipline.	Individual discipline, taking exogenous influences into consideration.	Corporation as a whole.
Type of data:	Quantitative.	Qualitative.	Primarily qualitative, also quantitative data.
Process for allocation:	Single time.	Multiple times.	Continuous.
Process control:	Not needed.	Continuous.	Continuous.
Influence of capital itself:	Non-fluctuating	Fluctuating.	Fluctuating.
Criteria for Resource Allocation:			
Base of tools and rules:	Strictly financial.	Deriving from theories and disciplines.	Only adopted from other disciplines.
Tool based / rule based:	Tool and rule based allocation	Mainly tool based allocation.	Rules based allocation.
Towards a multidisciplinary view:			
Bridging towards multidisciplinary view:	Not in traditional view.	Yes, SHRM.	

Table 1: Summary of the findings

Analysis

Main focus of the disciplines:

The traditional view of the discipline of Finance, used in this study, is the discipline researched the most. This is partly due to its long existence and partly due to its relative importance. Although this discipline has multiple views, they are comparable, in a way that they roughly all have the same result. The HRM-view of the discipline of HRM, used in this research, follows the more traditional Personnel Management view of this discipline. The HRM-view is a relatively new view, though its assumptions are already accepted in most researches. It concerns all stakeholders of a corporation and therefore, contrary to the discipline of Finance in its traditional view, is partly multidisciplinary. For example, gaining information on human capital from managers throughout the corporation enabling the evaluation of human capital.

The discipline of Strategy is clearly the youngest discipline of the three studied disciplines. There is still no unitary vision within this discipline of what view is the best. Within this study, the separated and distinct view is used, enabling the comparison with other disciplines. The discipline of Strategy takes all exogenous influences into account, either exogenous to the corporation or exogenous to the discipline. Therefore the focus of this discipline is multidisciplinary, for example, the concerns with the integration of the disciplines.

Issues of the type of resources to be allocated:

Although in the Strategic literature there is no specific resources mentioned for the discipline of Strategy, Bower (1970) speaks of 'corporate resources'. Corporate resource consists of accumulated resources from other disciplines. The discipline of Strategy tries to find the optimal allocation of the accumulated resources, in such way that the corporation as a whole benefits most. This is called the optimized strategic use of available resources. On the contrary, for example, Finance tries to seek the best practise of the allocation of its resources within its discipline. The allocated resources within the two other disciplines are financial capital (money) in the discipline of Finance, and

human capital (people) in the discipline of HRM. Financial capital is assumed to be scarce. Money can only be spent once. Human capital, on the other hand, is not scarce because it can be reused; possibly even improve its quality over time. The discipline of Strategy uses resources of other discipline for its study, therefore possibly scarce or reusable.

Process aspects:

The optimal allocation of resources within the discipline of Finance consists of the optimal allocation of financial capital, which is quantitative data. Quantitative data enables the possibility of calculating an optimum allocation of resources. The discipline of HRM deals with qualitative data. Human capital is allocated through the optimal allocation according tools and also the mindset of the decision maker. The mindset of the decision makers, for example politics, nepotism, etc, influences the optimal allocation process (Gilbert 2001). The discipline of Strategy deals with data of other discipline and therefore can be both qualitative and quantitative.

Within the discipline of Finance all resources can be allocated only once. Once it is used, it can not be allocated again. Financial resources should be gained back (i.e. profit) to provide the next allocation process with new resources. The discipline of HRM, on the other hand, uses human capital which can be allocated more than once; and possibly even improve its quality over time. The backside of this advantage is that human capital is in continuous need of control, liable to possible counter opinions, disagreement and even disobedience.

The discipline of Strategy consists of a continuous allocation process, making the RAP complex. Handling this many facets of other disciplines and the multidisciplinary context increases this complexity.

Within the discipline of HRM, the resource itself, human capital, is a fluctuating resource. People have their own opinions, which can prevent an optimal allocation of resources through one single mindset. This is contrary to the discipline of Finance, where financial capital itself has no influences on the optimal allocation process. The discipline of Strategy deals with all kinds of resources derived from other disciplines. Therefore these

resources can be of influence on the optimal allocation process. The discipline of Strategy concerns exogenous influences which are not to be allocated. Though, these influences should be kept in mind when trying to find the optimal allocation of the corporate resources. The optimal allocation of resources within this discipline consists of the best proportional allocation of resources for all disciplines, keeping the overall corporate goals in mind. In relation to the mindset, the same problems of nepotism etc. can occur, as described earlier in describing the mindset of the decision maker of the discipline of HRM. Where the discipline of Strategy views the corporation as a whole, the view of the discipline of Finance is limited to its own discipline. The view of the discipline of HRM is mainly on its own discipline, though taking exogenous influences into account.

