QB

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ISSUE 4 2020 | FEATURING:

- ***The Elements of Value®:*** *Delivering value for business results*
- ***Introducing the QVRC model:*** *Quality conceptualised as a balance between value, risk and cost*
- ***Foundation Tools and Techniques for improving Customer Value.***
- AND MORE…

AUSTRALIAN ORGANISATION FOR QUALITY NEW ZEALAND ORGANISATION FOR QUALITY

In the Q

Welcome to the final issue for 2020 – and the first issue dedicated to a theme: 'Creating Customer Value' – the theme for this year's World Quality Day on 12th November.

'Customer Value' is a natural consequence of applying the first of the ISO Quality Management Principles: 'customer focus'. We have assembled a bumper issue of fascinating articles to bring this theme to life.

In our lead article, Eric Almquist, who is an advisory partner with Bain & Company's Customer practice and based in Boston, USA, explores the elements that make up value and this is not just an academic exercise - Eric shows how these elements can be used to design for product success. This paper is also referred to by a couple of the other articles in this issue. In another take on this idea, Shayne Silcox, an Excellence Award Winner, 'demystifies' value; this paper is based on a webinar he gave in September jointly for AOQ and Business Excellence Australia. Nigel Grigg, Professor of Quality Systems at Massey University, presents a new model that conceptualises quality as a balance between value, risk and cost - it too can be used predictively.

Jayet Moon, another American contributor, explores the risk theme by reaching back to Deming's Principles and exploring how to apply them to achieve organisational sustainability through delivering customer value in the COVID era.

We have two 'tools' papers: Dr Jackie Graham continues her series on quality tools by looking at customers, data and value; and Michael McLean JM has provided a commentary on applying quality techniques to improve customer value.

Farisha Firoz and Alan Jones look for customer focus in the analysis of interested parties looks as customer value from a fresh perspective – how complaints are perceived.

Jeff Ryall has contributed a book review – another first for Quality Business. (Note: we welcome more book reviews!). Jeff explores customer value (or the absence of it) through the lens of not one, but three books on the recent Australian Hayne Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry. Try reading this and not getting angry!

Our member interview presents a personal and fresh take on value and quality from Lisa Mariah, an AOQ member based in the Victorian regional city of Bendigo.

Finally, our association with the Journal 'China Quality' continues with the translation by AOQ member Janet Johnson of a paper by Guo Sha on poor management habits, some at least of which impact customer value.

There are some great reads and stimulating ideas here. Enjoy!

Dr Martin Andrew, Co-Editor

Cover photo: *Metamorworksi*

Quality Business is directly delivered to quality and excellence professionals, employers, quality organisations and academics in Australia, New Zealand and internationally four times a year.

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ISSN 2463-5286	Print
ISSN 2463-5294	Digital

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qualitybusiness *In this issue:*

The Elements of Value®:

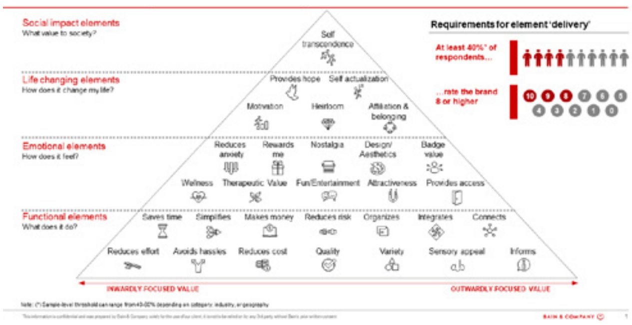
Delivering value for business results

Eric Almquist

Eric Almquist is an advisory partner with Bain & Company's Customer practice and based in Boston.

The amount and nature of value in a particular product or service always lies in the eye of the beholder. Yet universal building blocks of value do exist. As first described in a 2016 *Harvard Business Review article*, we have identified 30 Elements of Value that fall into four categories: functional, emotional, life changing and social impact (see Elements of Value pyramid in Figure 1).

Figure 1: The Element of Value®: A brand 'delivers' on an Element of Value if a critical mass of buyers rates it above a given theshold



Our model traces its conceptual roots to psychologist Abraham Maslow's "hierarchy of needs," first published in 1943. Maslow argued that human actions arise from an innate desire to fulfill needs ranging from the very basic (security, warmth, food, rest) to the complex (self-esteem, altruism). The Elements of Value approach extends his insights by focusing on people as consumers, describing what they experience as valuable in the products and services they use.

This approach has proven useful to two vexing business challenges: growing revenue and remaining differentiated from competitors. Companies can improve on elements that form their core value. They can also judiciously add elements to expand their value to customers without completely overhauling their products or services. The US retailer Nordstrom, for instance, acquired Trunk Club, a personal shopping subscription service that *simplifies* the process of selecting stylish, well-fitted apparel. Google expanded Google Maps to give users *access* to street views, restaurant menus and reviews, business hours and more. Domino's introduced easy and engaging mobile pizza ordering and tracking to *reduce effort* for customers.

LINKS TO MARKET SHARE, PRICING, LOYALTY AND REVENUE

To see how the Elements of Value link to company performance, through Dynata we recently surveyed 45,000 US consumers about their perceptions of 190 companies across 22 industry categories. Each respondent rated one company—from which he or she had bought a product or service during the previous six months—on each element, using a zero to 10 scale. We then looked at the relationships among these rankings, each company's Net Promoter Score® (NPS®), and the company's recent revenue growth and market share growth.

