SWP 30/91  THE PATHOLOGY OF COMPANY-WIDE QUALITY INITIATIVES: SEVEN PRESCRIPTIONS FOR FAILURE

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INTRODUCTION
The meaning of quality, as well as customer service, is undergoing review. The traditional production based concept of 'conformance to specifications' is giving way to a customer orientation of quality, i.e. perceived quality. The new view of customer service is set in a broader context, as a cross-functional co-ordination issue, which impacts on relationships with specific target groups across a broad range of a company's activities. Also the idea of total quality across all functions focuses the scope of quality management on the total relationship between the firm and its customers, suppliers and other key markets, on an ongoing basis.

Many of the techniques of Total Quality Management and its organisational values - based approach are now being introduced in the services sector and in customer service divisions of manufacturing companies.

Of concern is the wide-spread failure of quality initiatives, whether production or service based, in meeting customer requirements on the one hand and management expectations on the other. Our evidence is drawn from our action research and informal discussions with senior company executives which we present in this paper as the pathology of company wide quality initiatives. In so doing, we define seven prescriptions for the failure of initiatives in quality improvement, and offer suggestions and an antidote.

To begin, we describe the new relationship emerging between quality, customer service and marketing. Unless management bring these activities together with new forms of collaboration and cross-functional coordination, there can in our view be no market-orientated quality improvement and therefore no sustainable competitive advantage.

We then describe the building blocks for quality strategies. Unless we come to grips with the intangibility of the quality goal and indeed the change processes, there can be no company-wide understanding of the problem, or the 'continuous improvement' required for its solution.

Lastly, we describe what goes wrong in company-wide quality initiatives and why some apparently positive logics of action turn out to be prescriptions for failure.
The Role of Customer Service

The meaning of customer service varies considerably from one company to another.¹ These perspectives range from the marketing logistics required to accept, process, deliver and build customer orders through to the 'friendliness' of staff in the service encounter.

Our view is that it is an exchange process influencing long term relationships of mutual advantage. Customer service can be seen as a process which provides time, place and form utilities for the customer and which involves pre-sale, sale and post-sale transactions.²

Customer service decisions fit within the context of a marketing strategy and in our view, form a key interface within this activity. However, the 'demarcation' between production, distribution and marketing functions is never absolute and so an overlap in responsibility can occur between quality management and marketing, often to the detriment of the perceived quality and service received by the customer.

The Role of Quality

The typical approach to quality is moving from one of final inspection to one of assessing whether critical work processes are in control and giving guidance to others in the techniques involved. This change of focus from inspecting production outputs to monitoring the variation in process during the process has special significance in distribution and service industries, where production and consumption can occur simultaneously and traditional quality inspection techniques are impossible or ineffective.

This change in the role of quality has been a long time coming. Dr. Walter Shewhart of the Bell Laboratories (USA) first made the distinction between 'controlled' and 'uncontrolled' variation in work processes in the 1920s. He used statistical control charts to monitor the performance quality of a process. According to the type of process, this measurement might be temperature, units, dimensions, or error rate, etc. W. Edwards Deming and J.M. Juran are widely regarded as the men who taught the Japanese to achieve high quality at low cost. Deming had worked with Shewhart in America before World War II and his methods were used extensively during that War. Afterwards, markets for American goods sought volume, and quality was put to one side. Meanwhile, the Japanese faced a 'do or die' economic situation, and they
listened to Deming, Juran and others.

As quality management in the 1980s expanded from the factory floor to the purchasing department on the one hand, and distribution on the other, some mistakes have been made, techniques have become articles of faith, and expectations have been raised to dizzy heights for customers, staff and shareholders alike. Many if not most customer service and quality improvement initiatives in the 1980s have turned out to be prescriptions for failure. There is an important role here for marketing, in liaison with operations and personnel managers, to get the quality planning cycle and the 'continuous improvement' processes right.

The Role of Marketing

In the 1950s marketing interest was primarily focused on consumer goods. In the 1960s increased attention started to be directed towards industrial markets. In the 1970s considerable academic effort was placed on the area of non-profit or societal marketing. In the 1980s attention started to be directed to the services sector, an area of marketing that had received remarkably little attention in view of its importance in the overall economy.

