Goal Congruence
The Experience of a Performance Measurement System

A Case Study of AstraZeneca

Bachelor Thesis
Management Accounting
University of Gothenburg
School of Business, Economics and Law
Spring 2012

Supervisor: Johan Magnusson

Authors:
Ida Kronberg
Maria Gustafsson
ACKNOWLEDGEMENT

The authors would like to take the opportunity to thank all the people concerned in our study.

In essence the authors are truly thankful for the help provided by Rikard Olsson, Director of Performance Strategy and Reporting at R&D Finance, AstraZeneca. The information provided and the time he devoted was valuable indeed and facilitated the progress of the study. Further the authors are grateful for the intermediation of important contacts with key respondent as well as his overall engagement.

Furthermore, the authors would like to express their thanks to the five respondents, for their participation and willingness to share their thoughts and experiences. Their engagement enabled the study to be conducted.

In addition, the authors are sincerely grateful for the support and feedback provided by their supervisor Johan Magnusson. The advice received in the initial phase constituted a valuable and important foundation.

Gothenburg, 30:th of May, 2012

________________________   ______________________
Ida Kronberg             Maria Gustafsson
ABSTRACT

Bachelor Thesis within Business Administration, School of Business, Economics and Law; University of Gothenburg
Department: Management Accounting, Spring 2012
Authors: Ida Kronberg & Maria Gustafsson
Supervisor: Johan Magnusson
Title: Goal Congruence – The Experience of a Performance Measurement System

Background and Discussion: It can be stated that organizations use management control systems in order to influence employees’ behavior in the right direction, with the aim of achieving organizational goals. Nevertheless, employee’s behaviors can be difficult to direct in a desired way, especially if individual goals are not aligned with the organizational goals. Thus, designers of performance measurement systems (PMS) should seek to create goal congruence, which means that individual goals are aligned with organizational goals. Organizations today report difficulties in creating goal congruence when implementing PMS. Despite how well designed or executed the PMS are, the employees’ perception about the PMS is fundamental for its impact.

Research Questions: How do employees within an organization experience the use of Performance Measurement Systems, based on aspects relevant for the contribution to goal congruence? To what extent does their Performance Measurement System seem to contribute to goal congruence?

Purpose: The purpose of the study is to describe how the use of PMS is experienced among employees at different levels. Based on knowledge about how the PMS is intended to create goal congruence, we seek to identify how this phenomenon is experienced and perceived among the employees. With reference to the study we seek to find out to what extent the PMS contributes to the alignment between individual goals and organizational goals.

Delimitations: The study is based on the experiences of five employees within the R&D department at AstraZeneca in Mölndal, Sweden. The results cannot be subject to any generalized conclusion applicable for the entire organization, since it is based on a small amount of respondents. The focus throughout the study will be on aspects and implications relevant for goal congruence.

Method: The thesis is based on a qualitative approach in the form of a case study. Data was collected from five respondents by conducting qualitative semi-structured interviews. The empirical findings have then been analyzed by means of the reference of literature.

Results: In brief the result indicates that AstraZeneca has managed to create a system that contributes to goal congruence based on the experiences among the employees. The experience of the employees indicates that the aspects relevant for the achievement of goal congruence, for instance communication and alignment between individual goals and organizational goals seem to be taken into account in the PMS. The empirical data also indicates that the employees experience a direct or indirect connection between their own individual goals and the overall goals. Our own interpretation and observation lead to the conclusion that the company has managed to design a PMS including a Global Scorecard that can lead to goal congruence, as it serves as the overall base for all individual goals. By decomposing the GSC into adjusted scorecards relevant for each
business unit, it is possible to create individual goals that are aligned with the overall goals.

**Suggestions for further research:** A thought that arose during the study is to what extent a well-developed PMS actually has a positive effect on the profitability and growth of the company. Furthermore, a comparative study between two companies with distinguished different corporate cultures would be interesting to conduct, in order to investigate whether the achievement of goal congruence is affected by the corporate culture.

**Key words:** Management Control Systems, Performance Measurement Systems, Goal Congruence, Balanced Scorecard.

**Abbreviations:**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCS</td>
<td>Management Control Systems</td>
</tr>
<tr>
<td>PMS</td>
<td>Performance Measurement Systems</td>
</tr>
<tr>
<td>BSC</td>
<td>Balanced Scorecard</td>
</tr>
<tr>
<td>GSC</td>
<td>Global Scorecard</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research &amp; Development</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>CFO</td>
<td>Chief Financial Officer</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resources</td>
</tr>
<tr>
<td>Individual goals</td>
<td>Goals of the individual, prevalent in the individual goal document</td>
</tr>
</tbody>
</table>
# Table of Contents

1. INTRODUCTION .......................................................................................................................... 1  
   1.1 Background .......................................................................................................................... 1  
   1.2 Problem discussion .............................................................................................................. 2  
   1.3 Research questions ............................................................................................................. 2  
   1.4 Purpose ................................................................................................................................ 3  
2. METHOD ...................................................................................................................................... 4  
   2.1 Research design ................................................................................................................... 4  
   2.2 Research approach - qualitative study ............................................................................... 4  
   2.3 Secondary data .................................................................................................................... 5  
   2.4 Research method - case study ............................................................................................ 5  
   2.5 Respondents ........................................................................................................................ 5  
   2.6 Primary data - qualitative interview ................................................................................... 6  
   2.7 Data treatment ...................................................................................................................... 6  
   2.8 Discussion about validity and reliability ............................................................................ 7  
3. REFERENCE OF LITERATURE ............................................................................................... 8  
   3.1 Management Control Systems ............................................................................................. 8  
   3.2 Performance Measurement Systems .................................................................................... 9  
   3.3 Aspects for goal congruence ............................................................................................... 11  
   3.4 The Balanced Scorecard ...................................................................................................... 12  
4. EMPIRICS .................................................................................................................................... 15  
   4.1 Case study - AstraZeneca .................................................................................................... 15  
   4.2 Respondent 1 (R1) ............................................................................................................... 19  
   4.3 Respondent 2 (R2) ............................................................................................................... 21  
   4.4 Respondent 3 (R3) ............................................................................................................... 22  
   4.5 Respondent 4 (R4) ............................................................................................................... 24  
   4.6 Respondent 5 (R5) ............................................................................................................... 26  
5. ANALYSIS .................................................................................................................................... 29  
6. CONCLUSIONS .......................................................................................................................... 34  
   6.1 Results .................................................................................................................................. 34  
   6.2 Thoughts and considerations ............................................................................................... 36  
   6.3 Suggestions for further research ......................................................................................... 36  
LIST OF REFERENCES .................................................................................................................. 38  
ATTACHMENT ............................................................................................................................... 40
1. INTRODUCTION

1.1 Background
Employees go to work every day with different purposes and goals in mind. At the same time a well-established overall goal for for-profit organizations is to maximize shareholder value. Since individual goals are not necessarily aligned with organizational goals there is a challenge in making the employees work in the right direction (Anthony & Govindarajan, 2007).

Management Control Systems (MCS) play an important role in organizations pursuit of goals. It is a broad concept including different devices such as the budget, financial measures and incentives. A well designed MCS should influence employees’ behavior in a way that leads to the achievement of overall organizational objectives (Merchant & Van der Stede, 2012). Management control can also be described as a technique and process designed to appeal to every level within the organization with the purpose of increasing the likelihood of goal congruence (Flamholtz, Das & Thusi, 1985). Goal congruence is an important element and it can be considered as a phenomenon prevalent when individual goals are aligned with the overall objectives. When designing a MCS, the achievement of goal congruence should according to Anthony and Govindarajan (2007) be kept in mind throughout the development and execution. A high level of goal congruence exists when the probability that individuals in their own strive to achieve individual goals also contributes to the achievement of organizational goals (Anthony & Govindarajan, 2007).

The need for management control arises from different aspects. The behavioral focus is significant, and if organizations were able to rely on its employees to do exactly what was best for the organization in all situations, there would be no need for control (Merchant & Van der Stede, 2012). Furthermore there is a perception that employees might not perform adequately because they do not know what is expected of them and thus need a clear direction to achieve goals. Another implication underlying the use of management control is that employees can lack motivation to perform in the organization’s best interest (Merchant & Van der Stede, 2012).

There are many forms of management control and in order to handle the employees’ behaviors, the use of Performance Measurement System (PMS) is common and it includes individual measures (Simons, Dávila and Kaplan, 2000). Organizations today spend a lot of time and money in developing PMS (Kennerly & Neely, 2003). Properly designed PMS can have positive impact on both competitiveness and profitability, whereas poorly conducted PMS can have negative impact on the organization’s aim to achieve goals. It is commonly stated that what organizations measure gets done, which implies the importance of accurate PMS and that applied individual goals actually measure what the company wants to accomplish. A well-executed PMS should contribute to actions consistent with both strategies and goals (Kennerly & Neely, 2003).

Earlier, there has been a strong focus on the use of financial performance measures as a good indicator of performance (Kennerly & Neely, 2003). However the use of financial performance measures could lead employees to act in a manner inconsistent with the long run objectives in favor of reaching an individual financial short term objective (Merchant & Van der Stede, 2012). Therefore, during the 1980s when organizations started to acknowledged shortcomings related to financial measures, they wanted to solve the issue by developing PMS including non-financial aspects as well (Kaplan & Norton, 2005). The Balanced Scorecard (BSC) was developed in 1992 by Kaplan and Norton, and it is according to Anthony and Govindarajan (2007) a technique aiming to create goal congruence by fostering a balance between different goals and measures.
1.2 Problem discussion

Despite the fact that PMS have been used for a long time, organizations still report difficulties with the implementation of PMS as well as creating goal congruence. For a PMS to be successful it should enable effective communication about desired performances and facilitate understanding (Taticchi, Balachandran & Tonelli, 2012). It should also create a connection between individual goals and incentives to increase motivation (Simons, Dávila & Kaplan 2000). But that connection is not enough if the individual goals are not consistent with the organizational goals (Anthony & Govindarajan, 2007).

Simons, Dávila & Kaplan (2000) argue that no matter how well designed the PMS are, it is the employees and their perception that is crucial for the organization’s ability to reach both financial and non-financial goals. When studying management literature, the behaviors of employees recur frequently. According to Merchant and Van der Stede (2012), it can be difficult to influence the employees’ behavior, because they may have a tendency to work around systems. They can also manipulate data and make decisions that serve their own self-interest at the expense of the organization. A perception concerning human behavior is that employees can minimize their organizational effort if they do not get any personal pay off (Simons, Dávila & Kaplan, 2000). Consequently, we consider that the impact of a PMS is dependent on the employees’ experience of it, as well as how it affects their behavior in the pursuit of organizational goals.

Furthermore, the employees’ understanding for organizational goals as well as their understanding for individual goals is fundamental in creating directions (Merchant & Van der Stede, 2012). Even though employees may not always agree with organizational goals, they still need to be informed about what the organization tries to accomplish in the long run (Simons, Dávila & Kaplan 2000). A study committed of WorldatWork highlights some difficulties with developing PMS in order to reach goal congruence. The importance of increasing the employees’ understanding for overall objectives as well as the organizations value drivers was emphasized. On the question whether non-management employees aligned around a common set of critical business priorities 48% answered that they thought that non-management members only understood the strategic objectives and value drivers to some extent. Further 42% thought that non-management employees thoroughly understood the organization's overall performance goal. On the question, to what extent individual goals were aligned with organizational goals, 46% answered to some extent, 11% to a minor extent and 37% to a great extent (Sibson & Synygy, 2004).

Since the literature in the field points out difficulties in reaching goal congruence related to employees’ behavior we wanted to study the subject deeper. Merchant and Van der Stede (2012) highlight that the advantage of the use of MCS is related to the employees’ reaction to it. Therefore we seek to address the employees’ experience of the PMS in our study as it seems to be fundamental when considering the organizations ability to create goal congruence.

1.3 Research questions

- How do employees within an organization experience the use of Performance Measurement Systems, based on aspects relevant for the contribution to goal congruence?