We first explored whether the elements could shed light on market share growth. Companies with high scores (defined as a rating of 8 or above from at least 50% of respondents) on more elements do indeed realize higher gains in market share. Companies meeting threshold on one or no elements of value had declining shares of -2% (CAGR, 2015-2017), while those delivering four or more were gaining share at nearly 5%. This phenomenon is playing out in the US telecommunications sector, for example. Since

Continued from **page 3**

2013, T-Mobile has invested in a number of elements and realized gains in NPS along with its share of new customers, and its market capitalization grew from $14 billion in 2013 to $48 billion in 2017. But competitors did not stand still. Starting in 2017, Verizon responded with its own investment in elements such as *access*—through unlimited data plans and improved video add-ons. Verizon's market share has started to rebound, and recently, its share of new customers surpassed T-Mobile.

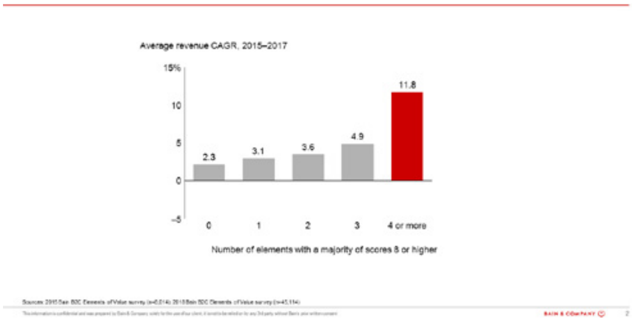
Next, we explored whether delivering more value to consumers results in their willingness to pay more for products and services. The survey confirmed this hypothesis when we employed discrete choice modeling, a gold-standard method for estimating consumer demand under different scenarios of pricing and product features. We showed consumers a series of offers from three brands, changing prices and product features systematically. Modeling responses allowed us to examine the pricing power of companies that deliver more elements than others do.

In smartphones, for example, Apple delivers 12 elements, Samsung 10 and LG 3. Using a method developed by Joffre Swait and others in 1993 (his "equalization price"), we set all features to be equal across the three brands, then adjusted prices up and down for the brands until the predicted market shares were equal. As a result, at equal market share with Samsung, Apple can charge a premium of $340 more than Samsung. At equal share with LG, Samsung can charge $178 more. At equal share with LG, Apple can change a whopping $518 premium. Indeed, the analysis supports Apple's strategy to set a high price for the iPhone X despite pundits initially saying it was a mistake. We found the same pattern in fast food restaurants, cars, hotels and other retail categories. In other words, if you deliver more value than your competitors do, you have the luxury of charging more or taking that premium in increased market share.

Some of our insights from our original research in 2015 hold up with the much larger data set of the newer survey. In the area of loyalty, companies that performed well on four or more elements had, on average, more than twice the Net Promoter Score of companies with just one high score, and more than five times the Net Promoter Score of companies with none. Furthermore, companies that add elements on which they have high performance see a sharp increase in their Net Promoter Score.

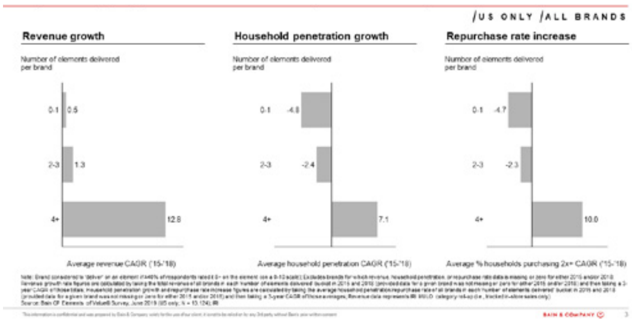
Strong performance on multiple elements also correlates closely with higher and sustained revenue growth. Between 2015 and 2017, companies delivering just one element averaged a 3.1% CAGR (Compound Annual Growth Rate), while those delivering four or more elements grew at 11.8% (*see Figure 2*).

Figure 2: Companies delivering on more elements have higher revenue growth rates



This pattern extends to consumer packaged goods, a category that for the last ten years has been managed almost exclusively by a focus on household penetration, shelf presence, memorability signals, and promotions. In mid-2019, we surveyed over 13,000 US consumers and covered 90+ consumer goods brands. We found that brands delivering 4+ elements of value to consumers experienced higher growth in revenue, household penetration, and repurchase rates as measured IRI behavioural data (IRI is a US consumer data company). (See Figure 3.) This was true for both traditional incumbent brands and newer insurgent brands.

Figure 3: In consumer packaged goods, brands that deliver 4+ Elements of valuet to consumers experience higher growth in revenue, household penetration, and repurchase rates



EMOTIONAL BONDS ON A FUNCTIONAL BASE

Another key finding in our analysis answers a question that many business executives and professionals have been asking us: Are emotional elements higher in the hierarchy worth more than functional elements? The answer is yes, delivering on one more emotional element will add 1.5 times the amount of Net Promoter Score, on average, when compared with delivering on one more functional element. In consumer packaged goods, very few brands clear threshold on the two upper pyramid layers of elements (life changing and social impact), but those that are performing better massively outperform value laggards on growth in revenue, household penetration, and repurchase rates as measured by IRI (*see Figure 3*). This was true for both traditional incumbent brands and newer insurgents.

