

PART II – INTERVENTION

The Research Problem

*What **consensus process**⁴² can increase the environmental manager and TMG consensus level and quality over the environment chains?*

As introduced in **Section 1.6.1** the general approach followed in this study comprises three conceptual steps: *planning*, *action* and *fact finding*. In the *planning step* the researcher should justify the reasons for the relevance of the research problem and make a plan on how he is going to go about it. In the *action step* the researcher should implement what was planned. Finally, in the *fact finding step*, he should analyse the results of that step and propose conclusions. Then, the researcher should plan for an additional cycle if deemed relevant.

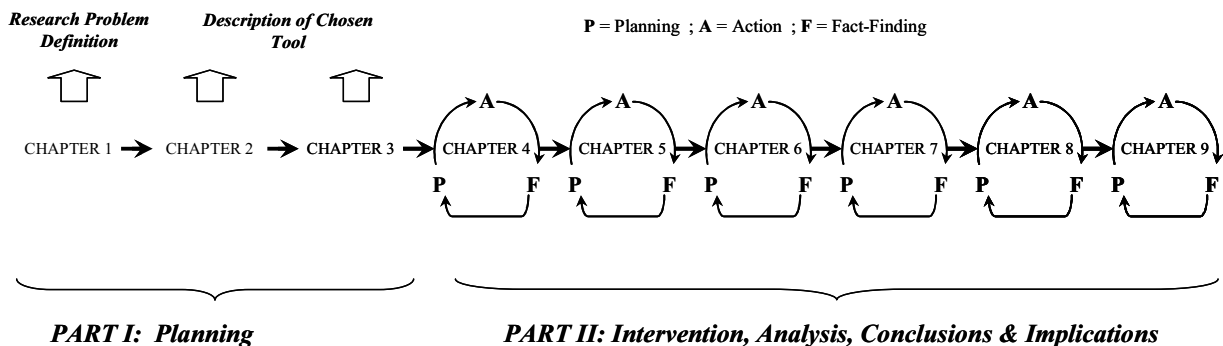


Figure II.1 Contents of Parts I and Part II of this study

As highlighted in **Figure II.1**, this study consists of nine chapters. The first three chapters, constituting Part I, focus on the *planning step*, comprising of the introduction of the research problem (Chapter 1) and the description of the specific tool used to explore this problem (Chapters 2-3). The following six chapters, which we are about to explore and which constitute Part II, include six subsequent action research cycles. In this sequence of research cycle the three steps of *planning*, *action* and *fact finding* are repeated chapter after chapter. Put more simply, each chapter describes what will be done and why (*planning*), then it is

⁴² The words in **bold** are the ones that are analyzed in this Part II of the study.

carried out (action) and finally the results are analysed and discussed drawing conclusions and implications (*fact-finding*).

While Part I essentially prepared the ground for the intervention, this part of the study is where the *action actually takes place* (i.e. consensus process). More specifically, as shown in **Figure II.2**, it describes what type of action managers were *forced* to carry out (*Consensus Process*) as well as the results of this action (*Consensus Level and Quality*). The information revealed in this intervention will be used as the basis of the *Consensus Process Prescriptions*, or the general rules to be followed by TMG and environmental managers to optimise their interactions.

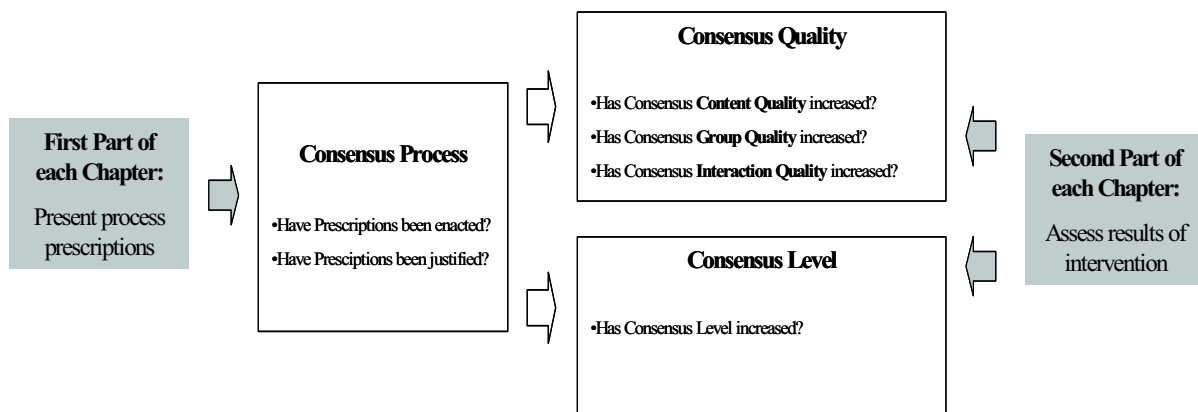


Figure II.2 What type of discussion is taking place in the next chapters?

The starting point for the *Consensus Process* is, in line with the rest of the study, the one proposed by Kaplan and Norton for the BSC. As shown in **Figure II.3** Kaplan and Norton (1996a, 291) divide what they call the ‘*strategy implementation processes*’ into four steps.

1. The first step is supposed to formalise what the TMG wants to do.
2. The second step entails communicating the TMG's intentions to the rest of the organisation and then aligning departmental as well as individual goals.
3. The third step is concerned with building (or re-focusing) projects in line with the communicated intentions, while establishing clear and quantitative targets.
4. The fourth and final step is where discussion, analysis and decisions take place.

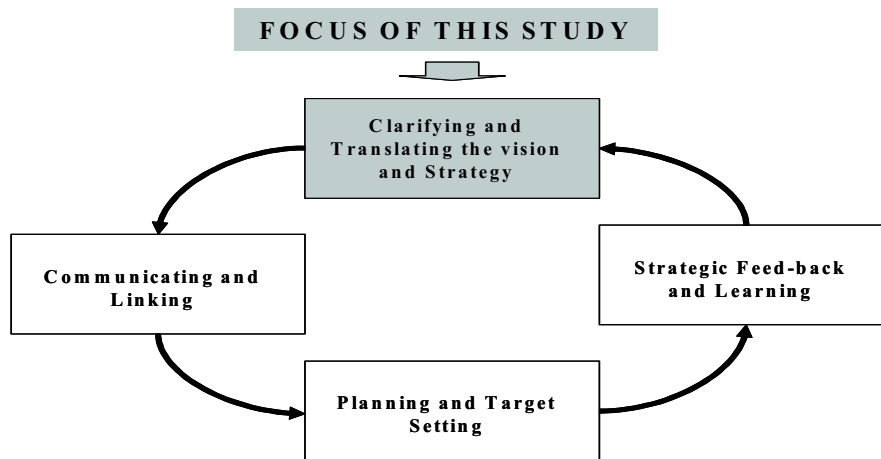


Figure II.3 The BSC process adapted from Kaplan and Norton (1996, p. 291) vs focus of this study

The intervention exercise focuses on the *first step* of the Kaplan and Norton process which, as shown in **Table II.1**, comprises ten *tasks*. After choosing an appropriate organisational unit (i.e. SBU⁴³) (Task 1) the architect, or facilitator, will conduct a few interviews with key corporate executives to learn about corporate-level issues that impact on the chosen organisational unit (Task 2). At this point the exercise in the chosen organisational unit can begin with the first round of interviews with the top management (Task 3). Following the interviews the members of the scorecard design team will discuss the results of the interviews and try to cluster them into a Strategy Map (Task 4). In a workshop executives will have the chance to discuss and validate this drafted view of their plan and brainstorm a first list of indicators (Task 5).

⁴³SBU = Strategic Business Unit. An SBU is a part of the organisation that is responsible for the production and delivery of a given product or product mix to specific customer segments.

N.	Task Kaplan and Norton	Task Activities Kaplan and Norton	PHASE This Study
1	Select the appropriate SBU	Select the appropriate SBU	Preparation
2	Identify SBU/Corporate linkages	Identify what are the corporate level demands on the SBU	
3	Conduct first round of interviews	Gather contents for strategy map building	Environmental Chains Drafting
4	Synthesis session	Draft the strategy map	
5	Executive workshop: first round	Approve the strategy map Brainstorm indicators	Environmental Chains Validation
6	Sub-group meetings	Refine objectives definitions and indicators	Indicator Definition
7	Executive workshop: second round	Validate sub-groups proposals Propose Targets	-
8	Develop the implementation plan	Validate Targets Indicator implementation plan	-
9	Executive workshop: third round	Validate all contents Build projects	-
10	Finalize the implementation plan	Integrate BSC in management process	-

Table II.1 Kaplan and Norton tasks vs steps of this study

At this point the original group splits into three or four sub-groups each of which will be responsible for refining the definitions of the objectives and indicators proposed in the previous plenary session (Task 6). When each sub-group is satisfied with the result (it may take more than one meeting) a second plenary session is organised to validate the sub-groups' proposals and start proposing targets (Task 7). Then, in a following session, targets are validated and an implementation plan for the indicators is developed (Task 8). When the executives meet for the third workshop they will have to reach a consensus on the entire contents of the BSC , as well as draw up an implementation plan, define projects and assign resources (Task 9). Finally, a clear agenda for discussion and revision of the BSC's contents should be defined in a way that it is totally integrated in the organisation's management systems (Task 10) (Kaplan and Norton, 1996a, pp 302-308).

In this study, as shown in **Table II.1** and **Figure II.4**, the intervention focuses on the first six tasks and re-clusters them into *four Phases as follows*:

Phase 1: Preparation

Phase 2: *Environmental Chains Drafting*

Phase 3: *Environmental Chains Validation*

Phase 4: *Indicator Building*

This re-clustering has no specific advantage, it is just a useful way of calling the various steps of the intervention. These phases are described and discussed in the following six chapters as shown below in **Figure II.4**.

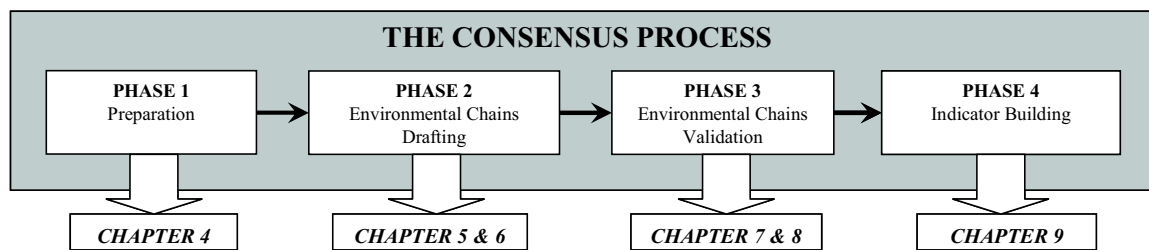


Figure II.4 *Phases and chapters of this study*

4 Preparation (PHASE 1)

The aim of this chapter, as shown in **Figure 4.1**, is to define the general process rules that will help the environmental manager in choosing the first pilot within his organisation. The chapter starts by describing how the research partners were found and how the business units were then selected. Based on the empirical evidence, the chapter then provides an overview of the general process rules. **Section 4.1** describes the process rules; comments on the companies found; describes the reasons that persuaded the companies to participate; and comments on the commonalities and differences between them. **Section 4.2** includes similar information for the business units. **Section 4.3** contains the conclusions, the contributions to literature and practice as well as the limitations and suggestions for future research.

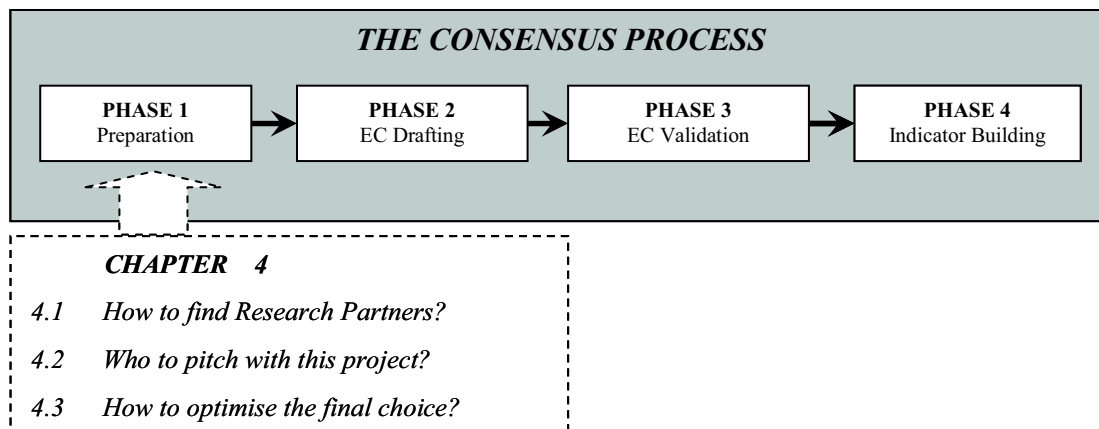


Figure 4.1 The sections in Chapter 4

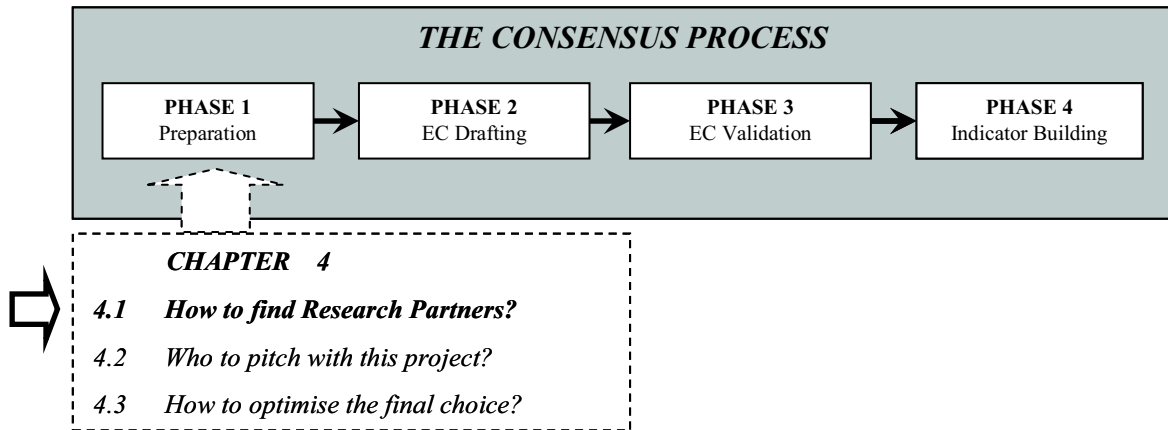
4.1 How to find research partners?

The fund-raising and search for partners started back in May 2001. The question at hand was: how many companies would participate in the research? How many would be prepared to:

- i. fund the research?
- ii. stay the course and get to the end of the process?
- iii. be different enough to generate a rich discussion through comparison?

iv. be similar enough to be comparable?

In order to avoid information overload and taking too much time carrying out interviews and analysing the data without leaving enough time for reading and reflection, it seemed that *four* case studies would be enough to provide the required results.



The choice to seek funding directly from the companies that would actively participate in the research had a strong methodological implication: it justified the very choice of those four companies as the most suitable candidates for investigating the research problem. In fact, only the companies that felt they needed to address the problem covered by this study would accept the time and resources that would be needed to participate in the 2 year-long research. Furthermore, the act of sponsoring the research seemed to give more certainty over the actual work that the managers in those firms were going to carry out.

Given the nature of the research problem the entry point to the potential research partners was the environmental manager (EM) at the corporate level. The *pitch* was straightforward: 'you (the EM) suggest to the TMG an exercise that will enhance the performance measurement system (of interest to them) while, at the same time, showing where environmental issues may contribute to reaching the desired results (of interest to you)'.

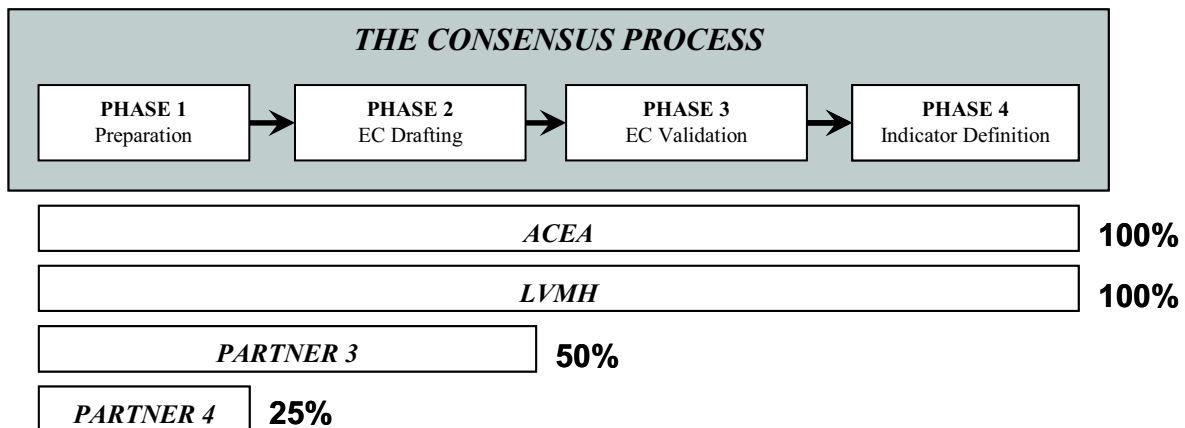


Figure 4.2 Portions of the process completed by the four research partners

The process from the first phone contacts to the signature of the last contract took six months in total. Out of about 50 prospective candidates and 30 initial telephone contacts *four companies* came to the kick-off meeting on 14 November 2001 to become our research partners: ACEA⁴⁴, ALPHA⁴⁵, Partner3⁴⁶, and Partner4⁴⁷.

As shown in **Figure 4.2**, ACEA and ALPHA carried out the maximum (and equal) amount of process steps while Partner 3 and Partner 4 stopped earlier in the process. The study therefore focuses on ACEA and ALPHA because the other two partners stopped the activities too early in the research to provide conclusive evidence for this study.

4.1.1 Environmental management in ACEA

In 1909 the company AEM (Azienda Elettrica Municipale) was created by the municipality of Rome (Italy) to provide the city with electricity and street lighting. The first wholly owned power plant dates back to 1912. In 1945 AEM changed its name to ACEA (Azienda Comunale Elettricit  e Acque) and added the management of the city's water resources to its

⁴⁴ACEA is a multi-utility company providing the city of Rome (Italy) with water, energy and street lighting services.

⁴⁵ALPHA is a large holding company with numerous brands acting in the luxury goods industry.

⁴⁶An energy production and distribution company.

⁴⁷An electronic equipment consumer goods company.

portfolio. In 1965 ACEA added water distribution to its responsibilities followed by water treatment in 1985. In 1999 ACEA took its place on the stock market becoming 49% public-owned. At the time this research project kicked-off the company had four main strategic business units each one with its own management team and director. These included: water management, electricity production, electricity distribution and street lighting. The company counted a total of 5000 employees and totalled over 700 million euros in turnover.

It was the Corporate Institutional Relations Director who decided to participate in this project. As shown in **Figure 4.3** his role entailed a very close relationship with ACEA's President. In ACEA the role of the President is to manage the relationship with the municipality while the CEO is more in charge of focusing on the operations as well as on customers. This position gave him a very high positioning within the company. The Corporate Institutional Relation Director knew personally all the key players in ACEA and could simply decide to call them at his will. This meant it was a lot easier to choose a business unit.

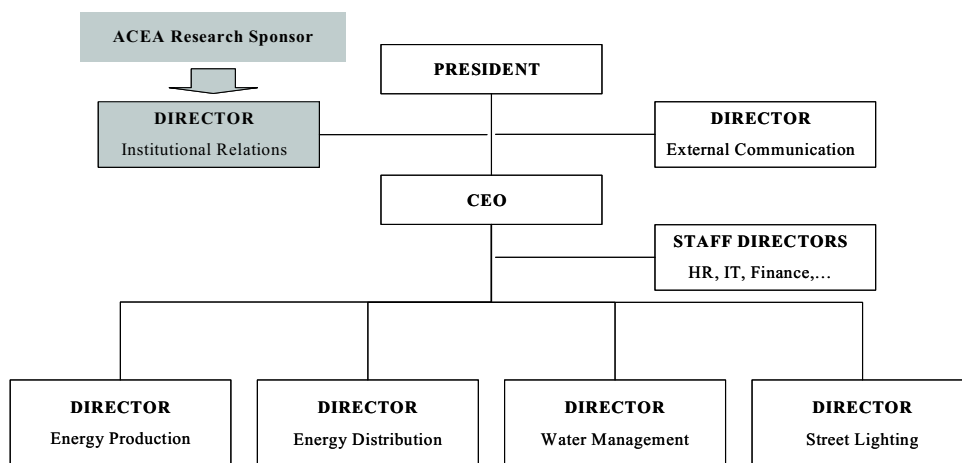


Figure 4.3 Research sponsor role in ACEA

The Corporate Institutional Relations Director is referred to in this study as the Corporate Environmental Manager (CEM) because of his responsibilities in ACEA. According to him, the attention on environmental issues in ACEA has traditionally gone hand in hand with improving the efficiency of the organisation. When he was hired ten years ago this attitude was already there. Managers were actively encouraged to search for and implement cost-saving and energy-efficient programmes (e.g. L to reduce water and electricity losses). Such programmes obviously had a positive impact on the environmental profile of the organisation.

This mind set was facilitated by the fact that ACEA was fully owned by the municipality which acted as a political, more than a managerial entity and, as a consequence, was more interested in increasing the quality of the service than in turning a profit. Also, according to him, between the municipality-owned companies in the various cities there was sort of a competition as to who would implement the latest technology, sort of: 'they have it, we must have it!' or, 'they don't have it yet, let's do it;' The CEM added that: *'It was perhaps for these reasons that in 2001, when all the Italian multi-utilities were required by legislation to pay for energy and water losses, we found out that we were doing much better than our competitors.'* (ACEA Corporate Environmental Manager, 15 March 2002, personal interview).

The year 1996 saw an acceleration of ACEA's environmental and social efforts because of the arrival of a new president. The new president had enjoyed a long career in the trades unions and was therefore extremely sensitive to the relationship between the organization and its stakeholders at large. He wanted ACEA to be proactive in the field of environmental and social management. Reporting was seen as the first step in this direction. In 1999 ACEA was listed on the stock market. This gave the company fresh impetus to publish its first Environmental and Social Report completed in 1998. The final motivating factor to publish the first environmental and social report in 1998 was given by the 1999 entrance of ACEA in the stock market (ACEA Corporate Environmental Manager, 15 March 2002, personal interview)

This report was key in that it gave two reasons for ACEA's continued environmental work. The first related to the risk factor and concerned the progressive tightening of environmental legislation especially at local level. For ACEA, which has production plants in the immediate vicinities of the city, there is a high risk that its operations could be disrupted especially when considering that the city is expanding. The second reason was that as a member of the corporate environmental management team ACEA had a vested interest in capitalising on all opportunities to cut costs. (ACEA Environmental Report, 1998). Three years down the line from the first environmental report the pace of environmental achievements in ACEA had somewhat slowed down. This is how the manager responsible for drafting the first report describes the situation:

'...While putting the environmental report together I had the strong feeling that in reality ACEA had not really been pursuing a specific environmental strategy. Our behaviour seemed to be totally random. The fact that we have a good system that manages environmental issues is due to the fact that some people with a high sensibility on these issues are working here...a lucky strike! The next step will be to transform these lucky strikes in projects, in courageous strategic choices; this is the objective of

the Environmental Management System...' (ACEA corporate environmental management team member, 14 January 2002, personal interview, English translation).

