

Topic 4

Customers and Customer Expectations

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INTRODUCTION

Topic 4 explains the concepts of internal and external customers and suppliers. The confusion that exists between the terms "*customers*" and "*stakeholders*" is reviewed. The importance of quality chains to the achievement of quality is illustrated and explained. The meaning of customer expectations is defined and explained. The association of customer needs and preferences with customer satisfaction is also considered.

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LEARNING OUTCOMES FROM THIS TOPIC

At the end of this topic you should be able to:

1. Explain the difference between external and internal customers.
2. Determine the difference between the terms "*customers*" and "*stakeholders*" and construct and defend your own definitions for each.
3. Summarise the concept of quality chains and recognise its importance to the concept to achieving quality.
4. Discuss the relationship between customer needs, customer preferences and customer satisfaction.
5. Use the table of customer expectations from AS/ NZS 3906:1994 to review the features of a product and decide on its ability to satisfy your needs and preferences.

CUSTOMERS AND STAKEHOLDERS

A review of quality literature appears to suggest there is a great deal of disagreement and divergence of opinion as to what quality is and how it is achieved. But we have already seen in Topics 1 and 2 that when we look at the intent and meaning behind the terms and names used in the literature, we find they actually have much in common. So, it should be no surprise to find that "*customers*" are defined by various authorities in ways that suggest divergent opinion. In addition, the term "*stakeholder*" is thrust into the arena to seemingly further confuse the situation. However, we will soon find again that the situation is not as confused as the evidence suggests.

It is interesting to note that many quality books written for the construction industry do not specifically define the terms "*customer*" or "*stakeholder*" nor do they explain their significance in a quality sense (eg Hughes & Williams 1991; Kubal 1994; Nee 1996; Thorpe, Sumner & Duncan 1996; Griffith 1990). Although some authors make reference to "*clients*" they do not make the association between the client and the customer, and leave us to make that connection for ourselves. In addition, none that refer to "*client*" actually define the term, although they appear to mean the owner of the building being constructed. As we shall find out, an understanding of customers

and their influence on the achievement of quality is fundamental to the success of quality management.

Definitions of customers can vary widely in wording and extent of explanation that they include. In the following four examples of definitions of "customer", the first two are generic, the third is intended for construction and the last one is for project management:

"Recipient of a product provided by the supplier"
(AS/ NZS ISO 8402:1994 , p2)

"The term [customer] applies in both the internal and external sense and means the recipient of an item or service" (Stebbing 1990: 172)

"Any person or enterprise who has valid expectations about the final outcomes of a building or construction project such as the building owner, building manager, tenants, etc." (CIDA 1993: 172)

"The customer may be:
-the sponsor, or owner of the facility
-the operators of the facility, or users of the services it provides
-the consumers of the eventual product it produces
-the media, or local community, or politicians."
(Turner 1999: 151)

Although it may not appear to be the case, the ISO definition is perhaps the broadest in intent. AS/ NZS ISO 8402:1994 (p2) further explains that *"the customer can be either external or internal to the organisation"* (though it seems to limit the concept of *"internal customers"* to the level of functional areas or sections within an organisation rather than individual employees). Also, the Standard considers the customer *"...may be, for example, the ultimate consumer, user, beneficiary or purchaser."* These clarifications link the ISO definition to the other three definitions. This wider view of *"customers"* seems to be very similar to the concept of *"stakeholders"*.

ISO 10006:1997 (, p2), the ISO guidelines for quality in project management, defines stakeholders as:

"An individual or group of individuals with a common interest in the performance of the supplier organisation and the environment in which it operates"

The standard further clarifies that stakeholders may include:

- Customers, recipient of the project product
- Consumer, such as a user of the project product
- Owner, such as the organisation originating the project
- Partner, as in joint-venture projects
- Funder, such as a financial institution
- Sub-contractor, organisation supplying products to the project organisation
- Society, such as jurisdictional or regulatory bodies and the public at large
- Inter-personal, such as members of the project organisation

Ireland (1991: II-1), an author on project management and quality management for projects, has a very restricted view of stakeholders as a form of customers who have an economic interest in the project:

- *Apparent customers*: the “*stakeholders*”, with an economic interest, who influence project direction, size, duration, budget and major physical aspects
- *Invisible customers*: who have “*no interest*” in the project meeting its goals but attempt to use the project to meet their individual interests (eg environmentalists, unions and government agencies)