Historically much of marketing theory has evolved from a study of consumer markets. However, the study of service and industrial markets has suggested that new perspectives are needed. For example, Gummesson\(^5\) points out how industrial firms' international operations are not so much primarily concerned with the manipulation of the 'Four Ps', as used in consumer goods marketing, rather they are concerned with reaching a critical support level in terms of the relations with customers, distributors, suppliers, public institutions, individuals, etc. The new theory of industrial marketing, 'network-interaction marketing', embraces "all activities by the firm to build, maintain and develop customer relations".\(^4\)

Whilst a Relationship Marketing focus has been present in some firms' marketing activities for many years, it is by no means a common philosophy throughout industrial and service firms today. The 1990s will, in our view, see a much increased acceptance of the relationship concept.

The purpose of Relationship Marketing strategy is to shape the market to your favour (to create the market if necessary). Relationship Marketing and its association with quality and customer service seeks always to create enough value in the sale to
bring customers back for more. If this sounds remarkably like any other form of marketing then we would say, yes, marketing in theory but not in practice. In other words, the strategic emphasis in Relationship Marketing is as much on keeping customers as it is on getting them in the first place. We believe this represents a significant, if not radical, shift in marketing practice.

QUALITY AS A COMPETITIVE STRATEGY

One point we must emphasise here is that while Relationship Marketing requires a look sideways to the competition, it also means looking straight ahead to the customer, and systematically building a relationship with them. However, if you don't work on quality improvement and innovation, you may sell today but you are less likely to sell to the same person or company again, or to any of their friends and associates.

In fractured deregulated markets, companies will not survive without quality. Quality is the means by which the firm sustains its position among competing offers over time. Quality is how the offer gains uniqueness and value in the eyes of the customer. Quality is both the act of making the offer different and its evaluation by customers.

What a firm offers can also be discussed in operational terms of 'outputs' and the customers' needs in terms of 'inputs'. Anything else the firm does, the way it organises itself, the materials it uses, its processes and people, are all inputs to the design and delivery of those outputs. When we orientate our thinking this way, the value of the offering can be understood in terms of the match or mismatch of output-input linkages, which represent the firm's offer on the one hand and each customer's need on the other.

Quality Gaps

Our basic concept of quality is simply the match between what customers expect and what they experience. This is perceived quality. Any mismatch between these two is a 'quality gap'. As perceived quality is always a judgement by the customer, whatever the customer thinks is reality, is reality. However, word of mouth information, past personal experiences, advertising and promotion, all mediate the acceptability of the offering, by influencing customer expectations. In effect, quality is whatever the customer says it is.
Defining quality in this way meets any 'customer orientation' test, but is it sufficiently robust to guide marketing decisions? There are two operational problem areas. Firstly, 'expectations' must be understood to mean what the customer thinks 'should' happen, not what the customer expects 'will' happen! Otherwise, the absurd implication would be that when consumers expect bad service and receive it they will be happy! Some companies seem to operate this way but it is not a safe position to take if quality is the goal. Secondly, the quality concept is not a single variable in itself but a function of both customer perceptions and the firm's resources and activities. The quality perceived by customers is the same in kind perceived by the firm providing it. The evidence remains the same. Only the perspective changes. Any quality gap is a mix of facts and judgements so it is important to remember that each party is ignorant to some extent of the other's intentions.

Research by Parasuraman and his colleagues, conceptualizes a number of quality gaps or potential breaks in the relationship linkages, which lead to quality shortfalls. Because quality has been difficult to control it has been 'left to Operations' by too many marketing managers, and perhaps we should add, left to chance by too many marketing academics. The fact that this research specifically focused on service quality by no means discounts its broader relevance. Gap Type 1 occurs when managers do not know what customers expect, Type 2 is an absence (for whatever reason) of managerial commitment to correcting what customers expect, Type 3 is variability in the performance of what customers expect, (this research study focused on contact personnel), and Type 4 occurs when external communications about the offering increase customer expectations and in consequence, decrease perceived quality. These four gaps lead to a fifth gap which is in fact an aggregate of them all, i.e. the gap between quality expected and quality perceived to have been received.

Of course, the general characteristics of quality solutions and service support vary industry to industry and indeed, person to person because we are talking about the customer's perceptual world. In medical care for example, quality solutions tend to involve both the efficacy of individual drugs to produce intended effects, and the correct selection of the right drug and information as to correct dosage. These are highly sensitive core competencies sought by customers. Service support in this case involves issues of availability, home service or surgery extended hours, emergency services, and the reassurance of personal well being, and the right balance of professionalism and empathy.
The problem is that quality solutions and service support dimensions have no connections to departmental divisions which would suggest some neat internal allocation of responsibility for quality. This is particularly the case in service industries, where production, delivery and consumption can occur at the same time. Making the connections between the activities of departmental divisions and customer perceived quality is the job of quality management.