Across almost industries we have studied, perceived *quality* affects customer advocacy more than any other element.

Products and services must attain a certain minimum level, and no other element can make up for a significant shortfall on this one. Consumers have come to expect high quality. But emotional elements obviously allow companies to connect with consumers on a deeper level—and that's worth a great deal in the ongoing battle to earn loyalty.

Yet it's also clear that companies cannot build a strong and enduring emotional bond in a functional vacuum. We know of no company that made the leap to excelling on emotional elements over a sustained period without a strong performance on some functional elements. In fact, companies that perform well on three or more functional elements also deliver significantly more higher-order elements than companies that excel on fewer than three functional elements. As just one example, mutual fund giant Vanguard, which over the past three years has added high performance on *reduces anxiety*, *provides access* (with a low minimum initial investment for ETFs [Exchange Traded Funds]) and *provides hope*, strengthened its functional elements as well, such as *simplifies* (by consolidating all of a household's investments on one website). By adding a semi-automated advice service in 2015, Vanguard increased its elements of value delivery over competitors. It has accelerated its share gain in its marketplace.

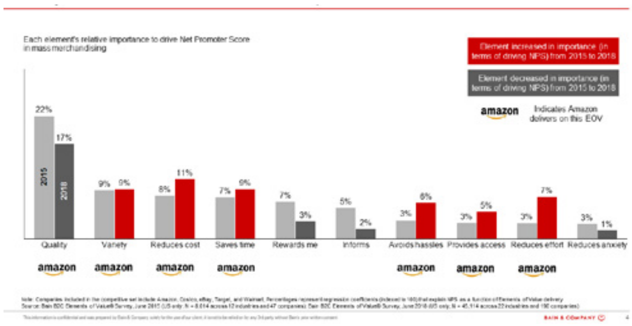
Whether a retailer sells through physical stores or online, or is trying to deliver on emotional elements, not just functional ones, the leaders are able to immerse customers in a distinctive experience that delivers value. Men's shaving was a sleepy market when Dollar Shave Club started in 2011 with an affordable, convenient direct-to-consumer model. Founded by entrepreneurs who found the price of razors high (and the goods often locked in store cases), Dollar Shave Club steadily added Elements of Value to its business and now excels on eight elements, seven of which are functional—a performance that's far ahead of the established competitors. Dollar Shave carefully tailors the convenience of a subscription, direct shipping, low price points, and simple, understated imaging and marketing to its customer base. Since 2015, as Dollar Shave added elements, its revenue nearly doubled, and market share doubled as well. Unilever acquired the company for $1 billion in 2016, and Dollar Shave Club continues to grow.

SOME COMPANIES ARE ACTUALLY CHANGING WHAT CONSUMERS VALUE

It is well known that in the US, Amazon has upended traditional retailers and steadily taken market share over the past two decades in categories such as general merchandise, furniture and apparel. Amazon delivers very well on eight elements while most retailers struggle to deliver on two to four elements. Almost all of these elements are functional—Amazon helps consumer reduce hassles, save time, reduce costs, and get access to a huge variety of goods in stock. Amazon makes shopping easy—no driving, no parking, no finding that an item is out-of-stock, and it's easy to return goods.

Just as impressive, though, is how Amazon has redefined what consumers want from retailers. Our research suggests the company's dominance has actually changed which Elements of Value matter most to consumers in mass merchandising. Over the past three years, elements such as *reduces effort* and *avoids hassles* have become more important catalysts for consumer loyalty in retail as measured by NPS *(see Figure 4)*. Amazon delivers on these quite functional elements at a very high level, as several consumer surveys by Bain & Company have shown. Its ascendance illustrates how some companies, as their innovative business models help them to expand their market share, can change what things really matter to consumers across a category.

Figure 4: Amazon appears to be changing what consumers value - they excel on many elements that have increased in importance since 2015



PUTTING THE ELEMENTS TO USE

Companies have been using the Elements of Value at many points during the product life cycle. When forming a value strategy for a new or revamped product, this approach helps to identify where to play and how to win. As part of improving one's value proposition, the elements guide selection of product or service features and choices about where to invest in research and development. During go-to-market planning, the elements give companies an analytical, objective anchor to understand how consumers perceive value and what they are willing to purchase. And before a company goes to market, the elements inform the marketing messages, pricing tactics and ongoing support.

Large organizations face a constant challenge of spending enough time with customers to learn how their behaviors and perceptions are changing. The Elements of Value give managers a way to identify what matters most to each segment of consumers and how the company can best fulfill their needs.

Foundation Tools and Techniques for improving Customer Value.

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CUSTOMERS

Back in the day, we had the pleasure of attending AOQ and NZOQ courses and company internal courses to learn about the quality tools, techniques, management system standards and auditing. The purpose was to help control and improve the processes within their management system. The quality courses were always focused on the customers. Customers wanted to assurance that the supplying entity was providing the confidence, transparency, documentation, records and (if required) accredited certification of that system – both for themselves for others in their supply chains.

VALUE – IN THE EYE OF THE CUSTOMER

There is much we can revisit in the quality body of knowledge – so much indeed that we would need a lifetime to do it! The following may help re-calibrate your thinking and application of some of the quality body of knowledge, tools and techniques to improve the value for your customers from your organisations' products and services.

Value is defined by the utility or functionality of the product or service judged by the customer, divided by the prices paid by the customer.