The bias in Ireland’s definition is surprising for it seems to be rather unenlightened and embody all that is wrong in attitudes that prevailed, and still prevail, in the construction industry. Certainly, the intent is contrary to a quality approach, and, I think, a good project management approach. Also, it is a confusing definition, because why should Ireland consider his “*invisible customers*” to be customers at all? However, the fact that some parties should have a negative or conflicting view to those who might have an economic interest in a project does not necessarily exclude them from being stakeholders. In fact, AS/ NZS 10006:1998(p2) considers all parties with a legitimate interest in a project are stakeholders, even though “*there may be conflicting interests among [these] stakeholders.*”

In summary, it appears that it is possible, and perhaps necessary at times, to consider customers in a narrower sense and in a wider sense. In the wider sense the intent seems to agree with good definitions of “*stakeholders*”, though more will be said about this when we look at “*quality chains*”.

SUPPLIERS

Although many of the authorities on quality mention the relationships between suppliers and customers, few actually define the term “*supplier*”. However, AS/ NZS ISO 8402:1994 (p2) defines “*supplier*” as

“Organisation that provides a product to the customer”

The Standard (p2) further clarifies the “*supplier*” to be “*...for example, the producer, distributor, importer, assembler or service organisation*”. And although the Standard notes “*the supplier can be either internal or external to the organisation*”, it again appears to be referring to functional areas or sections within an organisation rather than individual employees.

QUALITY CHAINS

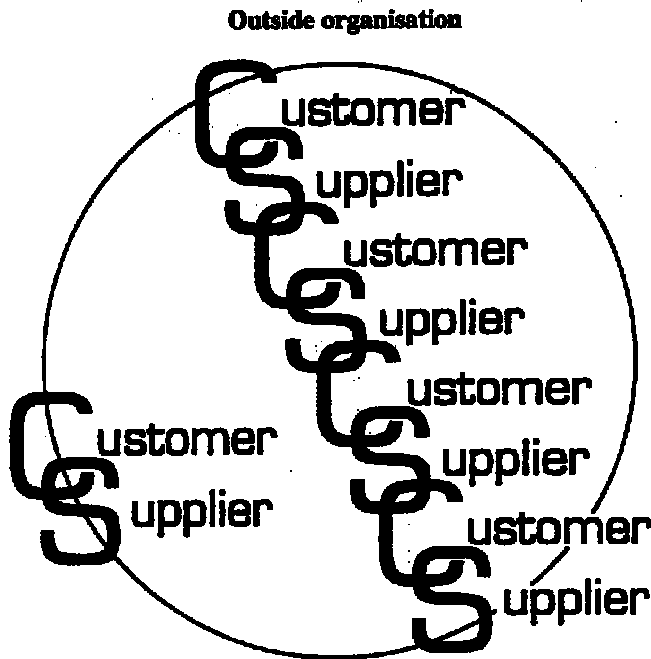
Oakland and Sohal (1996: 7) remind us that “*the concept of internal and external customers/ suppliers forms the core of total quality*”. AS/ NZS 3906:1994 (p6) explains that “*external customers are those for whom the organisation designs and provides a service, whereas internal customers are the organisation’s own employees who participate in the service design and delivery process*”. However, the definition of internal customer here appears to be different to the definition in AS/ NZS ISO 8402:1994 (p2), which we looked at earlier, and which seems to consider internal customers to be functional areas or sections within an organisation rather than individual employees.

Oakland and Sohal (1996: 7) also remind us that quality has to be managed and must involve everyone in the processes as applied throughout the organisation. Scholtes (1988: 2-6) emphasises this point in his statement that “*the quality of what comes out of a process is determined by the quality of what goes in and what happens at every step along the way.*” Therefore, to ensure the quality of a product or service, it is important that

the output of each worker meets the needs and expectations of the next person in the process, ie so that quality is actually built-in to the processes. This relationship of suppliers and customers forms a continuous chain which includes the external suppliers to the organisation, the organisation's own internal arrangement of suppliers and customers and the external customers to the organisation (see Figure 1).

Figure 1 - The Quality Chains

(Source: Oakland & Sohal 1996: 7)



Quality chains avoid incorrectly assembled components and poor workmanship through the part-completed product or service being passed on only after it meets all the specifications and work requirements of a given stage (Ireland 1991: I-5).