Quality Management

The best known quality management philosophy is Total Quality Management (TQM). TQM is 'total', because it is concerned with all work processes and the way they can be improved to better meet customer needs. Quality definitions provided by TQM 'gurus' tend to locate quality within the company as a set of "target values" so that work can be scheduled continuously in an orderly manner but without losing sight of customer requirements, which of course keep changing.

One of the most remarkable features of Total Quality Management (TQM) is the way in which it has drawn practising managers from many parts of an organisation to work together across traditional functional boundaries to improve quality and productivity. This points up a rather simple yet dramatic conclusion that has not been properly brought to attention. It is this: quality has become an integrating concept between production-orientation and marketing-orientation.

The Variability Of A Process Is Built In

All work is process. Sets of processes are connected in the firm's value chain. No matter what we do at work we are involved in these processes, indeed enmeshed in processes, as much as a worker in charge of a metal press, an airline pilot, or a bank manager.

Quality is at the mercy of variability built into work processes. It certainly will not correct itself. Very often, no one really knows why a routine procedure was established the way it was, or the way jobs are organized, or the design of the physical work environment itself. It often doesn't occur to people that things could be done another way. If a quality problem (representing a quality gap) were easy to fix, would it not have been fixed already? What at first seems impossible to change is often found to be possible when the assumptions being made about the nature and
Every work process generates outputs which in some way fall short of perfection and uniformity. All processes contain sources of variability and these differences may be large, or small beyond measurement. Variability can be reduced but it can never be entirely eliminated. The quality goal is to reduce these variations, so long as the value being added exceeds the total cost of achieving it. We can also understand the relationship between costs and value from the opposite angle, that is to say, waste in all kinds of business activity can be brought under control by minimising process variability. Eliminating 'waste' means eliminating cost that does not add value. This sounds like a traditional accounting approach and it is, except for one absolutely critical difference - you must focus on process variation, and reduce that. Organisations seeking to eliminate waste by cutting costs per se will almost certainly cut value, without ever knowing how or why.

Process variation is generated and passed along the whole chain of internal customers and suppliers to the final customer. Indeed, one eminent Japanese statistician, Genichi Taguchi, says that there is an incremental economic "loss" for each deviation from customer 'target requirements', which has a flow-on effect to society as a whole.

In this cycle of events, marketing has a pivotal position. Any major error in sales estimates, has a knock-on effect through the whole organisation from supply to distribution. This kind of process variability should be monitored statistically not to find the 'culprit' but so that efforts can be made (continuously) to improve the frequency and adaptability of sales signals. Another form of variability that is a marketing responsibility is customer complaints. Many organisations take care in handling customers who complain, but it is possible to go further, monitoring the key categories of complaints statistically and diagnosing the causes for corrective action. Another sensitive if seldom pursued marketing statistic is a customer loss/retention measure. If patterns of repurchasing by customers begin to show variability, that might tell you something about the total offering, in terms of the variability of quality and service.

Continuous Improvement

The challenge of survival in the 1990s in volatile markets demands a management orientation which accepts that getting and keeping customers requires continuous
improvement and innovation. The choice management must make is whether to drive workers harder at their assigned tasks, or whether to invite them to participate in generating new ways of improving the performance system. The first way treats people as 'prisoners' of the process and the second invites people to be agents of the process - a distinct and separate contribution for which their experience within the process makes them ideally suited.

SEVEN FAILURE-PRONE PRESCRIPTIONS

In managing the change processes for quality improvement, most of what needs to be done inside the organisation is invisible from the outside, and as with disorders of the body, the signs and symptoms of change can be misread. If the part that is critical is hidden from sight, the part that is clearly visible can be wrongly interpreted as the whole of the action. A wrong diagnosis is a prescription for failure. In discussions with company executives and in our research we have found seven flawed 'common sense' prescriptions which invite failure.