DR WALTER SHEWHART

At is roots is Dr Walter Shewhart's Control Charts and Histograms for understanding the behaviour of processes is critical. His control process behaviour Control Chart with its +/- 3 standard deviations (3 Sigma) was and still is critical to understand the stability of the process to be studied and that its output is capable of meeting the specifications and other requirements of the customer or market segment. This may seem familiar; it is sometimes described as the 'Voice of the Process' or the 'Voice of the Customer'.

PDCA OR PDSA?

It is one thing to meet 'specification', that is to *Check* that the process output was 'to spec' but there is a need to *Study* the process to see where the common or system causes along with the special causes contributed to some effect or problem in which the specification or requirements were not met.

Dr Shewhart developed the Plan, Do, Check, Act (PDCA). Dr Deming later changed it to PDSA. Why? Because one *studies* the process and the variations in it. Many call the Plan, Do, Study, Act Cycle the 'Learning Cycle' or 'Improvement Cycle'. ISO 9001:2015 refers to 'PDCA' – but says users "can use the PDCA" not *shall* use it.

PDSA is the better term.

IF THE ONLY TOOL YOU HAVE IS A HAMMER, THEN EVERY PROBLEM BEGINS TO LOOK LIKE A NAIL.

Some say this is a Chinese proverb. I do not know. I heard in my first "quality technique" course 'Zero Defects' in 1971 when I was a Production Engineering Apprentice/Trainee. We were attending a course developed by the then sixth largest company in the world, International Telephone & Telegraph. Phil Crosby was mentioned but our Textbook (which I still have) was written by James Harpin from the Martin Company, now Lockheed Martin.

Lockheed Martin now make the Joint Strike Fighter (JSF) F-35A Lightning. (The RAAF has taken delivery of 30 of the 72 planes ordered). The reason for mentioning Zero Defects and the JSF F-35 is that these planes are of better quality nowadays, like most things.

Customer satisfaction is crucial. Poor satisfaction will be amplified by Social Media Platforms to let other actual or prospective customers know.

SHARE

Getting to know Lisa Mariah

Lisa Mariah *NDIS*
Auditor **Profile**
by Louise Edgley *Aurecon, AOQ*

Lisa Mariah has been an AOQ member since 2004. She is an NDIS auditor, based in the regional Australian city of Bendigo, who also owns and operates Clarity Point, a Quality focused consultancy that brings curiosity and clarity to business systems and processes.

So what does this mean? How Lisa became a self-confessed 'word nerd on a Quality quest' may shed some light.

BRINGING LIFE EXPERIENCE TO QUALITY

Lisa began her career as a primary teacher in the UK. She saw how frustrated some students got when they didn't understand a lesson straight away (an unspoken cultural expectation). To take the pressure off, she'd explain to them how teaching worked: "You're the TV and I'm the TV station. It's my job to make sure I send programs to you in a way you can pick up," she'd begin. Then she'd twiddle her fingers above their head. "If the signal isn't getting through, I need to adjust the antenna so it does. You just have to be ready for it." There would always be a look of relief on the child's face when they realised it wasn't their 'fault', and this mental shift often made them more open to learning. It was a lesson in the power and value of words.

After her son was born, Lisa established a marketing and communications business, bringing the concept of authentic connection with customers through information design. A stint in the corporate sector made Lisa realise she was approaching marketing from a Quality perspective; while these should (and could) gel, there was a persistent tension between the two.

Stepping into Quality fifteen years ago felt like 'coming home'.

VALUE THROUGH CLARITY

Lisa has worked in various Quality roles, predominantly in the community services sector, and her passion as a writer and communicator brought a different perspective to Quality. She saw that many business documents 'ticked all the boxes' to pass Quality audits, but failed in usability, making the hard copies best suited as dust collectors.

"In business, as in life, words are the primary form of communication and connection," she says. "Policies, procedures, SOPs, forms… they all have messages that need to be read, understood and applied by the reader. Clear communication makes a big difference to whether processes and procedures are consistently followed. Authentic communication is what makes a business stand tall and stand out."

But words on their own are not enough. The key elements to clear communication are:

1. Words – using the most appropriate language for the intended readers. This may vary, and may mean developing multiple versions of the same document (e.g. a plain English version, and an Easy Read version for people with low levels of literacy or comprehension).

2. Images – these should complement the words, reinforcing the information you are conveying.

3. Design – layout, white space, headings and subheadings, etc. all contribute to readability and therefore usability. This will also vary depending on the medium; printed pages, websites, mobile messages all require different designs.

And there's a fourth: Intention. Is the intention to pass an audit, get something out there to look productive (common in the corporate sector, often unconscious), or to genuinely improve the way things are done?

"A Quality Manager has two 'customers': those who purchase goods and services from the business, and the staff within the business. Much of a Quality Manager's work is to help colleagues do their job efficiently and effectively."

THE FUTURE

Lisa believes the future of Quality is to go beyond documenting systems and processes (which appeal to her sense of order, but can be perceived more generally as 'dry') and adopt a mindset of authentic curiosity to more deeply understand how people think and work. After all, a system is only as effective as the people who implement it.

Lisa would love to redress her one educational regret: not studying archaeology after finishing school. That said, she's confident this would have led her to anthropology, and probably just a different path to the same end point. She is also working on a book which explores practical ways to bring clarity and curiosity to Quality.