The scope of the resource allocation within all disciplines has its influences on other disciplines. For example the allocation of financial capital influences the possibilities for HRM to gain human capital.

As stated before, money can be spent only once. Therefore this is a single process and the process itself is in no need of control while or after allocation. The resource allocation process of the discipline HRM, on the other hand, can be reconsidered. Because of the possibilities of reallocation and of the possible influence of human capital on the allocation process itself, there is need for continuous control.

Criteria for resource allocation:

The discipline of Finance uses tools and rules for decision making. Because the financial capital is a quantitative data, rules can be used in choosing between different findings offered by different tools. The discipline of HRM does not have rules for the allocation process of its resources. Though, this discipline uses tools for finding the optimal allocation of its resources, stemming from theories of different disciplines. The discipline of Strategy adopts tools from other disciplines for finding the optimal allocation process.

Towards a multidisciplinary view:

Within the discipline of Finance many alternatives exists for the calculation of the optimal allocation of resources. However, all alternatives use the same dogma, seeing the

decision making process based on profit maximizing and risk minimizing (Horngren et al. 2002 p. 35). In contrast, the disciplines of HRM and Strategy have different alternatives. In particular the discipline of Strategy is still in search for a best practise. For example, one could see Strategy as a centre-discipline, operating within the structure of other disciplines, as depicted in Figure 1. The separated and distinct view, applied in this research, fits this alternative. Here the allocation process exists of a coordinative role across all disciplines, focusing on how to allocate resources as optimal as possible.

Another option is to place Strategy on a higher level of analysis, interpreting Strategy as an umbrella for the integration of disciplines, see Figure 2. Its excess value stems from its integrated view on all disciplines. The optimal allocation of resources according to this concept will encounter an as large as possible benefit for the corporation as a whole, through the allocation of the optimal combination of resources over all disciplines. This is congruent to the ideas of Bower (1970), who tried to describe the conceptual scheme of the resource allocation process with the goal to find the common sense of the monodisciplinarity views.

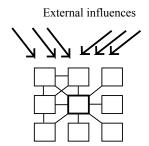


Figure 1. Strategy as a central discipline among others.

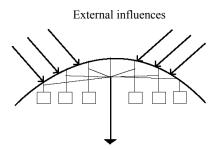


Figure 2. Strategy as an umbrella above all other disciplines.

Conclusions

The discipline of Strategy consists of accumulated resources of other disciplines; therefore it also uses a mixture of tools and rules which other disciplines provide. Besides this, the discipline of Strategy is mainly concerned with exogenous influences. Due to the continuous changing characteristic of the exogenous influence, the process of resource allocation within the discipline of Strategy is a continuous allocation process. Taking all this into consideration, finding *what* resources to allocate is considerably complex.

In their study on patterns of strategic control within multinational corporations, Doz and Prahlad (1984) elaborate on the difference and importance of what resources to allocate and in particular the importance of how resources should be allocated. They state that strategists should focus more on 'how' in stead of 'what' decisions they should make in the process of allocating resources. This is a crucial remark, because at first glance it seems impossible to find out how to allocate resources. According to the contributions in the Strategy field analyzed in this study there is no clear definition of what those strategic resources exactly are. Because the discipline of Strategy "...works on designing and implementing a 'structural context' [Bower 1970] which, in turn, provides a framework for individual decisions that is consistent with the strategic direction" (Doz and Prahlad 1984 p. 60) the necessity of knowing what to allocate is less important than creating this framework of how to allocate.

This research confirms the observation of Doz and Prahlad (1984) concerning the importance of finding out *how* in stead of *what* to allocate. Finding the resources specifically used by the discipline of Strategy is difficult; focusing on this will probably take a long time, while it does not directly contribute to the knowledge of the RAP itself. The discussion of what to allocate should be held within other disciplines, not by the discipline concerning all exogenous influences and accumulations of the RAP of other disciplines, namely Strategy.

Trying to find tools and rules within the discipline of Strategy is impossible until resources for this discipline are defined. By accepting the umbrella-view, finding tools and rules can be helpful for optimal allocation of the accumulated resources of all disciplines (i.e. corporate resources). When accepting the discipline of Strategy as 'central discipline', focusing on what resources are to be allocated seem unnecessary, since all current resources are studied within the many different disciplines.

So, unless there are new resources to be allocated, which are not researched within any other discipline so far; looking for what resource to allocate is of less importance than finding how to allocate resources in an optimal way.

The discipline of Strategy is concerned with balancing the conflicting priorities between all disciplines and construes the firm as a whole. Therefore, the allocation process of the discipline of Strategy concerns *how* to allocate all corporate resources in an optimal way, rather than *what* resources to allocate. What to allocate is up to the requested amount of resources per individual discipline and the total amount of corporate capital that the Strategic discipline has to its disposal.