Prescription One:
'We will cascade our commitment down to the troops. That should do it'

Internal marketing messages are going to be rejected by many staff unless the communications have a coherent logic which fits the evidence of their past experience. Just as with advertising, internal communications work best when they are designed to 'preach to the converted'. Message making is a difficult job when it attempts to get people to change their minds. Messages work best when they reinforce how people already feel and think.

People do not so much resist change, they resist being changed, especially when the implications of the change are beyond their grasp. When internal marketing communications attempt to change people's minds, these messages can work as signals of strategic intent. People are often willing to suspend 'disbelief' while they wait for some demonstrable action which confirms the truth of the message. Their attitude is 'you've told me, now show me...'. This is particularly so at middle management level. They need to know that 'commitment' has substance before they can effectively cascade the message down. Middle management will be asking themselves what effect the change programme will have on their own roles and responsibilities. Unless commitment is demonstrated from the top, middle management may well go through the motions and then make sure that nothing happens.
As a safe planning dictum, expect staff (sometimes a majority of staff) to hear 'mixed messages' in all major communication from the top. In other words, 'they are saying this, but...'.

Organizational defensive routines can cause a serious block in communications because they are effectively 'undiscussable'. The quality trap really opens up if the CEO fails to realize the potentially ambiguous effects that apparently direct and clear communications can have in terms of established decision making processes and the alignment of organizational power. Communication without action as supporting evidence (both real and symbolic) is empty rhetoric.

**Prescription Two:**

'We must invest in more training'

The most common mistake is to jump directly into intensive training. In marketing terms the questions that should be asked (and often are not) are:

- Who is my target audience?
- What are their expectations?
- What knowledge do they need now?
- What skills do they need now?
- How can we monitor the learning process?

The investment in training is wasted if too much training is provided for too many people too soon. These issues concern scale. On the other hand, training in skills is necessary so that individuals can adjust to changing work contexts. This kind of learning has been called 'single loop learning', especially where the intention is that organizational performance remains stable within organizational norms. The strategic issue however, concerns scope. The pathway to continuous quality improvement challenges the patterns of operations and the very organizational norms which have previously defined effective performance. This second kind of learning is called 'double loop learning'.

If this must be called 'training', then what is needed is a new process in training for line managers and specialists which allows them access across functional boarders for information, and works to integrate solutions to problems which transcend the usual departmental blocks. The ability to codify what is learned over time and retain the
knowledge through the organization is what is intended. This is a cyclical process, and one special representation of it is the 'quality wheel' presented in Figure 1. If the organization cannot teach itself to learn, which is the intention of 'double loop learning', then investment in training is a never-ending story. A cost effective business proposal would be to invest in learning how your people learn, then develop the training.

**Prescription Three:**

'We intend to build a strong culture as a priority'

Just as the culture of a nation is shaped and sustained by deeply held values and beliefs, so too in the world of business. Changing the 'culture' of a particular company is a task of great subtlety. It is possible for example to change surface appearances without changing the culture at all, by changing the marketing artifacts such as logo, signage, mission statements, 'corporate wardrobe', and the design of the stationery. Giving a company a superficial change of identity, in itself, will have no significant or lasting cultural impact.

Yet corporate cultures do change. It is a question of intention and action. It starts with a vision of what the company might be, or its strategic intent. Having said that, you cannot just 'change' cultures. Soft goals need hard plans. What is necessary is a series of coherent actions which confirm the strategic intention. It comes down to doing things in new ways, event by event, communicating the effects, and using some events symbolically to shine light on the meaning of those new ways.

The leaders of organisations have a major impact on corporate culture because they alter the way companies initiate and respond to opportunities and threats. Just as brand values must be congruent with brand image, so must corporate values be congruent with corporate aspirations. What kind of culture is desirable? One that suits the purpose, competencies, and market opportunities of the company. There is a lot of nonsense written about corporate culture and we certainly do not want to suggest detailed prescriptive rules for engineering its change. We recommend Schein as a guide through the maze.12
Prescription Four:
‘We want to get everybody involved’

Getting everybody involved sounds fine. It is a question of time scale. Many companies give the impression of wanting to get it over and done with. People in organisations are so focussed on the daily problems to be sorted out and on the downside risk of not doing so, they end up shutting out messages which signal opportunities and possibilities all around them. There is often virtue in starting small. In that way commitment can be built, confirmed by action programmes and the results broadcast across the organization. This provides a signal to others that the commitment has integrity. More and more people become involved in each recurring cycle of activity. The movement through the involvement phases of vanguard, ferment, followers and stabilisers, is described in Figure 2.