Find more at www.claritypoint.com.au

SHARE

Introducing the QVRC model:

Quality conceptualised as a balance between value, risk and cost

Dr Nigel Grigg
Professor of Quality Systems, Massey University.

1. INTRODUCTION

Risk and Value are terms that have been trending in quality literature over recent years. A recent review of literature spanning one hundred years of writings relating to quality revealed them (along with quality-related costs) to be themes that always underscored much of quality theory and practice. While references to the cost of quality have remained largely consistent over time, however, the concepts of value and risk have substantially increased in their occurrence over the 21st century.

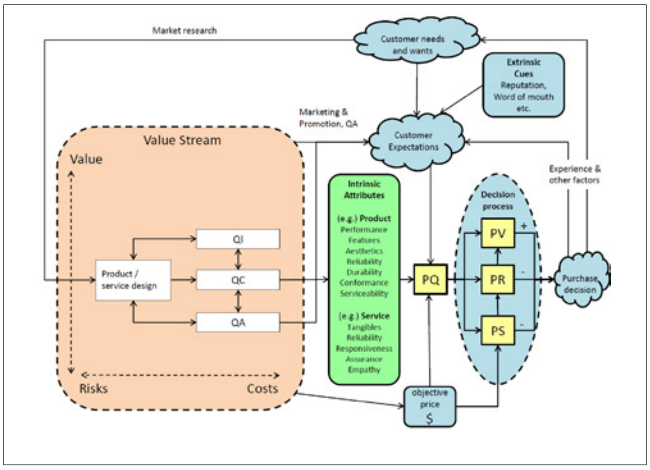
Considering value, Michael Porter first introduced the value chain concept in the mid-1980s [1]. A growth of interest in lean since the 1990s catapulted the term to greater prominence. Since then, the value concept has been widely discussed in reference to the value stream/flow, and the value chain has been reinvented to refer to the complete product life-cycle.

Considering risk, events such as: the 'Y2K' fears; the 2008 Global Financial Crisis; the 2012 European beef supply chain scandal and major product recalls; and now the global disruption created by COVID-19 lockdown have propelled risk to the very forefront of management concerns. However, risk is not new and has always been a primary concern of quality management (QM). Risk has been identified, reduced and managed through variation reduction, regulatory compliance, quality systems and procedures, and formalised tools such as FMEA (Failure Modes and Effects Analysis). Nevertheless, ISO 9001 and ISO 31000 have over recent years further explicitly emphasised the vital importance of adopting risk based thinking.

The third element (cost) has always been either implicit or explicit within early writing on the economics of quality by quality pioneers such as Shewhart, Dodge & Romig, Deming, Juran, Feigenbaum, Crosby and many others.

The literature analysis led to a re-conceptualisation of quality as a dynamic, tripartite balancing-act between creating and delivering customer value, while controlling and reducing risks, and managing costs across the entire value stream from design through to the purchase decision and beyond. This paper presents and describes the resulting model, referred to as the QVRC (Quality, Value, Risk and Cost) model. The paper will explain how to read the model, and its potential applications (value) for quality managers. The model is reproduced as figure 1

Figure 1: The QVRC Model (Grigg, N., 2020 [2])



Legend: QA = Quality Assurance, QC = Quality Control, QI = Quality Improvement, PQ = Perceived Quality, PV = Perceived Value, PR = Perceived Risk, PS = Perceived Sacrifice

2. THE PRODUCER SIDE (LHS) OF THE MODEL

Beginning on the producer (light orange, left hand) side, in designing a product or service the producer is aiming to create something that can be produced or delivered, and that a customer will want to pay for. The design process aims to create both product/service and a system to deliver it. This system is referred to as the value stream precisely because its purpose is to create the flow of customer value. Feeding into the design process are the stated and/or unstated needs and wants of the customer/market. To help with design we can employ a range of quality-oriented tools such as Failure Mode and Effects Analysis (FMEA), Quality Function Deployment (QFD), Design for Six Sigma (DfSS) and others. These methods are themselves oriented more towards value addition or risk (and cost) reduction as summarised in Table 1. The V/R/C orientations (depicted via stars in the triangles) are approximations at this stage.

Table 1: Quality Management tools and their major orientation in terms of management

Management tool	Application	General Orientation (V, R, C)	Management tool	Application	General Orientation (V, R, C)
QFD (design)	Translates 'Voice of Customer' into product, service or process technical attributes		**Six Sigma (QI)**	A structured approach to reducing unwanted variability	
FMEA (design)	Identifies and prioritises potential failure modes and their effects in products and processes		**Statistical Process Control (QC)**	Identifies and reduces unwanted variation (and cost) in products and processes	
DfSS (design)	Structured methodology to reduce unwanted variability in design		**ISO 9001 and other standards (QA)**	Control of all stages. Incorporates PDCA improvement and risk-based thinking	
Lean (QI)	Identifies the value stream and aims to reduce waste within the stream		**Cost of Quality (CoQ)**	Assessment and management of costs associated with quality activities and failures	

★ = author's estimated (initial) positioning with respect to V, R or C orientation

In managing the value stream, next, the producer aims to create and add the designed value while minimising risks and costs. They can use a wide range of quality tools and approaches to help with this (Table 1). For example, lean can map value flow and help identify sources of waste (risks to value). Quality Control can minimise unwanted variability that costs money and detracts from value. Quality Assurance can provide confidence to customers that systems are compliant, robust, well designed and actually being used. Quality Improvement (QI) can continually improve the processes and methods. At all points, the producer is attempting to keep costs under control, and can use the Cost of Quality as a guide in this endeavour.