He is frustrated by the current situation and looks back wistfully to the time of the first Environmental Report in 1998 when ACEA was at the forefront of environmental management in Italy. The organisation was unable to keep its lead in the market as it failed to follow-up with additional organisational improvements. In 1999 the Environmental Management System had already been proposed. But three years on the project was still stuck, still waiting for the seal of approval from the corporation's TMG, and all the while other cities were moving ahead with the implementation of such systems. One year after its entrance on the stock market, ACEA began to lose its grip on the leading position giving way to similar companies in Italy.

While external communication seemed to work rather well generating media attention for its environmentally sound policies, internally ACEA was moving rather too slowly. However, it is not that surprising that the company generated so much positive attention when we consider that the environmental management team member had control of all external communications. He could draft the reports after internal audits requiring little or no involvement of the business unit's top management. However, getting internal backing from the TMG for *additional* environmental work that could have significant business advantages was an altogether different matter.

The CEM's interest in this research project was four fold:

1. fleshing out the business-unit specific advantages in doing environmental work; motivating business units to implement the (possibly) upcoming environmental management system work;
2. benchmarking with competitors;
3. improving the internal and external image of the company by its affiliation with INSEAD.

(ACEA Corporate Environmental Manager, 15 March 2002, personal interview).

4.1.2 Environmental management in ALPHA

ALPHA, with its numerous prestigious brands, a turnover of roughly 11.5 billion euros (in the year 2000), 1250 stores worldwide and 53,000 employees is one of the largest luxury goods companies in the world. In the year 2001 the ALPHA group acted mainly in several different industries such as wines & spirits, fashion & leather goods etc.

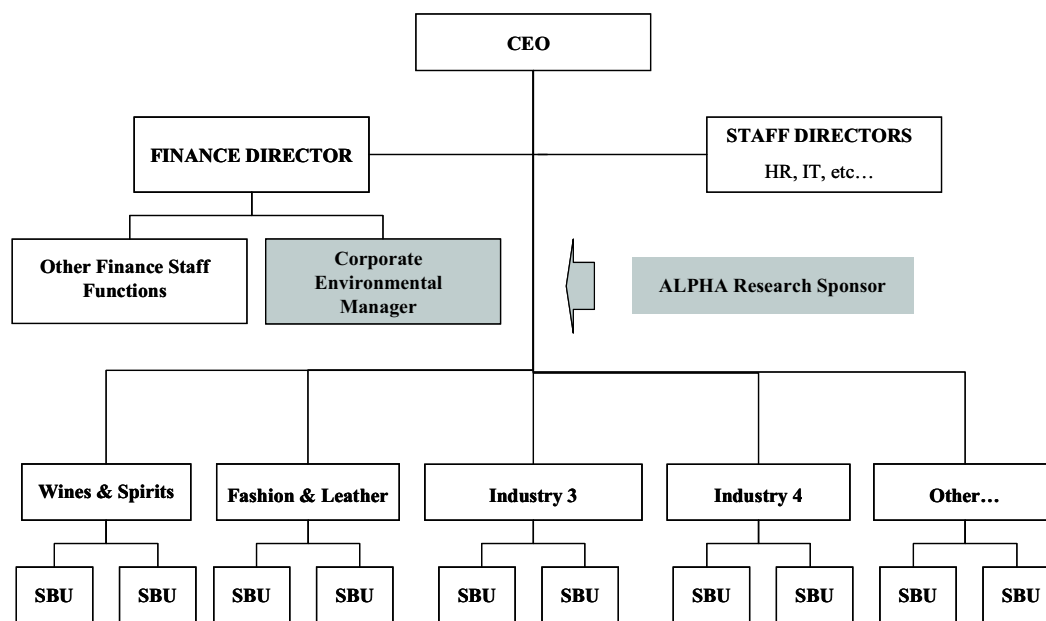


Figure 4.4 Corporate Environmental Manager in the organizational structure (2001)

In ALPHA the research sponsor was the Corporate Environmental Manager (CEM) (See **Figure 4.4**). She reports directly to the Chief Financial Officer, a member of ALPHA TMG. She had founded the corporate environmental department in ALPHA in 1992 by explicitly asking to be in charge of these activities within the group:

'...at the time nobody trusted me they thought I was crazy. They also didn't think we needed a full time person to deal with environmental issues. But I persisted and eventually persuaded the TMG to let me give it a go. Two years later they agreed it was the right move.' (ALPHA Corporate Environmental Manager, 25 June 2003, personal interview).

In other words, in the early stages ALPHA set up the environmental department as a result of the initiative of a single respected and motivated individual and not as a response to perceived pressures from the business environment. This is also the reason, according to her, that she

was left a rather large margin of flexibility concerning the initiatives she was able to undertake in the following years. Although she mentions *cost cutting* as a possible driver for environmental management, certainly the most important corporate driver for environmental management in ALPHA is the one related to *Brand Risk*.

'...our main products come from nature. Our clients want the best from our products and they have to be the best in environmental terms just like they are best in terms of quality. We don't want the consumer to start asking questions about the impact of our products on the environment, before we have already looked into it. In one product range, for instance, we had some questions on animal testing...brands are very easy to kill with an environmental issue...' (ALPHA Corporate Environmental Manager, 5 June 2002 personal interview).

In her view a luxury goods company, should incorporate environmental quality into all of its products as a precautionary approach. The fact that consumers do not ask for environmentally friendly products does not mean that it would be easy to explain why one of those very expensive products would be responsible for polluting the environment. She believes that failing to recognise such issues could have a negative impact on the company's image. As a luxury goods company ALPHA should lead the way and teach its brands to manage environmental issues proactively.

In 1996, four years into her mandate, she had developed a network of environmental managers, one for each subsidiary, which was formally recognised within ALPHA as the *environmental committee*. Together they worked on a draft environmental policy that would go hand in hand with the company's guiding principles, which included encouraging creativity and innovation; striving for excellence. increasing brand image; having a strong corporate identity; aiming to be the best (ALPHA Environmental Report, 2002). According to her, these principles are used by the environmental committee as a screening tool to evaluate the relevance of each new environmental project.

The issue of target setting at business unit level is especially dear to the ALPHA Corporate Environmental Manager (CEM). The overall rationale of her internal strategy has always been not to force subsidiaries into environmental work but rather to tease them in through proposing exercises and assessments.

'...I am not entitled to ask the business units to do things...but I can ask them to be transparent with me about their environmental goals that sometimes I participate in setting. They have to comply with regulations...no questions about that...but if they want to go further it tends to be a personal preference. I usual work with them to find the right indicators and targets. If I were to just tell them to get on with it would not work. Already it works better if I tell them I want them to do something and that I will pay for it. Of course, if I set targets at group level and cascade them to the business units it would be a lot faster, but I think they might hide the truth from me and that's not my way of working. I want to foster a culture of mutual trust. Therefore, I don't impose anything. For example, when

auditing is needed we meet ten consultants and pre-select three , then the business units choose who to audit their unit.' (ALPHA Corporate Environmental Manager, 5 June 2002, personal interview).

There seem to be two motives behind her strategy. The first is that one of the guiding principles of the ALPHA group is to ensure a high level of independence of the brands. The second is more related to the idea that once a business unit decides to carry out a project they have not been forced to do, they are more likely to take ownership and perform it with much more enthusiasm and success. In this particular case the corporate environmental department has the role to propose and facilitate the use of the latest tools and foster reflection of managers on issues. They fulfil this role by proposing ideas to the business units' environmental managers. Once one business unit has worked with a tool and communicates its positive results it is much easier for the CEM to foster its use across the entire organisation.

However, this way of working is not without its pitfalls. While periodically launching, communicating and pushing new environmental themes (or support tools) of corporate interest, the CEM cannot establish any overall targets on environmental aspects because she has no power to enforce them. This would be less of a problem if each brand would fix its own targets because corporate offices could then collate them into a corporate-wide plan. Unfortunately, the CEM cannot even enforce the idea that there *should be such targets*. As a result, until 2002, only two of ALPHA's 50 brands had a formal environmental management system (ISO 14001 certified) and consequently were *able* to make plans to reach future targets. The only way the CEM can proceed in her work is to convince the TMG of each subsidiary of the positive results of an effective environmental management. When she was approached in May 2001 to participate in this research she was already scanning the market for possible solutions.

'...To have an effective tool that would be easy to use and help convince the TMG to address environmental and sustainable development issues; to guide them and help them know what to do and how to do it would be fantastic. But currently I don't have such a tool and as far as I could tell there is nothing available on the market that responds to this need. The problem is that everybody agrees sustainable development is a big issue, but no one knows where and how to start. When I talk to top managers they say: "Ok, no problem, I'll do it, but concretely what do I have to do?"' (ALPHA Corporate Environmental Manager, 25 June 2003, personal interview).

4.1.3 Commonalities and differences between the two research partners

The two companies chosen for this study couldn't be more different. ACEA has a municipality as its major shareholder; acts in a space still rather closed to competition (e.g. water services). provides a service instead of a product; its services are seen as commodities and its clients are captive and local.

On the other hand, ALPHA has no government entities among its shareholders; acts in a worldwide industry completely open to competition; and provides its customers, spread all over the world, with hundreds of products that are everything but commodities.

While in their environmental management efforts they are also at different stages (i.e. ALPHA has started earlier and already has a few business units that are ISO 14000 certified) their problem seems to be very similar: their environmental managers have difficulties in impressing upon their business units the importance of carrying out environmental work as a value-added activity.

In 2003, a conference was organised in order to present the results of this research. The conference title was: *BSC & Sustainability*. **Table 4.1** reports what 10 managers answered to the question:

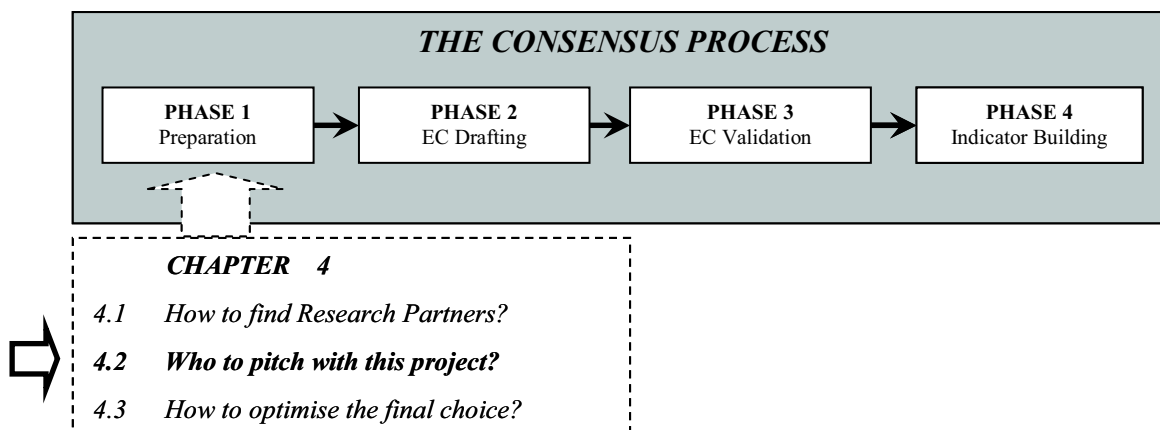
Question: What is the organisational problem that brought you to this conference?

The answers show that the problem that the two research partners were experiencing was deeply felt by other managers as well.

Environmental and CSR		What is the organisational problem that brought you to this conference?	
Company	Role		
<i>RIO TINTO</i>	Corporate CSR Director		We have already digested the fact that we need to work on CSR issues, everybody here is convinced about that. What we need to work on is in strengthening the link to value and to measure. This will convince us that these activities are worthwhile.
<i>SB MINERALS</i>	Corporate CSR Director		I am interested in how to integrate social and environmental issues in the business strategy. We definitely believe that these things are important and crucial for our long-term viability. But this is an issue of long-term strategy. The problem is how to integrate, how to include these things in every day management?
<i>SB MINERALS</i>	Corporate Environmental Director		It is key to find ways to link sustainability with the general business issues. It is hard because businesses prefer to look at the short-term benefits. The attitude is to abide to legislation but that's it.
<i>DOW CORNING</i>	Corporate Environment Health and Safety Director		How do you bring in environmental and social issues while still maintaining the economic aspect? This is a difficult thing to do.
<i>ENI</i>	Corporate CSR Manager		We have a hard time integrating sustainability issues in the business.
<i>NOVOZYMES</i>	Corporate Environmental Manager		We are trying to find ways to better integrate sustainability in the daily work, it is not easy to do.
<i>FRANCE TELECOM</i>	Corporate Environmental Manager		We want to find ways to measure the contribution of sustainability to the business.
<i>TOYOTA</i>	Corporate CSR Manager		We are trying to find a way to link CSR to corporate planning. We need to make sure that in the strategic plans the Environmental and Social issues are also taken into considerations. Otherwise the planning decisions are taken and we come after-the-fact.

Table 4.1 What organisational problem brought you to the conference on BSC & Sustainability?

4.2 Who to pitch with this project



There were two factors that contributed to choosing business units⁴⁸ as a starting point. The first was that Kaplan and Norton, as well as Niven (2001 p.42), explicitly suggest the BSC work should begin at business unit rather than at corporate level because ‘*most corporations are sufficiently diverse and constructing a corporate-level scorecard may be a difficult first task*’ (Kaplan and Norton, 1996, p.301). Since the author of this study had no prior experience with the methodology it was decided that their advice would be followed. Secondly, from the Corporate Environmental Managers points of view, this also seemed to be a desirable approach. As detailed in the previous section they were craving for the buy-in of operational managers. The buy-in of a business unit manager was, in this respect, a more desirable target than a functional director because he normally has more power and resources.

Nevertheless, during the *Focusing Sub-Phase*⁴⁹, it seemed clear that this approach is applicable regardless of the contents or responsibilities of the group involved. A BSC can be developed by business units, business functions (e.g. marketing, finance) or even by groups working on cross business unit themes (e.g. developing a geographical market). All of these groups have to develop a plan that will profit from the BSC approach. Also, all of these groups may need to integrate environmental issues in their strategy. This means that, while in

⁴⁸A business unit is a part of the organisation that is responsible for the production and delivery of a given product or product mix to specific customer segments. For example a utility company providing citizens with water and electricity services may have two different business units in order to satisfy the different client needs.

⁴⁹ See Section 7.1.2

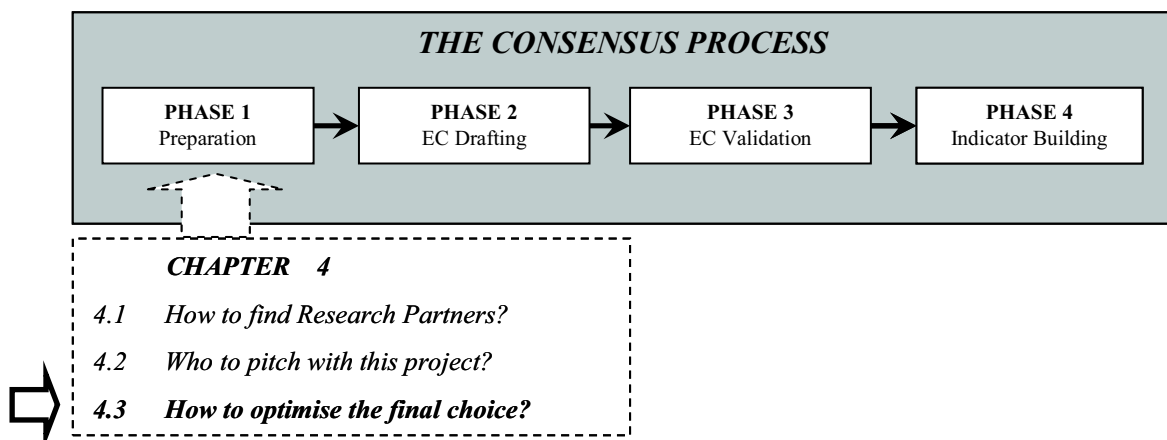
this project we were all looking in only one direction, several other options existed. **Table 4.2** shows the questions needed for listing all the available options.

Who can I pitch with this project?
Which are the business units in my company?
Which are the functions in my company?
Which are the thematic groups in my company?
Suggestion: List the Business Units first and go to next step. If no Business Unit is available come back to this process step.

Table 4.2 Who to pitch with this project? (Suggestions for managers)

Since for large corporations this list may be rather long and confusing it may be better to think of the business unit first, go to the next step of the process and come back to functions and thematic groups only if the environmental manager realises that it would be too hard to convince business unit directors. After all, the empirical evidence does point to the fact that for corporate environmental managers the business units directors are preferential targets.

4.3 How to optimise the final choice?



This stage of the research involved choosing business units that would be likely to see the research through to the end of the project (Finalisation); provide interesting findings for the research and for practice (Usefulness); and have a high chance of being replicated within the organisation (Replicability). To reduce room for error a list of criteria was discussed with the corporate environmental managers. As detailed in **Table 4.3** these criteria were enriched as an outcome of the discussions with managers in ACEA.

Criteria used for choosing the Business Unit - January 2002			
	<i>N.</i>	<i>Criteria name</i>	<i>Rationale</i>
Replicability	1	Not too small	I thought that very small business units would have little credibility within the organization.
	2	Innovative Curricula	I thought that a business unit that was known to try innovative management practices that are then implemented in the rest of the organisation would increase the credibility of our exercise within the company.
Usefulness	3	No shared services	I thought that it would be best not to do the exercise in a shared service because it would not link environmental issues to the operations.
	4	Environmental and Performance Measurement Existence	I thought it would be preferable to implement this project in business units that already gathered some quantitative data because I considered as a desirable outcome to obtain a quantitative relationship between environmental issues and business.
	5	Possibility to communicate the business unit strategy	I wanted to ensure that we would be able to communicate the results of the project.
	6	Competitive Market*	I thought that the discussion would be more interesting if we chose business units working in very competitive markets rather than monopolistic situations because that is where, at least in theory, there should be more interest for differentiation.
	7	Existence of environmental impacts	I needed to check upon this criterion to be sure there would be something to discuss at a later stage.
	8	Relevance of environmental impacts	I thought it would be preferable to work with business units for which environmental managers are convinced that environmental work could significantly improve their business performance.
Finalization	10	Available Time*	I thought that if the managers are already involved in other large improvement projects they will have no time for this one.
	11	Too large*	I thought that carrying out this project would be harder if the business unit had more employees.
	12	Logistical Ease*	I thought the project would be easier to implement for those business units whose managers are already working close to one another. This is, in light of the idea of organizing workshops where they would be required to attend.
*These Criteria were added during the first workshop in ACEA			

Table 4.3 Criteria used for choosing the business unit

4.3.1 The business unit recruitment process in ACEA

The process followed in ACEA to find the appropriate business unit is detailed and described in **Table 4.4**. The first meeting in ACEA took place on 8 January 2002 when, together with the CEM and two of his team members, the business units were shortlisted according to the criteria. As shown in **Table 4.5** the preferred choices were the Energy Production and Street Lighting business units.

<i>ACEA business unit recruiting process</i>	
<i>N.</i>	<i>Activities performed by the Corporate Environmental Manager</i>
1	Preselect some business units based on Table 4.3 Checklist criteria
2	Personally meet the two Business Unit Directors to briefly pitch the project. Get idea of interest.
3	Invite them in his office for a presentation of the project objectives and to listen them explaining their interest in the project.
4	Take a decision and sign an informal letter of agreement detailing the roles and duties of both players.

Table 4.4 ACEA business unit recruiting process

<i>Reasons for elimination of Business Units - ACEA</i>	
<i>Criteria name</i>	<i>Rationale for exclusion</i>
Post-sale services	It had mainly a shared service role. Too small.
Water Management GENOVA	Managers were in Genova.
Water Management ROMA	Too many ongoing projects. Too large.
Electricity Distribution	Too many ongoing projects.
Electricity Transmission	Too small, non-competitive market.
Electricity Production	RETAINED
Public Illumination	RETAINED

Table 4.5 Rationale behind elimination of business units.

Both of the chosen business units had pros and cons. On one hand, the Energy Production had an environmental management system up and running, while Public Street Lighting had never worked on environmental management. On the other hand, Public Street Lighting was a real business unit while Energy Production was basically a production function. However, none of these criteria were relevant for the final choice. The CEM decided to work with the Public Street Lighting business unit (also known as ACEAIP) because, at the time, it appeared that ACEA was going to invest in public street lighting much more than in energy production. Therefore it had more strategic interest. This criterion was not originally on the list, so it was added to the final checklist in **Table 4.8 (Criterion 9)**.

4.3.2 The business unit recruitment process in ALPHA

The process followed in ALPHA is described in **Table 4.6**. The first meeting in ALPHA took place on 29 January 2002. Similarly to ACEA, this meeting was attended by the CEM and two of her team members with the aim of running through the list of criteria to short-list the possible business units. Since the corporation had over 50 business units we started by listing the business units with headquarters and production facilities in France. This brought the number down to six possible business units. We then discussed the other criteria on the checklist. However, these six options were all open when the CEM launched the remaining steps of her recruiting process.

<i>LVMH business unit recruiting process</i>	
<i>N.</i>	<i>Activity Description</i>
1	Pre-select some business units based on Table 4.3 Checklist criteria
2	Present the project to all the Business Unit Environmental Managers
3	Shorten the list to the Business Units whose environmental managers showed interest for the project
4	Present the project to the CEO of these environmental managers, get idea of interest
5	Double check with the Business Unit environmental manager that he is willing to champion the project
6	Write a letter to formally ask the CEO for her engagement in the project
7	Get buy-in and signature of her boss, the corporate financial controller, before sending it to the Business Unit CEO

Table 4.6 ALPHA business unit recruiting process

BETA, a prestigious Champagne house was the final choice. It was the CEM who communicated that she had found a business unit that was interested in participating in the research, but there were still two issues that had to be overcome. Firstly, the CEM did not know personally the CEO before involving her in this project. Secondly, that her explanation of the project was very brief and general, and therefore the CEO had not completely understood what it was all about. At a later stage, the CEM explained that this was the only way to get the project pushed through. In her opinion a more detailed explanation would probably have resulted in rejection to participate (ALPHA Corporate Environmental Manager, 25 June 2003).

4.3.3 ACEA Public Lighting (ACEAIP)

At the time of the intervention the Public Street Lighting business unit (ACEAIP) had a 40 million euro turnover, 250 employees, 500 people to manage as contractors, 157,000 lights and, as the director liked to say, over 3 million *customers* (i.e. Rome's citizens). There were three main activities: maintenance, construction of new lighting systems and artistic illumination. The maintenance activity concerned the existing lights. The construction of new lighting systems concerned the new areas of Rome that still needed lighting. Finally, the artistic illumination activities aimed at spotlighting the city's monuments.

Environmental management in ACEAIP was an unknown topic and of peripheral interest. The director was mainly drawn to the project for five business-related reasons. Firstly, he was interested in the idea of leading indicators. He was pressured for results and a set of indicators showing that results ‘will come’ was of interest. Secondly he wanted the different organisational functions to work more together as one company. Thirdly, he would like to check whether his own organisational structure had all the right roles and responsibilities, he expected this project to indicate the existence of such gaps. Fourthly, he was interested in the team building aspect because he had taken his post only one year earlier and most of his managers were also new. Finally, he looked for a device that would help the business unit to focus efforts and to keep the focus through time.

4.3.4 BETA

BETA is, worldwide, among the most famous and prestigious Champagne brands.

Environmental work was not an unknown concept in BETA. In fact, one of the reasons that the CEM chose this company as a research partner was that this area of work was rather developed. Key environmental aspects had been identified and acted upon within the framework of an ISO 14001 certification process which had to be completed soon.