- To what extent does their Performance Measurement System seems to contribute to goal congruence?
1.4 Purpose
The aim of the study is to describe how the use of PMS is experienced among employees, based on its ability to create goal congruence. Based on knowledge about how the PMS is intended to create goal congruence, we seek to investigate how relevant aspects within the PMS are experienced and perceived among the employees. By getting a broader understanding for the PMS and the employees’ experiences we seek to identify to what extent the PMS makes it possible to communicate organizational objectives and its ability to create alignment between organizational goals and individual goals.

1.5 Delimitations
In order to fulfill our purpose we have executed a case study at AstraZeneca’s R&D department in Mölndal, Sweden. As we needed knowledge about how an organization works to create goal congruence in order to answer the question it would be too comprehensive and time consuming to involve several companies. The intention is not to come to a generalized conclusion about the experience of all employees, but to examine the experience of a limited amount of respondents. Concerning the reference of literature, we have described management control systems briefly as we solely wanted to focus on those aspects with relevance and implications for the achievement of goal congruence.
2. METHOD

In this chapter the aim is to provide information about the research process. The content should increase the reader’s understanding for how the results and conclusions are produced.

2.1 Research design

In the initial phase we knew that we were interested in investigating how the use of PMS affects employees at different levels within an organization. We started our work process by studying relevant literature in the subject, and identified a potential problem that became the foundation for our background and further the problem discussion and research question. We then formulated a reference of literature by using secondary data in the field. When we had obtained a broader understanding for how to approach the issue we decided to contact an organization that we were interested in studying. After conducting the interviews we compiled the empirical findings carefully. We then analyzed the empirical findings by using the reference of literature. When writing the conclusion we used the overall empirical findings and our own observations and interpretation acquired throughout the process.

2.2 Research approach - qualitative study

In the thesis we have chosen to conduct a qualitative approach, since the purpose of the study is to investigate and understand how a phenomena is experienced among employees. When deciding which approach to choose it is common to let the question in mind determine (Svenning, 2003). A qualitative approach is appropriate when the authors seek to understand the content of a certain phenomenon or experience. Qualitative data consists of detailed descriptions about occasions, experiences, opinions, direct quotes as well as observed behaviors (Merriam, 1994). A quantitative approach on the other hand is more appropriate if the authors seek to address questions concerning how many or how often, and when data is able to quantify. It is suitable when aiming to be more precise and when seeking to generalize and it is often based on a great amount of research units (Svenning, 2003). We rather aim to gather information from a limited amount of respondents to get information about their individual experience, understanding and opinions about a system. Therefore, we believe that the qualitative approach is in line with our purpose and increases the likelihood to represent data relevant for the question in mind.

Further we have chosen a deductive approach where we seek to interpret the empirical findings based on our reference of literature. An alternative would be an inductive approach, which in brief can be described as an approach where the authors seek to create new theory (Merriam, 1994). Although a case study is useful when researchers are interested in an inductive approach, prevalent conditions for our thesis implies it would be to extensive and time consuming. We found the deductive approach the most suitable since we have addressed a question that we have based on the reference of literature and we have used the reference of literature in order to create an analysis of the results. The inductive approach implies that a question is formulated in more open terms and in the analysis the empirical findings are not based on the reference of literature (Merriam, 1994).
2.3 Secondary data
As stated above, we wanted to create a reference of literature early in the work process. The most common sources for secondary data is gathered from textbooks and through articles published in scientific journals and reports (Patel & Davidsson, 2003). By using different sources we could get a deeper understanding for relevant concepts in the field. We have used three textbooks handling management control systems and performance measurement systems. Furthermore we have complemented the literature with Internet based articles, from databases such as Emerald Management Extra Plus, Business Source Premier and Science Direct in order to find reliable, peer-reviewed articles. The search topic have mainly been management control systems, performance measurement systems and balanced scorecard and when studying these subjects we acknowledged the importance of goal congruence. Throughout the searching process we strove to find relevant articles. Three of the authors, Robert Kaplan, David Norton and Andy Neely that we refer to in the reference of literature are among the most cited in the field (Marr & Schiuma, 2003), (Neely, 2005). Further, most of the articles from the databases are the most cited journals in the field, namely Harvard Business Review, International journal of Operations and Production Management and Management Account Research (Marr & Schiuma, 2003).

2.4 Research method - case study
In order to answer the questions, and thus fulfill the aim of the study we needed to immerse in a company. We thought that a case study would be accurate since it is suitable when committing a research on a limited amount of units (Patel & Davidson, 2003), and it would be too comprehensive to pursue this research on several organizations. We came in contact with AstraZeneca, which is a global organization that works hard to create consistency between goals worldwide and among the different units and all employees. A case study is suitable when the researchers are interested in receiving detailed knowledge in a certain phenomenon or fact (Merriam, 1994). In our case we wanted to develop an understanding for how AstraZeneca uses management control systems to create goal congruence. Then we pursued qualitative interviews in order to identify how the employees experience the use of the system based on relevant aspects. In a case study it is common to identify a phenomenon and use interviews or observations to study the implications of the phenomenon. Furthermore, a case study is preferable when the aim is to highlight certain characteristics and show how they affect the execution of ideas in a system, or how they affect the way an organization works (Bell, 2000).

In our opinion a case study is suitable since according to Merriam (1994) the focus is on the process rather than on the results, as well as the importance is to discover rather than to prove. A case study also makes it possible to identify what factors that affect the phenomenon in mind (Bell, 2000). The lack of structure within a case study also makes it possible to adjust to unpredictable events (Merriam, 1994). We do not seek to draw conclusions claimed to be correct or general, solely observe and interpret our empirical findings in order to provide the most convincing conclusion based on the issue addressed. Accordingly, the purpose of a case study is not to find the truth, it is more about eliminating erroneous conclusions (Merriam, 1994).

2.5 Respondents
To make it possible to handle our question concerning the employees’ experience, we needed prior knowledge about how AstraZeneca works in order to communicate their goals, motivate employees to work towards them, and create goal congruence. We came in contact with Rikard Olsson, the Director of Performance Strategy and Reporting at R&D Finance at AstraZeneca. He provided us with relevant information about their PMS, the purpose of it and how it was aimed to create goal congruence. This information was necessary in order to understand how to address our questions to the employees and to understand AstraZeneca’s intended design. Further it gave us the possibility to better understand the experience of the employees as we could better relate to the system. Before publishing the information received from Rikard Olsson, we sent him a draft of our interpretation.
of the background information to get his agreement.

When being in contact with Rikard Olsson we asked for proposals for respondents to interview. Three of the respondents were selected through recommendations from Rikard Olsson. The remaining two respondents were selected through suggestions from one of the respondents who works as a manager, as we asked if we could contact any of her subordinates. By getting in contact with respondents from another source than Rikard Olsson we created a greater variation in our selection and increased the likelihood for a broader perspective of the experience among the employees. All of the respondents worked within the R&D department but within different functions, namely Finance, Information and Research, and with different tasks.

2.6 Primary data - qualitative interview
The most suitable method for data collection was in our opinion to conduct qualitative interviews with individual respondents. It is a flexible way to collect data and it can reveal information that would not be clear if the data collection was based on questionnaires (Patel & Davidson, 2003). When creating an interview it is important to make decisions about the design. We wanted to create an overall structure to ensure that we asked questions relevant for the research question. At the same time we considered it important to be flexible, and to give the respondent space to describe their own spontaneous implications in the subject. Therefore we made a semi structured form, which blends both structured and unstructured questions (Bell, 2000). An interview that is more open and less structured, is suitable when the researchers want to find out the respondents points of view (Merriam, 1994). A strict structured interview implies that every question is decided in advance and also the order. This is a great form, when aiming to interview plenty of people. On the contrary, a complete unstructured interview is appropriate when the researchers do not have enough knowledge about the phenomenon to ask relevant questions.

Interviews
When contacting the respondents we did not provide them with any details about our study or the purpose, since we did not want them to prepare in advance. We were interested in capturing their spontaneous answers and understanding for how AstraZeneca works with the alignment of individual goals with organizational goals. All interviews took place at AstraZeneca in Mölndal and each interview lasted for about an hour.

During the interviews we tried our best to make the respondents feel comfortable since their willingness to answer is not self-evident but important for us. Therefore we ensured that their answers would be treated confidentially. This clarification is in accordance with how Patel and Davidson (2003) mentions that it is important to clarify how the answers are portrayed and treated. We also asked for permission to record the interviews, and all respondents accepted that.

2.7 Data treatment
In order to compile the empirical findings in a truthful way we processed the primary data by transcribing the entire recorded interview. Even though we made notes during the interview, we wanted to make sure that we did not miss any important findings and also we wanted to avoid misinterpretations. By transcribing the interviews it was possible to find relevant quotations that we could use to clarify the empirical presentation. According to Patel and Davidson (2003) the processing of qualitative data can consist of quotations from the interviews as well as the author’s interpretations of the findings. It is important to create a balance between commented text and quotations (Patel & Davidson, 2003). We have also tried to compile the interviews by categorizing the answers into relevant headlines with the aim of creating a clear structure. As mentioned above, we have chosen a deductive approach implying that we seek to interpret the empirical findings based on the reference of literature when creating our analysis in chapter 5. When the empirical presentation was finished we developed our analysis. We analyzed the empirical findings based on
some relevant aspects treated in the reference of literature. We emphasized similarities, when we thought that the empirical findings were in line with the literature in the field, as well as we mentioned differences that we identified.

2.8 Discussion about validity and reliability

Within a quantitative approach the term validity treats whether the researcher measures what he aims to measure (Ejvergård, 2009). In a qualitative approach the term has a slightly different meaning since the aim of a qualitative approach is to interpret or describe experiences. The accuracy during the measurement as well as how good the measure instrument is, are not as relevant as within a quantitative approach (Patel & Davidson, 2003). In the qualitative approach the term validity should rather designate and encompass the entire research process. Consequently, the validity can be connected to the data collection and whether the authors managed to collect enough data for making a credible interpretation (Patel & Davidson 2003). In our thesis the validity can be imperfect to some extent as we have only interviewed a few amounts of respondents, which indicates that we cannot draw any conclusions stated to be true. Nor can we make any generalization about the experience of all employees at AstraZeneca from the empirical data. According to Patel and Davidson, (2003) generalizations can be problematic when conducting a qualitative study since they are characterized by variations.

Additionally, the term reliability has another meaning within the qualitative approach. In a quantitative interview the reliability is said to be high when the same answers are received when asking the same question in different occasions. This does not have to be the case within a qualitative approach, when the respondent can in fact change perception or feeling in a certain situation. In a qualitative study the term reliability should be applied in terms of the circumstances prevalent during the particular situation when the interview was taken place (Patel & Davidson 2003). In accordance with the interpretation of Merriam (1994) the term reliability cannot be used in a meaningful way because the multiple use of a study would not give the same answers because of constant change. In a qualitative interview there is a risk that the respondents are affected by the interviewer and try to give answers that they think the interviewer wants (Svenning, 2003). We tried as stated above to diminish this risk by not preparing the respondents, and we also made clear that we were interested in their own experience and that there were no right or wrong answers.
3. REFERENCE OF LITERATURE

In this chapter the aim is to provide the reader with brief definition of MCS, PMS and goal congruence. Then we seek to distinguish aspects related to a successful PMS and the creation of goal congruence. In the end we present the BSC as a technique that could facilitate the achievement of goal congruence. Throughout this chapter there is a strong focus on implications related to employees’ behavior as it is of importance to our study.

3.1 Management Control Systems

“Management Control Systems” (MCS) is a concept with different definitions (Malmi & Brown, 2008). Merchant and Van der Stede (2012), who have adopted a behavioral orientated view of the concept Management Control, argue that it consists of all the devices managers use in order to affect the behavior of employees and to ensure that decisions made are aligned with organizational objectives and strategies. The authors emphasizes that it is related to all processes that are used to allocate resources and direct activities. Management Control deals with questions such as employees’ behavior, consciousness about what is expected from them, and achievement of organizational objectives (Merchant & Van der Stede, 2012). Anthony & Govindarajan (2007) provide a similar orientation and describe management control as a process that enables managers to influence employees to implement strategies. The strategies can in brief be considered as plans to reach overall organizational objectives. MCS facilitate the work to move the organization towards the right direction (Anthony & Govindarajan 2007).