When the product/service is ready to be delivered, certain 'intrinsic attributes' can be used to verify objectively that it meets design specifications and tolerances. Some of these are summarised in Table 2. These were originally developed by David Garvin [3]; and Parasuraman, Zeithaml and Berry [4]. These attributes (there are many more) can be objectively measured and used to improve the products and services.

Table 2: Intrinsic Attributes for assessing the quality of products and services

Attribute	Description	General Orientation (V, R, C)	Attribute	Description	General Orientation (V, R, C)
Product-related criteria			**Service-related criteria**		
Performance	How it performs, in relation to dimensions of importance to the customer.		**Tangibles**	The physical attributes of the service	
Features	What additional attributes it has (as compared with other products)		**Responsiveness**	How quickly and well issues are dealt with.	
Reliability	Expected lifespan (mean time to failure)		**Assurance**	How much trust user has in the servers and service.	
Conformance	How well the product conforms to expected requirements, regulations, dimensions etc..		**Empathy**	How much the customer feels personally valued	
Durability	How tough / resilient it is.		Reliability	How consistent and accurate is the service (in repeated visits?)	
Serviceability	How easy it is to get maintained or repaired.		**Aesthetics**	How 'attractive' or appealing it is to customer.	

★ = author's estimated (initial) positioning with respect to V, R or C orientation

The attributes, shown at the centre (green area) of the QVRC model, sit at the interface between producer and customer. We can think of these as criteria that the customer and producer can agree upon, especially since the customer often provides the data used to quantify them. Clearly, if we are dealing with different types of product, then different criteria may apply. For food products, for example, quality criteria are more related to safety, traceability, nutrition or authenticity. The QVRC model can simply be adapted to apply to different product/service types by changing the intrinsic attributes appropriately.

3. THE CUSTOMER SIDE (RHS) OF THE MODEL

Crossing to the customer (blue, right hand) side of the model, the customer has some needs and wants, of which they may not be even fully aware, driving their receptiveness to purchasing a product or service. They will also have some expectations about the product or service they want to buy based on 'extrinsic cues' such as advertising, marketing, word-of-mouth communications, user testimonials, web reviews or past experience with similar products. These, together with the intrinsic attributes mentioned above and the objective price, will be primary determinants of the perceived quality (PQ) of the product/service. The prospective customer will balance the value, risk and cost (sacrifice) associated with buying the product/service (yellow boxes). They will consider buying a product or service that provides them with some value known only to them (perceived value, or PV). If the perceived price is not a barrier, the customer will also consider any perceived risks (PR) associated with purchase. Cost is only one of these risks and is often termed 'perceived sacrifice' (PS). Perceived risks for the consumer include that a product might break, wear out, become quickly outdated, fail to deliver as expected and so on. If the balance is favourable to the customer, he or she will likely buy the product/service. It is important to re-state that these dimensions are entirely unique to every single person

Continued from **page 9**

(hence they are subjectively 'perceived').

4. USE OF THE MODEL

Finally, knowing the perceived value/risk profile of a product/service, the producer can determine how best to market the product/service. To promote value they can emphasise value characteristics (features, materials, environmental sustainability). To reassure against risk, they may decide to use regulatory compliance, visible stamps of QA (ISO9001, HACCP, QC stickers), or sophisticated traceability technologies such as a blockchain. They can provide other evidences such as user testimonials, positive reviews or personal assurances. If they can tilt the balance towards perceived value and away from perceived risk and cost, then it is more likely they will sell the outputs. The producer's value stream activities also need to match the value/risk profile of the product/service. Table 3 shows some products and services approximately classified according to their V/R/C profile. Again, the data are not at this stage empirically derived, but illustrative.

Table 3: Degree of value, risk or cost orientation of various product/service examples

P. Value	P. Risk	P. Cost L	P. Cost M	P. Cost H
L	L	LV, LR, LC e.g. commodity foods such as a can of beans	LV, LR, MC e.g. a higher-end restaurant meal	LV, LR, HC e.g. household/vehicle regular maintenance/compliance
	M	LV, MR, LC e.g. higher risk foods such as soft cheese, raw milk	LV, MR, MC e.g. motorbike taxi hire	LV, MR, HC e.g. gambling, casinos
	H	LV, HR, LC e.g. high risk, cheap foods such as street or market food	LV, HR, MC e.g. motorcycle self-hire	LV, HR, HC e.g. unregulated illicit activities such as drug abuse
H	L	HV, LR, LC e.g. cheap public services such as e.g. park / cycleway	HV, LR, MC e.g. good quality single malt whisky	HV, LR, HC e.g. a diamond ring
	M	HV, MR, LC e.g. a theme park outing	HV, MR, MC e.g. Japanese 'Fugu' pufferfish	HV, MR, HC e.g. parachute jumping
	H	HV, HR, LC e.g. potentially dangerous individual pursuits such as mountain climbing	HV, HR, MC e.g. organised adventure tourism (bungee jumping)	HV, HR, HC e.g. extreme adventure tourism (climbing Mt. Everest)

To illustrate the flow of value, risk and cost through the model, a product and service example will be used from Table 3. It should first be mentioned that many products such as canned foods are perceived as low risk precisely because the producer invests so much science and technology into engineering safety into the process. Having low perceived risk does not imply that consumer risk is not is not being, or need not be, managed for these products.