The main challenge facing BETA's Environmental Manager (EM1⁵⁰) was that most of the environmental work was taking place in the part of the company more connected to wine production (i.e. vineyard management) while very little was done in the other areas (e.g. marketing, bottling, etc.). EM1 thought that the reason for the low interest in this area was that the TMG members were not directly connected to the vineyard and therefore it was harder for them to see how environmental management, or the ISO 14000 certification stated above, could possibly help them in their jobs. In retrospect this is how he explains his interest in the project:

‘...I wanted to get the TMG to understand the meaning and positive impact of environmental activities , especially those not working directly with vineyards. Of course, we are all convinced that environmental issues are strategic, but I think something must be missing if the only people that show up to our environmental management system review are the ones directly involved in those activities. I had the idea that building a set of top management indicators for environmental issues could be of use in this respect. Without top management interest, the environmental management system will never progress because improving BETA environmental profile requires

⁵⁰ I call it **EM1** because in BETA there are two environmental manager. The second one will be called **EM2**

input and effort from all functions;' (BETA Environmental Manager, 12 April 2003, personal interview, English translation).

4.3.5 Differences in motivation between ACEAIP and BETA

The reasons for joining the project for the two business units are substantially different. In ACEA IP the project champion is the director. He is interested in the strategic planning side of the project, the process, the indicators, the environmental portion being a nice-to-have. On the contrary, in BETA the project champion is the environmental manager. He is interested in getting environmental issues on the top management agenda or, in other words, to make top management further understand the link between environment and strategy. The BETA CEO in this respect had a 'blessing' more than 'championing' role in the project. She approved that top management would take part in it but was in no way the driving force of the project.

4.4 Can the recruitment process be improved?

Improving the recruitment process in this case means using the empirical evidence to make it more successful. However, discussing the success of these processes is not an easy task because this assessment will depend on how *success* is defined. *Success* can be proportional to how far the business unit has gone in implementing the process steps. As shown in **Figure 4.2** (already discussed in Section 4.1) ACEA completed the entire process and was, therefore, the most successful of the four cases. Why?

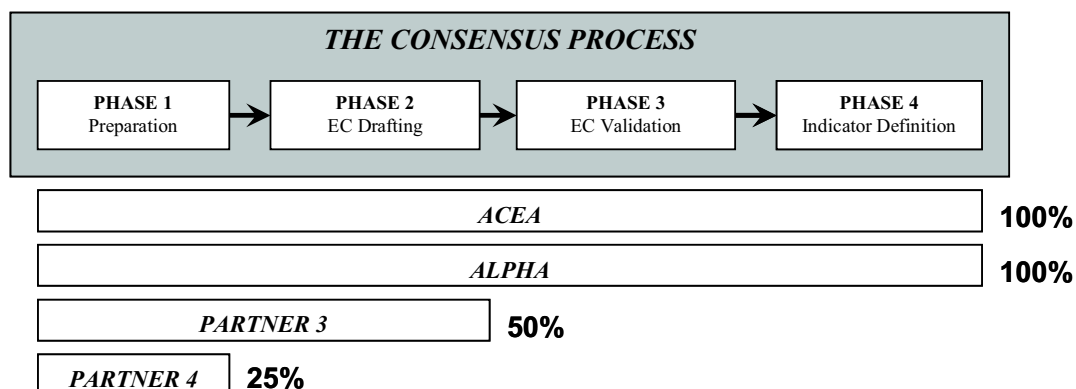


Figure 4.2 Portions of the process completed by the four research partners

Comparing ACEA and ALPHA two differences struck me as significant. Firstly, ACEA's CEM had very quick and easy access to the business unit directors, which he knew personally. This was certainly not the case for ALPHA's CEM, which forced her to take a longer route. The consequences of this different departure point enabled ACEA's CEM to launch the project (i.e. Phase 2) four months before ALPHA's CEM. This four-month head start partly explains why in ACEA it was possible to run more process steps than in ALPHA (**Criterion 2**). As shown in **Table 4.7** the importance of this criterion is also confirmed by the experience in Partner 3 where the project champion was several management layers below the business unit directors. It took them an additional six months compared to ALPHA's CEM to find a business unit director willing to participate.

Company	Business Unit Director Access Quality	Lag time to Kick-off
ACEA	High - Personally knows all the directors, can simply pick up the phone and call them.	2 months
ALPHA	Medium - Does not know CEO's personally, needs an occasion to contact the directors, but eventually manages to talk to them directly.	6 months
Partner 3	Low - Does not know them personally and it is hard to have an occasion to meet them. Needs to go through several intermediaries.	14 months

Table 4.7 Influence of business unit director access quality

Secondly, as described in **Section 4.3.5**, in ACEA IP the director participated in the project in order to improve his performance measurement system and process. This issue was clear, it was strategic and it turned him into a powerful project sponsor. In BETA, on the other hand, the CEO saw this as an environmental project and never really championed it. This made it more and more difficult to get management attention and meant that the scope of the project was shrinking on a regular basis (**Criterion 3**).

The empirical findings discussed in this chapter meant that the original checklist described in **Table 4.3** had to be modified . As shown in **Table 4.8** first it details and justifies the changes to the entity choice checklist. Secondly, each criterion is transformed into a question for the

environmental manager. Thirdly the criteria was listed in a logical order. This means that while using this list one should start from the top and answer the following questions only for the entities that made it through the previous question. **Table 4.9** summarises the questions and includes the entity listing questions originally contained in **Table 4.1** to form the final process rule coming out of this chapter (**Process Rule 1.1** – inserted in **Table 4.10**).

For example, looking at the column at the extreme right, the EM would start by asking the question:

Question: Which of the entities in my company are most underestimating the value-added potential of environmental work?

The word *entities* refers to the options stemming from the questions in **Table 4.2** and can be corporate, business unit, functional or thematic. The answer to this question will highlight a sub-set of the original list. This sub-set of entities is then filtered through the next question:

Question: Which entity directors can easily accessible?

This question defines a sub-sub set of the original list. Going through the other questions with this same logic should help the EM to make a plan and prioritise which entities s/he will try and contact first and with which argumentation.

The checklist is now a set of questions for EMs. The specific process the EM will decide to pursue will depend on his/her needs in that specific moment in time. If the need is to get something started quickly s/he may prefer to pursue a smaller pilot project, for example with a business function. On the contrary, if s/he needs a case that is credible in front of the entire organisation s/he may decide to devote effort to contact and convince a business unit director. Also, as the cases have shown, the way s/he will decide to pursue his/her objectives will depend on personal and company specific issues such as the position and role covered in the company, the culture of the company and so on.

Explanation of Changes in Criteria for Entity Choice				
Criteria BEFORE project	N:	Criteria AFTER Project	Rationale for change	
Key Criteria	1	Existence of environmental impacts	Which of these entities today is most undervaluing the value-creation of environmental work?	
		Relevance of environmental impacts	Which entities Directors can I easily reach?	
	No shared services	2	Entity Director Access Quality	What would be the interest of these Directors for this project?
		3	Entity Director Interest	Is the entity in a competitive market?
		4	Competitive Market	Is it logistically easy to gather the managers involved?
	Additional Criteria	5	Logistical Ease	Will the managers have the time to devote to this project?
		6	Time Availability	Is the BU sufficiently large for the other BU to think that tools they use are applicable to them as well?
		7	Appropriate Size	Is the BU sufficiently large for the other BU to think that tools they use are applicable to them as well?
		8	Innovative Curricula	Does the BU carry out activities that are of strategic relevance to the firm?
Discarded Criteria	9	Strategic Relevance		
	No shared services			
	Environmental and Performance Measurement Existence			
Possibility to communicate the business unit strategy				

Table 4.8 Explanation of changes in criteria for entity choice

Criteria for ENTITY Choice - FINAL

<i>N.</i>	<i>Criterion Name</i>	<i>Question for environmental manager</i>
<i>Entity Listing</i>	1 Business Unit Listing	Which are the business Units in my company?
	2 Functions Listing	Which are the Functions in my company?
	3 Thematic Groups Listing	Which are the thematic groups in my company?
<i>Key Criteria</i>	4 Environmental Management Relevance	Which of these entities today is most underestimating the value-creation of environmental work?
	5 Entity Director Access Quality	Which entities Directors can I easily reach?
	6 Entity Director Interest	What would be the interest of these Directors for this project?
	7 Competitive Market	Is the entity in a competitive market?
<i>Additional Criteria</i>	8 Logistical Ease	Is it logistically easy to gather the managers involved?
	9 Time Availability	Will the managers have the time to devote to this project?
	10 Appropriate Size	Is the BU sufficiently large for the other BU to think that tools they use are applicable to them as well?
	11 Innovative Curricula	Is the BU sufficiently large for the other BU to think that tools they use are applicable to them as well?
	12 Strategic Relevance	Does the BU carry out activities that are of strategic relevance to the firm?

Table 4.9 Criteria for entity choice - FINAL

4.5 Conclusions and contributions

The aim of this chapter was to describe and comment on how research partners and business units were chosen and to detail what attracted them to the research project. Although four research partners were originally selected, only two of them reached the final stages of the study: ACEA and ALPHA. While these two companies are very different from one another the interest of the project for both of them was perfectly aligned with the research problem covered by this study. In short, the CEMs wanted a tool that could assist them in bringing environmental issues closer in line with the business strategy.

Both ACEA and ALPHA managed to find a business unit willing to participate. In order to assist the decision a checklist of issues was drawn up and considered (**Table 4.3**). In the end, in ACEA it was the Public Street Lighting division (ACEAIP) that was chosen. While in ALPHA the Champagne house BETA was selected. The motivation of these two business units to join the project significantly differed. For ACEAIP, where the project champion was the business unit director, the interest was mainly to improve their strategic decision making process and supporting indicators. For BETA, where the project champion was the EM, it was to bring environmental issues more closely in line with the business strategy.

Using the empirical findings, the original checklist was modified and a final checklist of questions that can assist EMs in choosing where to start and how to proceed was drawn up (**Table 4.9**). As shown in **Table 4.10** this checklist represents the main process rule (**Process Rule 1.1**) for this case not because it prescribes what the manager should do, but because it provides him with the elements to decide on the most desirable course of action.

PHASE 1		
Code	Questions for Environmental Managers	Process Rule
1-1	Who should I pitch with this project?	<i>Use Checklist in Table 4.10</i>
No Fill = Supported only by common sense; Greyed = Supported also by relevant literature; Black = Supported also by the empirical evidence		

Table 4.10 Process Rule – PHASE 1

4.5.1 Contribution to the literature

The contribution to the literature is limited to the formalisation of the criteria for entity choice specified in **Table 4.9**. These are by no means exhaustive nor conclusive since there is no discussion on whether or not they proved to be useful and effective. Today their status is no more than a first draft, totally open to empirical investigation and revision.

4.5.2 Limitations and future research

The process rule proposed in **Table 4.10** is only a first tentative draft based on the experience in three case companies. This means that it should be applied with caution knowing that some criteria might be missing and/or ill-defined.

There seems to be at least three areas of interest for future research. The first one relates to enriching and improving the checklist at hand. Certainly using it in a number of different settings and companies will help in doing so. The second relates to including guiding principles for the use of this list. In other words, once the questions on this list have been answered, what are principles that should guide the EM to decide what to do?

The third and final area of interest relates to the fact that this process step is, in fact, a sales exercise. In other words, the EM is trying to sell this project to an entity director. By all means literature helping the EM to understand his/her clients' needs and correctly present the argument would be a very useful addition. This brings the attention to the literature on sales and negotiation techniques.

4.5.3 Contribution to practice

The contribution to practice in an action research project is so close to the research outcomes that it may be difficult to make a distinction. What are the process rules if not suggestions to practitioners on how to carry out this process? Of course, depending on the situation at hand managers may decide to carry out the process differently, but the existence of suggested process rules with their related justification may help in making the right choices. In this

respect **Table 4.10** is expected to be of use to managers trying to kick-off similar processes in their companies.

For example the issue of *Entity Director Access* is of interest to EMs because it forces them to reflect on the strength of their personal relationships and on how this may influence their business unit recruiting process. How they answer this question will determine how they will proceed. If they think their relationships are strong, they may decide to contact the business units directors at once. On the other hand, if their relationship with business unit directors are weak, they could either find their way through to them by using intermediaries or they could pitch this same exercise to the managers they know personally.

TO DATE and FORWARD

This chapter had the aim to introduce the research partners, describe the process of business unit choice, the activities of the business units ultimately chosen and propose a process rule guiding environmental managers in this phase. The next chapter will describe the first step of building the environmental chains: interviewing and clustering. The interviews are performed to gather data to build environmental chains. Clustering is performed to facilitate the discussion and validation of the chains taking place later.

5 Environmental Chains Drafting (PHASE 2)

The Research Problem – Final Version

*What **consensus process**⁵¹ can increase the environmental manager and TMG consensus level and quality over the environmental chains?*

This chapter, as shown in **Figure 5.1**, describes the first two steps of the content building process: *Interviewing* and *Concept Clustering*. *Interviewing* aims at eliciting from managers their ideas about business issues, environmental issues and the links between the two. *Concept Clustering* tries to organise their ideas under common headings, called *the BSC Objectives*. For both steps there is an explanation of why they are useful; a description of the process rules; as well as the results achieved.

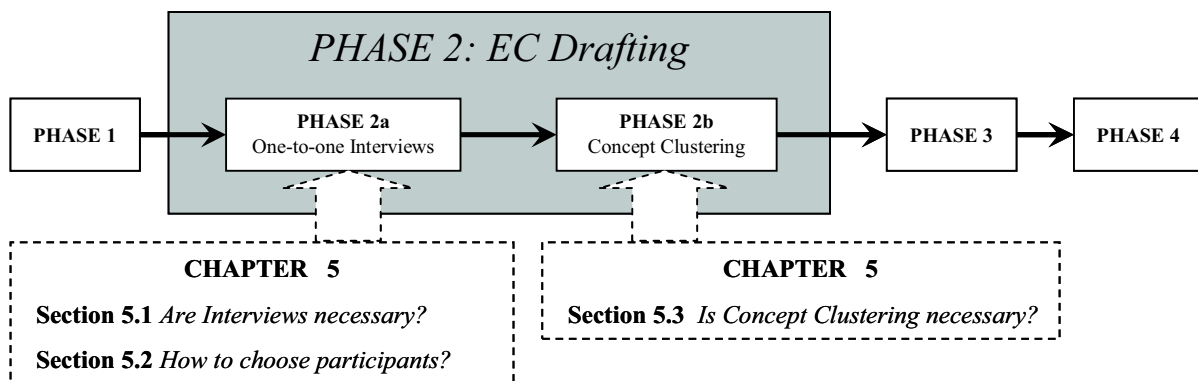


Figure 5.5 Phase 2: Environmental Chains (EC) Drafting - Sections in Chapter 5

In order to discuss and evaluate the increase in Content Quality, I will comment on the shift of two Content Quality Properties: *completeness* and *ease of understanding*. *Completeness* refers to the extent to which data is of sufficient breadth, depth, and scope for the task at hand. *Ease of understanding* refers to the extent to which data is clear without ambiguity and can be easily understood.

⁵¹ The words in **bold** are the ones that are analyzed in this Chapter.

Section 5.1 focuses on the interview phase and discusses why are they necessary, how they were carried out and what were their effects on Consensus Level and Quality. **Section 5.2** discusses the issue of who to involve in the interviews. Finally, **Section 5.3** asks the same questions for the Concept Clustering phase. Discussions on whether an environmental manager should participate in the interviews are carried out in **Chapter 6**.

As for the Consensus Process Rules, these are not treated with the same level of detail for each of them. Sometimes a criterion used is only described. other times there is also a link to the relevant literature; and in some instances this is also supported by the relevant empirical evidence. The guiding principle for these choices was one of relevance for the research problem. The more the issue seemed relevant for increasing the quality of Environmental Chains the more time (and space) was dedicated to it.

5.1 Are interviews necessary?

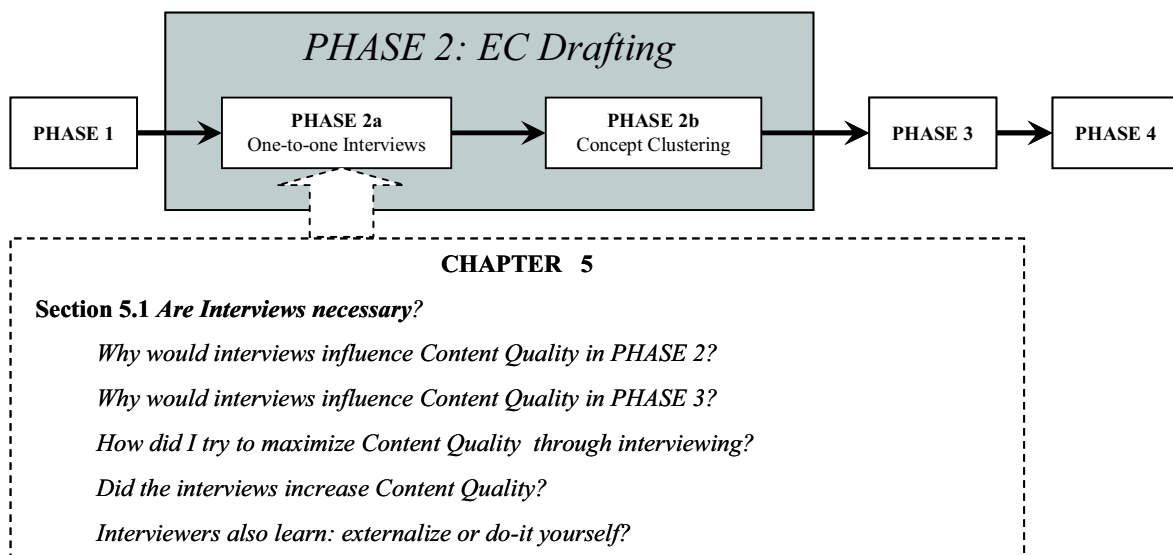


Figure 5.6 Issues covered in Section 5.1

Kaplan and Norton suggest individual interviews are the best method to explain the BSC concept; to gather the raw material to develop its contents; and to identify potential conflict among participants (**Process Rule 2.1**). By *conflict-among-participants* the authors mean: differing views of strategy, personal conflicts due to character and/or to the role in the organisation (Kaplan and Norton 1996a, p.303). Although this suggestion is perfectly

reasonable, in practice interviews are *time consuming* and, if outsourced, also *costly*. So, are they really necessary?

While one could argue that for a strategic exercise such as developing a Balanced Scorecard this might not be a real problem it might very well be for an environmental manager trying to organise an exercise dedicated to linking environment with strategy. As the following quotes seem to imply, *TMG time* is the greatest concern and it is something these environmental managers treat as a very scarce resource. For them it may be tempting to skip the interviewing step if they are not convinced that it is entirely necessary.

'We should go straight into the interviews. If we gather them to explain the project we would be wasting their time, besides some of them might not like it. Let's just do the interviews and explain later.' (BETA environmental manager, personal interview, 20 May 2002).

'The few times that I had the opportunity of presenting our environmental work to the TMG members it was one way communication, it was me informing them. The workshop was the first time that people worked, thought and exchanged ideas on environmental topics, and all that in an entire afternoon. This is, in itself, already a great achievement.' (BETA environmental manager, personal interview, 10 April 2003).

'I was surprised that all the TMG members showed up at the workshop, I was seriously concerned that we would be organising the workshop and that people would actually not turn up, and even if they did, they would leave half way through it.' (Corporate EM team member, personal interview, 12 April 2003).

In terms of my research problem interviews are desirable if they prove to increase Consensus Level and Quality of Environmental Chains. Consensus Level can be ignored because it only shifts through interaction among managers and, in this phase, there is no interaction. For the same reason *Interaction Quality*⁵² cannot possibly change, while *Group Quality*⁵³ will be of interest only once there has been a decision to carry out interviews. This section is only concerned with *Content Quality*, that is, the quality of the information made available⁵⁴.

Why would interviews influence *Content Quality* in PHASE2?

⁵² *Interaction Quality* has been defined as: the ability of the group members to exchange views on the information at hand.

⁵³ *Group Quality* has been defined as: the extent by which the managers involved have the necessary knowledge to cover all the relevant aspects of the business.

⁵⁴ See **Section 5.1.4** for the discussion of the relevant Content Quality Properties

The idea that *Content Quality* may improve by carrying out interviews is explained in the literature on individual cognition problems which served as the basis for the introduction in Chapter 1. The individual cognition problems shown in **Table 5.1**, reduce Content Quality because they reduce the amount and the quality of information provided by the managers. Interviews will increase Content Quality if they can counteract some of these individual cognition problems. An example relating to the *gap-filling* (N.4) mechanism is enough to make the point.

N.	Likely Errors in problem sensing	Explanation
1	Illusory correlation	Assume events are correlated that in fact are not, because they are similar.
2	Illusory causation	Assume events are causal, that in fact are not, because they are focus of attention.
3	Gap-creating	Assume events did not occur, that in fact did, because they are schema-irrelevant.
4	Gap-filling	Assume events occurred, that in fact did not, because they are schema-relevant.
5	Ignoring overly discrepant information	Fail to code or store information that is extreme or highly surprising.
6	Preference for ambiguous information	Prefer ambiguous information to avoid self-deprecatory learning.
7	Preference for self-enhancing information	Fail to code or store self-deprecatory information.

Table 5.1 Individual cognition problems (adapted from Kiesler and Sproull 1982, p. 560 – discussed in Section 1.3)

Let us say that one of my *Schema*⁵⁵ identifies the type of people I like to work with. Let us call this schema ‘nice to work with’. Let us also suppose that the schema’s criteria are:

- i the person smiles;
- ii the person gives a solid hand-shake;
- iii the person is capable of giving clear explanations; and
- iv the person delivers on its promises.

⁵⁵ A *Schema* represents the way knowledge about prior behaviour patterns and expectations about behaviour are organised. These constructs are the ones against which new information is tested for relevance (Kiesler and Sproull, 1982, p. 557)

Upon meeting someone our brains assess this person through our numerous schemas, including the one ‘nice to work with’. Accidentally this person fulfils two of the four criteria, that is, he smiles, and he gives a good hand shake. Subconsciously our brains make an instant connection between the person and the schema. This means that the person is now ‘nice to work with’ even though the only evidence to support this is that he smiles and has a solid hand-shake. How can interviews break this unhealthy mechanism?

The trick is that all of this type of mistakes, that is, the ones due to individual cognition problems, happen at subconscious level. People are not aware of them happening. The interviews are, in this respect, not only the instrument to avoid that these problems hurt the quality of the analysis of individuals but also the only way to know where and exactly how these problems exist. It is then of paramount importance to do the interviews. Skipping this process step and delving directly in a group plenary session would certainly result into decisions that are more ill-informed and ill-analysed.

Why would interviews influence *Content Quality* in PHASE 3?

Interviews are not only likely to influence the Content Quality in this phase, but also of the following phase, where group discussion starts. When Kaplan and Norton refer to interviews as means to ‘*explore conflict among participants*’ they seem to imply that such exploration cannot be done as efficiently in other ways Kaplan and Norton (2001, p.303).

In order to reflect on this specific point I have taken the **Table 1.3** discussed in **Section 1.3.1** and have added a column where I discuss the potential influence of using anonymous quotes on each one of the group-type mistakes. The opinions expressed in the right column of **Table 5.2** are personal and, at this stage, not supported by literature. Nevertheless, after going through this reflection process, it seems that displaying the opinions through the use of anonymous quotes may indeed have the potential to counteract many of the mechanisms that reduce the quality of group decision making.

I have focused so far on the quality of the issues *raised*. However, in a communication process messages also need to be *heard*. The quality of reception is also a potential source of reduction in Content Quality (e.g. biased interpretation). The preparation and use of anonymous quotes seems to have the potential to increase quality of reception because it

focuses the receiver attention towards the *content* without being ‘distracted’ by their personal opinions about the sender (e.g. I don’t like him = I don’t listen).

