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REPORTING ON INTANGIBLE ASSETS

Final Report for the Benefit of the Dutch Ministry of Economic Affairs and the Intangible Assets Pilot Project Sounding Board Group

COUNTRY COVERED: THE NETHERLANDS

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ABSTRACT

Assigned by the Dutch Ministry of Economics PwC Netherlands has drafted illustrative appendices on intangible assets / intellectual capital for the annual report of three Dutch Companies. PwC discusses from several theoretical perspectives why it has chosen to use indicators to ‘value’ intangibles rather then capitalising costs. In the report PwC presents how they, in close co-operation with the companies, arrived at the framework for presenting indicators of intellectual capital. The strategy of the company, the interrelations between (categories of) intangible assets, the three types of indicators which are used, and issues in identifying, defining and presenting indicators are key elements addressed in the report. Furthermore, the comments and experiences of the participating companies during the project are presented, as well a limited survey which conducted amongst the information users (investment analysts and a bank) in order to identify the current information need to arrive at more transparency in the intangibles of the companies.

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FOREWORD

1. This report could not have been produced without the contribution of three businesses to the survey conducted by PricewaterhouseCoopers in the context of the Dutch Ministry of Economic Affairs' Intangible Assets Pilot Project. We benefited greatly from these businesses' enthusiasm, openness and commitment in the course of carrying out the survey.

2. A number of investment analysts and one banker also agreed to co-operate in the survey. Their insights proved to be highly valuable in presenting a balanced view of the subject matter in this report.

3. We would take this opportunity to extend our sincere thanks to the businesses, the investment analysts and the bank in question for having contributed to the preparation of this report.

4. Finally, we owe a debt of gratitude to the Dutch Ministry of Economic Affairs for having invited us to participate in the Pilot Project.

INTRODUCTION

5. Society is increasingly evolving into a knowledge economy. In terms of financial reporting by businesses this is bringing about a situation in which an increasingly large portion of elements which create value for a business, such as knowledge, technology and clients, are excluded from the balance sheet pursuant to prevailing reporting practices.

6. The objective of this Pilot Project as described in the Ministry of Economic Affairs' invitation to participate dated 15 May 1998 has been "the identification and valuation, at one's own discretion, of the intangible assets of three knowledge-intensive businesses".

7. This report contains PricewaterhouseCoopers's (PwC's) contribution to the Pilot Project. it outlines the method applied and the experiences gained at the three businesses, as well as presenting the three trial intangible assets appendices.

8. Two listed companies and one unlisted business participated in the Pilot Project, all three operating in the knowledge-intensive service and industrial manufacturing sector. It was agreed with the two listed participants that their participation in the process as well as their respective trial intangible production asset appendices (hereinafter referred to as "the Trial(s)") will remain fully anonymous.

9. The theme of reporting on intangible assets is currently still at the exploratory stage. In view of the experimental nature of the Pilot Project, PwC put together a multi-disciplinary Project Team encompassing the following disciplines:

i) Corporate Finance - This mainly concerns the contribution of knowledge on the valuation of businesses in a merger and acquisition context. This concerns the determination of the economic value of the business of which the value of the intangible assets forms part (W.G.M. Holterman, R.S. Oudman and S.M. Zijlstra).

ii) Assurance and Business Advisory Services - Here the central plank is the contribution of external reporting know-how (J.B. Backhuijs).

iii) Management Consultancy - This hinges on the contribution of technology know-how and performance measurement (R.P.M. Overgoor).

10. The contents of this report are based on the contribution and opinions of the aforementioned PwC staff and therefore do not represent any official PwC point of view.

11. Chapter 1 discusses the conceptual points of departure and the reporting framework. Its contents largely coincide with our interim report entitled "Intangible Assets: Interim report for the Benefit of the Dutch Ministry of Economic Affairs and the Intangible Production Asset Pilot Project Sounding Board Group", which was issued on 20 November 1998. Chapter 2 outlines the various stages which we covered in the course of our survey in order to arrive at a trial intangible assets appendix, while Chapter 3 discusses the principal learning experiences as we progressed. Chapter 4 devotes attention to the relevance for the businesses of the approach presented by us and includes several observations by users of an intangible production asset report. Finally, Chapter 5 is devoted to some final reflections.

12. Appendices A to D inclusive contain a bibliography and the three intangible production assets appendices, respectively.

1. Conceptual points of Departure and Reporting Framework

1.1 Implications of Knowledge Economics in a Reporting Context

13. We already stated in the Introduction that society is increasingly evolving into a knowledge economy and that in terms of financial reporting by businesses this is bringing about a situation in which an increasingly large portion of elements which create value for a business, such as knowledge, technology and clients, are excluded from the balance sheet pursuant to prevailing reporting practices. This in turn is increasingly widening the gap between a business's economic or market value (e.g. its quoted market value) on the one hand and the value of that business's shareholders' equity accounting value as per its financial statements.

14. The inclusion in the balance sheet and valuation of intangible assets on the basis of prevailing reporting standards is a fraught with complications. For one thing, there are practices such as the due care principle, pursuant to which such intangible assets are preferably taken direct to the result. Moreover the various categories of intangible production asset differ by type, so that it is not always possible to break them down for reporting purposes.

15. The upshot of this is that the financial statements provide less of an insight into the true value of the businesses. Such a lack of insight can put individual businesses as well as the economy as a whole at a disadvantage, for example due to the fact that it puts businesses having a relatively high proportion of intangible assets compared with their tangible assets in a less favourable position when attracting funding.

16. Over the past few years attempts have been made from a variety of disciplines and vantage points to restore the relevance of financial reporting against the backdrop of the trend towards a knowledge economy. Some examples follow.

a) A variety of developments can be identified in the area of external reporting (financial accounting), with some businesses having subscribed to capitalisation of specific categories of intangible production asset such as publication rights and brands. Moreover (conditions governing) capitalisation and valuation of intangible assets is being considered in a wide range of reporting forums.

b) Within the world of internal reporting (management accounting) the realisation that traditional reporting is providing an inadequate insight for internal management purposes has prompted new reporting and management models to be developed such as the Balanced Scorecard[1], in which information of a non-financial nature is given pride of place in performance measurement as well as financial control information.

c) New methods in the area of shareholder value management have been developed at the initiative of the financial sphere which are used to try and dissect a business's market value into value drivers which are key to the development of that businesses's value.

d) Several businesses have already tried to report on intangible assets. An often-quoted example is Navigator by Skandia from Sweden.

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[1] Kaplan and Norton (1992).

e) Finally, developments in the area of knowledge management could be quoted in this context. Knowledge management is a new discipline which owes its existence to the realisation that knowledge is the prime asset within in the knowledge economy. The discipline addresses inter alia the development, structuring and utilisation of knowledge within organisations so as to enable them to return an optimum performance within the knowledge economy. The Intangible Assets Monitor[2] serves as an illustration of this method. Human Resource Accounting is a further example; in this context investments in training staff are capitalised on the balance sheet, among other things.

17. Pilot research[3] being carried out abroad and experiences of businesses which have been applying some form of intangible asset reporting or other for some time have revealed the following external benefits and drawbacks[4]:

Table 1.1: Summary of external benefits and drawbacks

Benefits	*Drawbacks*
Enhances transparency resulting in lower cost of capital and thus, higher share price	Causes competition-sensitive information to end up in the public domain
Helps inspire a sense of faith among the workforce and other major stakeholders	Leaves room for information manipulation resulting in the reporting of favourable information only
Supports long-term vision by communicating a long-term perspective	Creates user liability risks by presenting future-oriented information which cannot be substantiated
Lends itself for use as a marketing tool	Increases operating costs as a result of new rules and bureaucracy

18. The most frequently quoted benefit turned out to be the reduction in cost of capital and thus the increase in share price, while the most frequently quoted drawback was shown to be the competition-sensitive nature of the information. Chapter 4 discusses the various pros and cons in more detail. Pilot research being conducted abroad has furthermore hinted at the benefits in connection with dissemination of information such as management being in a better position to decide on intangible assets and the fact that knowledge is made more accessible and thus, more easily deployable within the organisation.

1.2 Reporting on Intangible assets

19. The preceding section has shown that valuable building blocks can be contributed from a variety of angles to the intangible assets reporting process. However, this development is currently still fragmented and is going through the exploratory stage. Attention is devoted below to the current discussion regarding intangible assets reporting from two value concepts: the retrospective value concept derived from financial reporting, and the prospective economic value concept.

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2 See, for example, Sveiby (1996).

3 See, for example, The Danish Trade and Industry Development Council: *Intellectual Capital Accounts, reporting and managing intellectual capital*, 1997.

4 See, for example, The Ministry of Economic Affairs, Information map *Transparantie in immateriële productiemiddelen,* The Hague, 1998 and Working papers of the conference *'Measuring and Valuing Intellectual Capital'*, London, 1998.

20. These concepts are then used to analyse the actual recognition of intangible assets in the financial statements as well as evaluate the problems encountered in valuing intangible assets on the balance sheet.

The retrospective value concept derived from financial reporting

21. The value concept as per financial reporting has traditionally been an essentially retrospective concept of value which is based on such rights and obligations as have arisen in the past.

22. Financial reporting is based on practices and agreements such as matching, due care, realisation, consistency, objectiveness and verifiability[5]. The aim of such practices is to help the users of financial statements in forming an opinion on the report before them by reducing subjective elements and leaving less room for management opportunism.

The prospective economic value concept

23. The economic concept of value is prospective by nature, in that it revolves around the cash value of future proceeds, i.e. cash flows accruing to the capital providers in question. The economic value concept mainly features in financial markets, for example on stock exchanges and in a merger and acquisition context. Economic valuation methods are increasingly being resorted to in connection with mergers and acquisitions. According to many a business's market capitalisation or quoted market value gives a good indication of that business's economic value (although there are those who doubt this[6]). Finally, it should be pointed out that economic value is increasingly being wielded as a yardstick in assessing the business policy, shareholder value management technique having been developed for this.

24. Although the relevance of the economic value concept is enjoying increasing acceptance, it comes with a major drawback in the form of the subjectiveness of future expectations.