MCS include a mix of different management control alternatives. According to Merchant and Van der Stede (2012), it is possible to distinguish management control in three broad control categories:

- Results control: contains elements such as planning and budgeting, financial responsibility centers and incentive systems.
- Action control: contains the use of behavioral constraints, pre-action reviews as well as action accountability.
- Personal and cultural control: concerns the selection of the right employees, training and the creation of organizational culture. (Merchant & Van der Stede 2012)

Broader definitions in the field, provided by Flamholtz, Das and Thusi (1985) include a more goal-oriented definition where control systems are considered necessary to make sure that individuals behave in a way that contributes to organizational goals. The authors state that control systems are developed to make individuals behave and act in accordance with organizational goals. In this sense control systems should be seen as a technique and process used to achieve goal congruence. The authors behind this statement say that individuals are goal-seeking and state that organizational and individual goals are not always consistent, and consequently there is an underlying conflict in between. Therefore, the purpose of control systems is to increase the likelihood of internalization of organizational goals. Furthermore, the authors stress the importance of goal congruence as crucial for the organizational efficiency (Flamholtz, Das & Thusi 1985).

Attempts have been made in order to clarify the confusion about MCS constitution. Malmi and Brown (2008) try to explain MCS as a package since it includes different systems that can be categorized as MCS and organizations today use a number of different MCS.
3.2 Performance Measurement Systems

Performance Measurement Systems (PMS) is within the framework of MCS (Anthony & Govindarajan, 2007). It is a topic of attention and organizations spend time and money in designing and implementing PMS properly (Kennerley & Neel, 2003). It is further used in order to increase competitiveness as well as to reach success (Tangen, 2003). Andy Neely claims that the advantages lie in its ability to clarify the priorities when deciding measures. Further the measures can be used to communicate desired directions to people in the organization. In addition, appropriate measures should lead to achievement of the right goals (Powell, 2004).

Despite the fact that PMS have been widely used, organizations still face difficulties in finding the perfect PMS (Marr & Schiuma, 2003). Organizations sometimes experience goal incongruence when trying to use their PMS (Taticchi, Balachandran & Tonelli 2012).

Definitions

Based on the view of MCS as a package, the cybernetic controls includes PMS. The cybernetic control is divided into four basic systems, budgets, financial measures, non-financial measures, and a mix including both financial and non-financial measures e.g. the Balanced Scorecard (Malmi & Brown, 2008). Cybernetic control is summarized by Green and Welsh, (1988) as:

“a process in which a feedback loop is represented by using standards of performance, measuring system performance, comparing that performance to standards, feeding back information about unwanted variances in the systems, and modifying the system’s comportment” (Green & Welsh, 1988, p. 289)

Neely, Gregory and Platts (2005) clarify the distinction between performance measurement, performance measures and performance measurement systems as follows:

Performance measurement can be summarized as the process that enables managers to quantify both the effectiveness and the efficiency of actions. The measurement corresponds to quantification and actions correlate with performance. The performance measures consist of different metrics used to quantify the efficiency of actions. Further the performance measurement systems itself could be considered as the set of different metrics used. Despite these short definitions PMS is a topic with a broad content (Neely, Gregory & Platts 2005).

According to the literature in the field, there is confusion about the concept of PMS and a lack of consensus about characteristics. Franco-Santos, Kennerley, Micheli, Martinez, Mason, Marr, Gray
and Neely (2007) have wrote an article in order to find characteristics of a business performance measurement systems, based on definitions provided in the field. They use the word business to point out that it is related to for-profit organizations. Our aim is not to provide the reader with a comprehensive definition of PMS, but we seek to address the content of relevance. Here we point out five elements that they concluded as the purpose and role of PMS.

<table>
<thead>
<tr>
<th>Measure performance: monitor progress and evaluate performance</th>
<th>Strategy management: planning, focus attention, provide alignment</th>
<th>Communication: internal &amp; external communication, benchmarking</th>
<th>Influence behavior: rewarding and compensating behavior</th>
<th>Learning and improvement: feedback and performance</th>
</tr>
</thead>
</table>

Simons, Dávila and Kaplan (2000) describe that the need for PMS enhances when organizations increase. As organizations encounters greater geographical distance among different business units, the need to set direction, communicate information as well as achieving common goals become more difficult. Performance measurement systems then work as an important tool that helps managers to make better decisions and create direction with the purpose of achieving goals. The PMS facilitates the transfer of information that influences both decision making and actions (Simons, Dávila & Kaplan 2000).

The behavior of employees
In an organization employees play a key role since their behavior and actions directly affect the organization's ability to reach goals (Simons, Dávila & Kaplan 2000). Unfortunately, employees can, according to Merchant & Van der Stede (2012) have a tendency to work against or around systems. They argue that if all employees were trust to do exactly what was expected of them there would be no need for management control (Merchant & Van der Stede, 2012). Therefore the human behavior is of interest as PMS should influence the behavior of subordinates and employees at different levels (Simons, Dávila & Kaplan 2000). According to Merchant and Van der Stede (2012), it is hard to predict the advantages and disadvantages of management control. This is due to the employee's individual reactions which are essential for the result. Employees might react differently on different control alternatives. Some employees react negatively on too much control meanwhile others think it is good. Furthermore, the underlying motivation can differ whereas some employees are highly motivated by financial incentives and others are motivated by the sense of having a stimulating and challenging work (Merchant & Van der Stede, 2012).

Goal Congruence
In the creation of an effective control system the achievement of goal congruence is essential in order to increase the probability of the organization to achieve its goals (Merchant & Van der Stede, 2012). Goal congruence should according to Anthony & Govindarajan (2007) imbue the design of the management control systems, and a good management control systems is supposed to influence human behavior in a goal congruent manner. Furthermore it should be understood as a phenomenon where employees’ individual goals are consistent with the goals of the entire organization (Anthony & Govindarajan, 2007).

"In a goal congruent process, the actions people are led to take in accordance with their perceived self-interest are also in the best interest of the organization” (Anthony & Govindarajan, 2007, p. 98).

Anthony and Govindarajan (2007) argue that in a perfect organization, individual goals and organizational goals should correspond perfectly. Unfortunately, this rarely seems to be the case since employees have personal as well as organizational goals (Anthony & Govindarajan, 2007). A PMS should be an efficient way to create alignment within the company by providing guidelines
and communicate desired performances (Taticchi, Balachandran & Tonelli 2012).

3.3 Aspects for goal congruence

The following content will handle aspects related to PMS and its ability to create or disrupt goal congruence. We will further provide an example of a PMS, which is supposed to create goal congruence namely the Balanced Scorecard.

Communication and Understanding

When seeking to achieve goal congruence, Anthony and Govindarajan (2007) mention that the communication channels are important as well as how goals are perceived. Operational managers must be aware of which actions are desired and what goals are to be achieved. The communication of different goals can occur through informal channels, which involves meetings and face to face interactions, or through formal channels including budgets or other financial documents. Unfortunately, there is a risk that even though the communication is well executed, it might not always be clear what senior managers want, as the authors argue that the information can be perceived in different ways (Anthony & Govindarajan, 2007). Each individual needs guidance and to be informed about how to direct their effort in the aim of attaining certain goals (Simons, Dávila & Kaplan, 2000). The goals and targets must according to Merchant and Van der Stede (2012) be well communicated to avoid lack of congruence. Organizations must therefore seek to internalize the goals in a good manner, to avoid that employees feel inability to achieve them. By letting employees participate in setting the goals and ensuring that they have enough resources and ability to control aspects relevant for the achievement the internalization tend to be higher (Merchant & Van der Stede, 2012).

Create direction

Merchant and Van der Stede (2012) mention that the absence of direction related to employees’ behavior can cause lack of goal congruence. Using performance measurement and goals facilitate efficient communication about what managers want their subordinates to focus on (Simons, Dávila & Kaplan, 2000). By providing clear information and direction employees can better understand what is expected from them, how to perform adequately, and how to contribute to the achievement of objectives. The implication of lack of direction is put in a context in a research committed by the World at Work that highlights some difficulties in order to create goal congruence, related to lack of direction. The study stresses the importance of increasing the employees’ understanding for overall strategic objectives as well as the organization’s value drivers. The study concluded that 87% of the respondents thought that non-management employees lack understanding for the organization's value drivers. Even though many people think that their employees’ goals are consistent with the once of the organization, 44% stated that employees set goals based on their own perspective rather than from the direction from leaders. On the question, to what extent individual goals were aligned with organizational goals, 46% answered to some extent, 11% to a minor extent and 37% to a great extent (Sibson & Synygy, 2004).

Motivation

Motivational problems can exist even though employees have knowledge about how to perform adequately. According to Merchant and Van der Stede (2012), motivational problems are prevalent in organizations because employees can act in their own self-interest instead of in the organization's best interest. By allocating resources they can make their own performance report look better, without benefiting the organization as a whole. A common view that permeates economic models of organizations is that managers as well as employees can minimize their effort to organizational objectives if they do not get any personal pay off, and they are considered to dislike work. Nevertheless this is not always the case, as the authors point out that some employees can show commitment and can feel responsibility to others and further be helpful without any required pay off. For some employees recognition and appraisal are enough as a reward when they
feel they have done something good (Simons, Dávila & Kaplan, 2000). Therefore, it is underlined that MCS play an important role in handling the employees’ motivation, in order to create goal congruence. Within the framework for MCS, incentives are used to motivate people and to increase the probability that employees will perform adequately (Merchant & Van der Stede 2012).

**Incentives**
To increase the likelihood of employees working to achieve their individual goals, organizations aim to influence motivation by providing incentives. Research suggests that individuals tend to perform better when they are rewarded (Anthony & Govindarajan 2007). Although rewards and compensations are considered as a separate system within the MCS as a package, it is often related to cybernetic control. It should create congruence between individual goals and organizational goals by stimulating individuals to perform by providing incentives, as rewards are related to increased effort (Malmi and Brown 2008). According to Merchant and Van der Stede (2012) incentives handles the lack of motivation issue because employees tend to work harder when they potentially can earn something (Merchant & Van der Stede, 2012).

**Connection**
Simons, Dávila & Kaplan (2000) state that the creation of connection between goals, performance measures, and incentives is important. Incentives related to performances contribute to the alignment of the employees’ self-interest and overall objectives (Merchant & Van der Stede 2012). The purpose of incentives is according to Anthony and Govindarajan (2007) to affect the behavior of the employees in the pursuit of goal congruence. Therefore, there is a need to relate incentives to individual goals, or in other words to motivate the employees by rewarding them for desired actions (Anthony & Govindarajan 2007). By linking incentives to certain goals, individuals tend to pay more attention to what is important (Merchant & Van der Stede, 2012).

**Short-term behavior**
It is argued by the authors Kaplan and Norton (2005) that the use of PMS strongly affects the behavior of employees. Performance measures have been used in organizations for a long time and before the 1980s, during the industrial era, there was strong focus on financial performance measures based on accounting information (Kaplan & Norton, 2005). It was used in order to give the owners of organizations information about the achievement of managers (Kennerley & Neely 2003). During the 1980s traditional financial performance measures was increasingly complemented with non-financial measures as there was a perception among practitioners that traditional financial measures were not sufficient in order to compete in the modern market (Kennerley & Neel, 2003). Furthermore, they were insufficient in order to manage an organization effectively because of shortcomings (Kaplan & Norton, 2005). A common issue concerning financial performance measures, based on accounting principles is that it can lead to suboptimization and inappropriate short-term behavior. Suboptimization can be described as a phenomenon where managers pursue investments or actions that make the results of their own unit look better, but the investment itself might not necessarily benefit the entire organization. Furthermore, if subordinates seek to increase profit and achieve short-term objectives it can lead them to take actions that are not aligned with the overall objectives in the long run (Merchant & Van der Stede, 2012). Within an R&D department a common control problem is to measure the effectiveness of inputs to become outputs. Since research projects often last for many years it is difficult to relate the annual input to a corresponding output. Therefore, managers and employees can be unwilling to pursue investments that would be beneficial in the long run but decrease the profit in the short run as investments usually are expensed much faster than it generates returns (Anthony & Govindarajan 2007).