Scholtes (1988: 2-5) notes, "each worker, therefore, is a customer of preceding workers; and each has customers, the people to whom the worker passes on his or her work." This takes the concept beyond the issue of a customer being only the next direct person in the process and points out that a worker's output may need to satisfy the specific needs of several customers as the work progresses through the process chain.

AS/ NZS 3906:1994 (p6) takes Scholtes' point even further and states that "as suppliers, all employees need to identify their internal and external customers, their specific needs and suitable measures of satisfaction." Because most employees will have no direct contact with external customers the standard also recommends that the organisation conduct reviews to "ensure the requirements of the external customer are understood at each step in the service design and delivery process." In any case, it is essential that organisations have good factual evidence of how satisfied their external customers are with the products or services they receive. This need is emphasised by the results of a 1985 study from the USA and which are referred to in the standard (p13):

- The average business will not hear from 96% of unhappy customers and, therefore, will not realise the customers have changed to another supplier
- For every complaint received, the average company has 26 customers with problems and 6 with serious problems
- Of customers who register a complaint, between 56% and 70% will continue business with the organisation if their complaint is resolved (95% if resolved promptly)

CUSTOMER EXPECTATIONS

Customer satisfaction with products or services is linked to the extent that the products or services meet the expectations the customer has of them. AS/ NZS 3906:1994 (p5) says *"the quality of a service or product can be defined as the totality of the features and characteristics that bear on its ability to satisfy customer needs."* But the same standard (p5) also says that *"customer expectations are the totality of all those needs and preferences, both tangible and intangible, which a customer brings to bear on the supplier of goods and services."* This infers that meeting needs alone may not be enough to delight a customer. The extent to which a product also meets a customer's preferences as well as their needs will influence the levels of satisfaction they have for the product or service and more will be said about this later).

The link between customer expectations, needs and preferences is also made by CIDA (1993: 172), which defines customer expectations as *"a combination of customer needs and preferences for opportunities to be realised, problems to be solved and good feelings to be created."*

PMI (1996: 84) defines customer satisfaction on projects as *"understanding, managing and influencing needs so that customer expectations are met or exceeded."* PMI also goes on to note *"this requires a combination of conformance to specifications (the project must produce what it said it would produce) and fitness for use (the product or service produced must satisfy real needs)."*

Interestingly, Kubal (1994: 65) believes that *"complete satisfaction has never been a goal in the construction industry for designers, construction managers, subcontractors and materials suppliers...[and] the true method of assuring complete customer satisfaction probably will never become a reality in the industry - buildings that can be refused or 'returned' if not satisfactory."* Although Kubal sees such a refund policy to be impractical for the construction industry, he seems to miss the point that such policies do not assure customer satisfaction, they merely attempt to limit the amount of damage to the relationship between the company and its customer.

However, in many cases a customer may not have thought thoroughly, or consciously, about the expectations they have of a product or service (including construction). As noted in AS/ NZS 3906:1994 (p5-6), customer expectations *"are rarely well defined and may well evolve as the transaction progresses"*. The Standard identifies 16 points that customers may include in forming their expectations, some of which will evolve as needs and some as preferences (Table 1). The weighting and ranking of the points by different customers for the same product or service may vary considerably.

Table 1 – Customer Expectations

(Source: AS/ NZS 3906:1994 , p5-6)

(a)	Performance	- primary operating characteristics
(b)	Features	- supplements, attributes, distinctiveness, differences
(c)	Conformance	- compliance with pre-established specifications, standards
(d)	Aesthetics	- appeal to human senses, elegance, tastefulness
(e)	Reliability	- ability to meet criteria consistently; dependability, trustworthiness
(f)	Durability	- useful operating life; endurance, hardiness, toughness
(g)	Maintainability	- ease and convenience of repair/ rectification
(h)	Information	- instructions, data, facts, knowledge, communications
(i)	Promptness	- timeliness of delivery, punctuality
(j)	Responsiveness	- ability to react to specific needs; awareness, willingness, alertness
(k)	Consideration	- behaviour shown in human relationships; tact, recognition, regard, thoughtfulness, empathy
(l)	Confidence	- reputation, assurance, credence, dependability
(m)	Image	- sum of experiences, beliefs, feelings, knowledge, and impressions
(n)	Safety	- safe operation of product or safe delivery of service
(o)	Product recall procedures	- effective recall procedures
(p)	Value	- perceived quality relative to price

Garvin (1987) proposes a framework of eight critical, competitive dimensions or categories which he suggests can be used for strategic analysis to ensure customer expectations are met. Table 2 identifies Garvin's eight dimensions and shows how McGeorge and Palmer very generally interpret the dimensions for construction. To be useful, each of the dimensions would need to be explored in depth to discover and record the customer's needs and preferences. Ireland (1991: II-2) emphasises the need for the project manager to "...work with the customer to determine the requirements in terms both parties understand and agree to the meaning...[as] failure to understand the requirements from the onset of the project will impede planning, implementation/ execution, maintenance/ operation, and delivery of the system."