25. In a conceptual sense the difference between the economic value and the value as per financial reporting can be deemed to be made up of intangible assets such as brands, Human Capital, client bases and technological know-how. In theory it is possible to allocate this difference to the various intangible assets[7], albeit that this is not nearly as straightforward in practice (see below).

26. The economic developments outlines in the Introduction have over the past decades increasingly widened the gap between the economic value of businesses (e.g. measures using their market value) and their shareholders' equity as per the financial statements. In reporting circles this has sparked discussions on the valuation of monetary assets and liabilities included in the balance sheet on the basis of face or actual value as well as on the capitalisation of intangible assets.

27. With respect to the debate surrounding the valuation on the basis of face or actual value, it is the time value of money which is a particularly prominent element at the moment. This is reflected by recognising assets and liabilities at actual rather than face value. Reference is made in this context to discussions at IASC level in connection with the preparation of IAS 39 Financial Instruments: Recognition and measurement, and to the discounting project which has been newly launched by IASC.

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5 See, for example, Lee (1996 pp. 47-64). See for the Dutch law on this topic art. 2:362 – 2,3, and art. 2:384 – 2 of Dutch Civil Law Code.

6 The doubt deals with the concern to what extent capital markets are information efficient.

7 See, for example, Smith and Parr (1994 pp. 287-311) and Reilly and Schweihs (1998 pp. 4-28 and pp. 737-754).

Recognition of intangible assets in the financial statements

28. In recent years much attention has also been devoted in reporting circles to the recognition of intangible assets in the financial statements. Those in favour of charing expenditure relating to intangible assets to the result in one fell swoop quote the due care principle by way of substantiation. The uncertainty surrounding the possibilities to realise such assets is sufficiently daunting as to deem it safer no longer to charge such expenditure to the future result. Then again, those in favour of capitalising such expenditure point out that this yields a better indication of the business's future income-generating elements.

29. IASC recently rounded off this discussion with the issue of IAS 38 Intangible assets. Although this has placed businesses under an obligation to recognise intangible assets in the balance sheet, it does impose certain strict conditions on the capitalisation of such assets in order to obtain greater certainty on their future realisability.

Problems encountered when capitalising assets on the balance sheet

30. In so far as intangible assets are valued on the basis of capitalised expenditure (the retrospective value concept) a problem crops up in that expenditure in relation to intangible assets need not necessarily be a good indication of such assets' economic value. Examples are the effectiveness of R&D activities or of the development of a new brand name. A further prominent consideration in this context is that experts point out that the link between expenditure and future income is becoming increasingly less unambiguous in the new knowledge economy[8].

31. This phenomenon is caused by the fact that unlike tangible assets, knowledge is not subject to diminution in value in many applications (no wear and tear in a technical sense) or to the law of diminishing surplus income (as opposed to tangible assets, the number of people who could use a formula or software is essentially indefinite)[9].

32. If intangible assets are capitalised on the balance sheet on the basis of economic valuation methods (the prospective value concept: the cash value of future cash flows), a number of problems crop up which affect the effectiveness of such an approach:

a) The subjectiveness of the cash flow prognoses is at odds with the ambition to be objective.

b) The fact that intangible assets are intertwined often makes it impossible to break them down for the purpose of individual valuations. For example, it is often impossible to determine the value of Human Capital or technology independent of the value of the client base. Experts regard the breakdown of the difference between the market and book values of shareholders' equity into individual intangible assets as the toughest, and often impossible, problem in the economic valuation of intangible assets[10].

c) It is very difficult if not impossible to determine when an intangible production asset can be included in the balance sheet.

8 See, for example, Stewart (1997 pp. 55-64).

9 Romer, P.: *Bank of America Roundtable, The soft revolution: achieving growth by managing intangibles, Journal of Applied Corporate Finance*, Summer 1998, pp. 9-13.

10 See, for example, Reilly lc.

d) The cash value can fluctuate strongly depending on changes in interest rates, inflation or future outlook.

1.3 The PwC Approach

33. The PwC approach is based on the following objectives on reporting on intangible assets:

Improvement of the insight into the development of a business's intangible assets enhances reporting transparency, thus providing users with a better insight into the future cash flow potential and the business's corresponding risk profile.

34. The point of departure in this choice is that it is the users of annual reports themselves (e.g. shareholders, capital providers) who prepare an economic valuation of the business. By providing them with reliable information on the development of intangible assets, they are enabled to prepare such economic valuation by making a more accurate estimate of the business's future cash flow potential and the accompanying risk profile.

35. Based on the above objective and basic premise, PwC has opted in favour of a reporting framework the core of which is formed by a report on indicators of intangible assets, thus circumventing the drawbacks of capitalisation of intangible assets referred to in section 1.2 hereinbefore. A major advantage of such a *modus operandi* is that it enables the preparation, on the basis of a general framework, of a report geared to the business in question.

36. The following elements have relevance in designing such a reporting framework for intangible assets:

a) *Classification of indicators* - A clear and unambiguous classification is important as it lends structure and consistency to the report.

b) *The link with strategy* - A business's strategy determines to a large extent what indicators of intangible assets have relevance and what the major interrelationships between the various intangible assets are.

c) *Types of indicator* - Several yardsticks are at hand which can be used in representing indicators of intangible assets. Brainstorming sessions and experiments were used at the participating businesses to arrive at three more closely defined indicators of (in consecutive order) "What is there?", "What has been invested?" an "Which objectives have been achieved?".

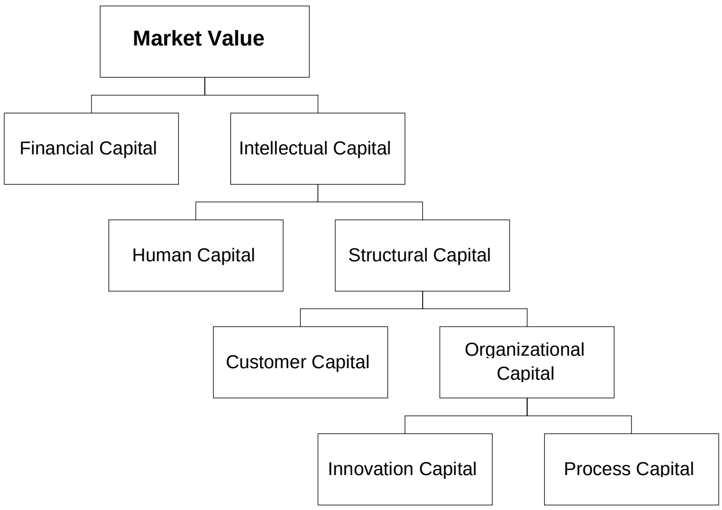
37. These elements are discussed in sections 1.3.1 to 1.3.3 below. Finally, section 1.3.4 deals with the reporting framework which served as the point of departure for the trial appendices having been prepared in the context of this assignment.

1.3.1 Classification of intangible assets

38. There are a number of ways of classifying intangible assets. Literature[11] dealing with this subject uses a variety of classification schedules whose various categories are substantively similar[12]. The purpose of this classification is to confer structure and order on intangible assets.

39. We have applied the following schedule, which is used by Skandia (1996), inter alia, for the purpose of providing the businesses with a clear insight into the categories of intangible assets which we have applied[13]:

Figure 1.1: Classification schedule for intangible assets



40. In this schedule the Market value (which is supposed to reflect the business's economic value) is split into Financial Capital (shareholders' equity according to the financial statements) and Intellectual Capital (value of intangible assets in so far as off-balance sheet). Intellectual Capital can be subdivided into the knowledge, experience and skills of the workforce (Human Capital) and such intangible assets as are embedded in the business (Structural Capital). Structural Capital in turn can be subdivided into Customer Capital (e.g. the value of customer relations and of brands) and Organisational Capital. The latter item represents the full complement of the business's internal value as laid down in internal processes, products and the like. Organisational Capital can be broken down into Process Capital and Innovation Capital. Process Capital has to do with the business's *modus operandi* and methods in relation to its internal processes, while Innovation Capital is what enables the business to innovate its products and services (e.g. through R&D activities) as well as such product innovations as have been protected by the business (e.g. patents).

41. Human Capital, Customer Capital, Process Capital and Innovation Capital will be used hereinafter as the four categories of intangible production asset.

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[11] See, for example, Sveiby (1998 p.27).

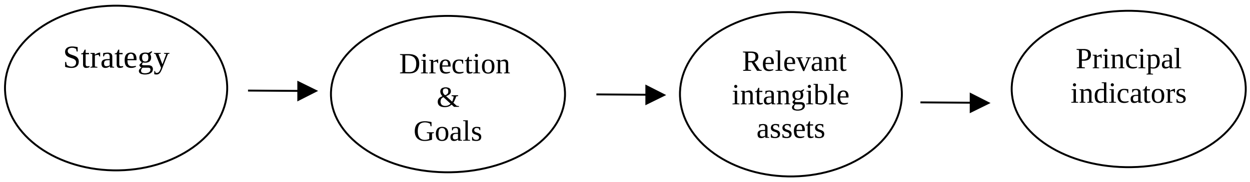
[12] See, for example, Sullivan (1998 pp. 59-74).

[13] See, for example, Roos et al. (1998 p. 29).

1.3.2 Relationship with strategy

42. The business's strategy serves as the point of departure in reporting on intangible assets as such assets only have significance and value in relation to the strategy. The strategy shows what intangible assets (or categories of asset) are relevant and what their interrelationship is. The principal indicators can be determined on this basis. Figure 1.2 shows the relationship between the business's strategy, direction and goals, the relevant intangible assets and the principal indicators.

Figure 1.2: Relationships between the business's strategy, direction and goals, the relevant intangible assets and the principal indicators.



43. For example, a business which indicates in its strategy that it is its objective to develop into the most dedicated service provider in the market will focus on indicators such as customer relations rather than the development of new patents[14].