**3.4 The Balanced Scorecard**
A well-established example of a PMS prevalent today that handles the shortcomings of financial
measures is the Balanced Scorecard, (BSC), developed in 1992 by Kaplan and Norton (Kaplan & Norton 2007). The balanced scorecard has had a major impact in today's organizations as a great complement. According to a study referred to in the article of Kennerley and Neely (2003), more than 40% of the largest US companies had adopted the BCS in the beginning of 2000 (Kennerley & Neely, 2003). The appealing attributes of the BSC is that it contains multiple goals and measures and instead of solely focusing on financial measures the BSC also addresses non-financial aspects, which is of major importance in today's business climate (Kaplan & Norton 2007). It is a technique which aims to create goal congruence through enabling a balance between combinations of measures that should correspond to different aspects of the organization (Anthony & Govindarajan, 2007). By including wider elements the BSC enhances the ability to link short-term actions with long-term objectives. Furthermore it handles the issue of suboptimization as it enforces managers to contemplate different operational measures (Kaplan & Norton 2005). Usually the BSC is divided into 4 broad categories, with different perspective of the organization. Each category contains goals important for each area:

**Perspective 1- Financial Measures:** The financial measures are still fundamental in evaluating organizational performance (Simons, Dávila & Kaplan, 2000). The financial measures are mainly related to organizational growth, profitability, and shareholder value (Kaplan & Norton 2005). The most frequently financial measures are profit margin, return on assets and return on equity (Tangen, 2003)

**Perspective 2 – Customers:** The customer perspective is essential since loyal customers tend to increase profitability over time. Therefore an organization should involve measures that illustrate how the organization is perceived. Generally measures include customer satisfaction, customer retention and loyalty. This categories can further be divided to smaller and more relevant measures (Simons, Dávila & Kaplan 2000).

**Perspective 3 - Internal Business:** Measures within the internal business processes are important since they have an impact on customer satisfaction. The measures should focus on internal operations relevant in order to satisfy customer needs (Kaplan & Norton 2005). Measures could consist of quality measures, cycle time measures and cost measures (Simons, Dávila & Kaplan 2000).

**Perspective 4 - Innovation and Learning:** The last perspective handles the infrastructure within the organization enabling improvements and value creation (Simons, Dávila & Kaplan 2000). An organization's value in the long run is linked to its ability to invent new products and improve processes as well as stay updated about its competitive environment (Kaplan & Norton, 2005). The improvement of capabilities is in other words crucial in order to survive in the competitive environment (Simons, Dávila & Kaplan 2000).

**General considerations about the BSC**

The BSC encourages employees to work in the right direction and highlights what the organization wants to achieve, to shareholders as well as other stakeholders (Kaplan & Norton, 2007). To ensure a better execution of the BSC, it is advantageous to involve different managers in order to create a broader understanding for organizational long-term goals. By incorporating more people in the design process a stronger commitment is built to reach stated goals. The authors describe three elements that are essential in order to ensure that employees’ individual performances are aligned with the overall strategy. These are communication, setting goals, and linking rewards to performance (Kaplan & Norton, 2007).

**Communication**

The communication of the content within the BSC is important and the information should reach employees all over the organization. The information provided to employees makes it possible for
Communication of goals and objectives
Understanding for organizational objectives - direction
Individual goals and their alignment to organizational goals
Prevention of harmful short term behavior
Motivation to reach individual goals
Connection between individual goals and performance to incentives

Setting goals
A central element in the use of BSC is to set goals. In order to affect behaviors at all levels the creation of awareness about corporate goals is not enough for the alignment of goals. In order to create alignment the overall objectives must be transformed to be applicable to unit and individual levels. The authors describe an attempt, made by an organization, to create consistency between individual goals and organizational goals. By creating a scorecard system containing a first level with the overall objectives at the top and a second level where the overall goals were translated into different business units, the employees were able to engage in the creation of the third level including their individual goals. Consistency was created as the individual goals were based on the overall objectives transformed to the business units (Kaplan & Norton, 2007).

Linking rewards to performance
According to Kaplan and Norton (2007), many organizations have applied the idea of linking measures within the BSC to compensations. It can be a powerful way to provide alignment in the company. As an example the authors mention an organization that solely uses the BSC when determining the incentives provided. They do so by linking 60% of the compensations to financial aspects and 40% to non-financial aspects such as customer and employee satisfaction as well as environmental responsibility. However, they argue that it is important to be aware of the drawbacks with this linking. Organizations must handle questions concerning whether or not the right measures are applied in order not to reward undesired performance (Kaplan & Norton, 2007).

“Our goals, measures and incentives are properly aligned, the business is like a heat-seeking missile focused intently on achieving profit goals and strategies” (Simons, Dávila & Kaplan, 2000, p. 214)

Our theoretical point of view
We have presented parts of the literature field with focus on implications for goal congruence. Here we will in brief state the aspects we consider relevant in order to give the reader an understanding for how we will address the results.

The achievement of goal congruence is a phenomenon that should permeate the design of MCS in general. PMS is widely used and the design affects the ability to achieve goal congruence. Our definition of goal congruence is based on the idea that it implies that individual goals and organizational goals are consistent. A goal congruent process is prevalent when employees take actions in order to achieve individual goals that are aligned with the goals of the organization.

The important aspects for the achievement of goal congruence that we consider relevant to our study are illustrated in the picture:
4. EMPIRICS

All empirical data originates from the answers received from the respondents during the interviews. The first section presents an overview of AstraZeneca and their use of a PMS, as a means to create goal congruence. The other section provides the reader with our compilation of five respondents’ experience of the PMS of AstraZeneca.

4.1 Case study - AstraZeneca

The company AstraZeneca is the result of a fusion in 1999 between Astra, founded in 1913 and Zeneca founded in 1926 (AstraZeneca, 2). AstraZeneca is a global biopharmaceutical company focusing on research and development as well as manufacturing and marketing of pharmaceuticals of prescription. The company is represented in more than 100 countries with increased activity in emerging economies such as China and Brazil. AstraZeneca employs about 61 000 people around the world (AstraZeneca, 1). The headquarters is situated in London. AstraZeneca has 14 Research and Development (R&D) units in eight countries and one of the R&D departments is situated in Mölndal, Sweden (AstraZeneca, 3). In Sweden, AstraZeneca employs about 7 600 people (2011-12-31) who work within R&D, Production and Marketing (AstraZeneca, 4).

Structure and value chain

AstraZeneca has a relatively plain organizational structure with a clear distinction between different departments. The organization consists of a CEO supported by a CFO, HR and legal advisory. In addition, each department in the value chain has a vice-president. The value chain is developed from three core categories: Research and development, Manufacturing, and Commercial.

The R&D department focuses on researches in order to further develop new medicines. New developed potential medicines are then manufactured within AstraZeneca. The last value adding activity is the Commercial which handles Marketing and Sales. The commercial itself is dependent on the results of the research and development.

Background

As a foundation for our study, we started by interviewing Rikard Olsson, the Director of Performance Strategy and Reporting at R&D Finance at AstraZeneca. Rikard Olsson is involved in developing as well as operating the management control system at AstraZeneca. He reports directly to the CFO and has 4 subordinates who work as analysts within R&D Finance. He provided us with information about AstraZeneca’s performance management system and their use of a Global Scorecard (GSC) as a technique. Further, he explained their purpose of their PMS, how they use the PMS to communicate goals to employees, and how it should contribute to create goal congruence. The purpose of the information received from Rikard Olsson is to create a foundation for being able to answer our questions in the study that is based on the R&D department in Mölndal.

Before providing information about how AstraZeneca works with PMS in terms of their GSC Rikard Olsson emphasized that an overall goal that permeates AstraZeneca is to conduct research and development of new pharmaceuticals that they are feasible to manufacture and distribute to the market. If they cannot provide any successful medicines they will not be able to move forward
within their value chain.

**Astrazeneca’s Global Scorecard**

Astrazeneca works in accordance with a Global Scorecard (GSC). The GSC can be considered as an interpretation of a BSC. We have been introduced to their Global Scorecard for 2012 which is a framework that contains the overall objectives for all Astrazeneca’s operations throughout the world. The GSC contains both financial and non-financial objectives, representing six different elements of the organization; Values, Achieve Group Financial Objectives, Pipelines, Deliver the Business, Business Shape, and People.

*The GSC in original is confidential, but we are allowed to present the content in brief.*

**Values**: Values comprise core elements such as ethical and moral aspects. It concerns manners and how to act internally as well as externally towards the market and other stakeholders. This implies natural commitments such as acting in a fair way without bribery and unfair payments. Ethics and moral are important implications, especially in the pharmaceutical industry.

**Achieve group financial objectives**: This element contains different financial objectives, also called financial performance measures. Two of these are of particular importance. The first measure is EPS (earnings per share) and the second include different measures of cash flow.

**Pipelines**: Pipelines consider the research portfolio and the pharmaceuticals provided. The aim is to reach different stages in R&D in order to launch 2-3 new pharmaceuticals a year. To be able to reach this level they use an intermediate goal which involves that between 8-11 researches objects should have reached a certain phase in the development. This phase is in the later stage of the development process where the probability of launching any of the research projects is fairly high. During the last years the objectives of Pipelines have been modified since they experienced some problems related to the earlier objectives. Before, the goal was to bring about 25 research projects, but in an earlier phase where the likelihood of success was much lower. They discovered that even though they managed to develop 25 research projects, too few of them reached the later phases where the likelihood of launching was higher. Consequently, they realized that increasing more research objects in an early phase was not the solution, since the quality was not adequate enough to reach the later phases. By evaluating the unit manager in terms of the projects in the early phase, they experienced a tendency that imperfect research projects went through, as a result of the desire to reach his goal. By changing the goal to 8-11 projects in a later stage they avoided suboptimization, and at the same time they increased the likelihood of developing research projects that would reach the market.

**Deliver the Business**: Deliver the Business handles objectives concerning the maintenance of products that are already available on the market. It implies that they should put effort in maximizing sales of their current products.

**Business Shape**: Business Shape treats infrastructure and the amount of disposable buildings. It is also related to the effectiveness of their information systems. Through the objectives under Business Shape, they strive to find ways to do more with less resource, which for instance may include layoffs.

**People**: The people aspect concerns what employees at Astrazeneca think of their place of work in
general, their well-being, perception of managers and benefits. Every year they commit a survey called FOCUS, where they evaluate different aspects of for instance leadership.

**The importance and use of the Global Scorecard**

According to Rikard Olsson AstraZeneca’s Global Scorecard is the only document containing the overall objectives for 2012. All managers around the world within the organization must acquaint oneself with this document. The managers are supposed to present the GSC to all employees, from sellers in Vietnam, to manufactures in Australia, to R&D in Bangalore. The aim is to make every single individual aware of the overall objectives. The managers are responsible for communicating this document and creating an understanding for the content. Furthermore, managers at different departments, (R&D, Manufacturing and Commercial) are authorized to design suitable and more specific scorecards adjusted to the department where they operate. Accordingly, the GSC is broken down into adjusted departmental scorecards relevant for different units and functions. There is no limit in how many times the GSC can be broken down and adjusted in order to be suitable for a specific operating unit. However, the adjusted scorecard must be consistent and aligned with the GSC. Based on the adjusted scorecard, each unit manager is able to create individual goals in agreement with their employees. Hence, the adjusted scorecards always serve as a base for the individual goals and performance measures. Rikard Olsson stressed that it is important to always see the link to the Global Scorecard. The purpose of this system is that everyone in the organization should know what they are supposed to do, while at the same time there is a link to the GSC.

**Global Scorecard as a base for evaluation and incentives**

Every quarter the executive group meets in order to see whether or not the organization is working in the right direction, based on the GSC. Every department scores themselves in terms of likelihood of attaining targets. They do this by using different colors; green, orange and red. For instance, the green dot indicates a good work, that the goals are attained. At the end of the year the presented results create the foundation for incentives. Depending on the amount of green, orange or red dots for the different departments, the incentives differ between units as well as individuals. The individual incentive is a share of the sum for the department and dependent on the individual performances. The individual incentives are therefore also depended on the performance of the entire department.