A word of caution! While the reflections of this section suggest that interviews are *necessary*, they also suggest they are not *sufficient*. Clearly there are a set of problems that one-to-one interviews can do nothing about. For example, opinions raised in one-to-one interviews can only have a positive impact if the owner of such opinions is prepared to explain them and defend them in the plenary session. As highlighted in **Chapter 6**, the fact that a person raising a doubt will also defend it in the presence of his colleagues is not something to be taken for granted.

Influence of interviews on Group-type Mistakes		
Label	Phenomenon	Interviews give the opportunity to...
Message Tuning	Overestimate the commonality of information shared and tune communication accordingly	...show the divergence in information through quotes.
Message Distortion	Modify the message based on perceived desires of the receiver	...discuss topics that have been ‘translated’ by the facilitator.
Biased Interpretation	Bend a message towards one’s own pre-conceptions or ideas	...expose manager’s quotes, it is more difficult to ‘bend’ messages
Transparency Illusion	Belief that one’s own thoughts and attitudes are more obvious to others than is actually the case	...through the quotes the concepts that are unclear to the group are easily identifiable
Indirect Speech Acts	Concealing a request behind indirect statements	...all is treated in explicit form because of quotes and facilitator ‘translation’ of them.
Uneven Communication	Relatively few people (not necessarily the most informed) tend to do the majority of the talking	NO INFLUENCE
Common Info Effect	People tend to discuss what everyone already knows	...discuss topics that are delicate, the existence of a quote is evidence that needs to be disproved.
Need to be Right	The tendency of looking at the group to define what reality is	NO INFLUENCE
Need to be Liked	The tendency for people to agree with a group so that they can feel more like a part of that group	NO INFLUENCE
Group Think	Deterioration of mental efficiency/judgement due to subconscious pressure to conform to perceived group opinion	...do critical analysis of an idea with the manager, the same analysis that would be impeded by group think.
Escalation of Commitment	Persisting in a losing course of action only because of the to-date involvement in that action	NO INFLUENCE
Abilene Paradox	Agreement of all group members to an individually undesirable course of action solely due to misperception of each others’ preferences	...show through quotes what the opinion of the others is. Problem totally solved.
Group Polarisation	The tendency for group discussion to produce a more extreme judgement than might be obtained by pooling the individuals’ views separately	NO INFLUENCE

Table 5.2 Influence of interviews and anonymous quotes in PHASE 3 (adapted from Thompson (2004) pp. 96-110 and pp. 126-156 – first two columns starting from the left already discussed in Section 1.3.1)

While it appears true that interviews have the potential to influence Content Quality in a way that group discussion cannot, it also seems true that this will depend on the way interviews are carried out and their contents displayed. This is why the following section delves into the presentation and discusses the techniques used.

What *Content Quality Properties* will be discussed?

Content Quality has been defined in **Section 1.4.2** as potentially having fifteen different properties. These properties are *potential* because, if the principle guiding Content Quality assessments is (as today is broadly agreed to be) fitness-to-use, not all these properties need to be maximised in all cases. As shown in **Table 5.3**, for this step I will discuss the shift in *completeness* and *ease of understanding*. *Completeness* is important because it points to the fact that interviews constitute the preparation step for discussion, where the richness of topics proposed will have an influence. *Ease of understanding* is important because interviews are the only chance for individuals to assess (for themselves) how clear their own opinions actually are. The idea here is that if individuals understand their own opinions they will be better equipped for a meaningful discussion with the others.

<i>Potentially Shifting Properties during Interviewing</i>				
<i>Concept</i>	<i>Property</i>	<i>Sub-Property</i>	<i>General Definition</i>	<i>Specific issue Investigated</i>
Consensus Quality	Content Quality	Completeness	the extent to which data are of sufficient breadth, depth, and scope for the task at hand	Maximizing the number of ideas proposed by the managers
		Ease of Understanding	the extent to which data are clear without ambiguity and easily comprehended.	Making sure managers explain clearly each idea they propose

Table 5.3 Potentially shifting properties during interviewing

Completeness has been defined as the extent to which data is of sufficient breadth, depth, and scope for the task at hand. In this context completeness is treated as synonym of *quantity* of information raised, quantity, that is, in the sense of amount, volume of information. The more issues managers raise, the higher the completeness. While I am aware that this is not the only aspect of completeness it definitely seems to be part of it. Can anybody argue that in taking

decisions it is better to have a smaller number of proposals or opinions to discuss? The caveat here would be how much of these can be reasonably managed in a given time, but not that having more is, in itself, undesirable.

Ease of understanding has been defined as the extent to which data is clear without ambiguity and can be easily understood. Ambiguity can be reduced through interviewing due to an exchange of information between the interviewer and the interviewee on the concepts at hand. The explicit objective of the interviews is then to make sure all the ideas raised by the managers are well clarified.

How to maximise *Content Quality* by interviewing?

The extent to which interviews will influence *content completeness* and *ease of understanding* seems to depend on at least four issues:

- i the interview guideline completeness;
- ii the level of interviewee disclosure; and
- iii the capability of the interviewer to understand the concepts expressed.

As for the interview guideline I have spent the entire **Chapter 3** working on its completeness. The sequencing of the interview guideline questions shown in **Table 5.4** follows, perspective by perspective, the same rationale. First I start with an open question. Then I propose, if necessary the BSC Framework topics, to check nothing has been omitted. Finally, I ask about the relevance of environmental work for the issues exposed. The advantage of asking an open question at the start means that managers are more likely to raise their main concerns at the outset, which in turn means not only that the time is used more efficiently, but also space is left for surprises, that is, issues that I may not have thought about. (**Process Rule 2.2 – Table 5.18**).

Financial/Shareholder Perspective Questions

- Q1.** What do Shareholders want from your firm?
- Q2.** Should you improve your performance in terms of new revenues sources, customer profitability, cost per unit and asset utilization?
- Q3.** What are the financial impacts of your risks?
- Q4.** How about the technological, economic, financial, performance, legal and regulatory risks?
- Q5.** How does environmental work influence the chosen risk items?

Customer Perspective Questions

- Q6.** Who are your clients?
- Q7.** What do your customers want?
- Q8.** What do customers want in terms of product attributes, customer relationship, image & reputation?
- Q9.** Why is your value proposition superior to competitors/substitutes?
- Q10.** How do you protect yourselves from new entrants?
- Q11.** How will Political, Economical, Social and Technological trends influence your business in the next 5 years?
- Q12.** In what way environmental issues do/may impact on the customer-related objectives?
- Q13.** Which stakeholders influence the risk-related objectives?
- Q14.** What do these stakeholders want?
- Q15.** Can environmental activities impact on the desires of these risk-related stakeholders?

Internal Process Perspective Questions

- Q16.** What do you think are the main issues the firm should do better to fulfill the previously discussed value proposition ?
- Q17.** How about quality/cost/time of innovation processes?
- Q18.** How about quality/cost/time of operational processes?
- Q19.** How about quality/cost/time of post-sale processes?
- Q20.** Can environmental activities foster any of the quality/cost/time issues you have already mentioned?
- Q21.** What risk processes do you need to improve the previously chosen risk items?
- Q22.** Can environmental activities contribute to reduce risk? How?
- Q23.** Which external stakeholder contributions does the company performance depend on? How?
- Q24.** Can environmental activities assist in improving such contributions? How?

Development and Growth Perspective Questions

- Q25.** What type of capabilities should your employees develop in order to improve the internal processes as desired?
- Q26.** Can environmental work assist in increasing the desired employees capabilities?
- Q27.** What IT systems/technologies would allow employees to better perform and learn faster?
- Q28.** How can IT systems support the environmental work defined in the previous perspectives?
- Q29.** What motivates your employees?
- Q30.** How about involvement, recognition, access to relevant info, responsibility, support, positive perception of corporate image, belonging to a team?
- Q31.** Can environmental activities contribute to improve the image employees have of the company?
- Q32.** How do you empower your employees?
- Q33.** How do you make sure their actions are aligned with overall strategy?
- Q34.** How do you make sure they are aware of the company strategy?
- Q35.** Can environmental activities assist in empowerment, alignment and awareness?

Table 5.4 Interview guidelines

Bringing in an outsider to carry out internal interviews plays an important role in both positive and negative ways. On the positive side, it encourages managers to disclose information they may not otherwise do because they not need to worry whether they should disclose a piece of information or not. They also do not have to worry that they boss will know their opinions, as the interviews are strictly confidential. On the negative side, it can also potentially hamper the disclosure of information because being transparent requires a certain degree of trust. For the interviewee, an outsider is also unknown to them and therefore they may be wary. They may wonder what the outside interviewer will to do with the information they provide. In order to reduce this specific concern it was useful to have a brief introduction to each interview, which covered five general points (See **Table 5.5**) (**Process Rule 2.3 – Table 5.18**).

N.	Issues covered in the interview introduction
1	The exercise is to be of use to you.
2	The quality of the outcome will depend on the quality of information you will provide.
3	All interview contents will remain strictly confidential.
4	To excuse the interviewer if some of the questions may seem obvious, but it is part of the method.
5	Explain how the interview contents will be used in preparation of the next process step.

Table 5.5 Issues covered in the interview introduction

Once the interview had been carried out and the information collected to the next challenge was in deciding how to disclose it while respecting individual confidentiality. There could be very good reasons why a manager may prefer not to bring a certain problem to the table. Kaplan and Norton suggest that a manager’s opinions should be displayed in the next phase as anonymous quotes (Kaplan and Norton, 1996a, p.303). Besides guaranteeing confidentiality this technique seems useful to counteract some inefficiencies arising from group discussions⁵⁶ (**Process Rule 2.4 – Table 5.18**).

Finally, in order to ensure the manager’s ideas were fully captured an additional person was present during the interview and a technique called *drill-down was used*. Kaplan and Norton suggest interviews to be carried out by two or even three people. The reason being is that they have distinct roles. One should lead the interview and ask the questions while the other(s) concentrate on noting down specific concepts and quotes (Kaplan and Norton, 1996a, p.303). For the purposes of this research there were two additional reasons for wanting a second

⁵⁶ See **Section 5.1.3**

person in the interviews. Firstly, the project was sponsored by the corporate offices, and there involving someone from their team in the work would make it easier to book business unit management time and to later report on the results. Also, and even more important, it would give me a chance to observe their own reactions to the process (**Process Rule 2.5**).

N.	Drill-down Technique
1	Once a concept has been unearthed questioning continues until concept is entirely clear.
2	To prompt clarifications use paraphrasing (i.e. re-expressing the same idea with different words) or ask for examples.
3	Once a concept is clarified ask for its causes and its effects.

Table 5.6 Drill-down Technique

The *Drill-down Technique* was not planned for at the outset of the project. However, when used, it contributed to an increase in Content Quality. The *drill-down* relates to the process of concept clarification and cause-effect linking taking place due to the exchange between the interviewer and the interviewee. In **Table 5.6** the approach elements are summarised and comprise three concepts :

- (i) Continue to question the manager on a concept until it is entirely clear. Once a concept is clarified always ask about causes and effects.
- (ii) To clarify concepts one may use paraphrasing⁵⁷ or ask for real life examples. As shown in the example this forces the interviewee to clarify what he has in mind and *may* generate modifications of different extents in the original idea.
- (iii) Ask for causes and effects of the concept to have further proof and explanation of what it is about and what it depends on.

⁵⁷ *Paraphrasing*: Re-explaining back to the interviewee the issue he raised in our own words.

The example below relates to an interview with one of the managers from ACEAIP the public lighting service business unit of ACEA, the main multi-utility service company of the city of Rome (Italy). One of the main customer groups of ACEAIP are the citizens of the city, they are the ones that ‘use’ the city and its public lighting. We had already agreed, through the discussion, that the citizens are an important customer group. The question that kicks-off the conversation below aims to elicit in further detail what the manager believes are the key factors that lead their citizens to be satisfied with their public lighting service provider.

Example of Drill-down Techniques

- MYSELF So...how would you describe a happy citizen?
- MANAGER Well...first of all it is a client that when he calls us is well-received.
- MYSELF You mean...received with courtesy?
- EM Yes...courtesy...a satisfied citizen is one that realises that the person on the other end is prepared...that his need is immediately transformed in something like ‘I understood what you are telling me and this is what you want from us’.
- MYSELF In other words you also mean: *show understanding of the problem*.
- MANAGER Yes, to show that one has understood and also to be able to provide a deadline by which the problem will be solved...this is what I mean by *well-received*...Of course, maximum satisfaction comes when the citizen sees that the promise has been kept and the light has been fixed by the deadline.

(ACEAIP, marketing director, personal interview, 14 June 2002)

In this example the discussion starts from the concept of *well-received*, where a citizen calls the ACEAIP call centre to report a problem (streets lights not working for example) and is dealt with swiftly and professionally. The drill-down concept allows for a certain amount of freedom for discussion that could not occur if the interviewer concentrated on a list of questions that was fixed at the outset. Although at the beginning *well-received* seems to relate only to courtesy after drilling down it seems to denote perceived professionalism; ability to understand the problem, ability to propose a deadline for repairs and (ultimately) the organisation's ability to stick to the proposed deadline (**Process Rule 2.6 – Table 5.18**).

Did the interviews increase *Content Quality*?

As shown in **Table 5.9** this technique allows for an increase in *completeness* and *ease of understanding*. By prompting the interviewee, the interviewer drills down the concept of customer satisfaction until it becomes clearer (i.e. *well-received* is not the same as *received with courtesy*) and has been expanded to contain a longer list of properties (i.e. starts with one, ends with four). In order to show that this is not an isolated case several examples from both companies have been included in **Tables 5.7-5.8** .

Examples of increased Completeness and Ease of Understanding (1)

ACEA IP	Added issues because of prompting...
<p>F. How does the relationship with the citizen work?</p> <p>M. Before we only had a toll-free number and an answering machine. Today the situation has improved. We have operators responding to the citizen's calls, and they have been trained to do so, this is why more and more people call us...true enough that we are not ready yet to call the client back and tell them when we will solve the problem, but we'll get there.</p> <p>F. So, this is a good sign, right?</p> <p>M. Of course, in my experience if something went wrong you cannot possibly forgive the fact that one cannot communicate the problem to somebody and most of all that one has no evidence of the work done to solve it. (ACEAIP, Financial Controller, 10th June 2002)</p>	<p>✓ The citizen wants immediate response...</p> <p>✓ ...be treated with courtesy</p> <p>✓ ...be told when the problem will be solved</p> <p>✓ ...be informed about progress and delays</p>
<p>F. How would you describe a satisfied citizen?</p> <p>M. Well...first of all it is a client that when he calls us is well-received</p> <p>F. You mean received with courtesy?</p> <p>M. Yes...courtesy...a satisfied citizen is one that realizes that the person at the other end is prepared...that his need is immediately transformed in something like 'I understood what you are telling me and this is what you want from us'</p> <p>F. In other words you also mean: show understanding of the problem?</p> <p>M. Yes, to show that one has understood and also to be able to provide a time delay by which the problem will be solved...this means to be well-received...of course the maximum of satisfaction will be when the citizen sees that I have maintained the promise and the light is now working on the date that I promised. (ACEAIP, Marketing Director, 14th June 2002).</p>	<p>✓ The citizen wants to be well-received...</p> <p>✓ ...that is, received with courtesy</p> <p>✓ ...and by somebody that can give a proper answer</p> <p>✓ ...somebody that can provide a time delay</p> <p>✓ ...sees that we respect the time delay</p>
<p>F. What does the citizen want from you?</p> <p>M. The citizen essentially wants from us a response, they want to know when the problem will be solved, there is no doubt about this, whoever the citizen is, from the granny to whoever, the question is: 'when are you solving the problem?' ...</p> <p>F. How do you know the client is satisfied?</p> <p>M. Normally we know how much time it took us to solve the problem and if we fulfil the timing we expected. ...</p> <p>F. Well, ok, but this is an internal focus, do you seek a feed back from the citizen?</p> <p>M. You are right, we are internally focused, we are now organizing ourselves to provide the citizens with information is the repair time goes beyond the 'time limit'. We are promising to the client we will let him know if there will be a delay. (ACEAIP, Costumer Relationship Manager, 14th June 2002)</p>	<p>✓ The citizen wants to know when the problem will be solved...</p> <p>✓ ...and that the timing declared is respected</p> <p>✓ ...and be informed if solution of problem is delayed</p>

Table 5.7 ACEA IP drill downs showing increase in completeness and ease of understanding

Examples of increased Completeness and Ease of Understanding (2)

BETA	Added issues because of prompting...
<p>F. For hypermarkets, what differentiates you from your competitors?</p> <p>M. With those people it is important the strength of the brand and a successful product...</p> <p>F. What do you mean?</p> <p>M. By successful product I mean a product that has a good marketing program to support it...</p> <p>F. Sorry if I insist, you said brand and support, what do you mean exactly? Why are hypermarkets interested in these features?</p> <p>M. They worry about profit, their concern is space, they have limited space and they want to pull as much profit as possible from it. They prefer strong brands because they sell well...they have a low shelf life...(BETA, Marketing Manager, 2nd September 2002)</p> <p>F. Do you know what type of clients does BETA have?</p> <p>M. Our clients are very diversified</p> <p>F. How so?</p> <p>M. Well, very international, they can be very different in culture and come from different countries. In my narrow experience of wine communication I noticed that the high end segment of our clients is very attentive to the product, much more that what I would've imagined.</p> <p>F. The product? You mean the champagne?</p> <p>M. Yes, but also in a more general sense to the way it is presented, the marketing aspect.</p> <p>F. So, you mean, the champagne and the presentation, the whole?</p> <p>M. Yes, the image is very very important for them, and it becomes more important as the price goes. The more they pay the more they are buying 'excellence' in the wider sense, everything has to be perfect. (BETA, Environmental Manager, 20th September 2002)</p> <p>F. Let's talk about the on-trade customers, the ones where the consumers both buys and consumes the champagne...</p> <p>M. With them we are in the world where the perception of the wine is important. The quality is important, but the price too. They always want very low prices. It is also very important what is 'around' the bottle, all the marketing objects that make the bottle 'visible' in the restaurant. We are good at that.</p> <p>F. How about client relationship? Is it important?</p> <p>M. Yes it is. The on-trade is a prescriber, so we often invest on those people. We are ready to reduce our prices to be top of the list in the trendy places...</p> <p>F. How do you retain the prescriber?</p> <p>M. With the personal relationship, because he likes us, he knows our wines well, he receives gifts, he comes and spends a day with us here. (BETA, Financial Director, 4th September 2002).</p>	<p>✓ Hypermarkets care about the strength of the brand and a successful product</p> <p>✓ ...it means good marketing support</p> <p>✓ ...it means the product has to have a low shelf life</p> <p>✓ ...our clients are diversified</p> <p>✓ ...our clients are attentive to the product</p> <p>✓ ...not only the wine but the presentation</p> <p>✓ ...the more the clients pay the more they notice every detail</p> <p>✓ ...quality and price are important, but also the visibility of the bottle in the shop</p> <p>✓ ...the presence in the trendy places is important</p> <p>✓ ...the prescriber will buy from us if he likes us</p>

Table 5.8 BETA drill downs showing increase in completeness and ease of understanding

Drill Down on the concept of CUSTOMER SATISFACTION in ACEAIP			
N.	Initial Concept	After First prompt	After Second prompt
<i>1</i>	Well-received	Received with courtesy	Received with courtesy
<i>2</i>		Quickly and clearly understood	Quickly and clearly understood
<i>3</i>			Provide a deadline for repair
<i>4</i>			Repair by the promised deadline

Table 5.9 Example of increase in content quality due to drill-down

Although this empirical evidence suggests that *completeness* and *ease of understanding* have increased there is no conclusive proof. Even if some of the ideas seemed to stem from the interviewer's additional prompting, it does not necessarily mean that for the manager they were unclear. In order to know that I should've asked the question on the single concept there and then. However, even if more in general, the managers themselves come in support of the idea that new insights were created through the interviewing. In other words the empirical evidence here described shows that while it is not certain that the Drill-down Technique increases the Content Quality, it is likely in a lot of cases that it does.

Manager 1

'...some questions you made forced me to take some distance from my everyday preoccupations. These questions were not new but I did not necessarily take the time to think about them carefully. Some of these were very simple questions "how do you see the company in 5-10 years?", and, "how do you see environmental issues evolve in the future?"...I had no easy answer, I found myself wondering...which means that our reflections today may be too short-term...' (BETA, environmental manager, personal interview, 18th June 2003).

Manager 2

'...during the interview I realised that our improvement was strongly dependent on the performance of some corporate shared services. Again, I knew it, I just I did not realise how heavy the impact was and what little effort we were putting into improving the situation in that respect.' (ACEAIP, financial controller, ACEA IP, personal interview, 22 June 2003).

Manager 3

'...in order to explain to you my concerns I was forced to clarify them for myself as well. In practice, while trying to give you a full picture of the problem, I understood things that I had not seen before...' (BETA, environmental manager, personal interview, 12 April 2003).

Manager 4

'...while discussing the different topics to you they also became clearer, it is similar to playing with your camera trying to find the right 'focus'. Certain topics were once again brought to the foreground thanks to our conversation...' (ACEAIP, production manager, personal interview, 21 June 2003).

Manager 5

'...it is funny to realise that during the interviews I discovered the 'hot water'. For instance, when the interview stirred towards the importance of the Municipality-Districts this was something I already knew. However, this idea was reinforced by the discussion. The idea was there, but it never had the opportunity to emerge. Most of all it had never emerged in a setting that called for action and, if necessary, organisational change...' (ACEAIP, financial controller, personal interview, 22 June 2003).

Interviewers also learn: outsource or do-it-yourself?

Up to this point the focus has been on the managers being led through the process. It describes how, for this group of people, the situation may have improved. These are, however, not the only participants involved in the process since the facilitator is playing an active (and even discretionary) role by deciding what to ask; when to dig deeper for more information; and what to underline. While suggested guidelines for managing this task correctly feature later in the chapter, here we focus on *what the interviewer learns*.

- (i) For the purpose of this study, two corporate managers were invited to be co-interviewers. The reason for this is as follows: to have some assistance in carrying out the interview;
- (ii) to ensure that the information coming out of the interview remains close to the needs of my sponsors; and
- (iii) to allow them to learn a methodology that could then be reproduced in other business units. This means that I had not planned for the interviewer role to be in any way the locus of learning. The following quote proved me wrong.

MY QUESTION: How did you find the interviews? Did you learn anything new?

'Oh la la...that was very very rich experience' (Why?) '...because you learn how a company works...it is a great and unusual opportunity [emphasis added] to be able to meet all the top managers and really understand their preoccupations, I learned a lot...' (Did it help in your job?) *'Yes...for a job in the environmental field you must really try and be aware of the preoccupations of all the areas of the company because today we work with the purchasing department to build tools for suppliers, [while tomorrow] we may work with the marketing department to help them integrate environmental aspects into product design...'* (Corporate EM team member, ALPHA, personal interview, 25 June 2003).

The process of interviewing is useful. It provides with an opportunity to learn first hand the opinions of managers, as well as present the opportunity to reflect on the alignment, the complementarities and the differences among these opinions. This quote is also interesting because it underlines the *rarity* of being able to interact with high-level managers as well as the absolute *need* to do so. Launching an interview process will thus provide such opportunity.

So if interviewing is so useful why not advise the environmental manager to do it himself? The answer to this question depends first of all on the objective of the interviews. If the objective is to build a BSC then the environmental manager may not be seen as the ideal project leader by the rest of the participants in the process even if he is acting on the corporate level or a specialist in his area. .