44. A further factor in reporting on intangible assets is to reflect the interwovenness of the various categories of intangible production asset. For example, the value of the Innovation Capital of a production company whose strategy consists in the proprietary development of new products and their subsequent direct sale to end uses will depend directly on the value of its Customer Capital: new innovations cannot be sold without a reliable sales organisation, while the sales organisation will not be able to sustain its success in the longer term without successful innovations. The two elements could in fact significantly boost one another provided there is close co-ordination between the two categories of intangible production asset owing to the proper management of the categories in their mutual interwovenness.

45. For example, the Process Capital of a production company which operates exclusively on the basis of orders will be of greater relative importance than its Innovation Capital; here it is the interwovenness between Process Capital and Customer Capital which is of prime importance.

1.3.3 Types of indicator

46. Intangible asset reporting and the indicators included here as well as the business's financial statements are jointly assumed to present a reliable picture of the business's "assets" and performance.

47. In presenting the selected indicators which reflect the intangible assets, a choice has been made in favour of following the system applied to the financial statements to some degree in presenting the indicators, which will therefore include the balance and the flows just by analogy to the financial statements. In view of the long term perspective it is also important that a long-term summary (e.g. covering a five-year period) should be presented.

[14] See, for example, Roos lc.

48. Of course it is impossible to come up with an historical five-year summary for fledgling businesses which do not yet have a track record; in such situations such number of years as is available will have to suffice.

49. We have based our classification of indicators into balance and flows, inter alia, on a report entitled '*The Danish Trade and Industry Development Council: Intellectual Capital Accounts, Reporting and Managing Intellectual Capital* (1997)'. Brainstorming sessions and experiments at the participating businesses have been used in elaborating and applying the classification into three types of indicator.

50. The three types of indicator, viz. "What is there?", "What has been invested?" an "Which objectives have been achieved?" will be discussed below (in that order).

"What is there?"

51. Here the indicators reflect the "balance" of intangible assets. This concerns financial as well as non-financial indicators, absolute indicators and ratios and distribution criteria (e.g. sales spread or competence matrix).

52. An example for a service supplier whose strategy consists in the posting of project staff with a high added value would be the indicator "Staff broken down into job levels".

"What has been invested?"

53. Here the indicators reflect the efforts having been made by the business during the period under review in realising its goals in terms of intangible assets. A broad definition of "investment" is wielded in this context, in that non-financial investments such as the number of training days (in a Human Capital context) or the number of account managers deployed in connection with a select group of key accounts (in a Customer Capital context) are included in addition to financial investments.

"Which objectives have been achieved?"

54. Here the indicators used reflect the efficacy of the development in intangible assets relative to the objectives, most of which can be derived directly or otherwise from the concise description of the business' strategy.

55. For example, a business whose strategic goal consists in the forging of long-term associations could present the "customer satisfaction" score in connection with this type of indicator.

56. By comparing the indicators applied in the context of "Which objectives have been achieved?" over the years with those presented in the context of "What has been invested?", the reader can form a picture of the business's efficiency and the effectiveness of its policy regarding its intangible assets. This comparison is important in assessing the business's future cash flows.

1.3.4 The PwC Reporting Framework

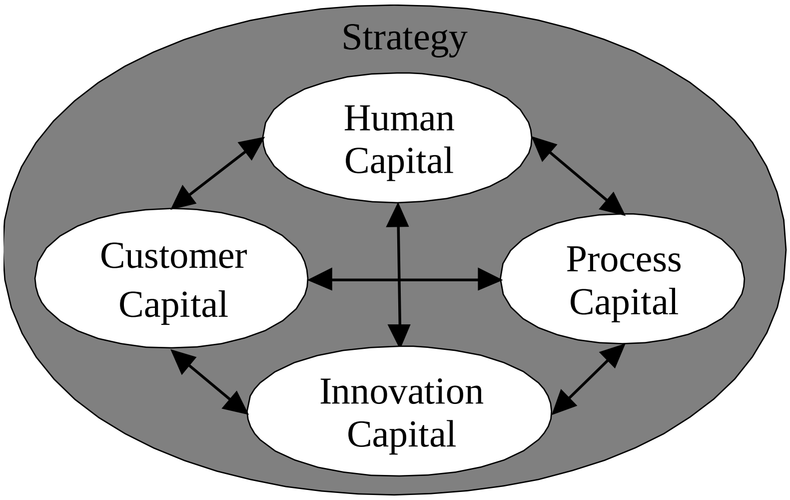
57. The elements of the PwC approach which have been outlined in section 1.3.3 hereinbefore yield the following reporting framework for the trial intangible production asset appendix:

i) A concise description of the strategy outlining the principal intangible assets.

ii) A description of the interwovenness between the four categories of intangible production asset.

58. The diagram below illustrates the interwovenness between intangible assets from a strategic angle:

Figure 1. Figure 1.3: Interwovenness between intangible assets relative to strategy



iii) A long-term summary (e.g. five years) of the principal indicators classified on the basis of the four categories of intangible production asset and the three types of indicator, as well as an explanation of the development.

59. The matrix below outlines the four categories of intangible assets and the three types of indicators:

Figure 1.4: Matrix containing the four categories of intangible assets and the three types of indicator

Types >> Categories	What is there?	What has been invested?	Which objectives have been achieved?
Human Capital			
Customer Capital			
Process Capital			
Innovation Capital			

2. Participants and Project Phasing

2.1 Participants

60. Three businesses participated in the PwC survey in support of the Intangible Assets Pilot Project. They will remain anonymous in this report. Alpha is a listed service provider, while Beta (listed) and Gamma (unlisted) are industrial manufacturers.

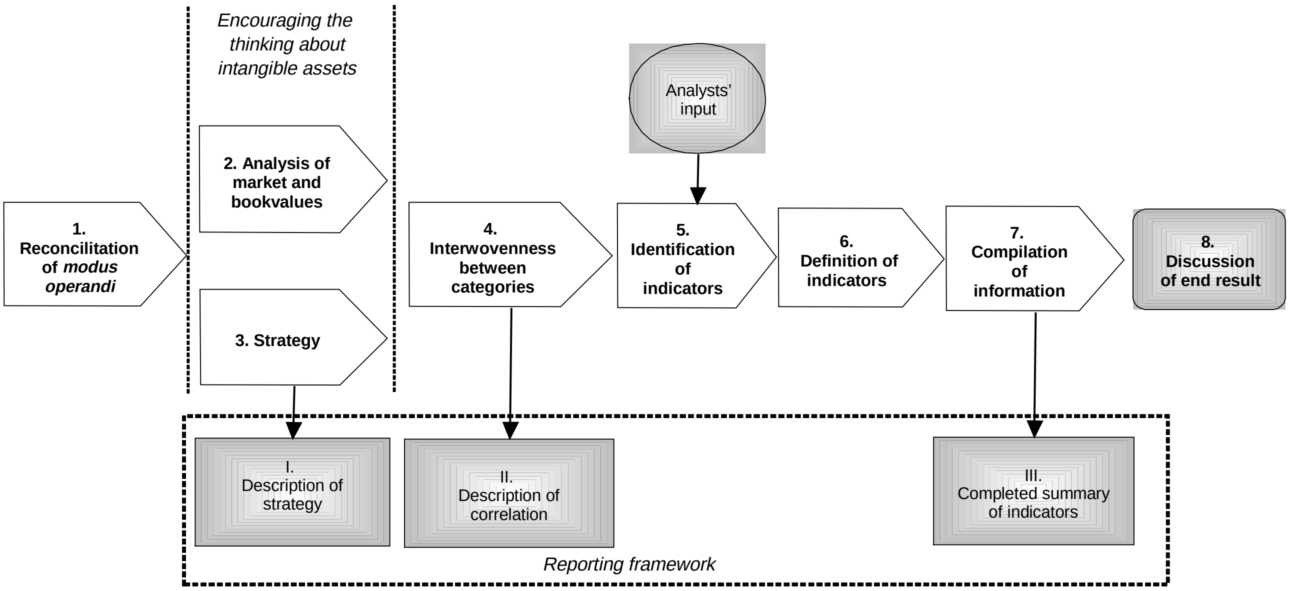
61. The listed companies, Alpha and Beta, were inspired to participate in the project because of their wish to be actively involved in the latest reporting trends in the Netherlands and because they were interested in learning how they could improve their external or internal reporting in this area.

62. The managing director cum controlling shareholder of the unlisted company, Gamma, was particularly interested in participating in the project because this would give him an idea of his business's market value as well as provide him with a few pointers on how to improve the management of his business's intangible assets.

2.2 Project Phasing

63. This section is devoted to the various stages which were covered with the businesses as the process progressed, as summarised in diagram 2.1 below:

Figure 2.1: Summary of stages covered



64. Throughout the process there was continuous feedback on and reconciliation of such results as were obtained at the various stages.

Stage 1: Reconciliation of modus operandi

65. The first stage of the process was devoted to reconciling the composition of the team with the participating businesses, each of which set up a multi-disciplinary core team working closely together with the PwC Project Team. The core team of each of the two listed companies was made up of senior officers from the Control, External Reporting, R&D, Strategy, Human Resources and Investor Relations departments, inter alia.

66. I view of the business's wish to remain anonymous, it was furthermore agreed at this first stage that no allowance would be made in the execution of the trial with what the businesses actually wished to report externally at the present juncture in time.

67. It was furthermore agreed with the businesses that they would not allow the fact that some information was no yet available within their business to frustrate their thinking about intangible production asset reporting.

Stage 2: Analysis of market and book values

68. This stage was devoted to several brainstorming sessions with the business's core teams on the difference between long-term market value (as derived from the market capitalisation of each of the two listed companies, Alpha and Beta, and a DCF analysis of Gamma) and the book value of shareholders' equity.

69. These sessions served the purpose of encouraging the businesses in thinking about their intangible assets by asking them which of these intangibles were responsible for the discrepancy between market and book value.

Stage 3: Strategy

70. Brainstorming sessions were subsequently organised with the business's core teams on the impact of the strategy on the significance of intangible assets and their mutual interwovenness. As before these sessions served the purpose of encouraging the businesses in thinking about their intangible assets. Together with the core teams a concise description was drawn up of the key elements from each of the business's strategies and their implications in terms of the significance of the various intangible assets.