Bungee jumping, parachute jumping and bridge-swinging are popular adventure tourism services offered in New Zealand, Australia and elsewhere. They can be considered as having high excitement value with medium to high perceived risk, at mid-high range cost. There have been a handful of related deaths over the years and there are risk factors such as retinal detachments, but these sports are statistically relatively safe because the service providers work hard to ensure that there are sufficient safety systems in place while also providing enough appearance of risk and danger to provide the necessary thrill (value) to the customer.

The value proposition of the Japanese 'fugu' pufferfish includes a fine and refined flavour, coupled with the fact that the dish is relatively rare and potentially deadly (containing tetrodotoxin). Hundreds have died from eating fugu over the years, including some who have been fraudulently sold it in the guise of another fish! Hiring suitably qualified and experienced sushi chefs is vital, and means that the price to the consumer will be relatively high, and the restaurant needs to ensure all appropriate protocols are in place (beyond basic legal food safety compliance) to match the risk factor from the product.

5. CONCLUSION

This paper has provided a very brief overview of the QVRC model. As an explanatory model, it attempts to define the domains of QM, and help identify how and where various tools and methods such as lean, Six Sigma or ISO 9001 can be positioned within it. As a practical model, it can: (1) help managers to classify the V/R/C profile of products and services; (2) help them to classify quality management tools and methods according to their degree of alignment to the management of V/R/C; and (3) help them to design a process and choose methods that will best match the V/R/C profile of their intended products/services. Research has yet to be done to accurately position methods, dimensions and products within the VRC triangles, using survey data and statistical methods. Like all models it is limited in many ways, and like all models it is a work in progress (always remembering the important adage that 'all models are essentially wrong, but some are useful'). There is also significant research to be conducted to collect empirical data to accurately classify products, services and management tools, and also to validate the model in use.

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Is there a real customer focus in your interested parties table?

Alan M. Jones B.A
CEO
Qudos Management Pty. Ltd.

Alan's career in management systems has included roles as IMS software project manager, certification auditor, consultant, trainer and technical author.

Understanding the needs and expectations of your interested parties (i.e. your 'stakeholders') is important because If you don't understand them you run the risk of failing to meet them and suffering the consequences of that.

Interested parties are those that may have an effect on, be affected by, or at least perceive themselves to be affected by your organizations' decisions or activities. In addressing the requirements of ISO 9001 clause 4.2, you need to consider: Who are the relevant interested parties for your QMS? What are their relevant needs and expectations? There is no need to consider interested parties where your organization has decided that they are **not** relevant to your QMS. If it is decided that an interested party **is** relevant, you may then decide which of their requirements are also relevant to your QMS.

WHO ARE YOUR INTERESTED PARTIES?

The list would vary from one organization to another. However, the following are some of the possible examples:

- Customers or clients
- End-users (if different)
- Workers
- Management
- Directors
- Shareholders or owners
- Suppliers

Some of these may be sub-divided into separate groups - where they may have diverging requirements. For example:

- **Customers** may be divided into separate cohorts based on geography, products or services provided to them, or on the stringency of their requirements, or other significant factors.
- **Management** is often considered separately to workers as they are the interface between the workers and owners.
- **Suppliers** may be sub-divided into product vendors and sub-contractors if they have different needs and expectations.

You will need some means of ensuring and demonstrating that you have determined, monitored and reviewed information about interested parties, and their relevant needs and expectations. Once again, although ISO 9001 does not specify any required documents, you might consider that some type of document would be useful to capture the relevant information and enable it to be monitored, reviewed and updated over time. After all, how can you review something that is not written down?

The following is an extract from a simple 2-column table that may be included in an overview or manual. We'll just focus here on customers.

Interested party	Relevant requirements
Customers	• Communications about products and services. • Delivering products and services that meet requirements. • Communications about any contingency arrangements in the event of emergencies / supply issues etc. • Actively seeking and responding to feedback.

A 4-column layout offers a more expansive model:

- The 1st column is to list the interested parties.
- The 2nd column is to list their relevant needs and expectations.
- The 3rd column identifies whether the item is a 'compliance obligation' e.g. a legal, contractual requirement or other requirement that you choose to comply with. This column is of particular importance in integrated systems that combine Quality with other topics such as OHS, Environmental, and Information Security management.
- The 4th column references what you do to meet the identified needs / expectations.

For maximum flexibility, the 'Interested Parties table' is best produced using the 4-column model as a standalone document. However, a summarised 2-column version may also be included in a QMS Overview or Quality Manual for general reference.

Whilst the requirements listed above are quite generic, benefits may be derived from a more detailed exploration. For example, in considering the first item listed regarding communications:

Is there a trend towards communicating by a particular technology, or using a specific social media platform?

Such a trend may reflect just one cohort of your customer base or be more widespread. Identifying and acting on that information can add real value for both the organisation and its customers. So, in this example, we may find that some customers may be appreciative of an additional / alternative means of communication about an element of your business transactions. For example, it may be an email or SMS reminder, or LinkedIn posts / messages etc. In the 'new COVID normal' it may be facilitating Zoom / Teams meetings for subjects such as product training or service delivery information. Hopefully, the above illustrates the need to regularly review interested parties' requirements and adapt to them.

A periodic review of interested parties and their requirements should be included as part of the overall management review process.