**Criteria for a good PMS**

The purpose of PMS is according to Rikard Olsson to outline the desired performances and to further develop measures that measure the right things, in order to create effective indicators that simultaneously work as motivating. By making the performance measurement more complex, it becomes more difficult to work around the system. The objectives are nowadays more advanced designed and many aspects have to be taken into account to achieve the goals. By making the system more complex you decrease the likelihood of unwanted behavior. Earlier the R&D unit experienced bad behaviors as a result of poorly designed goals and the system has therefore been redesigned.

According to Rikard Olsson there are three major criteria that should be permeating the PMS in order to create goal congruence. Fundamental is that every employee at AstraZeneca is aware of the existence of AstraZeneca’s GSC. The criteria are as follows:

1. There must be a document with clear objectives to communicate. Everyone has to know what a good performance is. In the case of AstraZeneca all these objectives appear in the GSC.
2. The objectives must be possible to transform and define into unit or individual levels, or in other words be communicated to a relevant level.
3. There must be a connection between the individual or team goals and the incentives that are provided. Incentives can consist of bonuses and other rewards, or praise in different ways.

Rikard Olsson stressed the importance of that employees understand why they have done a great job, or why they have underperformed, and thus understand why they receive a certain amount of bonus. According to Rikard a good PMS is achieved if all of these criteria are prevalent and if there is a connection between all of them. This is summarized by a quotation:

“If we manage to communicate the overall objectives, making sure that everyone is aware of the priorities, if we manage to breaking down the GSC to individual goals and if employees feel a strong connection between their own performance and their received individual incentives, then there is the case of goal congruence, and we have succeeded in designing a good performance system.” (Rikard Olsson)

He also stated that all three criteria must be fulfilled simultaneously. It is not enough to solely create a strong connection between performance measures and incentives if the individual goals are not aligned with the organizational goals. This implies that even though employees think that their own individual goals are great, and that their bonus is linked to the achievement of goals, it is not sufficient if their individual goals are without relevance for the organization’s best interest. Furthermore, he argued that it is important to be consistent and not change the objectives every year, it is important to have something to strive for in the long run, even though it is possible to focus on more specific things each year. The general opinion of Rikard Olsson was that they are good in this execution at AstraZeneca and he stressed that the overall goals are quite clear. The management works hard with breaking down the GSC into clear goals, thus it is not just words, but instead it is clear objectives with a comprehensive link.

**Management control in brief - alternatives within R&D**

According to Rikard Olsson the R&D department works very little with financial goals and financial control. It would be hard since the gap between input and output is usually 10-15 years. The input and output of the manufacturing and commercial departments are easier to understand. However R&D focuses primarily on maintaining the budget, to keep the costs low. Since financial goals are harder to measure, the R&D department uses many other measurements such as the results of different projects, the amount of time for different phases, and the probability of success of projects. A remaining issue is how to measure the performance when the result comes first in ten years.

Rikard Olsson mentioned that they have a triangular focus on costs, time and quality. The cost aspect is related to keeping the costs down, the time aspect concerns being effective and making processes go faster, and the quality aspect is the probability of success within new pharmaceuticals.

“Making things faster, cheaper and with high quality are essential elements and it is a way to describe how AstraZeneca strives to work.” (Rikard Olsson)
Empirical findings

We have interviewed both men and women but have chosen to refer to all of them as “she” in order to make sure that their information is treated confidentially. Furthermore the respondents’ position and background will be described more or less, due to their individual requirements.

4.2 Respondent 1 (R1)

R1 works as Clinical Finance Manager, which is within the R&D Finance department. She has been working at AstraZeneca for 11 years.

Purpose of the GSC
Based on the view of R1, the purpose of the GSC is to ensure that everyone is informed about the priorities for the year and that everyone is working towards the same goals. According to R1 there are many different scorecards at different departments. R1 points out that the overall objectives in the GSC are divided to goals more understandable for different positions and that the fundamental idea is the same but the decomposition of the GSC makes the goals clearer at lower levels in the organization.

“Everyone should know that we work towards the same goals” (R1)

Communication of the GSC
R1 does not really remember how the GSC was communicated, but assumed that it has been sent by e-mail. R1 also remembered that it was presented when R1’s individual goals were established. The GSC was showed to make it possible to understand the entire chain and how the individual goals were related to the goals in the GSC. R1 stated that the elements of major importance are communicated strongly and recur at different contexts throughout the year.

Understanding for the content
R1 could mention four of the six main elements within the GSC, and she had an understanding for the main elements, and their key messages. Further R1 was aware of the main messages related to R1’s specific department. R1 said she agrees with the content in the GSC but she also stated that the overall goals feel too big to have any opinion about. However she can relate to the scorecard at the department level.

“The key message has reached me, even though I don't know all the details” (R1)

Individual goals and connection to the GSC
R1 declared that the individual goals are clear and understandable. They concern general aspects such as legal aspects, the following of different frameworks, and setting financial statements. Other individual goals involve resource allocation and tracking the right amount of people involved in projects. Regarding to R1, the budget is extremely important, and reaching budget targets is crucial in these times.

R1 concluded that the individual goals are mainly non-financial. R1’s individual goals are directly derived from the scorecard adjusted for her department. The scorecard of R&D Finance contains the same elements as the GSC. The departmental scorecard serves as a base for the overall performance within the particular department, but R1’s personal performance is evaluated based on the individual goals.
R1 experiences a connection between the individual goals and those in the GSC as well as in the adjusted scorecard. R1 also emphasized the importance of connection between the objectives in the GSC and goals stated in the departmental scorecard. Nevertheless, she pointed out the fact that there might be too many objectives at the same time, which makes it more difficult to distinguish exactly what to prioritize in every situation. R1 stated that depending on your work tasks, it is easier or harder to directly feel how you are able to contribute to the overall goals in the GSC, in your work to achieve your individual goals. For instance, as stated in the GSC, AstraZeneca seeks to deliver a certain amount of new pharmaceuticals, if you are directly involved in a research project, it might be easier to see your own contribution.

**Short-term behavior**

R1 argued that she would never intentionally pursue any harmful actions to reach her individual goals. She rather stated that she would disregard her individual goals in favor of the organizational goals; for instance, to handle an unpredictable event that she perceived was of greater importance. However she pointed out that sometimes there is a strong focus on the individual goals due to the demand of delivering certain commitments. The workload can be high and you must prioritize what is in your individual goal document. This could lead to the sense of distance to the overall goals. Therefore, R1 pointed out, it is important to look up and see the whole picture to avoid the sense of distance.

**Motivation**

According to R1, the underlying motivation for accomplishing a good work and achieving individual goals lies in the sense of appraisal and recognition for having done a great job as an employee. R1 stated that earning 2000 Swedish extra crowns does not make her perform or work better; she would work just that hard however.

**Individual goals and connection to incentives**

In R1’s opinion the incentives provided have a connection to the performance but not necessarily to the individual goals. R1 stressed that all judgments on performances are subjective. R1 feels that you can also be rewarded individually for doing things that is beyond all the stated objectives.

> "If you deliver something extra good, beyond ordinary work task, you often get rewarded in terms of higher salary." (R1)

**Goal congruence**

R1 considers that the GSC serves as a good foundation for individual goals and it makes you understand the priorities, even though it can be difficult to know exactly how to prioritize in every situation. The reason for the difficulty however is rather lack of time than unclear scorecards. R1 feels that the scorecards have become significantly better and clearer during the last years. A lot of effort has been devoted to the implementation of the scorecards and the goals are well prepared and consistent. R1 experiences that nowadays the goals in the GSC and the individual goals are related, compared to some years ago. She feels that the performance measurement system is good and that the GSC is broken down to be more adjusted.

R1 herself could derive some of her individual goals from the elements in the GSC, for instance within the elements Achieve Group Financial Objectives, Deliver the Business, and Business Shape. R1 experience that there are quite many objectives though and some of them feels irrelevant to her. She provided a potential reason for why there are so many objectives. If some objectives were not included in the goal document, some employees would probably not put effort in focusing on those tasks. It can also be a matter of cultural aspects, as for instance an American might focus only on stated goals, and would maybe do nothing beyond that.
4.3 Respondent 2 (R2)

R2 has worked at AstraZeneca for 13 years and works today as Portfolio Manager at R&D Information. She works with the compilation of the research portfolio, strategies concerning how current projects works, involvement in the budgeting process, and monitoring with higher levels in the organization.

Purpose of the GSC
According to R2 the GSC is utilized to make everyone able to work towards the same goals. It enables employees to know the strategic objectives in the organization. Further it ensures that everyone cooperates in the same direction and it creates awareness about what is important and what to prioritize.

Communication of the GSC
R2 has been able to acquaint herself with the GSC through communication in many ways. There is plenty of communication around the GSC when it is established. It is mentioned on the intranet portal and also frequently referred to during management meetings, when it is time to establish departmental goals and individual goals. These goals are supposed to be in concordance with those in the GSC. R2 mentioned that you see the GSC quite often, especially in the beginning of the year when it is commonly discussed. R2 considered that the management in general is good at communicating the goals and especially she thinks they have put much more effort in communicating the GSC. Hence, it has improved the last years. The reason might be harder times and the goals are regarded as very important.

Understanding for the content
R2 was relatively aware of the elements in the GSC, as well as the amount of them. She agreed with the overall goals and understood why they are set, and could mention some of the important objectives. She stressed the element Pipelines and the importance of developing new medicines within a near future. Furthermore, R2 mentioned the strategy of resourcing which is a relevant goal to her department.

Individual goals and connection to the GSC
The GSC has been broken down several times before it has reached the level of R2. Her individual goals are not connected to every element within the GSC. Nevertheless one of her goals is aligned with the goals within Pipelines in terms of simplifying processes for effectiveness. R2 can feel a connection between the individual goals and the GSC, while she at the same time can feel a great distance. In general, R2 does not feel that she contributes to reach the overall objectives in her daily work to reach her individual goals.

“Since I am working within a supporting function I do not really feel that my work is contributing to developing new medicines.” (R2)

On the other hand R2 sees a connection to the goals within the adjusted scorecard for her department. She argued that they have progressed in creating a linkage between the goals by the decomposition of different scorecards, even though the goals within the GSC are very high. Further she mentioned that she really hope that what she is doing is aligned with the overall goals in some way, since that is the purpose.

Short-term behavior
R2’s individual goals are set with the motive of being aligned with the organization's best interest, and the goals have become broader and better formulated. She also stated that they are designed in a way to obstruct the possibility to do other things. AstraZeneca has improved in setting goals and
individual targets that are aligned with the GSC and overall objectives. According to R2, it has changed a lot during the last years and the scope to act in different ways was different some years ago. Employees were working more individually. R2 assumes however that her individual goals are properly worked out to be aligned with the objectives.

R2 gives her individual goals the highest priority and they embrace the daily work of R2. Only a few years ago the goals felt less important and were rather made up from what was regarded as being included in one's work or position. Today managers at AstraZeneca emanate from the overall objectives to outline everyone’s role to reach them through suitable goals. R2 assumes this change originates in harder times and the demand for tighter guidelines when the company faces increased competition. According to R2, employees have a personal responsibility to reach the goals and R2 feels that she gets requirements and resources to be able to work towards the goals. R2 feels reliance from her boss, the control is not too hard and she thinks you are not managed in detail. AstraZeneca has according to R2 a corporate culture where the employee’s thoughts and ideas are respected and you can feel free to ask for assistance.

**Motivation**
Salary and bonuses are not the main sources of motivation to do a good work, according to R2.

“The motivation rather comes from getting guidelines and actually accomplishes what is of highest importance and priority; that is what is most motivating.” (R2)

She gets motivated by doing the right things since the bonus is compiled from her performance. Hence, the bonus is important, but not the greatest source of motivation. What motivates her the most is to have guidelines for the long run, and the sense of having something to work towards. She does not think that incentives necessarily increase the motivation to reach individual goals.

**Individual goals and connection to incentives**
Continuous evaluation of the goals occurs about two or three times a year, and in the end of every year a more comprehensive evaluation is made with connection to incentives. On the question if R2 considers that there is good connection between her performance and her incentives she answered, both yes and no, claiming it is a hard question. R2 considered that the evaluation and bonus system is not individual enough, it is too generalized. It is hard to do a judgment of individuals and the bonus sometimes tends to feel unfair. If R2 feels satisfied with a work that she has accomplished but which lies beyond the goals she does not feel that is will be observed by her manager. What lies beyond the goals does not get noticed or measured and therefore you rarely focus on other things than your goals. Further she stated that you strive for achieving your short term goals and do not put any effort on what does not get measured. Added bonus usually requires a great deal of effort but the added effort does not always lead to a proportional increase of the bonus.