Stage 4: Interwovenness between categories

71. Using the concise description of the strategy, a description was subsequently drawn up with the core teams of each of the businesses of the mutual interwovenness between the four categories of intangible production asset. The description of the strategy and the mutual interwovenness were used to provide for the basics in identifying the main indicators for the business.

Stage 5: Identification of indicators

72. This stage served the purpose of preparing a "long list" of relevant indicators gleaned from the following three sources:

a) The preceding stages 2, 3 and 4 served as the principal source of indicators for the benefit of the appendix.

b) A checklist of indicators derived from other businesses which are already reporting on intangible assets and from literature on the subject. This checklist prompted the addition of supplementary indicators to those having been identified sub a. above.

c) Interviews held with several investment analysts and one banker.

Stage 6: Definition of indicators

73. At this stage the various indicators for each of the categories of intangible production asset used by PwC were classified into type of indicator.

74. Together with the core teams a selection was made from the out of total amount of indicators on the basis of their significance, mutual interwovenness and quantifiability. The indicators were also defined in more detail.

Stage 7: Compilation of information

75. On the basis of the selected indicators the various departments of the businesses generated information for completing the trial intangible assets appendix. An explanation of the indicators as per the trials was then drafted on the basis of the available information.

76. By developing the reporting framework in parallel with the three businesses, it was standardised as much as possible on the basis of insights having been gained at the businesses.

Stage 8: Discussion of end result

77. At the end of the project the way in which the process had progressed and the trial which it had yielded were discussed with executive management of the three businesses. Attention was devoted during these final talks to the pros and cons of the reporting process for the business in question and to the possibilities identified by executive management for applying it.

3. Major Learning Experiences in the Course of the Project

78. This chapter reflects the learning experiences of the three businesses on the basis of such stages as have been identified in Chapter 2.

3.1 Reconciliation of Approach

79. The participating businesses agreed with the PwC approach of not including the difference between the business's market and book value in the balance sheet, the rationale being as follows:

i) Efficiency of information - The businesses took the view that the Stock Exchange lacks information efficiency, so that inadequate justice is done to the business's economic value: *"I doubt whether the share prices adequately reflect the value of our intangible assets."* These doubts could partly have been inspired by the significant price fall which took place around the time the meeting took place and which caused part of the market capitalisation to evaporate.

ii) Fluctuations - The businesses have the impression that the share price is subject to excessive fluctuation due to particular sentiments or "the mood of the day": *"How about when share prices soar or plummet in response to some statement by Clinton? Does that mean that our intangible assets have fundamentally changed in some way or other?"*

iii) Subjectiveness - According to the businesses, a host of subjective views of future expectations and discount rates are crunched into a single number when valuing the difference between the business's market and book values. Such figures do not allow for comparison between businesses and thus hardly contribute to facilitating the formation of an opinion of the business's value. *"A company's value is meaningless until it is compared to that of similar companies."*

iv) Tax consequences - One of the businesses voiced concerns about the tax consequences of capitalising on the balance sheet; the capitalisation of assets made it impossible to charge the full complement of development costs to the profit and loss account within a single financial year: *"To what extent would one then be under an obligation to capitalise assets for tax purposes It would be a major problem for us if we had to, as we would then have bring forward our payments to the tax authorities due to the fact that we could no longer charge such costs to our taxable profit all at once."*

80. The following initial reactions cropped up during the discussion of the PwC approach, in which context an insight into intangible assets is provided to users of information, among other things on the basis of indicator reporting:

– *"How can you be expected to communicate information on intangible assets in a quantitative sense when such intangibles do not lend themselves for proper translation into figures?*

– *"So, we simply prepare a brilliant sales pitch on R&D expenditure, internal training, the level of our staff and the contracts with businesses?"*

81. The businesses acknowledged at the end of the process tat the reporting on intangible assets should not be seen as a *"no-strings-attached sales pitch"* but that it rather represented an important

internal control instrument to be applied with the utmost care if it were decided to use it for external purposes. This will be discussed in more detail in Chapter 4.

3.2 Analysis of Market Value and Book Value

The importance of intangible assets in terms of value

82. The potentially major impact of intangible assets was confirmed when the market value of the unlisted company Gamma was calculated on the basis of a DCF analysis. Gamma's managing director cum controlling shareholder explained the outcome of the valuation as follows: *"This value ensues from our efforts over the past years in product innovation, the rationalisation of our range and business processes and the creation of promising new markets."*

The interwovenness of intangible assets determines their value

83. The analysis of the difference between market and book value revealed that the interwovenness of a business's intangible assets makes it impossible to see them as separate elements: "*What sets our business apart is the clever way in which we combine our sales organisation with our product innovations. This is always providing us with a leading edge. The one if worth nothing without the other! You could perhaps value them separately by allocating the cash flows to the various intangible assets, but that would be a meaningless exercise."*

3.3 Strategy

The importance of intangible assets in relation to strategy

84. One thing that kept cropping up throughout the brainstorming sessions on the strategy of the businesses in relation to their intangible assets was that the way in which the business deals with its intangible assets determines whether it will succeed in attaining its prescribed strategic goals: "*Thanks to our major investments in training people in Innovation Area A and the fact that we have clients on our books for which Innovation Area A is of great importance, it will be easier for us in the longer term to achieve our goals regarding added value as reflected in our strategy."*

Stating the intangible assets strategy

85. It was revealed during the drafting of the concise description of the strategy's core elements that many of the important strategy elements pertaining to intangible assets are included in the Report of the Board of Management and other documents. The businesses did admit, however, that the system applied left considerable room for improvement: *"Much of the information concerning Innovation Capital is included in the internal environmental report."* Many of the elements referred to in the Report of the Board of Management were furthermore shown to be only qualitative rather than quantitative in nature.

Multi-disciplinary approach

86. The thinking in terms of separate intangible assets contributing to the realisation of the business's strategy struck a chord with all disciplines involved in the survey. This enabled substantively valuable discussions to take place, with the various disciplines supplementing one another.

3.4 Interwovenness between Categories

Discovering the interwovenness between intangible assets categories

87. The importance of recognising the interwovenness between intangible assets was emphasised in the course of the brainstorming sessions on these intangibles, with the businesses setting great store by this mutual interwovenness in determining the value of the intangible assets. As a member of the core team of one of the businesses put it: *"There was a time when we focused exclusively on the sales side while trailing in terms of innovation. This made us a horse with strong forelegs but dodgy hindquarters, and they're no racers."*

Human Capital as the pivotal intangible production asset

88. Each of the businesses indicated that it saw Human Capital as the pivotal element in its intangible assets: it was Human Capital which was key to the success in Customer Capital, Process Capital and Innovation Capital. The businesses also considered it important to include a reference to the actual deployment of Human Capital for the last three categories: *"Everything in our organisation revolves around Human Capital."*

The necessity of accurately defining the categories

89. The necessity of accurately defining intangible production asset categories was revealed in the course of the discussion on these intangibles, with confusion arising from time to time as to the heading under which specific intangible assets should be placed. With respect to product innovation the question was asked whether this should be included in Process Capital or Innovation Capital. This discussion resulted in a more accurate definition into "the improvement of internal processes aimed at effectiveness and efficiency" on the one hand and "the formulation and delivery of new products or services" on the other.

3.5 Identification of Indicators

Generation of indicators

90. It was revealed during the "Generation of Indicators" stage that both PwC and the businesses initially had difficulty finding indicators to pinpoint their major intangible assets: *"How can be do justice to our excellent R&D department?"* It nevertheless proved possible in a brainstorming session to arrive at indicators which according to the businesses did justice to the power of their intangible assets: *"The fact that our R&D capacities enable us to provide a newly launched product with a further functionality with an average frequency of three months makes us unique throughout the market."*

Information requirements of some users of information

91. In the course of the interviews with three investment analysts and one banker referred to in Chapter 2 certain pronounced differences in emphasis came to the fore in reporting on intangible assets. these have been worked out in more detail in Chapter 4.

3.6 Definition of Indicators

Representation of long-term developments in intangible assets

92. The discussions held at the preceding stages yielded a large number of indicators which on closer scrutiny turned out to be fairly operational or short-term in nature. In view of the object of reporting aimed at providing a longer-term insight it was decided where possible to avoid the inclusion of exclusively short-term indicators in the reporting framework. This explains, for example, why financial indicators which can simply be gleaned from the financial statements have essentially not been included in the reporting framework.

93. Nevertheless financial indicators to be gleaned from the financial statements (albeit only indirectly) can be very helpful in interpreting developments in intangible assets (e.g. the objective *"added value per direct member of staff"*). After it had been discussed whether such indicators should be included under the separate heading of Financial indicators, it was eventually agreed with the businesses that they would only be included in so far as they were directly correlated to the intangible production asset in question.

Relatively few indicators suffice in measuring intangible assets

94. During the process of selecting indicators from the "long list" for the benefit of the appendix, relatively few indicators turned out to suffice for painting an adequate picture. One of the reasons was the substantial overlap between some indicators (i.e. to some extent they measure the same thing). For example, in the context of Human Capital one of the businesses selected "number of staff split between different job levels" as having the most relevance for the business from the following, partly overlapping indicators: "number of service years", "number of years work-related experience", "staff split into age brackets" and "number of staff split between different job levels".

95. Continuous efforts were made in selecting the indicators to keep focusing on the reporting objective (providing an insight into future cash flow potential and risk profile). Against this criterion some indicators turned out to be too operational or detailed to allow their inclusion in the appendix, while other indicators turned out already to be accounted for, or to be gleanable from the financial statements.

The necessity of accurate definition of indicators

96. It furthermore transpired at this stage that the relevance of the indicator depends to a degree on the accuracy of its definition, in addition to which it was established that the reliable measurement of an indicator is conditional on the definition of that indicator having been arrived at with sufficient accuracy. For example, one of the businesses stated that it considered it important to measure the availability of staff for external projects on the basis of the number of times they had to turn down assignments. It was revealed in the course of the discussion that rather than the absolute number of rejections, this indicator actually related to the number of times they had had to turn down a job which they would have liked to

accept because it concerned an important client or a projects which could have served as a learning experience. The discussion then shifted to the way in which the indicator could reliably be measures using internal procedures and specific criteria.