Limitations of the research

Although a comparison between the discipline of Strategy, Finance and HRM on the RAP many contribute to a better understanding of the differences and similarities between them, this process suffers from a few limitations. A key problem is that comparisons between the three disciplines are difficult, mainly because Strategy already uses tools and rules from other disciplines –as many scholars have found. For example, Burgelman (1983) states that the discipline of Strategy uses Finance as inspiration for the RAP. Doz and Prahlad (1984) mention HRM, Christensens and Bower (1996) name risk investment decisions; Noda and Bower (1996) and Gilbert (2000 and 2001) state that the discipline of Strategy uses tools and rules form the Financial discipline, while Sull (1999) mentions the discipline of HRM.

The comparison of the three studied disciplines brings further complications. First, the timeframe and differences in complexity make a fair comparison difficult. The discipline of Finance is a well studied and well known discipline with clear resources, rules and tools. It has a long history within the research field. However, the discipline of HRM, originated from the more traditional Personnel Management, is a relatively young discipline. The resource of HRM, which is exists of qualitative data, is much more complicated than the quantitative data the discipline of Finance uses as resource. This complexity prevents the discipline of HRM from developing tools and rules for optimal allocation of resources. As a result, there is no best practise to allocate human capital to any source.

The discipline of Strategy is even more complex than the discipline of Finance and HRM. It is the youngest discipline in the field of business disciplines; there is no clear definition of the discipline, of its boundaries, and of which resources are to be allocated. The Strategy literature uses tools from other disciplines to describe the allocation process. Although many definitions of strategy exist, not one is specifically referring to a *discipline* of Strategy. Almost all definitions refer to improving the corporation as a whole, and achieving corporate goals. (Richard et al, 1997) According to these definitions,

the discipline of Strategy is considered as an umbrella discipline, covering al other disciplines in a corporation, as described by the encompassing concept (Richard et al, 1997)

A second complication for comparison between the three disciplines is the difference of concepts used by the disciplines. Whereas the discipline of Finance, in this research, is adopted in its traditional way, the modern view of the discipline of Finance has its focus on the strategic relations with of discipline. Within the discipline of HRM also developments in time took place; from the traditional Personnel Management via the more modern HRM view, to the Strategic Human Resource Management view also focusing on the strategic relations. Comparison of the most modern views of Finance or the Strategic Human Resources Management (SHRM) with Strategy is complicated due to the overlapping parts of the disciplines. In this study the traditional concept of the discipline of Finance is compared with the HRM-view of the discipline of HRM. The comparison of these two different concepts is assumed to be possible.

A third complication is the comparison of tools and rules of the allocation process of financial capital and human capital with the umbrella-concept of the discipline of Strategy; which is a higher level of analysis making efforts for improving overall business goals. Explanation on the latter is needed. Whereas money and people are clear-cut resources, the discipline of Strategy does not concern clear-cut tangible resource. Here, the concept of drivers that Porter (1991) mentions may help. "Drivers constitute the underlying sources of competitive advantage..." (Porter 1991 p. 104). Drivers constitute the underlying source of the optimal allocation process. In a way comparison of these underlying sources with the clear-cut resources of Finance and HRM, is a comparison of different levels of analysis.

Finally, the limited size and scope of the research question and the choice of just two disciplines for comparison with the discipline of Strategy, may have led to premature conclusions.

Recommendations for future research

This research is intended as a preliminary step towards a better understanding of the RAP within the discipline of Strategy. Additional research is needed before drawing conclusions.

A general recommendation that arises from this work is that future research within the discipline of Strategy should focus on 'how' the process of resource allocation is executed, in stead of 'what' resources are to be studied.

Due to the different opinions of scholars in the literature it is too early to choose either one of the dogmas discussed in this research. In addition other possible dogmas should not be left out of the research field. Fining how to allocate resources, however, within the discipline of Strategy should be the prior activity.