**Goal congruence**
In general R2 thinks that the GSC works quite well in order to create goal congruence. The GSC is a good basis for designing individual goals, since it gives adequate guidelines about what the company wants to accomplish. Hence, the decomposition of the GSC is essential. Furthermore she considered it enables you to see where the company is going, which is important. The GSC is advantageous in many ways, but the extensive individual goal document can also for instance impede employees’ way of doing their work and therefore inhibit creativity.

**4.4 Respondent 3 (R3)**
R3 works as Clinical Project Manager and has been working at AstraZeneca for 10 years.
Purpose of the GSC
R3’s interpretation is that the GSC should take the organization to a desired state and to create clearness about what to deliver. R3 also mentioned that it highlights what to prioritize a specific year.

Communication of the GSC
R3 has been introduced to the GSC during the unit meetings, and according to her every unit manager has the responsibility to present the GSC. It has also been visible in connection to the development of her individual goals. She claimed that the information about the GSC is sent out to the employees, but she also indicated that it is possible to find more information about it if you actively seek for it. Further R3 admitted that she has not studied the GSC in particular. The reason is that it is first when it is broken down into an adjusted scorecard relevant for her particular department that she pays more attention to it, since it has a more direct impact to her and to her individual goals.

Understanding for the content
Concerning R3’s knowledge about the content in the GSC, she could mention People and Pipelines and when R3 was given some help R3 remembered them all. She thinks the GSC is well communicated, based on how it was presented by the unit manager, although such document is not considered the most exciting. However, R3 pointed out her understanding for why such document is needed, and its purpose to get a unified view of the company. Further R3 asserted that this year the GSC was established in time, which made it possible to set individual goals based on the GSC. She explained that another year, the GSC was on the contrary communicated when the individual goals were already established, which made it impossible to attain a connection between the organizational and individual goals. In addition R3 agreed with the overall content in the GSC.

Individual goals and connection to the GSC
Many of R3’s personal goals are related to two specific pharmaceutical projects. It is a mix of goals, but a standard goal is to work in a good ethical manner according to the AstraZeneca policy. R3 stressed that there is an evident connection between individual goals and those stated in the GSC. An overall objective is to deliver a certain amount of new pharmaceuticals each year, and R3 contributes to this by achieving targets that in extension will help the organization in the right direction.

R3 stated that the focus is on commercializing new pharmaceuticals to the patients, and R3 sincerely feels that her individual goals have a connection to that. R3’s individual goals are reasonable in relation to what can be achieved, and if the goals would not be achievable they would be reformulated. R3 also pointed out the importance of being able to reach the goals, or else you would lack motivation.

Short-term behavior
R3 clearly asserted that she would never pursue an action to achieve an individual goal at the expense of the organization. R3 also emphasized that they are strongly controlled and that the budget restrictions are tight, as well as the delivery time. Therefore there is no time to take own initiatives and engage in something that does not appear in the goals. An issue with the GSC is regarding to R3 that an action that is in accordance with the scorecard one year might not be aligned another year if changes have been made. This implies that employees may focus on wrong things even if the intended ambition is good.

Motivation
R3 feels strongly about AstraZeneca and sincerely wants the organization’s best. R3 has worked at AstraZeneca for a long time and she wants the organization to progress. R3 gets motivation from
achieving something, and she gets a great feeling from succeeding as a Project Manager. R3 stated that she would seek to do her best all the time with or without incentives.

“One is loyal to the company as well as to colleagues” (R3)

R3 further asserted that they have a lot of monitoring on the goals during the year. The continuous feedback on the individual goals makes it possible to update the goals to keep them relevant. Nowadays managers tend to work even more with monitoring the goals than before.

**Individual goals and connection to incentives**

R3 strongly feel that there is a connection between individual goals and incentives provided, and the individual goal document is the basis for evaluation. There is a discussion with the manager during the evaluation and the incentives are based on which level you get placed within. Even though the connection is obvious, she mentions that an implication is the difficulty to differentiate each employee since the evaluation scale only has three levels. R3 argues that almost everyone falls within the middle level and she assumes that one must have done something extraordinary in order to be placed in the highest level.

**Goal congruence**

The GSC feels according to R3 very distant and in a sense difficult to transform. At the same time it is very clear. There is a need to provide the market with a certain amount of products. This goal is quite simple to divide that into smaller elements. R3 thinks that both the individual goals as well as the overall goals are understandable.

R3 thinks that the GSC leads to goal congruence. Even though each individual is unable to cover all the elements R3 thinks that everyone can recognize something. She stated that it is not only a document prevalent at a higher level that lacks connection to the reality. Further R3 meant that AstraZeneca has become better and better on the work with the alignment of goals and the closest manager sets requirements for how the goals should be formulated in order to be consistent. R3 mentioned that in the beginning of her employment they hardly had any individual goals at all and there was no connection between different goals within the organization. Her general interpretation is that the GSC is advantageous, especially when the competitiveness increases. R3 emphasized also that when the organization faces harder times it is of major importance that everyone shares the same focus.

### 4.5 Respondent 4 (R4)

R4 has been working at AstraZeneca for 14 years and operates within the R&D Information department.

**Purpose of the GSC**

R4 thinks that the purpose of the GSC is to visualize what is substantial, and how to direct all employees towards the same direction. It is about having a common goal picture of what to prioritize. Further R4 stated that if it is possible to divide the GSC into more concrete areas to manage against, it makes things easier.

**Communication of the GSC**

According to R4 the GSC is published at the AstraZeneca intranet portal and everyone is expected to look at the intranet when it is published. Further information is provided while the GSC is broken down to departmental scorecards and even to lower levels. Effort is put to apply the objectives within the GSC in a context relevant for each department and to explain how the objectives can contribute to goals at the level where R4 operates. The GSC is also mentioned
during operational meetings. In R4’s opinion it is easier to familiarize with the goals when they are
adjusted to smaller scorecards. In terms of how well the management has been able to
communicate the goals in the GSC, R4 asserted that they have done a great job. They have tried to
concretize the goals to show what implications they have on each individual employee.

Understanding for the content
R4 stated that since the GSC includes a lot more than only goals relevant for the R&D
department, it is impossible to have an understanding for all details. But those goals with
connection to R&D Information are understandable. From the six main elements included in the
GSC, R4 could mention two, People and Pipelines. She pointed out that People and Pipelines have
been prevalent for a long time, whereas the others have been changed or reformulated. R4 agreed
with the overall goals that she remembers. At an intellectual level R4 understands that they need to
provide the market with new pharmaceuticals to earn any money, and also the importance of
reaching new emerging markets. She described further that at higher levels there are many different
aspects involved in making the organization perform well.

Individual goals and connection to the GSC
R4 thinks it is possible to see a connection between her individual goals and those stated in the
GSC. R4’s individual goals are based on certain goals intended for her function which are based on
the adjusted scorecard for R&D Information. This is in turn derived from the scorecard of the R&D
department, which is based on the GSC. R4’s individual goals are briefly designed to facilitate for
colleagues and provide information. R4 also have individual goals linked to personal development,
to be able to progress at a personal level. Furthermore R4 mentions that she is involved in setting
her individual goals. The personal involvement in designing the individual goals increases the
motivation. Nevertheless there is a genuine dialogue with her two managers. By having that
dialogue, the managers can make sure that the individual goals are relevant and aligned with their
particular scorecard.

Even though it is difficult to directly see how R4’s achievement of individual goals contributes to
the objectives in the GSC her performance contributes to the goals of the scorecard for R&D
Information.

”You are able to see the connection between individual goals and those in the R&D Information
scorecard” (R4)

Short-term behavior
R4 stated that she would never pursue an action in the short run in order to achieve an individual
goal if it would be harmful for the organization. Nevertheless she argued that the goals are set in a
way that would not make it possible to act in your own self-interest. R4 emphasized that in her
position it is impossible to set goals that would benefit her in person at the expense of the
organization.

“There is no scope for actions that would benefit you, by for instance reducing quality because
the goals are set in a broad way and contains many different aspects.” (R4)

R4 explained that it would be possible to change a direction in the short run as a result of
unpredictable events, but it does not imply that the original goals are neglected. It must be possible
to handle unpredictable happenings if necessary. Furthermore R4 thinks that she has got enough
resources to achieve her goals and that she is supported by her managers, since they have agreed to
her goals.

Motivation
When we asked R4 what motivates her the most in her work she answered:

“I would lie if I said that it is not of interest to achieve the goals because there is a connection to my bonus.” (R4)

At the same time R4 pointed out that, when setting goals it is also important to create goals that are interesting. When doing so the achievement of the goals itself is motivating.

**Individual goals and connection to incentives**
R4 stated that there is a clear connection between goals and incentives, and the achievement of goals directly affects the bonus received. Besides the achievement of goals, R4 thinks that there is also a connection between her overall performances in general. She claimed that the goals make it possible to make an overall assessment at the end of the year, and it is possible to discuss and argue during the evaluation process. How performance is executed then is important and R4 argued that it is a subjective as well as individual evaluation based on the overall process. She further stated, that so far the evaluation feels fair. The evaluation scale is divided in three categories and R4 stated that she do not really know how to act in order to fall into the highest category. It seems like most employees are placed in the middle.

**Goal congruence**
In conclusion R4 stressed that the GSC serves as a good foundation for decomposing the overall goals into adjusted scorecards. In R4’s opinion the decomposition is crucial and it is a great support for setting individual goals. R4 pointed out that it would be extremely time consuming and difficult to create relevant goals if you only used the GSC. For instance R4 mentioned that it is not enough to know that an overall goal is to develop in emerging markets, it must be goals on a more understandable level and therefore the decomposition down to smaller scorecards is fundamental. In R4’s opinion the GSC leads to goal congruence, by the means that the whole purpose of using the GSC is to let all goals at different departments and functions be derived from it.

**4.6 Respondent 5 (R5)**
R5 has worked at AstraZeneca since 2001 and operates in a function within R&D Information.

**Purpose of the GSC**
R5 assumed that the aim of the GSC is to make sure that everyone strives towards the same direction.

“I guess it is, I don't know but I think that it is used in order to make everyone strive towards the same direction, that all of us works towards a common goal” (R5)

**Communication of the GSC**
According to R5 the GSC is available at the intranet portal, which makes it possible for everyone to read it if they want. R5 has not deeply studied the GSC this year, but R5 have noticed the most comprehensive elements. R5 argued that she is more involved in the scorecard adjusted for the department and the group where she operates. R5 stated that the goals in the GSC are very distant, so they must be broken down to be achievable. In R5’s opinion the GSC is well communicated. She also emphasized that the GSC is mentioned one time and then the departments work individually to break down the overall goals. Instead of recurring to the GSC during the year, her group frequently looks at the adjusted scorecard.

“The group goals recurs frequently during the year since they are the most relevant” (R5)
Understanding for the content
R5 meant that it is possible to understand and relate to the content if you read the GSC. On the question whether R5 could mention any of the main elements in the GSC she referred to the element Pipelines but could not immediately remember the other five. R5 asserted that she recognizes all the elements when she hears them, but not by heart. Furthermore, R5 stated that she agrees with the overall content in the GSC because she is developing her own individual goals based on the content in the GSC.

Individual goals and connection to the GSC
To start with, R5 described that she designs her own individual goals, or at least makes a proposal. Then she has a dialogue with her two managers and they can make changes if necessary. Furthermore, her goals are quite similar to her colleagues’ within the same position. When designing the individual goals, the adjusted scorecard serves as a base. R5 claimed that it would be hard to achieve individual goals if she did not develop them herself. For this year R5 have 5 different goals, with different contents. One goal regards her personal development but the others are focused on her particular occupation, however the goals are primarily non-financial. For instance measures are related to the delivery of the right things in the right time with the right quality.