Advantages compared with the Balanced Scorecard

97. It was at this stage that the added value of the reporting framework in terms of the business's internal information supply was confirmed: compared with the Balanced Scorecard method, with which the businesses were familiar, the PwC approach not only places more emphasis on Human Capital but also the 'stock' and 'flows' as referred to in Chapter 1.

98. The businesses were interested to see that whereas the Balanced Scorecard confined itself to balancing strategy-related output variables, the approach adopted here generated what they saw as a more comprehensive picture: *"This reveals the link between input and ultimate output."*

3.7 Compilation of Information

Availability of information in completing the indicators

99. In the case of the participating businesses some 60 to 80 percent of the information required to complete the trial intangible production asset appendix is available. However, a major portion can only be determined by analysing a range of sources because *"(...) our systems are not geared to this. However, we should be able to deal with that in a couple of years' time."*

100. An example is the number of people having received training in a specific Innovation Area. This is something which can only be established by deciding on the basis of a list of past training courses which of them come under what Innovation Area and determining on the basis of a specific criterion when the staff are deemed to have received sufficient training.

101. In the case of Alpha, the trial was drafted for one of its divisions while in that of Gamma it was prepared for the whole business. A two-year period was covered in both cases. In so far as no accurate information was available, PwC used estimates in consultation with the business in question.

The need for reliable information in completing the indicators

102. While compiling information it transpired that it would be an even greater challenge for the businesses to meet the need for information on the indicators in a reliable way, with several new procedures to be developed in order to achieve this.

103. Moreover some of the information which as yet is not available could only be reliably and independently compiled by or in collaboration with an independent consultancy, such as data pertaining to customer satisfaction, staff satisfaction, market share and the quality of internal processes.

Aggregation of indicators

104. Alpha and Beta have learned a great deal with respect to the aggregation issue in reporting on indicators. It has been shown to be impossible for a business whose operations or products vary in nature to

present a transparent picture at consolidated level. This means that segmentation into divisions or product groups will be needed if a transparent insight is to be obtained.

105. At one of the businesses, for example, indicators dealing with Human Capital (age brackets, number of service years, staff turnover) were shown to be easily consolidatable without causing any significant loss of relevant information while the Innovation Capital indicators barely contained any relevant information at all by the time they had reached consolidation level due among other things to the great differences in optimum time-to-market between divisions.

3.8 Discussion of End Result

106. During the final evaluation with the members of the businesses' executive management they confirmed that they had experienced the preparation of the reporting as a highly useful exercise. The businesses' vision of the relevance of reporting on intangible assets is discussed in more detail in Chapter 4 hereinafter.

4. The Relevance of Reporting

107. This chapter addresses the relevance of reporting on intangible assets from the vantage point of the information providers. It contains several observations made by some of these. Finally, it discusses the internal usefulness of reporting on intangible assets.

4.1 Reporting from the Perspective of the Provider of Information

4.1.1 The Pros and Cons According to the Businesses

108. Together with the executives of the businesses which participated in the survey, PwC performed an assessment of the pros and cons of reporting on intangible assets.

109. The benefits and drawbacks referred to in section 1.1 of Chapter 1 hereinbefore are outlined in the paragraphs below from the perspective of the businesses and that of the information providers. Only the benefits and drawbacks having the most relevance for the businesses and such pros and cons as they themselves mentioned are discussed.

Increased transparency lowers the cost of capital, thus pushing up the share price

110. We mentioned in Chapter 3 that the businesses had their doubts as to the information efficiency of the financial markets. This made them fairly sceptical of their potential impact on the efficiency of the market: *"The analysts don't appreciate our business-specific information anyhow, so what good could it do us?"*

111. Nevertheless the businesses were aware that they could possibly influence the share price development by providing a more transparent insight into their intangible assets, albeit in terms of a better substantiated rather than a higher share price: *"If the financial markets had more knowledge of our intangible assets, this could result in a better substantiated share price."*

Increased transparency helps inspire confidence among staff and other important stakeholders

112. Inspiring confidence among staff and other important stakeholders is at least as important (if not more so) as increased transparency *vis-à-vis* the shareholders, as the following quote implies: *"After all, it's not our shareholders who are our primary concern. Our staff come first followed by our customers and our business partners, in that order, with the shareholders bringing up the rear."* The two listed companies which participated in the survey ranked their stakeholders a notch above their shareholders.

Increased transparency leaves room for information manipulation so that only "positive" information is reported

113. One of the well-known drawbacks of reporting on intangible assets is that businesses could leave out or redefine certain ratios at their own discretion in order to present a more favourable picture of their business.

114. The three businesses which participated in the survey acknowledged this. Overhead charges were quoted as an example, in that the management is free to allocate part of these to sales charges, thus enabling them to be seen as an investment.

115. The only way to curtail such opportunity for management opportunism is by developing new legislation and regulations and enlisting independent consultancies as a safeguard of the reliability of the indicators. These consultancies will also have to study indicators such as market share, customer satisfaction and process quality if they are to safeguard the reliability of such data.

116. The aggregation of indicators could also lead to reliability problems. This is dealt with in more detail in section 4.1.2 hereinafter.

Increased transparency places competition-sensitive information in the public domain

117. The businesses felt highly uncomfortable about competition-sensitive information ending up in the public domain. What was noteworthy about the discussions on this topic yielded highly diverse views, from *"That would mean revealing the tricks of the trade"* to *"What the heck, our competitors knows all about it anyway"*.

118. All in all the discussions revealed that the businesses could significantly enhance transparency without going so far as to actually disclose competition-sensitive information. In the words of one of the core team members: *"It may do no good, but it can't harm either."*

The new regulations and bureaucracy that increased transparency brings with it would push up operating charges

119. The host of new regulations surrounding intangible assets reporting would translate into a major investment in time and money for the businesses on implementation of this new system, including the extensive process of compilation of information in support of new procedures and systems and the possible enlisting of external.

120. The emergence of new information systems such as Enterprise Resource Planning (ERP) and data mining software packages could in future help lower the additional costs of implementing this type of new reporting.

Increased transparency would enable greater control of analyses made by investment analysts

121. A further advantage which first surfaced during the survey was that the dissemination of information on intangible assets would enable the businesses to exercise greater control on what investment analysts write about them. However, it transpired in the course of the discussions that the businesses were not yet thinking of replacing their current more passive role in the dissemination of information by more proactive participation. We would point out that the actions of immediate competitors were seen as a criterion in this context: *"If our immediate competitors started practising greater openness, we would have no choice but to follow suit."*

Increased transparency impinges on management flexibility

122. An additional drawback which was discussed with the businesses' executives was that greater transparency would commit the business to continually having to render account of how it was handling its intangible assets, which in turn could impinge on the flexibility of the management - a prominent reason for not being overly forward with information. According to the two listed companies, *"Our investors should simply leave the management of the company to us. There's no reason to bother them with all the ins and outs."*

123. The fact that more extensive information provision would result in greater benchmarking possibilities compared with the competition also cramped the management's style in making decisions: *"We are already pelted with questions, and that will only get worse if we proceed with this kind of reporting."* Nevertheless the businesses were keen collectors of information on their competitors to be used as internal performance-boosting incentives.

Increased transparency will arouse false expectations

124. A further newly discovered drawback of reporting on intangible assets which was discussed with the executives was that it could arouse false expectations. For example, information could be communicated on new development projects within the business. This was something which the listed companies saw as a drawback in that it could arouse false expectations among shareholders: *"Having succeeded in manufacturing a new product in compliance with the latest environmental standards does not necessarily mean that compliance will have been achieved for all other products within the next year."* A further important comment in this context was: *"We wouldn't mind talking about it given the current favourable economic climate, but if that suddenly changed for the worse we'd much prefer to keep a lid on things."*

125. The listed companies were not yet convinced of the benefits of greater openness in their communication with the financial markets: the systematic reporting on their intangible assets would cause positive as well as negative information on their business to be communicated. The current cultural climate prescribed that negative information should be avoided while the presentation of a balanced picture of the business was deemed to be a potential confidence booster. In the words of one of the investment analysts: *"We tend to take the success stories presented in the Report of the Board of Management as read. What we're interested in is what's really happening at the business."* The fact that listed companies which practise greater openness in their communication with the capital market are rated more highly by investment analysts is discussed in more detail in section 4.2 hereinafter.

4.1.2 Observations in the Context of the PwC Approach

126. Together with the businesses, PwC performed an assessment of the reporting framework as this was developed in the course of the project, the main elements are discussed below.

Recognisability of the business in the trial

127. Each of the businesses' multi-disciplinary core teams stated that they clearly recognised themselves in the (non-anonymous) trial intangible production asset appendices: *"Although it covers ten pages, it still manages in a fairly concise way to present a comprehensive picture of what we are doing."*

Presentation of mutual interwovenness

128. The businesses were particularly pleased with the insight provided by the reporting framework into the various categories of intangible production asset as well as the interwovenness between the various indicators: "*It's quite something to be able to trace the interwovenness between the development of Human Capital and Customer Capital as well as discover the link between your input and your output in a single report."*

Report of the Board of Management to become more factual

129. The executives indicated that the reporting framework could be used to achieve greater cohesion between the financial statements and the Report of the Board of Management, having spotted room for 'quantifying' the Report of the Board of Management using the framework by operating more systematically as well as making greater use of quantitative non-financial information.

To what extent to report at aggregate level

130. In the context of the reporting framework the process of aggregating information from essentially different divisions yields data which is either highly general or lacks genuine information, as the indicators applies could have greater or lesser relevance from one division to another. Moreover the interpretation of an indicator could depend to a large extent on the division in question. As the business is made up of a greater number of essentially different divisions, the transparency of consolidated reporting plummets.

131. This could prompt questions to be raised regarding the use of aggregation or consolidation of information. The financial community is increasingly advocating drastic segmentation in external reporting by businesses. In the oft-quoted words of Steven Wallman, a former commissioner of the Securities and Exchange Commission: "*We take disaggregated data and have accountants aggregate it, only to have investors disaggregate it again."*

Benchmarking using the reporting framework

132. As long as the indicators to be wielded in a specific industry are not prescribed in the form of fixed definitions, there will be limited scope for benchmarking indicators between similar businesses. The user of information could, however, make comparisons between the indicators across the years and vet them against one another.