It is an exercise in futility to attempt to get people actively involved, if they cannot be supported within a quality network of committed people and by training resources. Our view is that involvement should be task focussed but process lead. By that we mean people volunteer or are selected to work on the ‘vital few’ work processes which will create maximum impact. Certainly, detailed planning must precede any communications to staff. It is here that Internal Marketing can function as a facilitating arm.

Prescription Five:
‘We will introduce Quality Circles and see what happens’

A Quality Circle is a volunteer group of workforce members who have undergone training for the purpose of solving work related problems. The Circle concept evolved in Japan in the early 1960s as a support for the quality management techniques which had been introduced there by Deming and Juran in 1950 and 1954 respectively.

Historically, Quality Circles are an adjunct to a more broadly based quality management approach. Quality Circles differ from other participative groups such as quality improvement teams or diagnostic review groups in that they are always volunteer based and usually select their own problems for diagnosis. It would be fair to say that their great advantage is in dealing with assignable (special) causes of variation. In other words when the participants are close to the problem area, they are able to contribute valuable solutions to the 10,000 little issues that in aggregate
make a difference. Because the main focus of such groups is assignable/special causes, they are able to effectively 'drain the swamp' so that the real characteristics of a process are revealed for statistical control, or monitoring in other ways.

So far so good. Difficulties arise when groups are unsupported by management and they do not have access to valid customer data which guides the choice of problems for diagnosis. A closely related problem is that if Quality Circle networks are not connected to the organization's hierarchy through a quality planning group or steering committee, they tend to 'float off' the organizational chart.

There are probably good reasons for introducing Quality Circles in some companies as a pilot venture towards a more broad-based quality improvement process. Without a champion however they will surely die. When Quality Circles demonstrate a better way of managing, and lead to a more sustainable quality commitment, they serve as a catalyst. However, it is unwise to launch a Quality Circle programme to 'see what happens'. It will only make the launch of a full scale initiative at some future time more difficult.

Prescription Six:
'Ve can't improve service unless we set standards'

Only the customer can 'set' service standards. Therefore, how the customers' standards are signalled and interpreted by the company is the central issue. It is no good setting operational standards which have no meaning to the customer. It is characteristic of an authoritarian approach to quality improvement to move quickly to standard setting as a prerequisite for improving service. There are better ways. The first step is to identify which work processes are connected with the 'vital few' customer service characteristics that are of critical concern to the customer.

What is needed is a clear picture of the key processes, usually achieved by flowcharting. What is usually revealed at this point is that the critical processes have no clear ownership patterns. In other words, nobody is in charge! Who owns the process? This is next to be resolved (see Figure 3). This might involve negotiation with key departments, perhaps using a Departmental Purpose Analysis technique.17 Linking the 'vital few' critical service issues to key processes is a matter of judgement and wisdom.

One design technique sometimes used is Quality Function Deployment. Through a
process of linking and matching, a target value might be generated after careful consideration as presenting the ideal state of a particular process characteristic. This is the standard at which to aim, but it is by no means the standard by which performance of the process in its current state can be measured. Of course, intermediate goals can be set as ‘standards’ and these relate to periods of time and certain operating conditions.19

The quality goal is really the progressive elimination of variation against a target value. In service industries, setting standards for ‘front line’ service quality and managing those standards can work only where there is very little process back-up needed for front line service staff. It is more common to find that the total process is the service experienced by the customer, so it is the process capability that must be monitored.

Some people say that it is what gets measured that gets done. This is a useful structural approach but it is the quality of the measurement systems on which most attention should be focussed. Otherwise, standards can distort the true direction of enquiry. What is wanted is not so much feedback about performance against standards, but feed forward which effectively channels a sense of commitment and teamwork in problem solving and opportunity seeking quality improvement.

Prescription Seven:
‘The bottom-line tells us when we are succeeding’

There is no one solitary way of monitoring progress and what is useful is a range of external and internal feedback mechanisms which enable a ‘fix’ on quality. A generic list of strategic audits and surveys is shown in Figure 4.