Considering the connection between R5’s individual goals and those in the GSC, she said that it is difficult, but there is a connection since her goals from the beginning are derived from those in the GSC. Further R5 argued that it might not be easy to directly see the individual connection, unless you carefully follow the different scorecards all way up to the GSC. In R5’s point of view her own contribution to the overall goals is primarily within the element Pipelines. R5 mentioned that if her team would not develop certain things, further tests could not be made at the laboratories and if the scientists cannot test new things the company cannot develop new medicines. And one of the goals in the Pipeline element within the GSC is to develop new medicines. Therefore R5 thinks that she in a way can see her own contribution to achieve overall goals in her own achievement of individual goals.

Short-term behavior
R5 clearly stated that she would never commit any actions to achieve her individual goals, if it was not in the organization's best interest. Nevertheless R5 claimed that the goals are developed in a way that would make it impossible anyway. Further R5 points out that all employees have participated in a course about the code of conduct of AstraZeneca, and that such a behavior would not be in accordance with the code of conduct.

R5 believes that she has got enough resources and conditions to reach her goals. She has many people to contact if she encounters problems. She has both a team manager, task manager and a mentor and feels that she has got all needed support. Furthermore, R5 described that she continuously receives feedback during the year, at least every half a year. In addition she is supposed to look at her own individual goal document to make sure that she is doing the right things, and if realizing that something has changed it is also possible to change, add or exclude her individual goals. At the end of the year there is a comprehensive evaluation with her team manager based on her achievement of the goals as well as feedback from colleagues. During evaluation the manager decides in which category R5 will be placed, and thus the size of salary increase and incentives provided.

Motivation
When R5 was asked to describe what motivates her to achieve her individual goals, she immediately mentioned the ability to get a salary increase as well as the bonus.
“I hope for a salary increase and bonus” (R5)

R5 also added that it is great to have the goals since it provides directions in terms of what to do, but you can also look at the goals to actually see what you have accomplished.

**Connection individual goals and incentives**
R5 thinks there is a direct connection between the goals and incentives, since the bonus received is based on the achievement of individual goals. The goals are the basis for evaluation, and if one have done something extra beyond the goals, one must write it down. It is possible to do a lot besides the stated goals that is not noticed. At the same time R5 emphasized that it seems difficult to be categorized in the highest score, irrespective of how she performs. R5 feels that, everyone is scored in the middle level. Despite a link between the goals and incentives it is quite unclear how to perform in order to be placed in the highest score.

“No matter how great the feedback is, one is placed in the middle any way” (R5)

**Goal congruence**
R5 thinks that the GSC is a great base for creating individual goals, claiming that the GSC must exist so that employees can create their individual goals. Furthermore, R5 pointed out that a great amount of time and effort are spent on breaking down the scorecards.

Additionally, R5 thinks that the use of the GSC provides goal congruence, since the goals are aligned by letting the GSC serve as a base. R5 also described that during the last 5-6 years the management have increased the focus on making the goals connected between different levels. R5 is not aware of the reason for why it nowadays is such a focus on the alignment of goals, but claimed that it might be a result of a new management and an attempt to create consistency worldwide.
5. ANALYSIS

In the analysis, we seek to emphasize the results of relevance to our questions in mind. The analysis is based on the experience and perception from the respondents’ points of view and we have analyzed it by means of the reference of literature.

The purpose of the Global Scorecard
The GSC contains all objectives for the current year and it is supposed to create directions for the organization and it serves as a base to create adjusted scorecards as well as individual goals.

Among the respondents it is possible to distinguish a common perception about the purpose of the GSC. The majority of the respondents mentioned that one of the purposes of the GSC is to make everyone strive towards the same direction. This view is similar to the description provided by Simons (2000) who writes that one of the purposes with PMS is to set directions. In addition the respondents’ perception of the purpose is in compliance with the purpose of a BSC, which according to Norton and Kaplan (2007) should enforce employees to work in the right direction. According to one of the respondents, the GSC works as a tool to take the organization to a desired state and visualize what to deliver. This is in conformity with the view provided by Anthony and Govindarajan (2007) who mention that MCS should contribute to moving the organization to a desired state. It is further stated by some respondents that the GSC should provide guidance and information about the priorities. This is in compliance with the purpose of the BSC provided by Norton and Kaplan (2007) that it should highlight what the organization wants to achieve.

Communication
The communication of the overall objectives is important within AstraZeneca and the managers are expected to communicate the GSC to all the subordinates. Since the GSC contains all objectives for AstraZeneca it is important that it is well communicated.

Managers must be aware of what goals to achieve, according to Anthony and Govindarajan (2007). The actual result implied that all respondents had been introduced to the GSC, but to a different extent and through different channels. All respondents were aware of the publishing of the GSC at their intranet portal. Some respondents asserted that it was well communicated during meetings, while others stated that it was mainly the adjusted scorecard that was highlighted during meetings. The fact that the GSC is communicated to the employees is advantageous and in accordance with how Kaplan and Norton (2007) mention that a BSC must be communicated to be successful. A central element of the BSC is to make sure that information reaches employees all over the organization. The result further indicates that the communication of the GSC is extensive during the beginning of the year when it is established, and then there is more focus on the adjusted scorecards during the rest of the year, since they are more understandable and relevant for the employee’s particular department. The overall opinion is that the GSC is well communicated, but the adjusted scorecards receive much more attention as they have greater impact on the employees daily work. This view indicates that the GSC is a great foundation and the ability to communicate goals to different levels is fundamental in a BSC as Norton and Kaplan (2007) declare that communication creates commitment.

Understanding
It is important that employees have an understanding for the overall organizational objectives within the GSC. As these goals are extensive and applied for the entire organization around the world, AstraZeneca works carefully with decomposition of the GSC into relevant adjusted scorecards to facilitate the understanding among employees.
The understanding for the overall content within the GSC varied between the respondents. The result indicates that no one could mention all of the six elements within the GSC. Nevertheless all respondents seemed to be aware of the overall objective within the element Pipeline. PMS is according to Simons, Dávila & Kaplan (2000) a technique to make sure that employees understand the overall goals. The result indicates that the employees were aware of the overall goal of providing the market with new pharmaceuticals (Pipelines), but they were not able to mention all other elements by heart. A perception among the respondents was that the GSC contains many high objectives and it is hard to understand them all. However, the key message within the GSC was clear among the respondents and they had a broad understanding for the content within the adjusted scorecards specific for their departments. The lack of understanding for all elements in the GSC does not necessarily imply lack of direction. The GSC is broken down with the purpose to be relevant and understandable, and to create directions at different levels within the organization. Hence, the respondents were aware of what to accomplish and they understood the content with relevance to them. This decomposition of the GSC is aligned with the use of a BSC where overall goals advantageously can be divided into departmental as well as individual goals (Norton & Kaplan, 2007).

**Connection individual goals and the GSC**

The GSC is supposed to be the foundation for all individual goals and facilitate alignment. The individual goals should directly be derived from the adjusted scorecards, which in turn are directly derived from the GSC. Consequently, the employees’ work at AstraZeneca towards their individual goals should automatically contribute to the overall goals within the GSC.

To start with, some of the respondents are directly involved in setting their individual goals, but the managers ensure that the connection to the adjusted scorecards is intact. This approach is favorable and in obedience with how Merchant & Van der Stede (2012) mention that the internalization of goals increases when letting employees participate in setting goals.

Goal congruence should according to Anthony and Govindarajan (2007) exist when individual goals are aligned with organizational goals. The result indicates that the perception is spread among the respondents. An overall perception among the respondents was that it is hard to see a direct connection between individual goals and the goals in the GSC. However some of them asserted that it is possible to distinguish a connection if you carefully follow the different adjusted scorecards up to the GSC. Furthermore it seemed to be consensus among the respondents that it is impossible to feel a connection to all of the elements within the GSC, since all objectives are not relevant or applicable to all departments.

There was an agreement among the respondents that the objectives within the GSC must be broken down to adjusted scorecards with understandable goals that are relevant to the individuals’ specific area. This view is as earlier mentioned compatible with how Kaplan & Norton (2007) emphasizes the importance of transforming overall objectives at higher levels into more suitable goals that are relevant to lower levels. Furthermore, the connection seems to differ depending on work position as well as under which function the respondents operate. The result provides us with the information that some respondents have individual goals that directly have an implication for the elements within the GSC. One respondent could feel how her team contributed to the achievement of the objectives within Pipelines, while another felt that her work had an impact on the element People, by her involvement with other stakeholders.

However all respondents felt a clear connection between their individual goals and the adjusted scorecard for their department. They considered that AstraZeneca has managed to create coherent links between all the decomposed scorecards in connection to the objectives within the GSC.
Short-term behavior

In the pursuit of goal congruence it is important to ensure that employees’ short term actions are consistent with the organization’s best interest in the long run. At AstraZeneca they seek to avoid inconsistent behaviors by creating a PMS that is complex. They have acknowledged the importance of designing an advanced system containing different aspects when working towards their goals.

The result indicates that the interpretation among the respondents is that it would be impossible to behave in a way that is not aligned with the organization's best interest. Regarding to Merchant and Van der Stede (2012), employees can have a tendency to work around or against the systems or to put their own self-interest ahead of the organizations. This does not seem to be an implication among the respondents. The goals are not designed in a way that to make it possible for the employees to put their self-interest ahead of the organization and the respondents do not have any intentions or incitement to try to work inconsistently. Furthermore, the strong control and the budget restrictions seemed to aggravate the employees’ ability to engage in actions not prevalent in their individual goals. The respondents seemed to feel a strong commitment to their own individual goals and because of the fact that their individual goals are supposed to be aligned with the overall goals, their own achievement of individual goals should be advantageous, and not harmful for the organization. The only expectation for inconsistent work would be in the case of an unpredictable event, when it could be necessary to commit actions that did not precisely occur in the individual goal document.

Merchant and Van der Stede (2012) mentions that management control should obstruct inadequate behavior that can lead employees to commit short term actions that is not in the organization's best interest in the long run. Based on the respondents’ experience, the system seems to be efficient in preventing undesired actions. Most respondents stressed that the goals are designed to obstruct the possibility to involve in actions not consistent with the organizational goals. This finding corresponds to one of the purposes with the BSC that is to avoid suboptimization (Kaplan & Norton 2005). In addition the employees clarified that the continuous feedback from the managers makes it possible to add or remove individual goals if the circumstances or priorities have changed. Furthermore, the respondents stressed that their individual goals are mainly non-financial. The use of non-financial measures can according to Kennerly & Neely (2003) prevent the shortcomings related to financial measures.

Motivation

At AstraZeneca they use incentives such as bonus and salary increase in order to augment the employees’ motivation to achieve their individual goals.

The result implies that the source of motivation differ among the respondents. This is in compliance with the view provided by Merchant Van der Stede (2012) who mentions that some employees are motivated by financial incentives while others are motivated by the feeling of stimulation by having a challenging work. Three of the respondents were motivated by the sense of appraisal and recognition. Also the feeling of having accomplished something good was motivating enough. This experience of the respondents is aligned with how Simons, Dávila & Kaplan (2000) emphasizes that the human nature can differ and that some individuals can show commitment without rewards and the sense of appraisal can be enough.

The remaining two respondents were primarily motivated by the financial incentives. Nevertheless they also mentioned that the sense of achieving their individual goals was important for the motivation. According to Merchant & Van der Stede (2012) motivation is related to goal congruence since lack of motivation can lead to undesired performance. It seemed like the respondents are motivated to reach their individual goals even though the motivation is derived from different sources.
Individual goals and connection to incentives
At AstraZeneca the PMS is supposed to create goal congruence by creating a linkage between individual goals and the incentives provided. The connection is supposed to be evident among the employees so that they can feel that their performances correspond to the incentives provided. It is intended to facilitate the evaluation and the employees are supposed to understand how their performance is reflected in the bonus.

The incentives increase the likelihood of goal congruence since it is supposed to affect employees behavior in the right direction (Anthony & Govindarajan, 2007). The result demonstrates that the overall opinion is that they can feel a connection between their performance and the incentives. Some of the respondents argued that there is a stronger connection between the performance itself and the incentives while others felt that the achievement of the individual goals had the strongest connection to the incentives. The fact that the respondents feel a connection is positive since for instance Simons (2000) argues that it is important to create a connection between goals, performance measures and incentives.