4.1.3 Intentions for External Information Provision

Intentions of the listed companies, Alpha and Beta

133. Apart from performing an assessment of the Report of the Board of Management, the two listed companies, Alpha and Beta, have no intentions for the time being to proceed with the publication of an intangible production asset appendix on the basis of the reporting framework created in the course of the Pilot Project. They have, however, spotted opportunities to use the reporting framework in rendering the Report of the Board of Management more factual.

134. Apart from the fact that a significant portion of the information needed for intangible production asset reporting is not available, the executives of the two listed companies saw the competition-sensitive nature of the information to be disseminated and the fact that management flexibility would be affected as important reasons why they should for the time being refrain from communicating such information at their own initiative. A further consideration was that the businesses preferred to spend a couple of years gaining experience with intangible production asset reporting so as to be fully conversant with the ins and out as and when they would be ready to embark on external reporting.

135. Experiences gained in the course of the project have enabled an estimate to be made of the amount of time needed to implement reporting. Depending on the size and complexity of the business in question, a core team of five to ten persons will need two to three months to prepare the reporting framework in such manner as to render it sufficiently measurable as well as endorsed throughout the organisation.

136. Depending on the information requirement revealed from the reporting framework and such systems as are available within the business, it would take a maximum of six to nine months for an implementation team to complete such systems as would enable the information to be reliably measures as well as perform an assessment of and where necessary modify the reporting framework on the basis of such implementation.

Intentions of the unlisted company, Gamma

137. Gamma specifically mentioned the expected (high) costs in comparison with the expected additional proceeds of such reporting as a drawback. The business's executive management did not expect such reporting to reduce the cost of capital for the business: *"In the final analysis, the bank will want to talk face to face to the entrepreneur and examine things for itself."*

4.2 Observations of Users of Information

138. The interviews with the investment analysts and the banker have yielded several interesting observations on intangible production asset reporting, as follows.

The improvement of current reporting rules has top priority

139. When it comes to the provision of a transparent insight, investment analysts set great store by the harmonisation and tightening up of reporting rules in the Netherlands, it being their view that there is too much opportunism in the way Dutch businesses apply the rules: *"You can get away with murder in Dutch accounting."* They are particularly critical of the following aspects:

- the recognition of goodwill in the financial statements (write-down from shareholders' equity vs. capitalisation);

- the ease with which provisions are made and released;

- the classification of extraordinary income and expenditure;

- the restatement of income and expenditure in the profit and loss account (*"Some companies restate every year"*).

140. This opportunism in applying the reporting rules is primarily inspired by the urge to present a stable development of earnings per share (development of an attractive financial track record) in order to charm investors. This brings with it that negative as well as excessively positive developments are where possible left out of the equation.

"Proper management" is a further factor of significance for investment analysts

141. Investment analysts name the management as a prominent criterion in assessing a business. One of the comments which the interviews on intangible assets yielded: *"It is the management which determines how a business's intangible assets are dealt with."*

142. When prompted, the investment analysts confirmed that they often equated "proper management" with the track record of the business in question, its strategy and the way it manages its intangible assets.

Openness affects the valuation by investment analysts

143. A business which is reliably open on developments often inspires extra confidence. Investment analysts admit that *"I tend to confer a higher rating on businesses that provide me with greater insight into what's actually going on"*.

144. When analysts are provided with a greater insight in what is actually happening within the business, they tend to interpret this as a sign of strength compared with immediate competitors as well as proof of the management's commitment to attain the pre-set targets.

Intangible production asset reporting provides the users with a host of relevant information

145. The investment analysts and the banker who were interviewed conduct their own investigations to obtain such information on immaterial assets as has the most relevance for them. The cash flow potential and risk profile estimates are the determining factors in this context. In order to achieve at an estimate, they have a continuous need for (even) more information on things such as sales spread, dependency relationships, increase in staff numbers and staff turnover, marketing and sales expenditure, operating strong brands, market position, customer loyalty, efficiency and product innovations.

146. With respect to the capitalisation of intangible assets on the balance sheet, the investment analysts volunteered that they considered the accounting solvency of the business in question to be of minor importance: *"We only care about a business's solvency based on market valued. Only credit providers and creditors could take an interest in the accounting solvency."* The interview with the banker revealed that a business's solvency is just one of the six criteria on the basis of which a credit application is vetted.

4.3 Internal Use

Internal use for the listed companies, Alpha and Beta

147. Both Alpha and Beta expressed great enthusiasm about implementing the use of the intangible assets appendix based on the reporting framework created in the course of the Pilot Project for internal purposes. They saw the reporting framework as an important internal control instrument as it would provide them with a greater insight into their intangible assets *vis-à-vis* their strategy. The management would be in a better position to make the right decisions by having an insight into the pool of knowledge within the organisation and thus, making better use of it.

148. Alpha and Beta stated that they would prefer to gain more experience internally in the measurement and reporting of such indicators as had been identified, with one of them qualifying the PwC approach as a serious addition to the possible implementation of a Balanced Scorecard in this context.

Internal use for the unlisted company, Gamma

149. As for the relatively small, unlisted company Gamma, its managing director cum controlling shareholder was already fully conversant with the ins and out of his business, and although the present one-off reporting did provide him with an enhanced insight into the links between his business's intangible assets and its strategy, he stated that if performed annually, a reporting exercise of this kind would be too expensive to qualify the added value for internal purposes as sufficiently attractive.

5. Some Final Reflections

150. It is by providing for transparency in the development of intangible assets that a business can give the user of its external reporting a better insight into its cash flow potential and risk profile. We would judge reporting using a fixed reporting framework in which indicators of intangible assets are systematically presented to be the most appropriate method of doing this.

151. The two listed companies which participated in the survey have indicated that they consider the reporting framework which has been formed as most valuable, in that it offers scope for rendering their current reporting on intangible assets more systematic. Nevertheless they will for the time being shy away from assuming the role of pioneer in this process: apart from the fact that not much information is at hand which would be relevant in this context, they fear that greater transparency could “cramp their style” and end up jeopardising their competitive position. In order to be prepared for external future reporting on intangible assets, the listed companies intend first to gain experience in working with the reporting framework at internal level. They see the framework as a major internal control instrument in this.

152. In the case of the unlisted company, Gamma, the proprietor of the business succeeded in getting the bank to come up with substantial financial backing by demonstrating how much the business's intangible assets were worth. The reporting framework used in the context of the present survey could help other entrepreneurs in attracting funding.

153. Research into reporting on intangible assets is in full swing internationally. We feel that the following aspects should take centre stage: the objectiveness and consistency of information, the ability to compare indicators from one business to the next, and the reliability and verification of information.

154. It became evident to us as the project progressed that intangible assets represent a prominent element in the creation of (shareholder) value for the business. The creation of and reporting on

(shareholder) value is becoming increasingly important in today's society, and the users of information can therefore be expected to experience a growing need for information on the intangible assets of companies. The establishment of a tripartite consultative forum (on which the providers of information, the users of such information and independent consultancies to safeguard the reliability of such information should be represented) could be a suitable tool to devise new regulations in the area of reporting on intangible assets. In view of the great importance of being able to compare indicators across businesses the obvious next step would be the specific elaboration, within these new regulations, for the various business sectors, while attention should also be devoted to the segmentation of consolidated annual reports.

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APPENDIX B: THE ALPHA APPENDIX TRIAL

Concise Description of Strategy

155. Alpha, a service providing business, seeks to achieve continuity-based growth in sales and profitability through optimum deployment of its staff, continuously amassing market and product know-how in constituent areas which are of strategic relevance to its clients, either in a sector or product specific sense.

156. Alpha's sound reputation and the fact that it is a household name as one of the most successful service providers throughout the Netherlands adds to the company's attraction as a potential employer as well as making it sought after among potential take-over candidates.

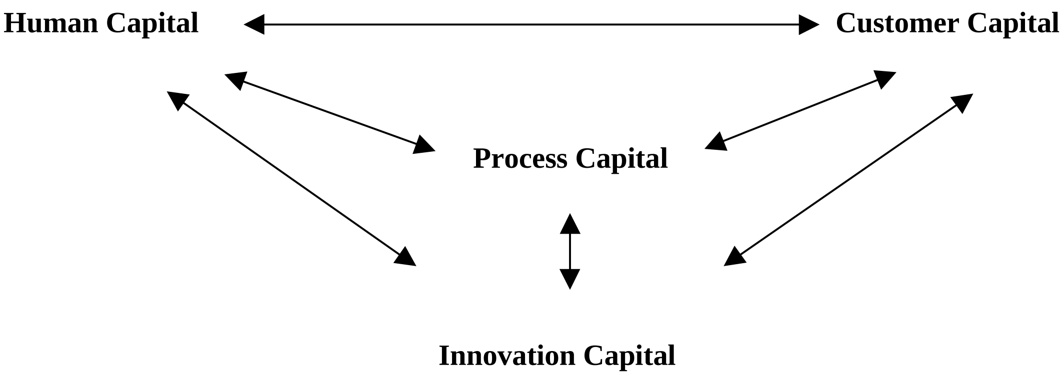
157. Alpha seeks to offer a comprehensive range of services in a broadly based market without losing its focus on the most attractive market segments.

158. Markets have a habit of changing rapidly, and so the organisation is geared to innovation, applying the latest methods and technologies so as to respond promptly to new trends.

159. The optimum deployment of its pool of expertise and experience within a working environment which its staff experience as stimulating provides the foundation for long-term associations with its clients.

Alpha seeks to create a challenging working climate for committed staff by keeping the lines of information and communication short and devote attention to the personal development of its people - a working climate which at the same time bolsters the flexibility and striking power of the organisation as such.[15]

Categories of Intangible Assets and Their Mutual Correlation



[15] The data used for completing the trial were taken from a business plan, corporate plan and financial report of one of the Alpha divisions.