On the other hand, if the objective is simply to provide links between environment and strategy then this hypothesis is not so far fetched because the TMG members will see this activity as being in line with the EM role in the organisation. Nevertheless, even in this second case, it seems important to proceed with caution and to double check on the pros and cons of outsourcing the interviews.

The advantage of outsourcing interviews is that there is no former history between the facilitator and the participants and, most importantly, everyone knows there *never will be*. This may facilitate the flow of information because, for example, an interviewee does not have to worry that giving his opinion could: damage him in any way; encourage him to take action on what he judges to be peripheral and unimportant; and influence in any way the future relationship with the interviewer.

In addition, there is the issue of whether or not the environmental manager will be able to follow the criteria discussed in **Section 5.1.3**. Issues such as the *ability to focus on the interviewee's opinions* may be understandably hard for a manager who is convinced of his own opinions. Finally, even if he is capable, there is an issue of professionalism. An expert facilitator is specialised in this type of activity and may, for this sole reason, do a better job in eliciting and capturing the information. **Table 5.10** details a series of reasons that would favour the outsourcing of interviews.

N.	I should use an external interviewer if...
1	My views are likely to be seen as biased due to my role in the organisation.
2	My position in the organisation is too low to be taken seriously.
3	My own views might reduce my ability to focus on interviewee's opinions.
4	It is unacceptable for me to ask questions such as: 'what satisfies our customers?'.
5	My participation is likely to reduce interviewee's openness because they may feel threatened.
6	My participation is likely to reduce interviewee's openness because we do not like each other.

Table 5.10 Reasons to outsource interviews

If *outsourcing the whole exercise* or the *do-it-yourself* option are at opposite ends of the spectrum and each with undesirable implications, maybe the solution lies somewhere in the middle. Ideally, it would be a process solution where the increase in knowledge and the quality of the interview are not affected. In other words one can increase without the other automatically decreasing. **Table 5.11** provides three possible solutions for choosing the interviewers.

Choosing the interviewers – three options			
Questions	S1	S2	S3
1. My views are likely to be seen as biased due to my role in the organisation.	No Prob.	No Prob.	No Prob.
2. My position in the organisation is too low to be taken seriously.	No Prob.	No Prob.	No Prob.
3. My own views might reduce my ability to be objective and focus on the managers' opinions.	No Prob.	No Prob.	No Prob.
4. It is unacceptable for me to ask questions such as: 'what satisfies our customers?'.	No Prob.	No Prob.	No Prob.
5. My participation is likely to reduce the interviewee's openness because they may feel threatened.	Risky	Less Risky	No Prob.
6. My participation is likely to reduce the interviewee's openness because we do not like each other.	Risky	Less Risky	No Prob.
7. How much will I learn from the process?	High	Low	High
S1 = Environmental manager and external facilitator S2 = Junior environmental manager and external facilitator S3 = External facilitator as interviewer, environmental manager as one of the interviewees (superior solution only if there is a validation step)			

Table 5.11 Choosing the interviewers – three options

1. **Environmental manager and external interviewer.** Interviews could be carried out by both the environmental manager and an external facilitator. This solution [S1] takes care of problems 1 to 4. However, there is still a risk that the person does not completely open up because they feel threatened or there is a history between them and the environmental manager conducting the interview. If this issue exists with a small number of interviewees then the environmental manager could decide not to participate in those specific interviews and maybe send a junior member of the environmental team instead. This is only a partial solution since a junior assistant is expected to share what he has heard with the environmental manager (his boss).
2. **Junior environmental manager and external facilitator.** This solution [S2] is less risky than [S1] because sometimes it is hard to evaluate with precision the predisposition and the thoughts of a manager. On the other hand, this solution [S2] certainly reduces the first hand learning available to the environmental manager. Hence the **low** ranking for question 7 in Table 5.10.
3. **External facilitator as interviewer, environmental manager as interviewee.** The third solution [S3] is only available if the process continues to the next process step. If a validation session is carried out then the environmental manager could be, as was the case in this study, one of the interviewees. He would learn about the Environmental cause-effect chains (see Chapter 2) during the validation seminar as with the other managers. In this solution, the problems mentioned are no longer relevant since the whole interviewing process is outsourced. (**Process Rule 2.5**).

5.2 How to choose participants?

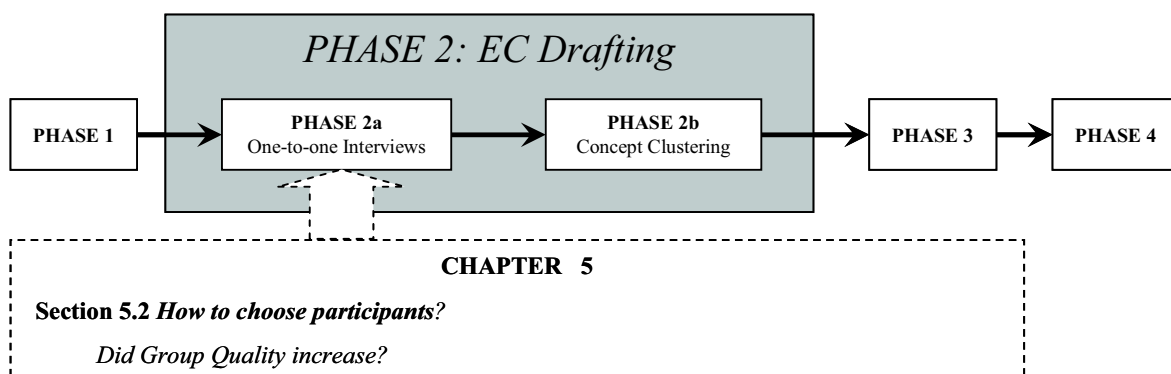


Figure 5.7 Questions discussed in Section 5.2

Group Quality refers to the idea that there should be no waste of management knowledge and that this knowledge must be prompted to the maximum extent. In other words, a group is of *low quality* if, for the decisions to be taken, it does not possess all the knowledge potentially useful to take those decisions. In **Chapter 1** the TMG members are defined as *managers whose opinion the CEO usually calls upon when the most important decisions need to be discussed*. The TMG members must be included in the process because they are the ones who can take the decisions as to whether or not the resources are available to implement the decisions taken during the process. So who should we involve in the process and how do we choose them?

Similarly to the work done in **Chapter 2**, it seemed useful to draw up a checklist of typical roles within the organisation particularly as some of the key roles may fall outside of the remit of the business unit that was chosen for the study. For instance, in most cases business units are linked to company wide activities such as HR, marketing, production and so on and you may need the buy in of people from these departments to be able to take decisions. The fact that there is no official environmental role in the business unit does not necessarily mean that environmental activities are not important for that business unit. However, there may be the tendency to neglect or forget this issue. Also, as suggested by the research carried out by Wooldridge and Floyd (1990), one would probably want to include in the interviewee group those managers whose approval/assistance may be needed in the implementation stage. The checklist shown in **Table 5.12** includes all these criteria (**Process Rule 2.7 – Table 5.18**).

Who covers the roles allowing my organisation to deliver?	
1	Who could bring a marketing perspective?
2	Who could bring an R&D perspective?
3	Who could bring a product development perspective?
4	Who could bring a supply manager perspective?
5	Who could bring a production perspective?
6	Who could bring a distribution perspective?
7	Who could bring a sales perspective?
8	Who could bring a post-sales perspective?
9	Who could bring a public/institutional relation perspective?
10	Who could bring an IT perspective?
11	Who could bring a social and environmental perspective?
12	Who could bring a legal perspective?
13	Who could bring the financial perspective?
14	Who could bring a human resource perspective?
15	Are there additional people in the company with specialist knowledge who should be included?
16	Whose assistance would be needed to implement decisions? Should they be included?

Table 5.12 Checklist of typical roles within an organisation

After going through this checklist for the purposes of this study there was a group of 10 interviewees in both ACEAIP and BETA. In BETA, the marketing, supply chain and environmental managers joined the TMG members. In ACEAIP, the call centre director and the corporate environmental manager were added. In both cases the environmental manager joined the group because they were the reason these companies had signed up to the project in the first place. **Chapter 1** highlights how environmental managers are frustrated because often environmental matters lack management attention or input. **Chapter 4** reveals that this is an issue for both ACEA and ALPHA. Therefore, the involvement of the environmental manager in a strategic discussion was exactly what our research partners were hoping to see. (**Process Rule 2.8 – Table 5.18**).

Did Group Quality increase?

It seems that, at this stage *Group Quality* is a property of *Content Quality* because by capturing managers' knowledge in a discussion it should automatically improve the quality of the content made available in the discussion. *Group Quality* improved if those managers

brought into the discussion raise issues that would normally have been ignored by the others. This chapter focuses attention on the environmental manager's contributions. **Chapter 6** shows that by including the environmental manager in the interviewee group, the set of issues under discussion is further enriched because of his/her specialist knowledge. That section constitutes also the proof that such an addition to the group also *increases Group Quality*.

5.3 Is Concept Clustering necessary?

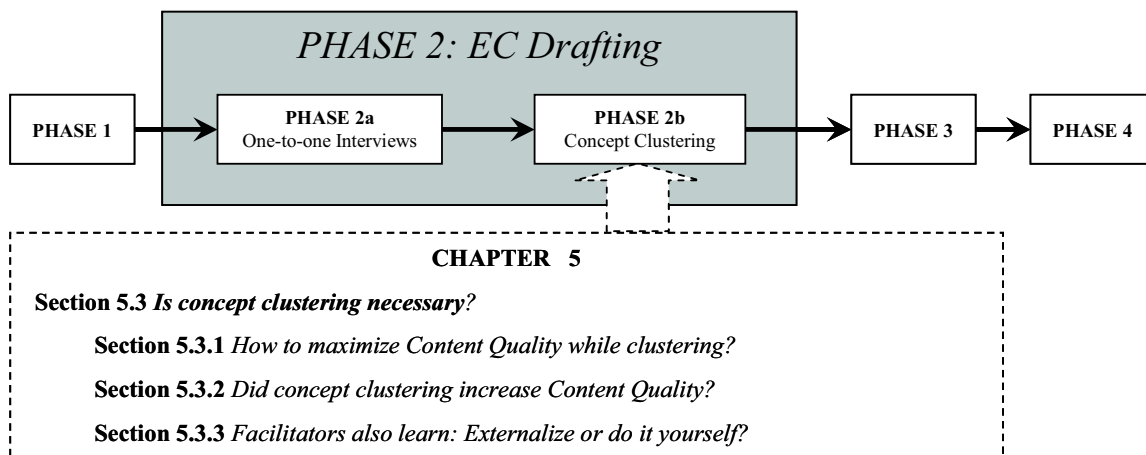


Figure 5.8 Questions discussed in Section 5.3

Concept Clustering brings together all the ideas expressed by the interviewees and *clusters* them into concepts called *BSC Objectives*. In the example shown in **Table 5.13**, the list of *Concepts Expressed* represents an interpretation of the quotes of the four managers reported in the rest of the Table. Then, based on the interviewees' indications, the interpretations have been linked together through cause-effect links. Finally, as shown in **Figures 5.5** and **5.6** the *grey* highlights where environmental work could influence the BSC Objectives.

As shown in **Figure 5.7** in **ACEAIP** reducing a negative environmental impact has a three significant gains for the organisation. Firstly, it decreases costs by reducing the consumption of energy (or other resources), waste production, waste-related fines and so on (*EC1*). Secondly, by implementing an environmental management system (EMS) the organisation could reduce the risk of losing revenue by fulfilling the most recent public tender requirements concerning environmental management (*EC2*). Thirdly, by using the green-pricing mechanism the organisation could potentially increase revenue because of the

preferential energy prices ensured by Italian legislation for energy produced with ‘green’ technologies (*EC3*) (See **Chapter 6** for a more thorough description).

As shown in **Figure 5.8**, in BETA the impact of being proactive in environmental management can pay even greater dividends for the organisation and can be clustered in three cause-effect chains. First, by including environmental parameters in the packaging design process (i.e. eco-design) there could be significant cost reduction (*EC1*). Secondly, using sustainable practices in viticulture has a positive impact on sales while at the same time reduces risk. It impacts sales by increasing employee motivation; satisfies consumers’ interest in safety, health, and environmental issues; encourages those grape suppliers who prefer to work with environmentally friendly companies; and protects the champagne’s organoleptic properties (i.e. its taste). It can reduce risk as environmentally friendly packaging for example is more likely to be accepted by the various country-specific environmental standards as well as increasing the chances that the product is more readily accepted by the local community where BETA operates (*EC2*). Finally, using sustainable practices in viticulture can also enhance the local image of BETA, making it more desirable for suppliers to work with the company and in turn increasing loyalty among existing suppliers. All in all enhancing it can improve the chances of ensuring enough supplies to satisfy market demands (*EC3*) (See **Chapter 6** for a more thorough description).

Example of Concept Clustering– ACEAIP – Citizen Satisfaction					
N.	Concept Expressed	Manager 1	Manager 2	Manager 3	Manager 4
	<i>Be able to communicate the problem</i>	In my experience if something went wrong you cannot possibly forgive the fact that it is impossible to communicate the problem to someone.			
	<i>Received with courtesy</i>		A client needs to be <i>well-received</i> , that is, received with courtesy		
	<i>Quickly and clearly understood</i>	We have operators responding to the citizens' calls, and they have been trained to do so, this is why more and more people call us.	A satisfied client is a client that perceives the person on the other end of the phone to be prepared. Someone that is capable of transforming his need into a phrase such as: 'I understood what you are telling me and this is what you want from us'.		
	<i>Provide a deadline for repair</i>		Certainly, the citizen wants to know when the problem will be solved, in how many days, and possibly a precise date.	The citizen essentially wants a response from us. They want to know when the problem will be solved. There is no doubt about this, whoever the citizen is, from the granny to whoever, the question is: 'when will you solve the problem?'	
	<i>Repair the problem quickly</i>				The citizen wants us to be quick to solve the problem.
	<i>Repair should last the test of time</i>				The citizen wants the repair to last the test of time.
	<i>Keep the citizen informed if deadline cannot be respected</i>	Citizens want evidence of the work we do to solve the problem.		You are right, we are perhaps too internally focused, we are now organizing ourselves to provide the citizens with information is the repair time goes beyond the 'time limit'. We are promising to the client we will let him know if there will be a delay.	
	<i>Repair by the deadline</i>		The citizen will notice if I respect the given deadline and will subsequently be satisfied with the service if I do.		