The final score is of course traditionally profit or surplus, expressed in numbers and set in an historical cost accounting framework. This is an important convention, but it is still only one dimension.20

There is no doubt that many quality improvements can actually reduce the cost of quality. It is a question of eliminating waste in resources and time without reducing value to the customer (see Figure 5). Time is a powerful dimension of success in cost-effective quality improvement. This has been the Japanese experience. The strategic imperative is not to set up projects at great speed, rather it is to set the
sights on the quality leadership goal, take small steps, check the outcomes and effects as you go, then take more decisive action according to the evidence from internal and external sources of feedback.

Turning the quality improvement wheel is slow at first but produces results which have all the appearance of 'fast and flexible' action, when viewed from your competitor's watch tower.

Company-wide, we need to design our way out of quality problems. We are not naturally good at this because we have not in business life developed the constructive and creative habits of thinking that are required for design. This is why management must empower staff and create the changes that enable new ideas and problem solving approaches to come forward.

With a few minds at work, the sum total of inputs starts to organise itself into an outcome. In a sense, solutions become 'obvious'. This is not our 'natural' way of thinking things through because our traditional Aristotelian logic is based on judgement and analysis.

**GETTING THE PRESCRIPTIONS RIGHT**

How can we possibly 'break-out' of our 'culture-bound' prescriptions for failure?

What is needed is a framework for the diagnostic review of work processes, within a strategy for 'continuous improvement'. There are a number of alternative approaches. They all involve "turning the wheel" of continuous improvement. This means continuously reassessing the historic role of managers in the planning, organising and controlling of work. It also means diffusing responsibility for knowledge generation so that staff at all levels can contribute to the process of continuous improvement by knowledge sharing. The decision authority of managers rests on knowledge application and need not be affected. In this way, there is more knowledge for managers to work with and a better informed workforce. Knowledge is the antidote to failure in our pathology of company-wide quality initiatives.

This is a transformational step to make but one that is pivotal. It is a strategic step because it has a profound effect on the quality of internal communications and managerial styles, and challenges the corporate culture. This may be difficult but the options look worse.
REFERENCES


4) op cit.


13) Under the Pareto principle, a 'vital few' of work processes will account for most of the quality defects. This is a phrase coined by Joe Juran; see for example JURAN, J M, Juran on Leadership for Quality, an Executive Handbook, London, The Free Press, 1989, p150.


FIGURE 1

TURNING THE WHEEL OF IMPROVEMENT - CONTINUOUSLY

- Review feedback and measurement systems
- Review training schedules
- Performance evaluation
- Improvement to system introduced
- Diagnostic review phase
- Schedule improvements for implementation
- Reward contributors to quality improvement
- Review training and development for diagnostic skills
FOUR PHASES OF ORGANISATIONAL COMMITMENT TO QUALITY

4. REWRITING CULTURAL 'SCRIPTS':
- Quality is reinforced by its own positive consequences

1. SELECTING AND SUPPORTING KEY CATALYSTS:
- Change Agents
- True Believers

3. BREAKING WITH HISTORY:
- Alignment of purpose
- Coming to terms with new ways

2. MAKING HISTORY:
- Opinion Leaders
- Outbreaks of Excellence

1. VANGUARD

2. FERMENT

3. FOLLOWERS

4. STABILIZERS
Who owns the process? Who recognises the quality improvement opportunity?
FIGURE 4

THE STRATEGIC SCANNING
PROCESS FOR QUALITY LEADERSHIP

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<tr>
<th>PRIMARY</th>
<th>SECONDARY</th>
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<tbody>
<tr>
<td>1 Strategic intent</td>
<td>1.1 Mission statement</td>
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<td>1.2 Philosophy statement</td>
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<tr>
<td>2 Strategic audits and surveys</td>
<td>2.1 Staff markets (internal climate monitor)</td>
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<td>2.2 Customer markets analysis (critical service issues)</td>
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<td>2.3 Potential markets analysis (non-users)</td>
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<td>2.4 Competitors (benchmarking)</td>
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<td>2.5 Non-competitors (benchmarking)</td>
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<td>2.6 Suppliers (co-partnership opportunities)</td>
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<td>2.7 New product markets (product development)</td>
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<tr>
<td>3 Strategy formulation/</td>
<td>3.1 Strategic direction</td>
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<td>realignment</td>
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<td>3.3 Revisit mission statement in 1.1</td>
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<td>3.4 Revisit philosophy statement in 1.2</td>
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FIGURE 5

HOW TO ELIMINATE QUALITY COSTS

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<th>PRODUCTION STAGE</th>
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