Despite the experience of good connection, some of the respondents considered that the evaluation system is quite generalized which makes it difficult to differentiate individuals. Most respondents felt that increased performance does not necessarily lead to a corresponding increase in the bonus provided, since there are only three different score levels in which they can be categorized during evaluation. This could possibly be an implication with respect to how Anthony and Govindarajan (2007) points out that increased effort should be rewarded in order to create motivation. Some of the respondents felt it was hard to know how to perform in order to be placed in the highest score level and this sense could possibly harm the motivational aspect.

The experience among some of the respondents was further that the connection between goals and incentives leads to the sense of that the performances beyond the goals were not included in the evaluation, meanwhile others felt that their performance beyond the goals was considered in the evaluation and they felt it was a subjective judgment. The experience regarding the connection between performance and incentives seemed to be divided depending on the individual. However all of them agreed about an overall connection but to a different extent.

General considerations about Goal congruence
At AstraZeneca the GSC is the foundation for the creation of goal congruence. A high degree of goal congruence is considered prevalent if they manage to communicate goals to relevant levels, enable alignment between individual goals and organizational goals, and create a connection between goals and incentives. The GSC is supposed to make this possible.

There was a consensus among all respondents that the GSC leads to goal congruence, by its ability to create alignment between individual goals and organizational goals. Goal congruence should with reference to the definition by Anthony and Govindarajan (2007) be understood as a phenomenon where employees’ personal goals are consistent with the organizational goals. The decomposition of the GSC into several different scorecards adjusted for departments and further down to functions makes it possible for the respondents to understand the connection too. Further it makes it easier to create individual goals when the goals in the adjusted scorecard are more understandable and relevant. The respondents felt that a lot of time and effort were spent on the development of the adjusted scorecards, indicating the importance of creating a connection. Further it was argued that there has been a change in how the individual goals are set. Nowadays, the GSC is a good base for the development of individual goals, compared to some years ago. Some of the respondents mentioned that earlier the individual goals were set without taking the overall objectives in consideration. They were set later in the year and rather based on the employee’s specific position and appropriate work tasks. Setting the individual goals before the GSC indicates clearly lack of connection.
Some respondents stated that it also has been a stronger focus, during the recent years, on providing alignment between the individual goals and the goals in the GSC. One possible reason is that it was necessary to make sure that everyone pays attention to what is of greatest importance, as the competitiveness has increased. The GSC then creates directions and highlights the priorities. Furthermore, another respondent argued that the increased focus on the GSC was based on the fact that AstraZeneca is a global company that seeks to create standardization around the globe. The use of a common goal picture is then important. Regarding to Simons (2000) the need to create directions increases with geographical distance and the PMS should facilitate the achievement of goals.
6. CONCLUSIONS

In this part we have compiled the result in order to address the questions stated in the introduction. We also provide our own observations and eventually suggestions for further research.

6.1 Results

- How do employees within an organization experience the use of Performance Measurement Systems, based on aspects relevant for the contribution to goal congruence?

The relevant aspects we have chosen to emphasize, with respect to goal congruence, is as follows: Communication, Understanding, Alignment between individual goals and organizational goals, Motivation, Prevent short term behavior, and Connection between individual performance and incentives.

We believe that there is much consensus between the employees’ experiences of the PMS and how it is supposed to be perceived based on its purpose at AstraZeneca. The experience among the employees is that the purpose of the GSC is to create a common goal picture and set directions by its ability to highlight the priorities for the year.

Communication is a significant aspect and it permeates AstraZeneca’s PMS through their GSC. It is further highlighted by Rikard Olsson’s statement that the GSC should be communicated to each employee. The GSC provides something to communicate, and the employees feel that the goals within the GSC have been presented by different channels. Thus, the key messages have reached them.

An element that facilitates the understanding of the overall objectives is the decomposition process of the GSC. Consequently, the employees feel that they understand the goals in a more relevant level and context. The employees stated that those goals that have an impact their daily work are strongly communicated and easy to understand. Furthermore, the employees are involved in the configuration of their individual goals, which also increases their understanding.

The employees’ feeling of a connection between organizational and individual goals is important for reaching goal congruence. The employees feel that their individual goals are consistent with the goals prevalent in the adjusted scorecard relevant for their specific position. In addition some of them could even feel a direct connection between individual goals and the goals in the GSC. By means of the focus on the decomposition and linkage of scorecards at different levels, they can see an indirect connection to the overall objectives. This experience was shared among all the interviewed employees.

The design of the GSC with a complex content, transformed into individual goals prevents inconsistent short-term behaviors. The employees felt that it would be difficult to commit actions that are not in the organization's best interest since their individual goals are set in order to be aligned with the GSC. The employees argued that the ongoing feedback from managers during the year made it possible to add or remove goals in order for them to be relevant and aligned. No one could see how actions inconsistent with the individual goals would benefit them. Furthermore, the employees did not seem to have any intentions or incitement to try to work inconsistently.
Incentives as a part of the PMS seemed to be motivating to some extent. The experience among the employees was diverse as some employees were motivated by the sense of recognition and the feeling of having performed well, while others felt that the incentives are highly motivating.

The employees’ general experience was that there is a connection between individual performances or goals and incentives. Though, it turned out that a perception was that increased performance do not necessarily lead to a corresponding increase in the bonus. Furthermore, some experienced that the evaluation process did not differentiate the individuals enough and therefore the process was perceived to be too generalized. This sense could possibly harm the motivational aspect.

The view among the employees is that AstraZeneca has increased their effort in making sure that everyone pays attention to what is essential. In order to stay competitive in the long run AstraZeneca must achieve its ultimate objective, to provide the market with new pharmaceuticals. Here the GSC seems to fulfill the function of communicating what is important and it facilitates alignment throughout the organization. In conclusion the overall opinion that permeated the experience of the employees is that the GSC is perceived as a great foundation for the creation of goal congruence.

The GSC provides favorable conditions to create alignment between individual goals and organizational goals. Even though the employees are not aware of the entire content of the GSC, all of them can relate to the adjusted scorecards. Furthermore it was argued that in order to create goal congruence, the PMS should ensure that there is something to communicate, a possibility to break down organizational goal into individual goals, and a connection between individual performance and incentives provided.

- To what extent does their Performance Measurement System seems to contribute to goal congruence?

We seek to address this question with support from the employees’ experiences as well as on the information provided concerning criteria that a PMS should include to create goal congruence.

First of all, it is apparent that a PMS can provide a document with clear objectives that should be communicated to employees in an organization. AstraZeneca has a document, the GSC, with clear objectives that they seek to communicate to the employees. We got the impression that the employees felt that the GSC was well communicated.

A condition for the alignment of goals is the possibility to transform overall goals to individual goals. This seemed to be prevalent to a great extent as the GSC have been decomposed into adjusted scorecards which in turn have served as the base for the configuration of individual goals. The decomposition of goals ensures an alignment between organizational and individual goals. It also enables the employees to understand and agree with the content.

Another aspect that could contribute to goal congruence is the PMS’s ability to create a connection between individual goals and incentives. We got the impression that this connection is prevalent to some extent, as the incentives directly are based on the achievement of individual goals, even though it was experienced in different ways. A possible implication could be the fact that the employees did not know how to perform to get placed in the highest score as well as the difficulty in differentiating the individuals during evaluation.

In summary, it seems to be an understanding for relevant goals among the employees through the communication of the GSC. There is a strong focus on the quality of the linkage between overall and individual goals and both managers and individuals are highly involved in the process. The
system enables a connection between the employee’s individual goals and the incentives which is supposed to affect their motivation to perform consistently. Based on our interpretation it seems like many of the important conditions for a PMS ability to create goal congruence are observed. Furthermore, the fact that all employees that participated in our study were truly aware of the importance of AstraZeneca’s ultimate objective should increase the likelihood of consistent behavior. This leads us to consider that the PMS used at AstraZeneca fosters conditions for reaching goal congruence within the company. Based on how the PMS is intended to create goal congruence we argue that this phenomenon is prevailing to a great extent.

6.2 Thoughts and considerations

In order to sum up the study we seek to point out our own thoughts and considerations to give the reader an insight in our own observation throughout the research process.

In the initial stage we did not know to what extent AstraZeneca had recognized the importance of creating goal congruence. We had only studied the literature in the field and we acknowledged that goal congruence was important and that it should permeate the design of management control. When contacting Rikard Olsson we made our intentions clear and we pointed out that we were interested in receiving information about how they used PMS in order to create goal congruence. The response was positive as this is something they work hard with today. It must also be pointed out that this study would look very different if we had conducted it on AstraZeneca ten years ago, since many changes have been made during the last years. The alignment between goals has indeed a stronger importance today. When we met Rikard Olsson we were struck by the fact that they had developed such a dynamic system that actually addressed the issue of goal congruence. We were also fascinated by the involvement among employees at different positions, with the development of adjusted scorecards.

When we were introduced to the GSC it was clear that they had adopted a focus on different aspects. As mentioned in the reference of literature organizations need to incorporate non-financial goals in order to stay competitive and it has been argued that the shortcomings of financial measure has led to the development of the BSC. The GSC can be considered as a sort of BSC but it is developed based on the conditions for AstraZeneca. We felt that it was interesting to immerse in the employees experience rather than only looking at the GSC itself. As the literature recurs that the reaction among employees is crucial for being able to evaluate the advantages and disadvantages of any management control, it felt motivated to choose this orientation. During the data collection it came clear that all respondents felt strongly about AstraZeneca and it felt like they had a strong commitment to the company in terms of high work moral. Hence, we felt that a strong corporate culture is prevalent at AstraZeneca based on the employees’ experiences. The strong commitment and the pride of working at AstraZeneca among the respondents lead us to consider that the result might have looked slightly different if we instead had observed an evident dissatisfaction among the employees. The corporate culture could possibly be an important aspect for the achievement of goal congruence in an organization.

6.3 Suggestions for further research

Based on our research we consider that AstraZeneca has an advanced and well-developed PMS. What is not examined is to what extent their developed system actually has a positive effect on the profitability and growth of the company. Even thought it would require many years of investigation it would also be interesting to see if the profitability increases in the long run.

Another conception is that a strong management control may impede creativity. A question that arose is if the system possible could lead to inhibit creativity and if that is disadvantageous for the development of a company engaged in R&D.
A third notion is to conduct a similar study among employees but in the public sector. In the public sector, e.g. in a school or hospital, budget restrictions are often tight and sticking to the budget could possibly be in contrast to personal goals, related to the providence of sufficient care or education.

Furthermore, it could be interesting to conduct a study with the purpose of making a comparison between two companies where it is possible to distinguish different corporate cultures. It would then be interesting to investigate whether the achievement of goal congruence is affected by the corporate culture.
LIST OF REFERENCES

Text books


Articles


**Respondents**

Olsson Rikard, *Director of Performance Strategy and Reporting*, R&D finance, AstraZeneca, April 17, 2012

**Web pages**

AstraZeneca. www.astrazeneca.se (23-04-2012)

Sibson & Synygy, (August 2004), The State of Performance Management
Interview Guide

Occupation: 
Period of employment: 

General questions about the Global Scorecard

- In your opinion, what is the purpose of the GSC?
- In what way have you been introduced to the GSC?
- Are you able to mention the elements within the GSC? Which are they?
- Do you consider that the management has communicated the GSC in a way that facilitates understanding for the content?
- Do you agree with the overall content within the GSC?

Question related to individual goals and the connection to the GSC

- What individual goals are prevalent in your goal document?
- Do you experience a connection between your individual goals and the goals stated in the GSC?
- Would you be able to conduct any short term behavior in order to achieve your individual goals if you were aware of that it would not be in the organizations best interest?
- Do you feel that you have enough resources to reach your individual goals?
- What motivates you in the achievement of individual goals?
- Do you consider that incentives increase motivation?
- Do you feel that there is a connection between your performance and individual goals and the incentives provided?

Completive Questions

- Do you consider that the GSC is a good foundation to communicate goals into different levels within the organization?
- Do you consider that the GSC is a good foundation for the development of individual goals?
- Do you feel that your GSC creates goal congruence?