160. Alpha sees its Human Capital and Customer Capital as factors which continuously reinforce one another. Having the disposal of the right kind of know-how translates into the ability to provide the client with added value. By preserving the knowledge edge the company lays the foundation for long-term associations with its clients. A high-quality client base is the best possible springboard for offering incumbent and new staff a challenging working environment and adequate remuneration, and this in turn is enabling Alpha to preserve its lead.

161. Innovation Capital performs as a catalyst in this process. It is formed by closely monitoring market trends and customer requirements and through a proactive training policy geared to adopting the methods and techniques in question or developing them on a proprietary basis. However, this process is predominantly implemented through regular business operations.

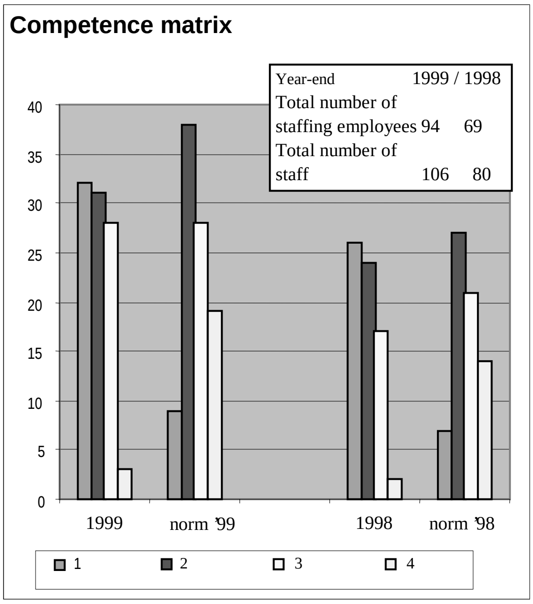
162. Process Capital has an important support role in this. Although its added value will often be invisible to the client, neglecting it would jeopardise the relationships with clients as well as result in underutilisation of the other intangible assets.

HUMAN CAPITAL:

What is there?

The competence matrix looks as follows:

163. Alpha distinguishes four job levels (numbered from one to four inclusive). Its targeted distribution across the four categories has been set at approximately 10 : 40 : 30 : 20.



164. As in previous years, 1999 was again a year of insufficient “twos” and “fours”. This was largely due to the short supply of staff in the labour market. Alpha is seeking to resolve the shortfall at the second level by recruiting “ones” in relatively greater numbers than the target prescribes. Internal training

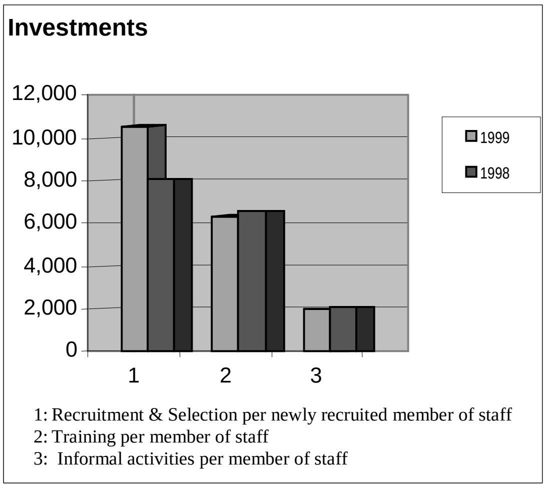
programmes and coaching are used to safeguard the quality of customer service, so that "ones" can move up to become "twos" within a matter of years.

165. A number of current "threes" are expected within the next few years to move up within the organisation to become "fours". It is likely that there will still be a demand for "twos" and "fours" in the year 2000.

166. Alpha operates a system of staff co-ordinators to make the best possible use of its resources as well as be alerted at an early stage to problems experienced by its clients or staff. Ideally there should be one staff co-ordinator for every 40 staff; in 1999 and 1998 the average number of employees per staff co-ordinator fluctuated between 47 (1999) and 33 (1998).

167. The average number of temporary employees put to work on behalf of Alpha as a percentage of the overall number of staff totalled 2% for 1999, i.e. less than Alpha's prescribed maximum of 5%. Alpha significantly improved its number of temps as a percentage of the overall workforce in 1999 compared with the 7% achieved for 1998.

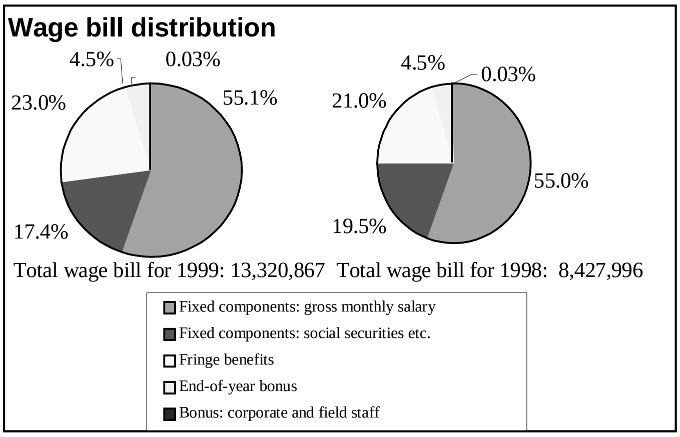
What has been invested?



168. Expenditure on recruitment and selection per newly recruited member of staff have been upped. In order to achieve its growth targets, Alpha intends to continue investing in recruitment and selection. In view of the expected shortages of more highly trained staff, the company will keep close tabs on expenditure relative to the return of the various recruitment instruments.

169. Social meetings are considered to be a crucial incentive in improving team building and getting members of staff to identify with the company. Expenditure per member of staff in this respect remained level in 1999.

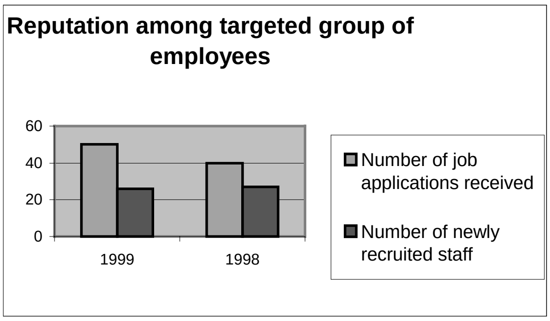
170. Although the number of training days per employee increased to 5.5 work days compared with 4.5 in 1998, training expenditure dos not show that much fluctuation.



171. Alpha has adopted a more flexible stance with respect to its wage bill distribution: the fixed component has declined by 2%. Cost flexibility has shown a slight decrease as a result of the reduction in the overall number of temps below the prescribed maximum of 5%.

172. As in 1998, the average salary increase for staffing employees and corporate and field staff turned out at 8% in 1999.

Which objectives have been achieved?



173. Effectiveness of expenditure to further the company's reputation among its targeted group of employees

Notwithstanding the shortage of more highly trained staff, a greater number of job applications were received in 1999 than in the previous year. Alpha has a feeling that it might well owe this to its increasing attraction as an employer for the labour market. Potential employees who are newly entering the labour market in particular are attracted to the secondary employment conditions which the company offers.

Effectiveness of staff deployment

	1999	**1998**
Productivity	72.3%	73.1%
Number of contracts turned down with regret	49	32

174. Alpha seeks to achieve top productivity in the deployment of its staff while minimising the number of contracts it has to turn down with regret. Productivity declines slightly in 1999 [due to the fact

that more time was earmarked for training and education, something which Alpha sees as an investment for the coming year. The decline was partly offset by the improved planning process (see the section entitled “Process Capital” hereinafter).

175. The strong increase in market demand translated into a strong demand for Alpha's services. In combination with the limited availability of staff, this caused the number of contracts turned down with regret to rise from 32 in 1998 to 49 in 1999.

Effectiveness of staff commitment

	1999	1998
Staff satisfaction	7.5	7
Staff turnover	5%	<5%

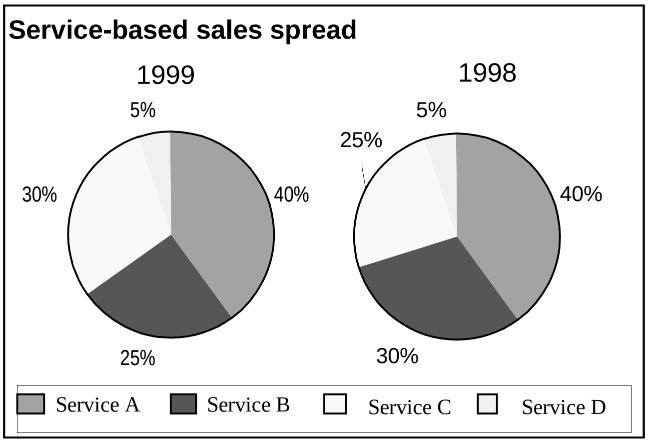
176. Alpha returns a high staff commitment score while its staff satisfaction score (which was vetted by an independent consultancy) has improved. The staff turnover rate, at 5%, is lower than the market average of 7%. Alpha is furthermore considering the launch of a general staff option scheme, to get its workforce to commit to the company for a longer period of time. Internal surveys have confirmed that such a scheme would meet with distinct acclaim among the company's workforce.

The added value per average number of staffing employees, corporate and field staff and temporary employees increased from NLG 75,00 in 1998 to NLG 85,000 in 1999.

CUSTOMER CAPITAL:

What is there?

177. Alpha's current service-based sales spread:



178. In comparison with the other services, the percentage for Service A went up from 25% for 1998 to 30% for 1999. Alpha strives for a targeted ratio between Service A on the one hand and Services B, C and D on the other of 50:50 in its drive to add value to its clients' operations.

179. Due to the shortage of “threes”, the management of the company will have to devote even more attention to upping this percentage.

180. The share of overall sales accounted for by key clients decreased from 79% in 1998 to 69% in 1999 whereas the number of key accounts remained level, at 12. This decrease was caused by the relatively large number of newly recruited clients which do not yet bring in major sales. Alpha intends to restore the sales share accounted for by its key accounts to 80% within the next two years as this ratio benefits overall profitability. Some 20% of available hours are earmarked for market players which, although they do not (yet) qualify as key accounts, are potentially promising. The majority of Alpha's accounts are Dutch-based.