Table 5.13 Example of Concept Clustering – ACEAIP – Citizen Satisfaction

Figure 5.9 ACEA IP Strategy Map and Environmental Chains

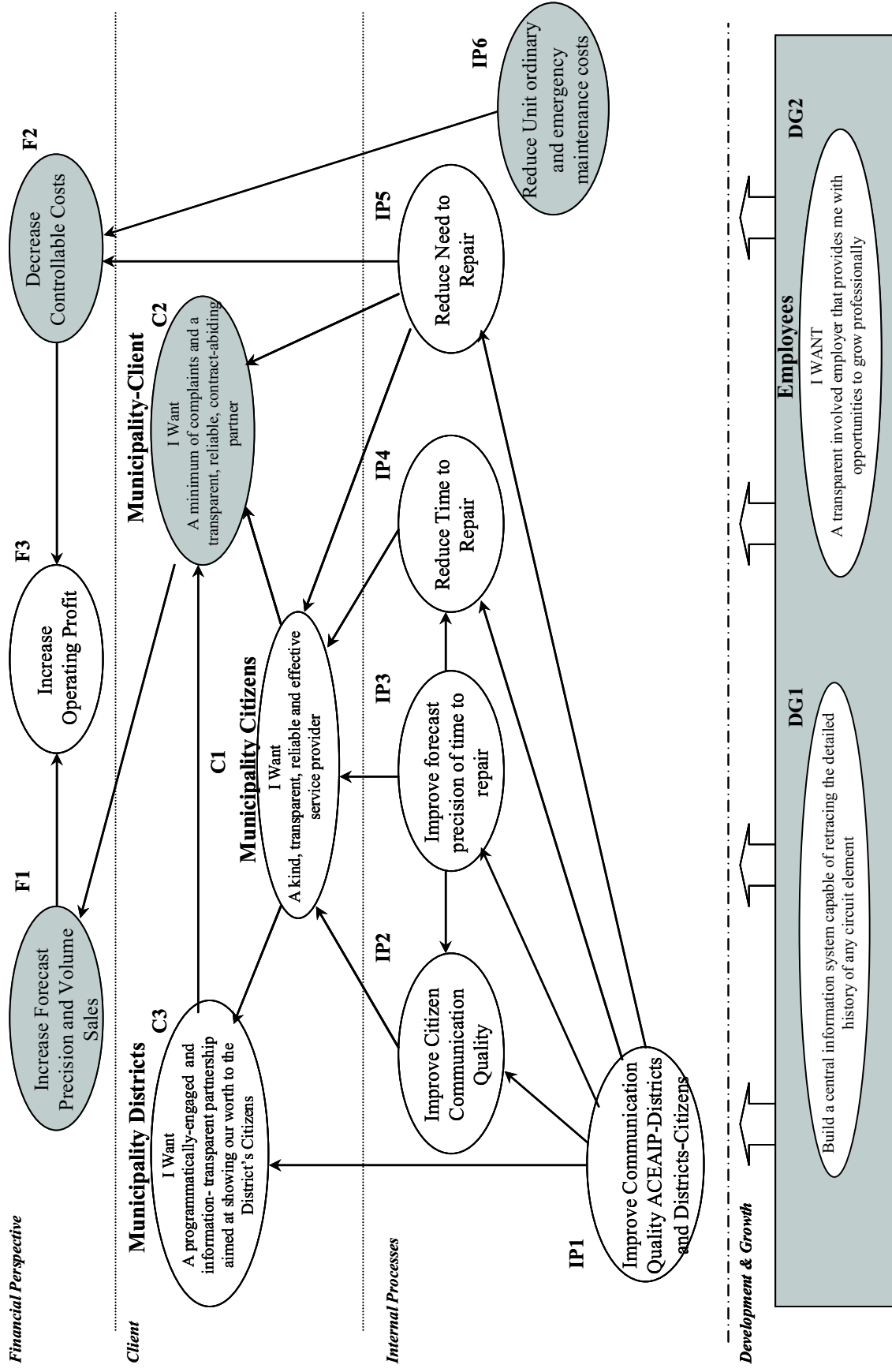


Figure 5.10 BETA Strategy Map and Environmental Chains

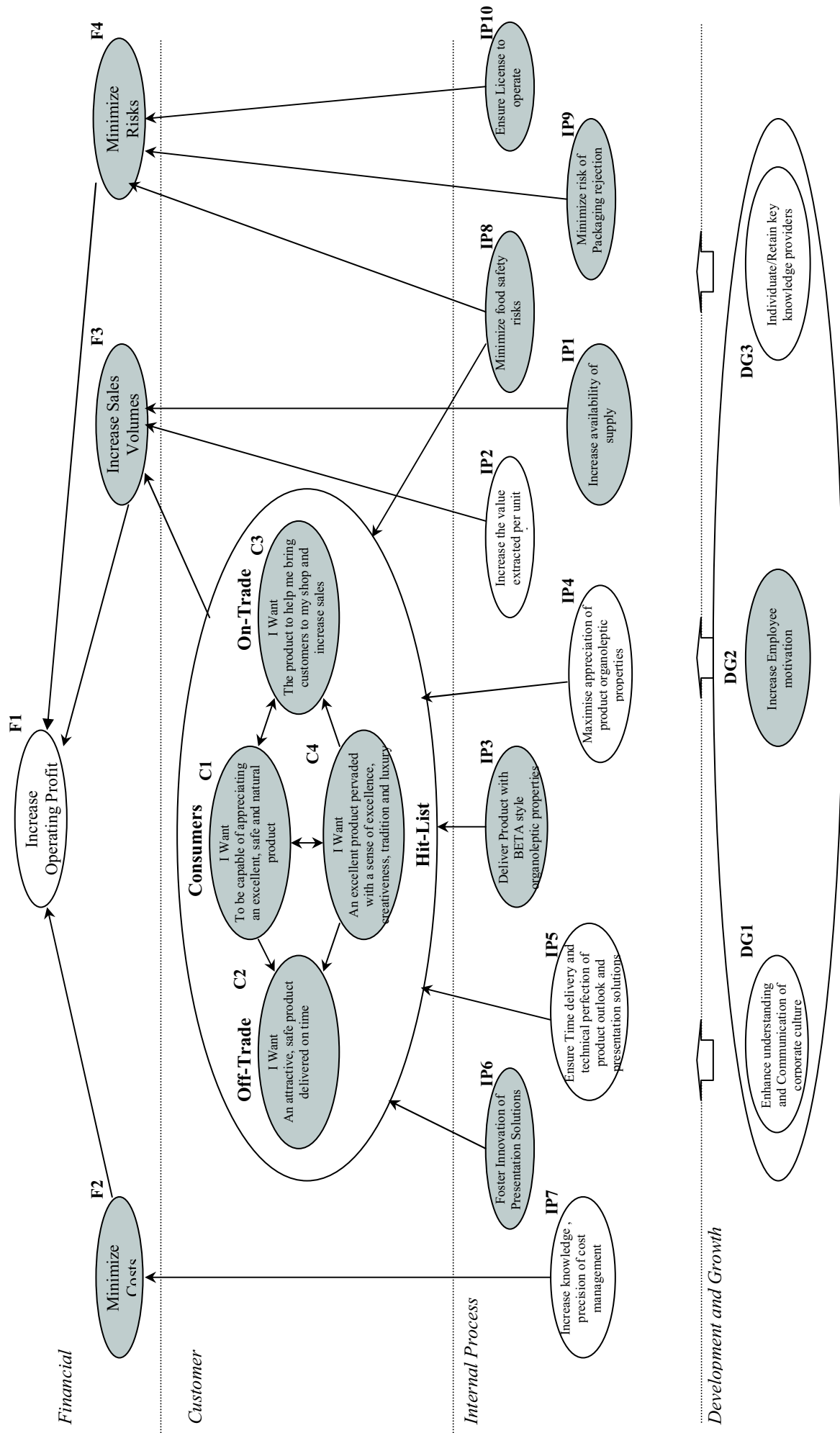


Figure 5.11 EC1-EC2-EC3 before and after the Clustering Phase - ACEAIP

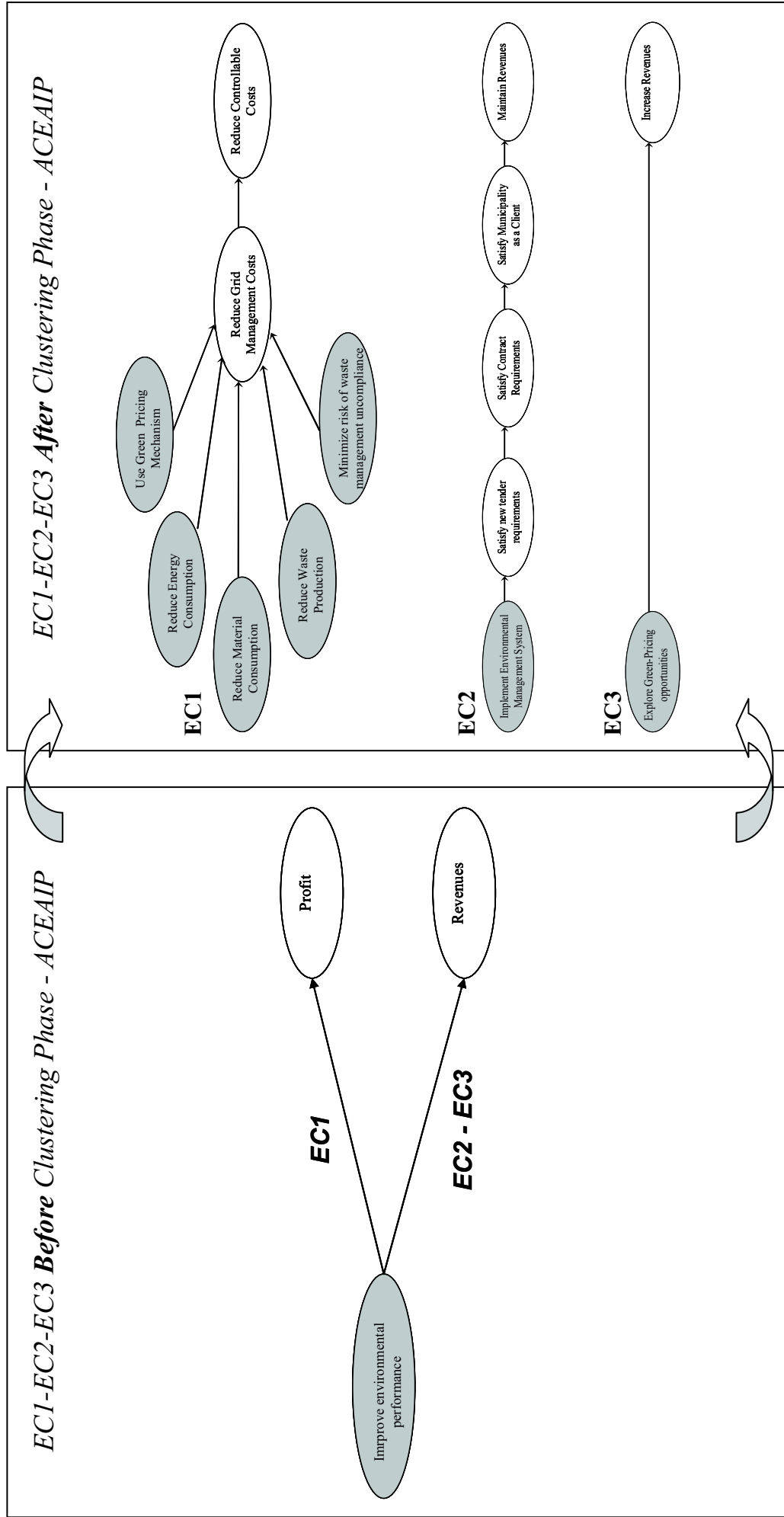
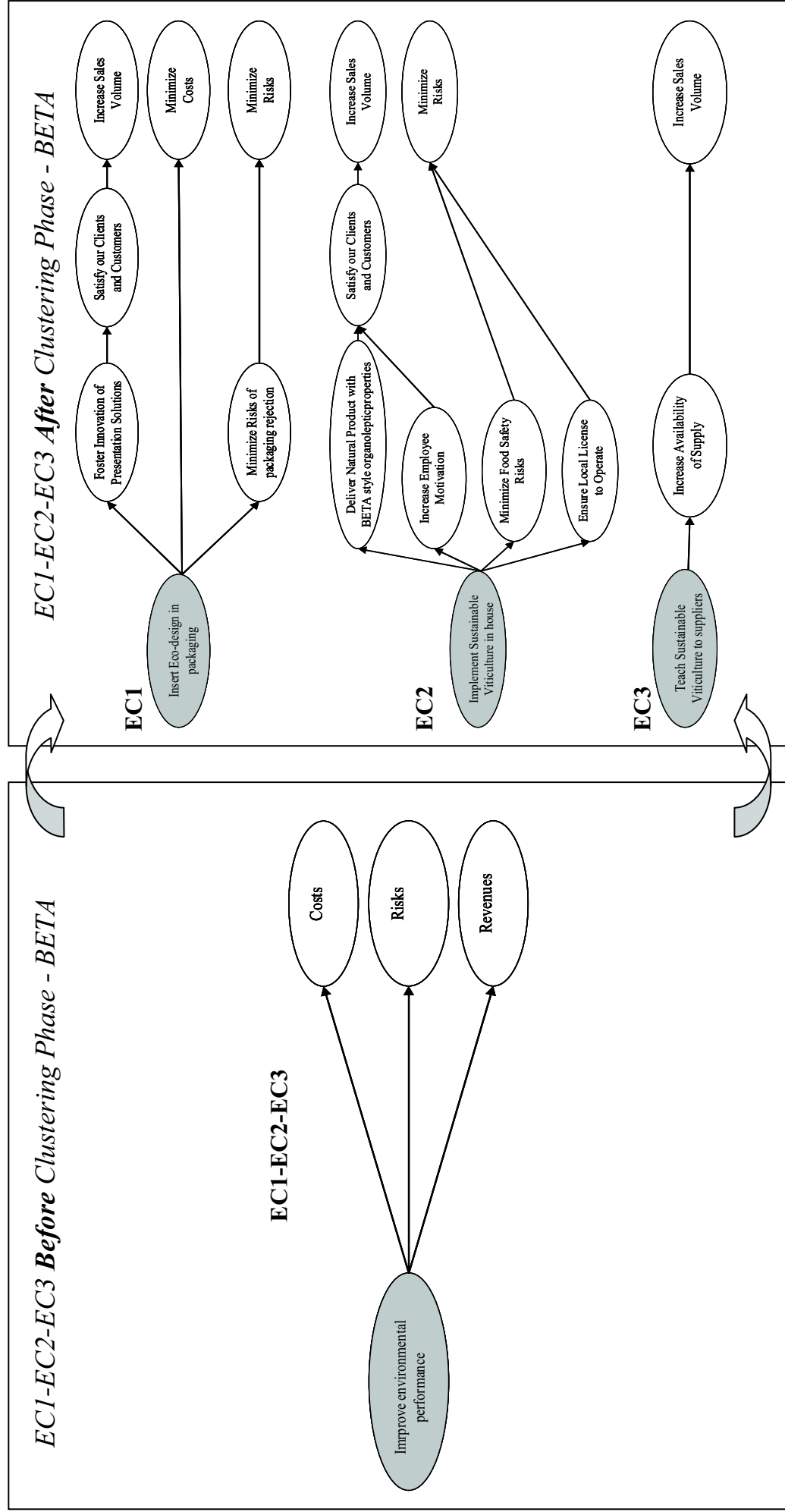


Figure 5.12 EC1-EC2-EC3 before and after the Clustering Phase - BETA



When delving into Kaplan and Norton's publications (1996a, 2001) one may get the impression that this process is rather simple and straightforward. This may be due to the fact that, from three books and over 600 pages of ink, the authors only dedicate half a page to discuss this process step (Kaplan and Norton, 1996a, p.304). On the contrary, as this study suggests, not only is it not easy to do, but it proved difficult to do it *well*. The expectation is that clustering the concepts before hand will make it easier to manage the upcoming group discussion.

How to maximise Content Quality while Concept Clustering?

For the *Concept Clustering* phase to be carried out successfully the facilitator must be able to identify the similarities or differences of the concepts expressed by different interviewees, at different moments in time, and with different words and examples. Specifically, the list of *Concepts Expressed* the first column on the left of **Table 5.13** is an interpretation of the quotes from the four managers reported in the rest of the Table.

This exercise is delicate because individual-level cognition mistakes *of the facilitator* can play an important role in the overall results of the study. For example, in this study, it was tempting to ignore a concept because:

- (i) it was unclear from the notes;
- (ii) it was mentioned by only one interviewee;
- (iii) it was against what was believed to be right.

Resisting these temptations is very important. Clearly, it could very well be that an issue mentioned by one person alone proves to be incredibly precious because he alone has a specialist knowledge enabling him to see that problem. Such temptations can be overcome by bringing all concepts to the next process step. If any of the concepts were unclear an interpretation was drafted and proposed for further discussion (**Process Rule 2.9 – Table 5.18**)

Additionally, and perhaps more fundamentally, it is also possible to miss a concept because the notes or transcripts are misinterpreted. For the purposes of this study, due time was given to this activity and usually another person was included in the process, for example the person

who sat in on the interviews. The constant question that sprang to mind while reading the transcripts was whether or not a specific statement contained a new concept. There was a tendency to assume that a concept read is ‘the same’ as something spotted earlier, the well-known individual cognition problem of *Illusory Correlation*⁵⁸. To counteract this tendency it was assumed, when first reading a manager’s idea that the concept at hand was different from the previous one. This meant that it could be evaluated and assessed as to whether it was really the same as an idea previously mentioned (**Process Rule 2.10 – Table 5.18**).

Finally, in order to draft the *Strategy Map*, of which *Environmental Chains* are part, the five steps as specified in **Table 5.14 (Process Rule 2.11 – Table 5.18)** were followed rigidly to the letter.

Steps for drafting a Strategy Map	
1	Write the complete list of issues provided by all interviewees for the financial perspective.
2	Decide on appropriate titles for the objectives.
3	Draw cause-effect links among objectives.
4	Go to the next perspective and repeat points one to four.
5	Link the objectives vertically (across) and horizontally (within) the perspectives.

Table 5.14 Steps for drafting a Strategy Map

Did Concept Clustering increase Content Quality?

Table 5.15 describes why the *Clustering* activities may have a positive impact on *Content Quality*. The **Figures 5.7** and **5.8** show how *Environmental Chains* seem to increase the property of *Value-Added*. In both ACEAIP and BETA the question for the environmental manager was to try to link environmental work with revenue, costs and risks (**Figure 5.7**)⁵⁹, after the Concept Clustering phase he has a clear route of how the value is created (**Figure 5.8**). This information, the *Environmental Chains*, are of *added value* because they seem to

⁵⁸ See **Table 1.2**

⁵⁹ It is worth specifying that the pictorial view of the strategy of our pilots, shown in **Figures 5.5** and **5.6**, is new to the managers. Before the Concept Clustering phase, there is no such overall view of the company, no model, nothing. Concepts are discussed freely and with no definitions attached. In other words, while **Figures 5.5** and **5.6** are, in my view, a good proxy of what that group of managers collectively has in mind, this certainly remains a model that I have created, a model that did not exist before, a model that is certainly clearer and more precise than what managers would be able to explain at that stage.

facilitate, as expected, the explanation of where exactly environmental work could contribute to the company's bottom line.

Content Quality Properties potentially increasing through Concept Clustering		
Sub-Property	Definition	Why would Clustering have an impact?
Value-Added	The extent to which data is beneficial and provide advantages from their use.	Strategy Maps and Environmental Chains provide the opportunity to understand clearly where environmental work impacts the business objectives.
Concise Representation	The extent to which data is succinctly presented without being overwhelming.	The Strategy Map summarises the company's entire strategy in one page.
Ease of Understanding	The extent to which data is clear without ambiguity and can be easily understood.	Concept <i>Clustering</i> forces the facilitators to define what they write. Concepts become clearer.

Table 5.15 Content Quality properties potentially increasing through Concept Clustering

Before drafting the Strategy Map environmental work in BETA was generally related to minimising costs or increasing sales. However, after the Strategy Map it is more directly linked to the quantity and quality of the goods; to the innovative marketing solutions; to food safety risks; to the excellence in organoleptic properties (i.e. taste); and to employee motivation. These are all routes that the environmental manager can pursue. They are useful because they are clear and specific.

Of course, it must be remembered that *Content Quality Properties* are a function of what the user needs. While it seems logical to suppose that a clearer value creation route is useful it is still questionable whether this approach is useful to the managers. **Table 5.16** contains the opinions of 15 managers, from both environment and strategic planning departments, who attended the presentation of the results of this research project. They were asked about the usefulness of the Strategy Maps. The quotes all point in the direction of *value creation*.

Furthermore, the following quote shows the appreciation for the Strategy Map from one of the co-facilitators:

MY QUESTION: How about the exercise of drafting the Strategy Map? Was it helpful?

I think it really helped me compare the views of individual managers ...it was the fact of having to draft the Strategy Map that forced me to do so...it is kind of a translation...its usefulness is in the hard work that went into producing it...it was hard, and intellectual...but by simply doing it we understood a lot of things...the Strategy Map makes everything clear...it's effective...it's powerful! (BETA, Co-Facilitator personal interview, 25 June 2003).

Another issue pointed out by this quote is the increase in *Ease of Understanding*. The manager has participated to the clustering activities, and, because of that, has come to understand the concepts themselves and the difference in views of the managers on those concepts.

Company		Role		What do you think of the usefulness of the Strategy Maps?	
Environmental and CSR	RIO TINTO	Corporate CSR Director	I think it is useful to understand the implications of environment and social issues for the company, it is a good way of showing and describing the business case.		
	SB MINERALS	Corporate CSR Director	I think the cause-effect idea is useful.		
	SB MINERALS	Corporate Environmental Director	I think the map is useful because it establishes the connections starting from the financial issues downwards. It is logical, it will help. It is important because you are forced to write it down and to see it.		
	HEWLETT PACKARD	Environmental Manager	It seems that it works quite well. It makes sense, it is robust, useful.		
	DOW CORNING	Corporate EHS Director	I think it works very well. It shows the relationships between the different drivers and perspectives. I like the linking it is visual and can be drawn for whatever situations the company is facing. In one page you have the whole picture, you see how it come together. For me, as the EHS manager, I can show more easily how my work contributes to financials.		
	NOVARTIS	Corporate EHS Manager	I think the map can show how the environmental objectives are linked to the operational objectives. It shows something punctual, exactly which part of the strategy is impacted.		
	NOVOZYMES	Corporate Environmental Manager	I think the strategy map is very useful because the cause-and effect relationship link things together. It makes it a lot easier for us to find the business case for sustainability and to link sustainability to everyday business activities.		
	GAZ DE FRANCE	Corporate Environmental Manager	I think that it is a methodology, like others, to measure if you are going in the right direction.		
	TOYOTA	Corporate CSR Manager	The strategy map looks like a nice way of structuring the ideas, it seems useful. Especially the cause-effect linking, it speaks to you, it is clear.		
	DANONE	Industrial Director	I think Strategy Maps are useful. For me the linking is the key element. In an industrial guy, I like cause and effect. Why? It makes it is easier to understand and follow what went wrong, why we did not achieve what we intended to achieve.		
	PAVILLION HOUSING GROUP	CEO	It facilitates the discussion of the links between value drivers.		
	SCHNEIDER ELECTRIC	Corporate Strategy Director	I have learned how crucial the strategy map can be for management. The cause-effect links between objectives and perspectives show where the problems are. It is very powerful.		
	Corporate Strategy	SCHNEIDER ELECTRIC	Corporate Controller	I think the map is the most important point in the BSC approach. It clarifies what management wants to do. For the environmental manager specifically it is very useful because it is a good way to make the connection between environment and business. If environment is not linked to the strategy then it is only a gadget.	
RENAULT		Corporate Strategy Director	As all maps it helps people visualize the links and the challenges. It allows to simplify reality, but not too much. It makes complexity manageable.		
DENMARK BANK		Corporate HR Director	I think it is very useful because it gives clarity, it makes you think and visualize what you would probably not see otherwise. With one single view one has a synthesis of a very complicated thing. Normally we have the problems of getting lost in the details, here really we've got the whole picture.		

Table 5.16 Do Strategy maps add value?

While on one hand Content Quality can increase there is also a risk that Concept Clustering could affect the *completeness*. As detailed in **Table 5.17** while in the interview step completeness is *prepared*, in the clustering step it is *protected*. To *prepare completeness* means trying to maximise the volume of issues through interviewee to interviewer interaction. To *protect* it means minimising the loss of volume of issues due to the clustering activities. Since I went through my notes several times there was no loss in the ideas but, as described in **Section 5.3.1**, the temptation to leave issues behind existed and I had to actively resist it.

<i>Potentially Shifting Properties during Clustering</i>				
<i>Concept</i>	<i>Property</i>	<i>Sub-Property</i>	<i>General Definition</i>	<i>Specific Meaning</i>
Consensus Quality	Content Quality	Completeness	the extent to which data are of sufficient breadth, depth, and scope for the task at hand	Minimize ideas loss

Table 5.17 Potentially Shifting Properties during Concept Clustering

Facilitators also learn: Outsource or do-it-yourself?

While it seems that Concept Clustering and linking ideas is useful for the quality of discussion in the next phase there are also some more immediate advantages. One of the co-facilitators involved indicated how being ‘forced’ to cluster and link helped them to understand not only the concept in itself but also the differences in views between the managers.

(my question: how about the exercise of building the strategy map? Was that of any help?) I think it really helped me compare the individual managers views...it was the fact of having to build the map that forced me to do so...it is kind of a translation...its usefulness is in the hard work that one must do to build it...it was hard, and intellectual...but by simply building it we had understood a lot of things...the strategy map makes everything clear...it’s efficient...it’s powerful! (Co-Facilitator BETA, Personal Interview, 25th June 2003).

Again this result favours the involvement of the environmental manager in the clustering and linking work. The decision here is, however, less of a problem compared to the interview phase because their involvement can hardly have any negative consequences. This is because

there is no interaction with the managers in this phase, the work is entirely done in back-office. The risk in the previous phase was that the environmental manager's role in an organisation could hamper the openness or the breadth of the conversation. Since at this stage there are no conversations there is also no risk. So, if the environmental manager has already carried out the interviews there seems to be no reason why he should not participate in this step as well (**Process Rule 2.12 – Table 5.18**). Furthermore, as the quote from my co-facilitator in BETA shows, it might be not that easy to explain a Strategy Map to a manager who has not participated in the process.

'...I think this is the main problem of this exercise that you need to be trained to understand...once you understand it, it is clear, it's all right...but you need to be trained...if not...I presented it to the ALPHA environmental manager and she found it very interesting...but only after we spent some time on it...and she was really interested...she had the same feeling...suddenly everything is clear, it's efficient, it's powerful (ALPHA, corporate EM team member, 12 April 2003)⁶⁰.

5.4 Conclusions and contributions

The aim of this chapter was to describe and comment the first two steps of the content building process: *interviewing* and *Concept Clustering*. *Interviewing* aimed at getting from the managers their ideas about business issues, environmental issues and the links between the two. *Concept Clustering* aims at organising the manager's ideas under common headings, called the BSC Objectives. For each of these two steps the same procedure was followed. Firstly, it discusses why these two steps are useful. Secondly, it describes and justifies the process rules followed. Finally, using the empirical evidence, there are comments on the achieved results. Given the outcomes of this research it would seem that interviews are necessary because their absence is likely to increase both individual and group-type mistakes. Furthermore by clustering the concepts before hand it will facilitate the upcoming group discussion.

Concerning two process steps, **Table 5.18** provides, at a glance, the list of the process rules that were used for this study. It also describes whether these were introduced *with* (grey) or *without* (white) reference to relevant literature and whether the empirical evidence of this

60

study proved them to be *useful* (black). The advantage of this kind of display is twofold. On the one hand it allows practitioners to use these prescriptions as a basis for their action while at the same time being well-informed about the true degree of ‘reliability’ of the prescription. On the other hand, it clearly points to areas where other scholars could bring in additional literature or develop additional empirical evidence.

Process Rules - PHASE 2		
	Questions for Environmental Managers	Process Rules
Interviewing	How to maximize Content Quality? (Completeness and Ease of Understanding)	2-1. <i>Perform Interviews</i>
		2-2. <i>Use Table 5.4 as interview guideline</i>
		2-3. <i>Use Table 5.5 to kick-off the interview</i>
		2-4. <i>Use anonymous quotes</i>
		2-5. <i>Use Tables 5.10 and 5.11 to choose interviewers</i>
		2-6. <i>Use Table 5.6 to implement drill-down technique</i>
Interviewing	How to maximize Group Quality? (Completeness and Accuracy)	2-7. <i>Use Table 5.12 to choose participants</i>
		2-8. <i>Involve the Environmental Manager</i>
Clustering	How to maximize Content Quality? (Completeness and Ease of Understanding)	2-9. <i>Bring all concepts to the discussion phase</i>
		2-10. <i>When encountering an idea, always assume it is new</i>
		2-11. <i>Use Table 5.14 to build Strategy Map</i>
		2-12. <i>Consider EM involvement as desirable</i>
No Fill = Decision taken through use of common sense; Grey = Decision taken through use of relevant literature; Black = Supported by the empirical evidence		

Table 5.18 Summary of Process Rules – Phase 2

Finally, this chapter also aimed to discuss whether and, if so, how Consensus Level and Quality have increased (if at all). For this phase, since there is no interaction, the only two properties that could possibly shift are Content and Group Quality. As shown in the Evaluation Framework⁶¹ **Figure 5.9** the empirical evidence suggests Content Quality has increased while for Group Quality the discussion is left to **Chapter 6**.

⁶¹ See Section 1.4.1

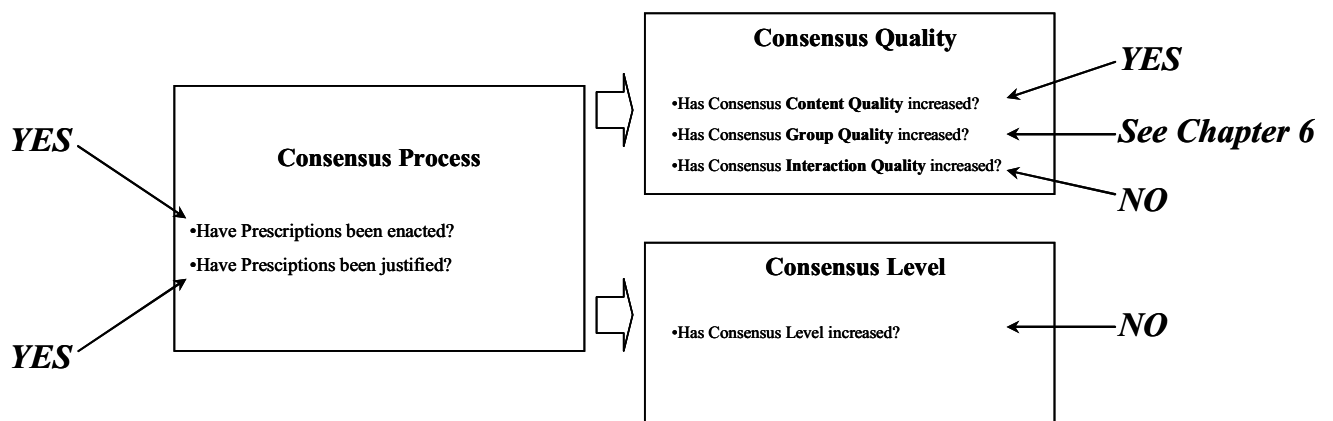


Figure 5.13 Evaluation Framework Results for PHASE 2

Another conclusion of this chapter relates to the question of whether or not environmental managers should be included in the process as facilitators. This issue has been raised because the corporate environmental manager team members working with me as facilitators mentioned that these activities provided them with a unique learning opportunity. While of course the decision on this issue will depend on what the exercise is about, it seems that the less risky option is to involve one of the environmental team members but with the assistance of an external expert facilitator.

5.1.1 Contributions to the literature

The literature on the *process* of developing a Balanced Scorecard is somewhat scant. Kaplan and Norton only dedicate roughly 15 pages at the end of their first book to the process issues (i.e. Kaplan and Norton, 1996a, pp. 295-311). Paul Niven (2002) and Schaltegger & Dyllick (2002) make some effort to in detailing the BSC process. Niven (2002) only dedicates two pages to the issue of interviews and Concept Clustering, while Schaltegger & Dyllick (2002) provide some technical indications of an ideal process they do not delve into the details on the personal and organisational implications. If the amount of time spent on issues is a measure of their importance one could be led to think that interviews, whether they are performed or not, have little or no significance. This chapter, by bringing together relevant literature and

empirical evidence suggests this assumption to be *wrong*. The fact that there was so much to say about interviews, and the fact that what has been done in this study appears only like a very first step, seems to constitute sufficient evidence in this respect.