Table 2 – Garvin's Dimensions Related to Construction

(Adapted from: McGeorge & Palmer 1997: 161-162; Garvin 1987)

1.	Performance	This is the primary reason for having the project along with the main characteristics it must have. In terms of a hospital this may therefore be the provision of wards, waiting rooms and operating theatres. Does the building achieve its main purpose?
2.	Features	Not addressed (has been included in point 1)
3.	Reliability	Asks if the building will operate for a reasonable period of time without failure. Is the building reliable?
4.	Conformance	This is the degree to which the specification is met. Does the building conform to the specification?
5.	Durability	The length of time the building lasts before it needs to be replaced. Is the building lasting a longer or shorter period than is required?
6.	Serviceability	The service given after the building is completed, particularly with regard to repair. Is the building repaired quickly and with a quality service?
7.	Aesthetics	How the building looks and feels. Is the building aesthetically pleasing internally and externally?
8.	Perceived Quality	The subjective judgement of quality that results from image. Does the user and client feel it is a quality building?

CUSTOMER NEEDS AND PREFERENCES

CIDA (1993: 172) defines customer needs as *“those essential requirements of customers which must be satisfied by the goods and services response”* and customer preferences as *“those non-essential requirements which customers desire to be satisfied by the goods and services response.”*

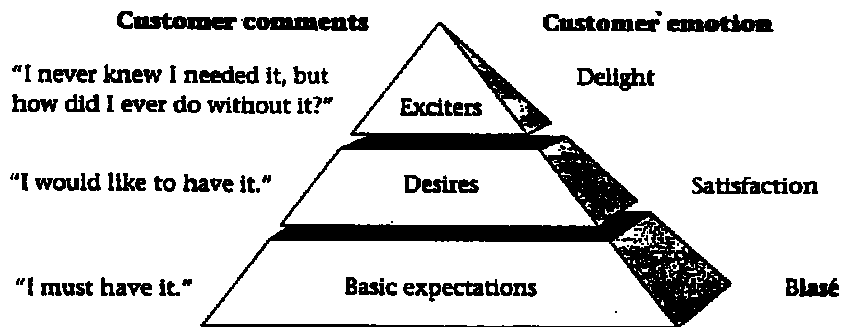
AS/ NZS 3906:1994 (p6) similarly notes that *“needs are the essential or significant characteristics of a service. Preferences are other expectations which enhance or embellish the basic service.”*

Therefore, it is essential that products or services must satisfy customer needs ahead of their preferences. Unmet needs are likely to create a negative reaction in customers, whereas unmet preferences may not be so important. However, satisfying customer preferences as much as possible is still important as it may provide a competitive market advantage and may well delight the customer in a way that would not have been possible if only their needs were met.

Ehresman (1995) considers that customers are only likely to be satisfied if both their needs and desires are met. But, he considers meeting needs and desires only will not delight customers. To truly delight customers requires additional features that surprise customers and are beyond their expectations (Figure 2). However, to keep customers truly delighted requires companies to be innovative and constantly changing as the features that excited customers the first time will become basic expectations the next time they purchase the same product or service.

Figure 2 - The Customer Satisfaction/ Delight Model

(source: Ehresman 1995)



Identifying customer preferences may be a complex task, especially where customers are not consciously aware of their preferences. However, tangible preferences may be readily quantified and objectively assessed, though intangible preferences involving subjective judgements are more difficult to assess (AS/ NZS 3906:1994: p6).

SELF ASSESSMENT QUESTIONS

1. Explain the difference between external and internal customers.
2. Determine the difference between the terms "customers" and "stakeholders" and construct and defend your own definitions for each.
3. Summarise the concept of quality chains and explain its importance to the concept to achieving quality.
4. Discuss the relationship between customer needs, customer preferences and customer satisfaction.
5. Select a product and use the table of customer expectations from AS/ NZS 3906:1994 to review the product features and decide on its ability to satisfy your needs and preferences.

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