What has been invested?

181. The deployment of customer co-ordinators is aimed at providing the clients with the best possible assistance in the process of satisfying their requirements. Alpha operates a target of six clients per customer co-ordinator. The actual number fluctuated from 5 in 1998 to 7 in 1999. Sales per customer co-ordinator has increased substantially, from NLG 7.1m in 1998 to NLG 11.1m in 1999; this was the result of the targeted key account policy.

Expenditure in support of marketing and promotion

	1999	1998
Marketing expenditures as a % of sales	2.1%	2.4%

182. Alpha would note with respect to its marketing expenditure that this also has a beneficial effect on its recruitment and selection efforts.

Efforts in support of sales

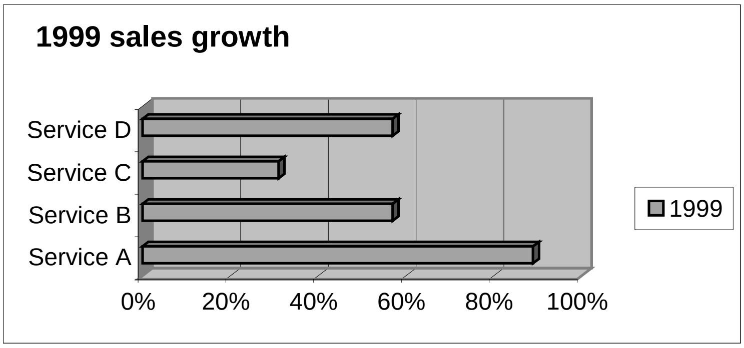
	1999	1998
Number of quotes issued	210	140
Number of contracts won	90%	90%

183. The number of quotes issues increased in line with the sales growth while the percentage of contracts won remained gratifyingly stable, at 90%.

Which objectives have been achieved?

Unfortunately, Alpha does not yet have the disposal of reliable independent statistical data on its share of its niche markets to back up its observations.

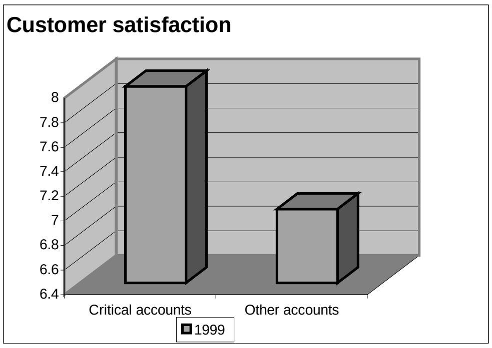
Effectiveness of marketing and sales expenditure



184. Sales growth was achieved in each of the various service segments in 1999. Despite its modest share of overall sales, the growth achieved by Service A outperformed that of the others, as it had in 1998.

185. We would point out that the growth in sales for Service A totalled 152% in 1998 compared with 79% for Service B and 102% for Services C and D each.

Customer satisfaction effectiveness



186. In 1999 a customer satisfaction survey was performed for the first time.

187. On a scale from 1 to 10, the key accounts returned a customer satisfaction score of 8 in 1999, compared with 7 for all other accounts. Both results tally with Alpha's minimum target, with the company seeking to achieve an 8 for its clientele overall.

188. No customer satisfaction data are available in respect of 1998.

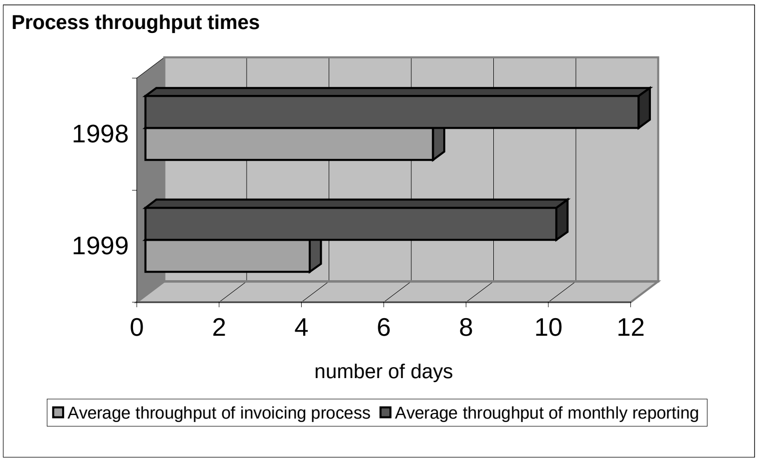
Effectiveness of name recognition and reputation

189. Alpha has plans to organise a survey next year in order to gain an insight into its name recognition and reputation. They company is keeping track of any publications in the media in this context. No suitable publications were published in 1999.

PROCESS CAPITAL:

What is there?

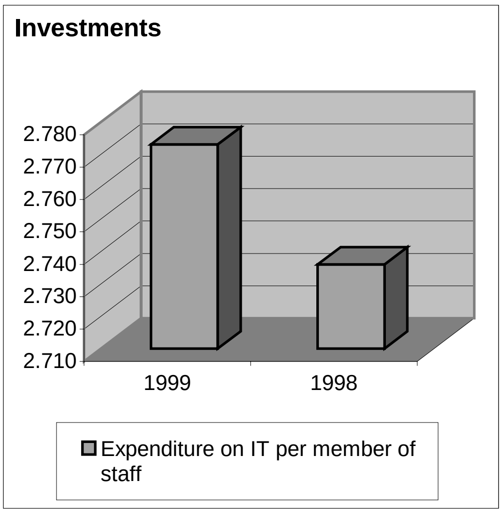
190. Alpha's current process throughput times:

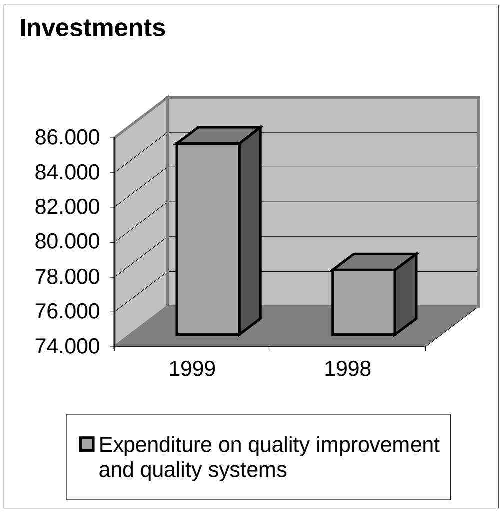


191. The average throughput time of the invoicing process has improved from 7 to 4 days and that of the monthly reporting from 12 to 10 days.

192. These improvements were achieved thanks to further standardisation and application of information technology.

What has been invested?





193. Expenditure on IT per member of staff went up while investments in hardware and software increased. Every member of staff now has a company laptop computer at his or her disposal. Alpha's investments on the enhancement of process quality and quality systems totalled approximately NLG 85,000 in 1999.

Which objectives have been achieved?

Effectiveness of expenditure on process improvement

194. The quality of the key processes is rated on a scale from 1 to 10.

195. Alpha's quality control desk provides for the assessment of the efficiency and quality of Alpha's key processes. These are rates on a scale from 1 to 10. The method applied and the measurements themselves are subjected to a spot check carried out by the reputable consultancy Quality Assurers Inc. The final verdict on the quality of Alpha's key processes is as follows:

	1999	1998
Bidding process	7,0	6,0
Het Salesproces	8,0	6,5
Process generating 'Pipeline' surveys on projects and planning	7,5	6,0
Overall Quality rating	7,6	6,4

Efficiency ratio for internal organisation

196. The ratio between corporate and field staff on the one hand and staffing employees on the other fell from 1:4 in 1998 to 1:6 in 1999. This has helped boost profitability to a significant degree.

INNOVATION CAPITAL:

What is there?

Current plans to be developed

197. In view of prevailing market trends, Alpha has designated a number of innovation areas in its targeted growth disciplines. Here Alpha seeks to develop new methods and techniques in order to ensure that it will continue to be able to serve the market.

198. The innovation areas are as follows:

1 innovation area A ……….. (elaboration) ………..
2. innovation area B …………(elaboration) ………..

199. Alpha will continue earmarking funds over the next few years for the development of services geared to these innovation areas, in the amount of NLG 500,000 for innovation areas A and B.

Number of staffing employees who are currently deployable in innovation areas:

	1999	1998
Innovation Area A	10	7
Innovation Area B	5	3

200. At the start of 1999 only a handful of staff had the capacities to be successfully deployed in projects in innovation areas. Thanks to targeted training programmes Alpha has succeeded in expanding their numbers to ten in the course of the year.

What has been invested?

Expenditure on the development of new products and services on the basis of the strategic policy:

Expenditure on the main innovation area (innovation area A) can be broken down as follows:

	1999	1998
Expenditures on internal development in support of innovation area A	50,000	60,000
Internal training in support of innovation area A	50,000	64,941
Other (external) expenditure in support of development with the parameters of the strategic policy	100,000	140,000
Total expenditure in support of innovation area A	200,000	264,941
As a % of sales =	1.5%	3.0%

201. Expenditure on development of innovation area A declined in 1999 compared with 1998, and is expected to decrease further in 2000. The company intends systematically to target expenses in support of innovation areas B and C; this will be reported on separately.

Which objectives have been achieved?

Effectiveness of expenditure on new methods on the basis of the strategic policy

	1999	**1998**
Sales achieved in innovation area A	NLG 8m.	NLG 4m.
Sales achieved in innovation area B	NLG 4m.	NLG 2m.

202. A combination of services are often implemented simultaneously at clients. Over 70% of hours devoted to the project were spent on a defined innovation area in the sales figures as per the above graph.

Contribution to Innovation Capital made by completed acquisitions

203. Alpha seeks to achieve accelerated growth through its targeted acquisition of businesses whose operations are in line with its own innovation areas.

204. Alpha took over Delta during the first half of 1998. Delta specialises in the development of products and services in Innovation Area A. Its operations complement Alpha's proprietary development in this area. Delta, whose total sales in Innovation Area A currently amount to approximately NLG 6m - made a direct contribution to Alpha's Innovation Capital in 1999.