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Appendix

Appendix I

Author & Year	Main content	Strategy Formulation	Strategy Implementation	Adaptation & Change	R.A. subject	Extra info.
Burgelman 1983	Operational level is crucial. New venture division → study the key activities in the hierarchies. (product champions) Case: large high technology diversified frim.	Impetus / strategic forcing / strategic building. Product championing. Bottom up.	Top management should allow strategic implementation. Middle management decides the outcome of strategy.	Strategic context vs. structural context Internal selection Product championing.	Internal	Financial Discipline as basic for RAP. Top managers create context for the process.
Doz & Prahlad 1984	Top management should focus on HOW in stead of WHAT decisions to make Case: LM Ericsson, GM et al.	Headquarter vs. subsidiary Top management should manage decisions actively Bottom up.	Balance overview of top management with detailed information of subsidiary	Data management, Managers- management Conflict resolution	Reset focus of RAP	Data management Managers- management (= HRM) Conflict resolution
Burgelman 1991	RA-rules solve the discrepancy between internal selection and organisational strategy	Behaviour is important, not block ideas.		Product champions should continue if they are sure of result	R.A. Rule	Selection, retention, variation.
	Case: Intel	Variation (ongoing vs. epoch) Autonomous initiative; if 'invention' of product champion is ok → strategy. Top down and bottom up.	Selection —	Retention R.A. rule Product champion		
Burgelman 1994	Business exit. R.Arule Case: Intel	Internal selection environment → forces driving to business exit: - base of competitive advantage - strategic action - distinctive competence - official strategy. Bottom up.	Action occurs from middle management	[see formulation]	RA-rule	business exit: - base of competitive advantage - strategic action - distinctive competence - official strategy.
Christensen & Rosenbloom	Attackers advantage	Incumbent shifts to process innovation Entrant likes potential and does product innovation	Entrant: find radical innovation bring into industry.	Reaction on attackers → process innovation for incumbents	Exogenous	Importance of a product depends on different demands of different users.

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Chrisensens & Bower 1996	Failure of leading firm (incumbent) Lead customers are source of failure of incumbent. Entrants only attackers advantage with disruptive architectural change Failure is not technological but strategic. Case: diskdrive industry	Incumbents: customer needs Middle management Risky investments (ie. disruptive) are not liked by incumbents Emergent likes market potential and takes the risk.	Middle management	R.A. influence the types of innovations. Middle management The allocation of (scarce) resources to customers demands stalled the innovation of keeping up to entrants.	HRM & Fincance Risk & career manage-ment Closely linked RAP based on rational assessment of date (return/risk) Resource dependence	What do the customers REALLY want? That is important
Noda & Bower 1996	Elaborate on BB-model Strategic commitment by middle management as broker between top/front managers Iterative model Case: Bell South & US West	Bottom up. High- middle- fron- Manager Bottom up and top down.	High- middle- fron- Manager		Finance (technology + market) (org. learning) Strat. Makingprocess)	Perfect summary of BB- processmodel of strategy making (p 160) Added iterative model
Burgelman 1996	Identifies unlinking and repositioning; resource shifting and technological uncoupling and strategic recognition and structuring as key categories of different levels of managerial activities. (no leeway for product champions) Process model of Strategic Business Exit (SBE) is a diagnostic tool, it can draw top managements attention before business level managers see it heading to the death spiral (and vice versa) Case: Intel	Middle Difficult to say who the relevant actor is (Allison 1971) Bottom up and (less) top down.	Middle Difficult to say who the relevant actor is (Allison 1971)	Middle Difficult to say who the relevant actor is (Allison 1971)	Investment	Death spiral Again customer needs are crucial RA-rule → protection Investment less driven by top management than divestment.
Sull 1999	Case example. Very strong corporate values, family firm. Following customers too much, and strong desire to protect employees helped decide not to exit or start Greenfield. Crisis → outside manager Case: US tire industry	Tight but social topmanagement, accepting and approving idea's from 'bottom' (middle and lower management) Bottom up and top down.	Through family band	Close contact with customers, quick adaptation and change to their wish	HRM (!)	Incumbent did not do nothing, but did things they did wrong.

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Greve & Taylor 2000	Reactions on innovative changes in the market. Imitative actions vs. non imitative actions Influence of (past) decisions in actions					
	Case: radio market					
Eisenmann & Bower	Entrepreneurial M-Forms Corrupted M-Forms (CM) → centralized M-Forms	Top management and process of bottom up orchestrating			Allocation of top- management	Eisenmann & Bower 2000
2000	Case: global media firms	Bottom up and top down.				
Gilbert 2001	Threat and opportunities on managerial behaviour and as catalyst. Frames (mindsets)	External threats and opportunities		External threats and opportunities	Investment, financial. Operational (time etc) Threat framing.	Threat framing is the required catalyst in RAP.
2001	Case: newspaper industry				g .	
Gilbert	Behavioral at disruptive change: 1) willingness to commit substantial			Disruptive changes asks for a reaction of the whole	Finance. Operational behaviour due	Lots of literature tips to actions/reactions and
2002	resources 2) contraction of authority 3) focus on existing resources (centre towards core business) Case: newspaper industry			firm, the commitment and behaviour should be changed (see main content)	to threat	behaviour of management on disruptive change (threat)
Eisenmann 2002	Risk averseness of agent- vs. owner managed firms.	Bottom up and top down			RAP more effectively in M- Form (corporate executives beter information, and less moral hazard	Owner managed firms are less risk averse because manager cannot be terminated.