The contribution to the Balanced Scorecard literature is then three-fold. First, the discussion of the process prescriptions constitutes a starting point for further scientific investigation. Secondly, the provision of a process effectiveness measurement framework constitutes a baseline to be both challenged and used to benchmark the effectiveness of these or new process rules. Thirdly, it provides a clear indication that the problems that the process rules should aim to solve are the ones related to individual and group type biases.

5.1.1 Limitations and future research

This work should be considered exploratory, the main aim being to set some clear rules of the game such as definitions, measurement frameworks and first tentative process rules. There are at least three areas that seem interesting for future research. Firstly, since this process step deals with effective interviewing more work should probably be carried out to link it to the interview techniques body of knowledge. Secondly, since part of the decision is to decide who to interview, more work is probably needed to empirically test the desirability of larger or smaller groups of interviewees. Thirdly, on the Concept Clustering step, seeking additional techniques on how to maximise its efficiency from the literature and empirical testing of different alternatives seems to be also worthwhile.

5.1.1 Contributions to practice

Similarly to the previous chapter the contribution to practice of this study are, first of all, the process rules. These rules, contained in **Tables 5.5, 5.6, 5.7, 5.11, 5.12, 5.13, 5.14** and the reflections around them may be of use to managers wanting to kick-off similar processes in their companies.

From an environmental manager's point of view perhaps the strongest message coming out of this chapter is that if s/he wants to kick-off a discussion about environment and strategy with

top management then s/he should start with a set of interviews. This becomes evident when looking at the breadth of interpretation of concepts as basic as client satisfaction. If this concept is not clear and agreed by top managers it can hardly constitute a useful 'hook' for the environmental manager to show the business relevance of environmental activities. One may argue that this was only a coincidence due to the case-based nature of this study and that in most companies the main strategic objectives are clear and appropriately shared among the top managers.

There are at least two reasons to weaken this argument. The first reason is that the individual cognition mistakes strongly point to the fact that different managers, with different roles in the organisation and different backgrounds are very likely to have different opinions and/or even if the opinions are the same might use different language to express them. The second reason is that managers are not aware of them. In other words, before carrying out the interviews it may be very hard to detect them, let alone try to solve them.

TO DATE and FORWARD

This chapter describes the first steps for developing the Environmental Chains: *interviewing* and *Concept Clustering*. The next chapter focuses on whether or not the environmental manager should be included in the interviewee group. It analyses the question of how he contributes to increasing Content Quality.

6 Should the EM be interviewed? (PHASE 2)

The aim of this chapter, as shown in **Figure 6.1**, is to discuss the effect of including the environmental manager (EM) during the interviews and to introduce a related general process rule. This seems an important issue to explore in detail because it would probably not be a natural choice for the TMG to include a manager that *is not already a TMG member in their decision-making process*. **Section 6.1** focuses on the contribution of the EMs in both ACEAIP and BETA (BETA). **Section 6.2** discusses the need to introduce the Content Quality Property of *Accuracy*. **Section 6.3** presents the more general process rule and finally **Section 6.4** is dedicated to conclusions and contributions.

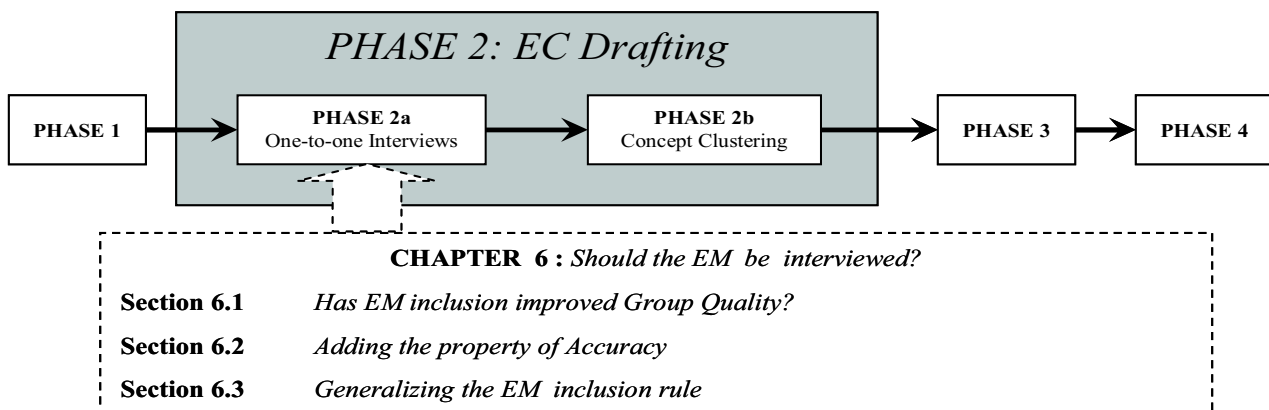


Figure 6.1 Sections in Chapter 6

6.1 Does EM inclusion improve group quality?

Group Quality is defined as *the extent to which the people involved have sufficient knowledge to discuss and power to implement the decisions taken*. As shown in **Table 6.1**, this section focuses specifically on the Content Quality Property of *Completeness*. It highlights that including the environmental manager in the interviewing step has increased *Completeness* in both ACEAIP and BETA. This is largely due to the fact that environmental managers have *more* ideas about the potential contributions of environmental work to the business. In Table 6.1 the wording '*relevant specialists*' refers exactly to those managers who have specialist knowledge which completes the discussion at hand. Environmental managers are, in this respect, an example of relevant specialists.

<i>Group Quality Properties Analyzed - PHASE 2</i>				
<i>Concept</i>	<i>Property</i>	<i>Sub-Property</i>	<i>General Definition</i>	<i>Specific Meaning</i>
Consensus Quality	Group Quality	Completeness	the extent to which data are of sufficient breadth, depth, and scope for the task at hand	Minimize ideas loss due to failure to involve relevant specialists

Table 6.1 Group Quality Properties Analysed – PHASE 2

6.1.1 Consequences of EM inclusion in ACEAIP

Work began with ACEAIP, in April 2002. The objectives of this research and the process for the project were clearly explained at the project kick-off meeting, attended by the director and 15 of his managers. By the end of the meeting the interview dates had already been booked with all the relevant interviewees. Furthermore, the director publicly took on the responsibility for pushing the project in collaboration with his financial controller. The interview step of the project was started with reasonable optimism. In order to complete the list of interviewees, however, someone needed to play the environmental manager role since in ACEAIP no one had worked on these types of issues.

The corporate environmental manager was approached to play the role of ACEAIP's environmental manager; The director agreed to accept him as a participant to the process. The interviews all took place in June 2002 (ACEAIP, personal interviews, 2002). The following two sections show the difference between the Environmental Chains resulting solely from contributions of the TMG members and the ones including the EM's contribution as well. This is a clear indication that the exclusion of the environmental manager from the interviewee group would've reduced *Completeness*.

ACEAIP – Why environment? – the TMG's opinions

ACEAIP's top managers see environmental issues mostly linked to energy, materials and waste costs (See **Table 6.1**, **Figure 6.2**). In other words, since energy is costly, reducing consumption will reduce costs. The relevance of this link is enhanced by the fact that cost efficiency had been a

focus of ACEAIP’s work since its entry in the stock market in 1999. Furthermore, the Municipality of Rome, which is ACEA's main shareholder and client, has been pushing hard to increase the efficiency of its service providers.

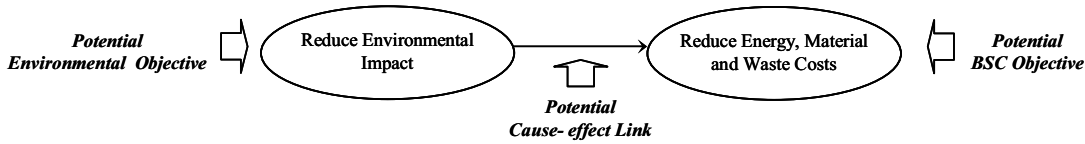


Figure 6.2 ACEA – Why environment? – the TMG's opinions

ACEAIP - Why environment? – the EM's opinion

The ACEAIP environmental manager⁶², was the only interviewee to raise the following three issues:

- (i) the waste mismanagement risk.
- (ii) the preferential requirement in public tenders. and
- (iii) the use of green pricing mechanism to decrease energy costs and generate revenues (See **Table 6.1** and **Figure 6.3**).

The first issue is compliance-related. The ACEAIP environmental manager is confident that several of the materials used in this business unit would be classified as dangerous and/or toxic whilst requiring specific handling and disposal practices. Failing to fulfil these procedures would expose the business unit to the risk of heavy fines from the authorities and a backlash on the corporate image of ACEA.

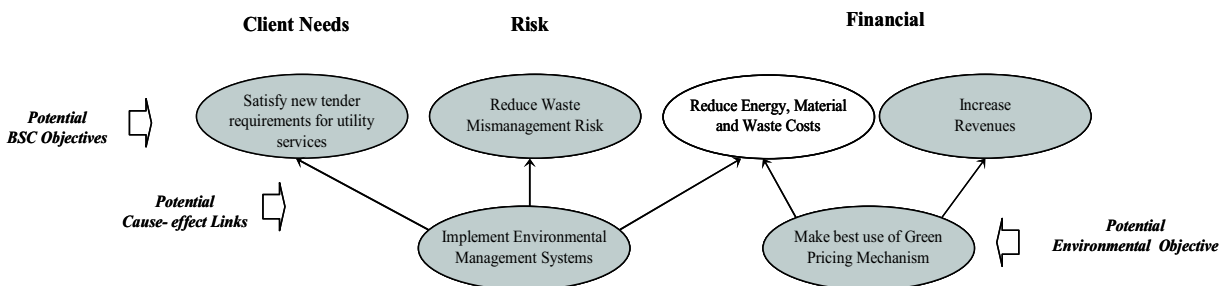


Figure 6.3 ACEA – Why environment? – TMG (white) + EM (grey))

⁶² We interviewed the corporate environmental manager because ACEAIP did not have a business unit environmental manager.

The issue of public tenders is also legislation driven. The environmental manager explains that a recent nationwide legislative bill specifies that contractual agreements between public administrations and private companies would include environment, health, safety and quality as preferential requirements. This means that any company failing to provide evidence (e.g. an ISO 14001 certification) of their performance in these areas would most likely be penalised in the process of assigning the tender. The gravity of this omission should not be underestimated. At best, during the next signature of the contract (early 2005), ACEAIP could be questioned on these issues. In a worst case scenario, if the municipality decided to do a public tender ACEAIP would most likely fail in one of the criteria thus increasing the chances that a better equipped competitor takes the business.

The third and final issue relates to a new European legislation called *green pricing*. Such legislation allows large energy consumers like ACEAIP to label its energy consumption as *green* at an additional price. The additional revenue is, however, earmarked and matched with European funding to build *renewable energy* production plants. The price of such energy is regulated by government to be (roughly) twice the price of the non-renewable energy whilst generating a new revenue stream for the original investor. Such a project, argues the environmental manager, would over a medium-term time frame significantly reduce energy costs, generate additional revenues and enhance ACEAIP and the corporate image of ACEA towards the Municipality of Rome.

ACEA Public Lighting - Why Environment?						
Points Raised by	Why environment?	Managing Director	Network Building Manager	Maintenance Manager	On-Site Construction Manager	Claudio (EM)
TMG	Reduces Cost of Energy Reduces Cost of Waste Reduces Cost of Materials					
EM	Reduces Waste Mismanagement Risk Preferential Requirement in Public Tenders Occasion of increasing revenues through 'green pricing'					

Table 6.2 ACEA IP – Why environment?

BETA - Why Environment?								
Points Raised by	Why environment?	CEO	Marketing Manager	Financial Controller	HR manager	Grape Supply Manager	Env. Manag. 1 (EM1)	Env. Manag. 2 (EM2)
TMG	Reduces Risk to Health of Consumer and BETA Image One of the many additional features of a luxury product Appeals to grape suppliers desire of status Reduces Legislative Risk							
EM	Appeals to consumer need of feeling close to his origins, his roots, the land Appeals to grape supplier need of pursuing effectiveness Appeals to grape supplier/employee desire to live/work in a healthy environment Appeals to employee pride of working with a responsible company Enhances Image of Champagne as a product and as a Region Satisfies environmental information needs of intermediate clients Reduces Packaging-related Costs and Risks							

Table 6.3 BETA – Why environment?

6.1.2 Consequences of EM inclusion in BETA

Setting up interviews was different in BETA compared to ACEAIP. During the first meeting with the BETA environmental manager (EM1 – there are two environmental managers in BETA), it was difficult at first to convince him to join the project and decide on the interviewee list. However, the meeting ended with an agreement on a list of ten managers, one of which was the EM1. He then went to the different managers to agree on meeting dates. All interviews were carried out in September 2002.

The peculiarity of the BETA business meant that there were in fact two environmental managers in this company. Besides the EM1, the vineyard director (referred as EM2) was a very strong supporter of environmental strategies. He constantly made efforts to reduce the negative environmental impact of grape production, so much so in fact that he was known in the Champagne region for being an innovator in the field of vineyard management. For these reasons in the following sections his proposals are considered as ones coming from an environmental manager. Similar to the discussion for ACEAIP, the next two sections present the Environmental Chain contents provided by the TMG members and environmental managers respectively. The empirical evidence shows that the exclusion of the environmental manager from the interviewee group would've reduced *Completeness*.

BETA – Why environment? – the TMG's opinions

BETA's top managers mention environmental issues are a concern for three main stakeholder groups: consumers, suppliers and legislators. For the consumer, environment is relevant for three reasons: pre-requisite fulfillment, image protection and differentiation. BETA Champagne brands are all luxury products, but, as the CEO points out 'they need to be products *first*'. The pre-requisite of respecting the consumer *health* is closely linked to environmental management. For example, using a smaller amount of chemicals in the vineyards reduces the risk of these molecules ending up in the wine. Of course, these being pre-requisites, there is no question whether to deliver them or not:

'...we are absolutely obsessed by what we put in the bottle...how we make the wine, how we manage the vineyard, how we manage the production, how we store, how we protect our customers, what sort of due date we put...all those sorts of things are THE requirements...and you have to meet those requirements...either because they are legal requirements, or business requirements and that makes you just survive, and you have to make them happen, I mean you HAVE to...' (BETA, CEO, personal interview, 2 September 2002).

'...one of my obsessions is the environment...we spend a lot of time communicating that the champagne starts in the vineyard...many countries don't know that...so if you go and say we are in the vineyard and in the field and we have all the benefit of producing an agricultural product then the people immediately hear HEALTH...' (BETA, CEO, personal interview, 2 September 2002).

Pre-requisites are, however, not important *per se*. BETA is *obsessed* with them because failure to deliver would irremediably damage the image of the brand. A consumer would think: *'if this company cannot even ensure safety of the product, then how can it claim to be a luxury brand?'* Moving away from the pre-requisites of the product we move into the area *luxury* and what *really* makes the difference between a good and an excellent prestige brand.

(So, these pre-requirements are the baseline and then you need to go beyond that?)

'...absolutely...and then if you want to be a leader and if you want to be a prestige brand and you want to be a luxury brand and you want that the consumer is absolutely ready to pay your price, you have to give so much more, and the "so much more" in luxury is not always visible and you have to accept to spend some of that money on things that are not going to pay...short term...but you know that it is just part of your mix and in luxury you never know which part makes the difference...it is always the accumulation of all those things that at the end of the day makes people say... "that is my preferred brand"...' (BETA, CEO, personal interview, 2 September 2002).

The CEO couldn't make it any clearer, to be in the luxury business you need to show you are constantly doing more than what would be normally required. The topic of environment seems to qualify as one of those *things* (See **Figure 6.4**).

'...I always like to remind our customers that we are not expensive for the quality we are offering...what we offer is different from the rest...environment can be one of those small things...when you are in China and you say to the people there "you know that in BETA we hand pick every grape?"...they think... "handpick...ah...I understand why it is expensive".....and then I continue... "by the way...we try to be as biological and as environmentally friendly as we can...we took an initiative to use less cardboard so that we could destroy less forest"...this is a small tip that, added to the others, is going to add something if it is well put together, if it is well explained...people will understand why it is expensive and will be convinced that BETA is really a different champagne;' (BETA, CEO, 2 September 2002).

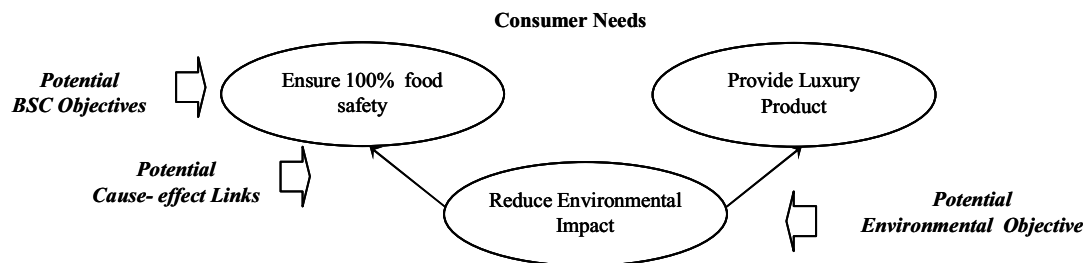


Figure 6.4 BETA – Why environment for consumers? – the TMG’s opinions

When it comes to grape supplies, one should consider that *all* grapes in Champagne products have to be grown in a specific geographical area in France. Within this area there is very little additional land where more vineyards can be planted and, on the existing vineyards, the productivity can hardly increase (vineyard manager, BETA, 2002). As a result, Champagne houses wanting to increase the volume of products sold have *no other option* than subtracting grape supplies from their competitors. This is an important strategic issue especially considering that the number of people who can afford to buy luxury products is likely to increase worldwide in the next 10 years.

Winning the trust and the loyalty of grape suppliers is of utmost importance. Two issues are at the basis of supplier retention *grape price* and *perceived ability to fulfill contractual agreements*. Grape suppliers know that Champagne is not sold cheap and want to make sure they are getting their fair share. Also, since the contracts they sign with a particular Champagne house ties them in for several years, they want to be certain they will actually get paid. While BETA certainly fulfills these criteria there at least another 10-12 other Champagne houses who also do (financial controller, BETA, 2002).

Suppliers also prefer to sell their grapes to a known brand and preferably a leader in the market. Locally, this gives them added prestige if their grapes are associated with known high-end brand names as it shows the excellent quality of their work and of their grapes. Being at the leading edge of vineyard environmental practices is proof that BETA is a strong brand. They can afford to invest in issues that are linked to the long-term health of the

company. It is also proof of leadership because such innovations depends on a mixture of sophisticated technical knowledge, discipline in execution and courage (e.g. breaking away from traditional practices), all typical characteristics of a leader (See **Figure 6.5**).

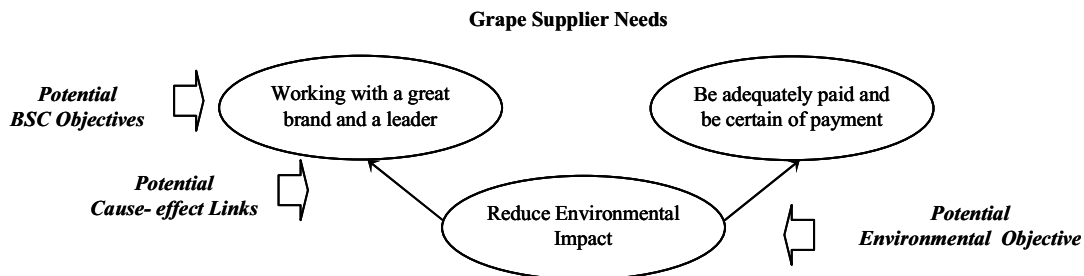


Figure 6.5 BETA – Why environment for grape suppliers? – the TMG’s opinions

New national and international legislation trends in agricultural, consumer health, product labelling and packaging standards are all potentially relevant for a Champagne house. Latest legislative developments in these fields heavily relate to environmental issues. Agricultural standards prescribe the use of less and less chemicals. Product labelling legislation force food companies to mention the types of molecules that are in their products with increasing precision. Finally an increasing number of substances is banned from packaging because of assumed or verified dangers to the environment and to consumer health. Environmental work addresses pro-actively all these areas allowing the company to better monitor these trends. Also, in case of any problem, the environmental management system will make it easier to find the source of the problem. fix it. explain it. be trusted in the explanation. and avoid falling into an adversarial mode with the damaged stakeholders (See **Figure 6.6**).

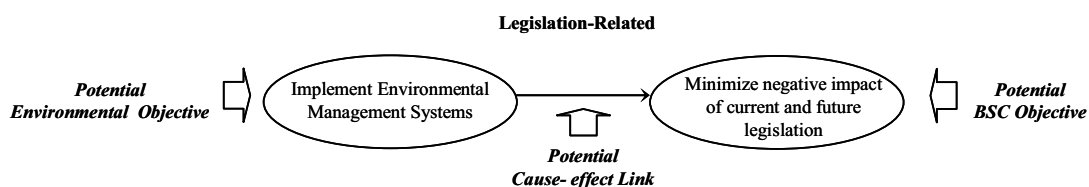


Figure 6.6 BETA – Why environment for legislative risk? – the TMG’s opinions

BETA - Why environment? – the EM's opinion

In BETA the vineyard director⁶³ provides several additional points of reflection on consumers, suppliers, employees and the local community. On the issue of consumers, we have heard from the CEO on how environment is both a health-related pre-requisite and *one of the several ingredients* of the luxury mix. The vineyard director's pitch brings a different dimension to the discussion:

'...today consumers are in quest of their roots...only 3% of the population is still agricultural...it is often the case that two or three generations separate them from their native land...they want to know where the things that they eat actually come from...before they knew...today they don't know any more...people look for their origins and [to do so] they hold on to the soil and all that it represents...' (BETA, vineyard director, personal interview, 3 September 2002).

He seems to suggest that environment may not be *just one* of the ingredients but *one of the most important* because it brings the consumer closer to an ancestral need of feeling close to their roots, feeling at home (See **Figure 6.7**).

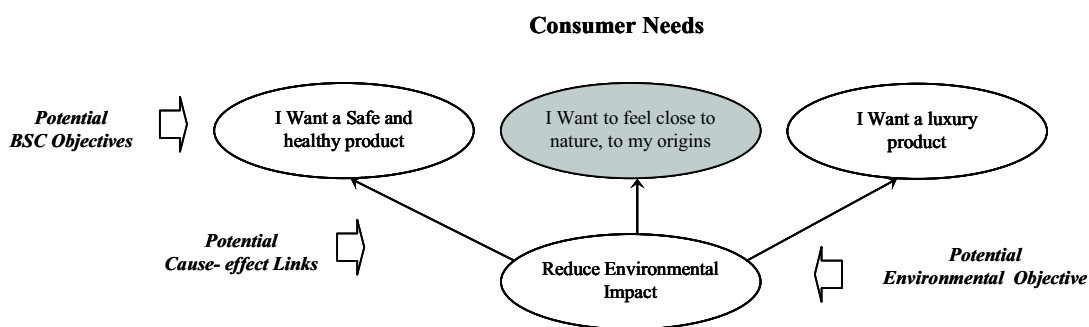


Figure 6.7 BETA – Why environment for consumers? – TMG (white) + EM (grey)

⁶³ Christian is the vineyard manager but also fits our definition of *environmental manager* because he proactively seeks ways to reduce the environmental impact. The peculiarity of his situation is that nobody has given him this task. The environmental work at the vineyard has been, for the last 25 years, his own initiative and whatever his production objectives are he always tries to find ways to achieve them while being more environmentally friendly.

On the issue of grape suppliers, the TMG members emphasise the contribution of environmental management to grape supplier *status*. BETA's vineyard director mentions that environment and environmental matters contribute to three additional supplier needs: *effectiveness, relationship* and *quality of life*. *Effectiveness* relates to their need to protect the quality of the grapes, ensure longevity of the vineyard, increase grape volumes and reduce costs. *Relationship* relates to the suppliers' preference for the personal touch. They are not used to, nor do they like, to deal with a 'faceless' corporation, they prefer *people*. *Quality of life* relates to all those issues that make the life in the champagne region pleasant and enjoyable. Most of the suppliers live in the region(See **Figure 6.8**).

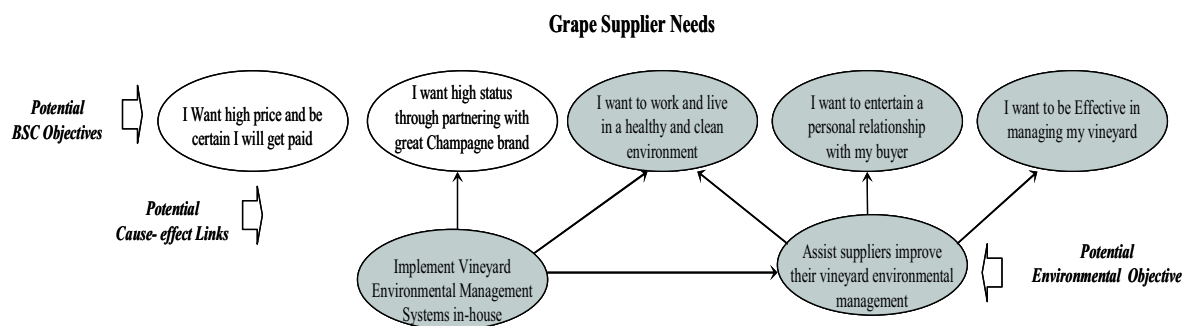


Figure 6.8 BETA – Why environment for grape suppliers? – TMG (white) + EM (grey)

The fact that BETA is ready to try innovative practices on their own vineyards and then offers to teach these practices to their suppliers seems to elegantly contribute to all three of these objectives. It contributes to *effectiveness* because environmental-related innovations tend to reduce risks of soil and water pollution, ensure grape quality, increase longevity of vineyards and reduce hazards to employees and consumers. It contributes to *relationship* because exchanging environmental best practices requires a mutual understanding, collaboration and trust. It contributes to *quality of life* because all innovative practices aim to protect the quality of the local, natural environment.

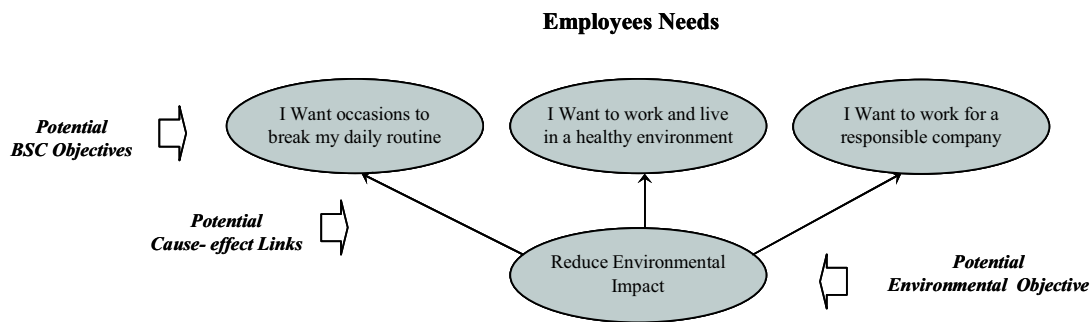


Figure 6.9 BETA – Why do employees like the environment? – TMG (white) + EM (grey)

As shown in **Figure 6.9** BETA's vineyard director also believes that employees are also enthusiastic about the proactive work carried out on environmental-related issues. . It provides them with an occasion to break their daily routine, it reduces their exposure to chemicals and it gives them the feeling and the pride of working for a responsible company. Finally, he also mentions the topic of environment to be of potential importance for Champagne as a product and as a region. This point hinges on the idea that, while within Champagne there is competition, they are also one big family compared to the substitutes such as sparkling wine. If the press, which is very attentive to luxury brands, decides to go after Champagne because of a single problem of pollution or consumer health it is not just the product but the whole region that will suffer.

As shown in **Figure 6.10**, EM1, responsible for the environment-related activities from the moment the pressed juice enters BETA production facilities, proposes two further issues, namely the environmental information needs of intermediate clients and cost/risk reduction through eco-designed packaging. The first issue relates to the fact that Champagne is sold to consumers through large and small retailers. In the last few years EM1 notes how the interest of large retailers for the environmental performance of their suppliers has increased and that certifications schemes such as ISO 14001, for which BETA is currently certified, are useful in this respect. The second issue relates to the fact that a focus on reducing the negative environmental impact of the packaging would reduce costs due to diminished use of certain materials. Also, such focus would reduce the chances of having undesirable substances in the packaging. Substances that, in the worst case, could damage the quality of the product itself and that, in a best case, could impede the product from being imported into a country with strict packaging-related legislation.

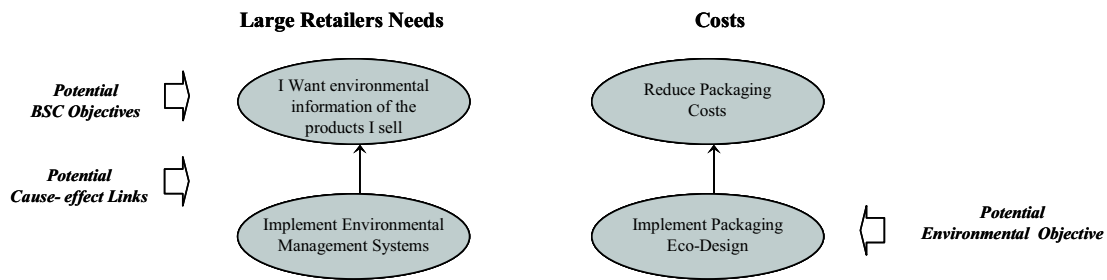


Figure 6.10 BETA – Why environment retailers and for costs? – TMG + EM opinions (in grey)

6.1.3 Similarities and differences between the two case studies

While the two companies are very different fit seems that in both cases the environmental managers' contributions were significant. This finding is in line with the idea that failing to involve specialists will cause loss in the richness of the contents. Also it seems to suggest that environmental managers should be considered as specialists.

6.2 Adding the Content Quality Property of Accuracy

An additional Content Quality Property of interest to environmental managers is *Accuracy*. *Accuracy* is the extent to which data is correct, reliable and certified free of error. At this stage of the process, where the content is only about ideas and concepts (i.e. the BSC Objectives), *Accuracy* relates to the extent to which the arguments are based on hard evidence. In other words, as exemplified in **Table 6.4**, highest level of *Accuracy* may occur when the evidence gathered is so strong that its applicability to the case at hand is hardly questionable. On the other hand, *Accuracy* is at its lowest when the arguments are solely based on personal, unjustified opinions.

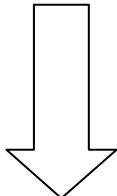
Accuracy Level	My view is based on...	Example
<p>Low Accuracy</p>  <p>High Accuracy</p>	Individual opinion with no externally verified proof	I think that environment decreases costs but I have made no calculations
	Anecdotal evidence in different settings	I have evidence that eco-design has worked very well in the consumer goods industry but I am not sure whether it would work in the luxury goods
	Anecdotal evidence in similar settings	I have evidence that eco-design has worked very well for a company working in the luxury goods industry
	Anecdotal evidence with explanation of mechanisms	I found a study that explains exactly how to make eco-design work for luxury goods through the discussion of five different cases.

Table 6.4 Environmental Content Quality stages and examples

The Content Quality Property of *Accuracy* is useful to counteract individual level biases. As discussed in Chapter 1, these biases form because of who we are and what we do and we may forget to check upon the validity of our opinions. If environmental managers keep in mind the *Content Quality Property of Accuracy* this may help them to realise the extent to which they, or the top managers are biased. More interestingly, it can raise doubts in their minds concerning a certain issue, which in turn could open up the discussion.

The following example relates to a situation where the environmental manager needs the collaboration of the marketing manager. If he had the *Content Quality Property of Accuracy* in mind he could ask himself if his opinions are based on hard evidence . A negative answer immediately creates a common ground, an excuse for working together. His message to the colleague could be: *‘I know you do not agree with me, but how well have we really looked into the issue? Let’s dig deeper together to find out, from hard evidence, if there is a chance of fruitful collaboration’*.

The example that follows, taken from the experience in BETA, shows that while the opinions of the two managers are legitimate because they come from their experiences, they also lack accuracy. However, since they are not really aware of that, it seems very hard for them to find a common ground for discussion and investigation.

6.2.1 The risks of low-level Accuracy: an example

In BETA one of the main topics of discussion and interest for the environmental manager was the inclusion of environmental criteria in the packaging design. This activity, however, falls within the remit of the marketing manager. **Figure 6.11** shows the differing opinions of these two managers on the topic. Where do these opinions come from?

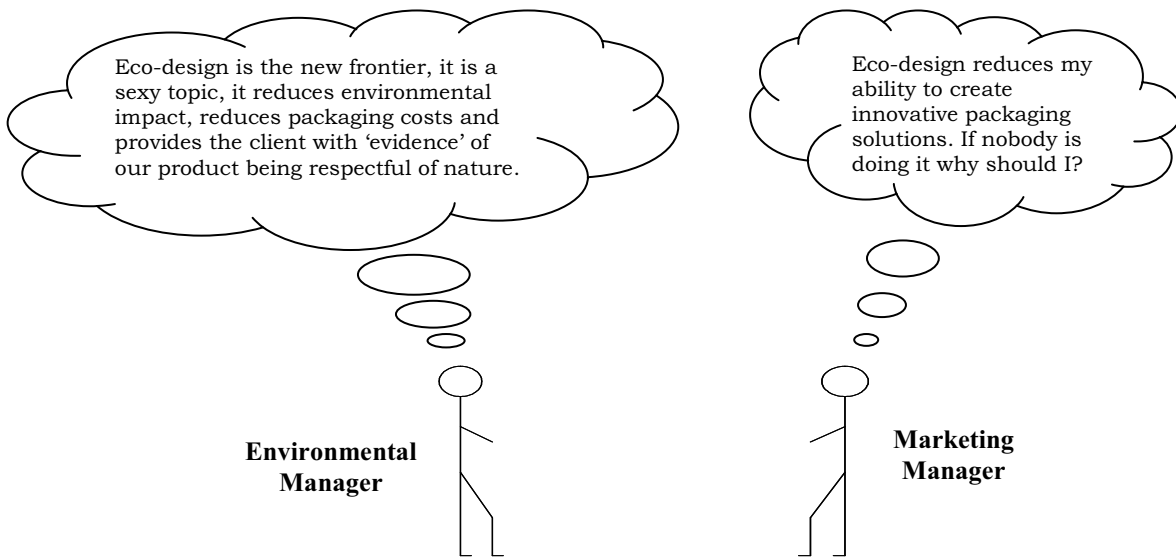


Figure 6.11 Example of the differing opinions of the environmental manager and marketing manager differing opinions

The environmental manager has been working in BETA as oenologist and quality manager from 1982 to 1997 when he also took on the responsibility for environmental topics. His first step was to implement an environmental management system. In 2001 (during the time of this study) he was about to reach the ISO 14001 certification. This was not an easy task but he pushed hard and managed to convince the BETA shop-floor people that it was worth making the extra effort. He also liked new ideas and challenges and, as soon as he saw the end of the EMS approaching he started thinking: what next?

'...I also think that the ISO 14001 will now be implemented and followed, we were the leaders, we did it, we look good...but what is next? We need to think ahead, what makes us stand out from the crowd and gives us the edge on the others? I think the packaging design can...the environmental motivations are strong because it is there that we can have the biggest impact on climate change and where there

is a big margin for improvement..! (BETA, EM1, environmental manager, personal interview, 20 September 2002).

The corporate environmental department proposed him to pilot a new project: a methodology that measured the CO₂ emissions over the lifecycle of the product. He accepted. His analysis showed that the greatest negative environmental impact comes from the production of packaging, the treatment of waste particularly in packaging and the product's transportation. Since transportation issues could not be influenced by BETA alone (they depended on the regional transportation infrastructure) he turned his attention to eco-design. The more EM1 thought about eco-design the more he liked it. He became involved in creating new marketing materials, which was diverse and interesting compared to the policing-type activities that an environmental management system forced upon him.

'...there is also the issue that ISO 14001 is not really something that makes people dream...people identify much better and are much more excited about "design"...for the marketing people there might be an individual motivation to design products that do not worsen the climate change problem' (BETA, EM1, environmental manager, personal interview, 20 September 2002).

Finally, (a speculation) having direct contact with the marketing department, which is a very important part of BETA's value chain brought him one step closer to the top management.. At the time, quality, health and safety and environment across the value chain were spread across a number of different functions (i.e. production director, oenology director, vineyard director, and sales director). It lacked a real (and maybe necessary) overall coordination. If there was the possibility, and need, for an overall coordinator to oversee all aspects in the value chain then the EM1 would stand a good chances of being chosen.

Unfortunately, while these arguments seem to explain the reasons why EM1 had certain ideas about eco-design they also fall somewhat short of providing a solid business angle to justify the move to eco-design, in other words, *low Accuracy*. As shown in the quotes, the EM1 makes three purely business-related claims.

First claim: it reduces our costs!

'...I think that eco-design has a great potential to reduce costs for us...I think that roughly 10-15% of total cost of a bottle of champagne is the primary [e.g. bottle] and secondary [e.g. cardboard] packaging.' (BETA, environmental manager, personal interview, 20 September 2005).

This claim has two main problems. The first problem is that luxury goods companies are traditionally more focused on ways to drive price up rather than costs down. Despite the fact that BETA is today striving to reduce its costs, this argument is not really attractive for a marketing manager whose daily job is to focus on volume growth. The second problem is that the number of 10-15% may not be exact since the production manager evaluates it in the 40-50% range. The environmental manager himself seems not to be that sure of that number anyway when he chooses the wording '*I think that roughly...*'.

Second claim: it reduces cost for our suppliers!

'...also it will reduce the costs of suppliers because we will need for less cardboard and less volume of raw material in the packaging...less energy...'(but presumably BETA would also pay less for the product) well there is also the issue of transport for the supplier, less volume means less space and less trucks (well, but if you pay less, what is his interest in this...I am provoking you...) you're right...mmmhhhh...not sure at all...maybe it is a question for our purchasing manager..' (BETA, EM1, environmental manager, personal interview 20 September 2002).

Third claim: consumers appreciate the moral stance!

'...then there is a softer issue that relates to the concept of luxury, at least for me...I mean...luxury goods are by definition things that are not needed to survive...a buyer might appreciate the moral stance taken by the rich companies to propose products that do not pollute...after all, protecting the environment is an issue for rich anyway right?...well...maybe this sounds a bit idealistic...luxury without wastage...I wonder...' (BETA, EM1, environmental manager, personal interview 20 September 2002)

These latter two quotes also show that the business angle of the eco-design proposal had not been developed in depth. The environmental manager lacks evidence to support his claims. To summarise, it seems fair to suppose that the eco-design idea, while *maybe* having some potential, had little business grounds and was based on personal motivations and influenced by the EM1's role in the organisation (i.e. an environmental manager who strives to reduce environmental impact).

The marketing manager's opinion on the topic is totally different but it seems to be based on the same type of mistakes:

- (i) Bias due to role in the organisation.
- (ii) Opinion not based on hard evidence.

The marketing manager had arrived in BETA only a couple of years earlier and was in charge of producing marketing materials that appeal to the consumer to raise sales.

This role is quite crucial in BETA because, unlike for the Champagne production where the rule is to 'stick to the tradition', much of what the consumer saw when buying Champagne was the presentation. This factor is thought to be so influential in the 'decision to buy' that the CEO felt it necessary to say: '*...I like to remind my people that Champagne is first of all what you drink...*' (BETA, CEO, 2002). As if there is a tendency to focus too much on the marketing presentation and less on the champagne itself.

It is thus hard to blame the marketing manager if he sees in eco-design a constraint. How else could the idea of putting additional environmental requirements on the type (and volumes) of materials the marketing manager could use to 'create'? While it is difficult to blame the marketing manager for seeing environment as an additional constraint he may be blamed for seeing it *only* as a constraint and for not being willing (or able) to dig deep enough to find other possible solutions. Again, his opinion is not based on hard evidence. Does he do customer surveys? Has he asked questions on the importance of the natural features of the product? Has he conducted any pilot projects to look into this? He freely admits that, he has not.

(How do environmental issues impact customer satisfaction?) '*Frankly speaking I see it as something nice to have...but we never used it in our communication...people don't think about these things when they buy a bottle of Champagne (do carry out customer surveys?) ...no we don't because we feel, and maybe we are wrong, that we are sufficiently close to them to know what they have in mind...but you are right, maybe we should do a survey to know them better...*' (BETA, marketing manager, personal interview, 2 September 2002).

While the marketing manager can certainly carry out his work without the EM1's assistance, the opposite is impossible. The EM1 *needs* to win over the marketing manager to his way of thinking. Views that are solely based on personal opinion (lowest accuracy) will make it harder for the marketing manager to take the argument seriously, especially if it entails a significant shift in his own way of thinking. So, while the marketing manager may be blamed for his unwillingness to *dig deeper*, the EM1 was largely responsible because he failed to provide deeper analysis to back up his argument.

6.3 Generalising the EM inclusion process prescription

The fact that EM inclusion has improved *Completeness* in both ACEAIP and BETA is comforting, but not sufficient to draw persuasive conclusions. There are at least two reasons for this. The first reason is that not all companies or business units have an environmental manager. The need to include one is therefore not particularly practical. The second reason is that including only the environmental manager as opposed to say, the marketing manager, may be counterproductive as it could twist the knowledge providing only one perspective of the argument. .

Chapter 1 defined the environmental manager as ‘*someone who is in charge of finding the optimal ways for the organisation to deal with the environmental impact of its products and processes on the natural environment*’. However, the interest for the EM inclusion in this process step is not due to his role as manager, but rather it relates to his/her ability to improve environmental *Completeness* and *Accuracy*, two key Content Quality Properties. To this end one should consider the possibilities that more than one person has to be involved in order to maximise *Completeness* and *Accuracy*.

In order to generalise the process prescription introduces the concept of *Environmental Idea Launchers* (EIL) defined as *people capable of increasing environmental Completeness and Accuracy*. With this process rule if an environmental manager does not exist one can look for someone with sufficient knowledge that could play the role, as was the case of ACEAIP. On the other hand, if a manager exists he may still want to include additional managers that have knowledge that is complementary to his own as was the case in BETA where two EMs were chosen.

Process Prescription 2.8 (Previous Chapter 5 Version)

Include the environmental manager

Process Prescription 2.8 (New Revised Version – to be used)

Include Environmental Idea Launchers

6.4 Conclusions and contributions

The aim of this chapter was to address the importance of the contribution of the environmental managers. The empirical evidence shows that in both ACEAIP and BETA environmental managers have brought additional information to the table, which top managers did not know. EM inclusion has therefore increased *Completeness*.

This chapter has also brought about a change in the Process Rule of EM inclusion with *Environmental Idea Launchers (EIL)* inclusion. EILs are people who may contribute to Content Quality through their knowledge. Introducing this concept has the advantage to open up the options of process participation to those managers, or external people, who could best contribute without ‘blocking’ them from the discussion because of their role in the organisation.

Process Rules - PHASE 2	
Questions for Environmental Managers	Process Rule
Interviewing	2-1.
	2-2.
	2-3.
	2-4.
	2-5.
	2-6.
Clustering	2-7.
	2-8. <i>Include Environmental Idea Launchers</i>
Clustering	2-9.
	2-10.
	2-11.
No Fill = Decision taken through use of common sense; Greyed = Decision taken through use of relevant literature; Black = Supported by the empirical evidence	

Table 6.5 Decisions discussed in this Chapter

The final finding of this chapter is the importance of the Content Quality Property of *Accuracy*. This is the extent to which data is correct, reliable and certified free of error. At this stage of the process, where the content is only about ideas and concepts (i.e. the BSC Objectives), *Accuracy* relates to the extent to which the arguments are based on hard

evidence. To argue this point, we can refer to the experience in BETA, where the concept of accuracy and accuracy maximisation may provide a good basis to encourage environmental managers and top managers to work together and collaborate.

6.4.1 Contribution to the literature

The level of detail reached by the discussion in this chapter goes much beyond what the literature in the field of BSC and environmental management in general.. As discussed in **Section 1.2.1**, only one article found (to-date) dealt directly with the needs of environmental managers. However, even this article did not go into sufficient detail about the contribution that environmental managers bring to the strategic discussion.

The contribution to the literature is three fold. Firstly, this chapter provides a methodology to display and discuss the contributions that environmental managers can make. Secondly, it introduces two Content Quality Properties, *Completeness* and *Accuracy*, upon which to evaluate the quality of these contributions. Thirdly, by introducing the concept of EIL's, the chapter provides guidelines to choose participants that are likely to maximise *Completeness* and *Accuracy*.

6.4.2 Limitations and future research

While the process rule of EM inclusion had a lot of limitations, its modification into EIL inclusion seems widely applicable. In practice, it takes the form of a question: who should we involve in order to have enough knowledge about environmental issues? This question is always applicable.

In terms of future research there are at least two interesting directions. First there are a number of questions related to environmental managers and their contributions such as: How can environmental managers maximise their contributions? How can they recognise when there is a need to involve other people from outside the organisation? How should they choose these people? How should they be involved in the process?

Secondly, the same type of discussion could be carried out for other functions that have similar, shared service, characteristics, such as HR, IT and so on. This is because these specialists face the same kind of problems experienced by the environmental managers. They perform activities that contribute horizontally to the business unit's work and because of their horizontal function their contribution to the business is not easily recognised, appreciated or valued.

6.4.3 Contribution to practice

As usual, the contribution to practice is the existence of the suggested Process Rules. For this chapter the Process Rule under discussion is EIL inclusion. The EIL inclusion enables the person championing the project to widen the involvement of specialists who may not traditionally have been included in discussions. By doing so they are able to maximise *Completeness* and *Accuracy* on environmental issues.

Environmental managers reading through this chapter will probably be enthusiastic about the idea that they should be involved in a strategic discussion. For them, this is clearly a desirable outcome, but it is no great novelty. As the survey of Swedish environmental managers suggests, they already think they can contribute to the strategic discussion, it is top management that does not seem to acknowledge that fact. (NMC, 1997, 1998, 1999, 2000, 2001, 2002).

So, the key contribution to practice is not so much the one pointing to the importance of including environmental managers in the discussions but to the idea that it is impossible for any TMG members to play the role of an environmental manager at this stage. Top managers reading this chapter should ask themselves whether environmental issues are appropriately *defended* at their management meetings and if they are aware of the type of constraints and opportunities that environmental issues pose for their companies. They might also want to think about whether or not someone in the company is aware of these issues. This chapter shows at least two points of practical relevance for them. First, that the involvement of *Environmental Idea Launchers* in decision making might be beneficial to them. Second, that involving them in discussions can be very easily arranged and cost effective to do. The knowledge is already there, it just needs to be brought to the attention of the decision makers.

TO DATE and FORWARD

This chapter started with the description of the contributions that environmental managers can bring to a discussion and ends with a Process Rule providing guidelines on who should be included in the interviewee group to maximise environmental Content Quality. The following chapter discusses the interaction part of the study where managers will come to a group-level view of Environmental Chains.