To some degree, interested parties and their needs and expectations could also be referenced in a **Mission Statement**. Although it is not an ISO 9001 requirement, such a statement may also serve to define the purpose of the organization, provide motivation, and help create a clear focus on the customer. The following is just such an example. It's the mission statement of that very well-known brand, Harley Davidson:

"We fulfill dreams through the experience of motorcycling, by providing to motorcyclists and to the general public an expanding line of motorcycles and branded products and services in selected market segments".

While we cannot all deliver products and services with the same glamour, we can at least aim to focus on customer satisfaction and value.

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Acknowledgement: Image courtesy of Unsplash and Harley Davidson.

“Book Review: *The Banking Royal Commission and Customer Value*”

Jeff Ryall JM
Founder: RelianSys ®

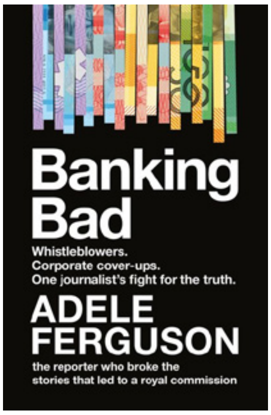
“The love of money is the root of all evil”

St Paul

You feel cooped up at the best of times during a Melbourne winter. COVID-19 restrictions has meant even more time confined. So I decided to take the opportunity to read not one, but all three books on the “The Australian Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry”. Commonly called the Hayne Royal Commission (HRC), it had made for some ugly news reports for weeks.

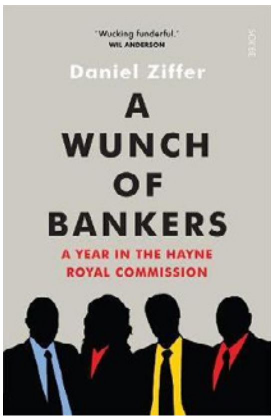
The three books are each deeply researched, well written and consistent in their analysis. The authors are all accomplished journalists, and present three different styles. They are all very readable. And you can’t read them and not feel angry!

“Banking Bad”



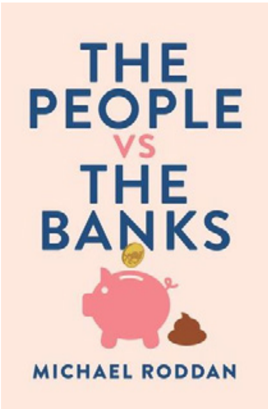
Adele Ferguson probably best unpacks the human toll as the slow motion train wreck unfolds over decades, with the backdrop of unconscionable financial sector behaviour. It’s a serious and interesting journalistic read, by an accomplished investigative journalist who persisted for some years to expose the problems in the sector. As I travelled the victims’ journeys, I couldn’t avoid the feeling of tragedy for them, and outrage at the behaviours which caused it. And admiration for the heroes who persisted in pushing for a Royal Commission, resisted by political inertia.

“A Wunch of Bankers”



The cheekily-titled “A Wunch of Bankers” by Daniel Ziffer is an expose of the finance sector, which parades a range of ugly human behaviours, normalised in their context of the finance sector bubble. As witness after witless witness is dissected in public, we share in the disdain. It's almost comical. Yet as the disconnects between behaviours and reasonable ethical expectations are exposed, we know it's not funny.

"The People vs the Banks"



"The People vs the Banks" by Michael Roddan is the most forensic of the three. In this book he takes you back to the origins of the problems: banking deregulation. You explore the inner workings of the sector, the spurious self-justifications of the players, and the tragedy of the disempowered victims who are outplayed by skilled manipulators - who seem more concerned with their own bonuses and shareprice considerations than customers.

As you are taken through the various financial services – loans, mortgages, insurance, superannuation and more – story after story detailing personal loss and tragedy unfolds.

The contrast between the attitudes of the financial sector, and the circumstances of their victims is stark.

One story that impacted me greatly is that of a farming family. They had borrowed from a bank, secured against their farm. The farm was revalued down, and the bank called in the loan. With harvest only weeks away, which would have cleared the loan, the bank would not budge. Nor would the bank excise the home from the farm land, even though it didn't assist the property valuation to do so. The bank foreclosed. When challenged in the Commission the bank's response was "We only did what we said we'd do". It seems bankers have always been thus:

"Do not be one who shakes hands in pledge or puts up security for debts; if you lack the means to pay, your very bed will be snatched from under you."

Proverbs 22:26-27

… and hence the inevitable need for regulation of the banking industry.

Now, Dear Reader, you may be wondering why I have such an interest in this. Back in 2012 I stepped out of my company RelianSys to work for a year in the finance sector as Program Director in an industry association. My assignment was to produce the new Credit Reporting Code, which has force of Law, and is the framework for the way your personal credit information is now managed. The unsatisfactory culture in the sector was immediately obvious.

For example, before passing on to the credit reporting bureaux the vast amounts of your credit history information that they now could access, under the new credit laws that were being introduced, the credit provider has to give you notice. Seems fair enough: get your affairs tidy. Astoundingly, although written into the Act, there was resistance to doing this, with lawyers looking for loopholes. An email was circulated amongst some 35 senior managers across the finance sector which crystallised to me the cultural problems in the sector.

"Our intention is not to avoid notifying consumers of the change, allowing time for them to tidy up their credit information before it forms part of their credit file. What I want us to resolve is whether the driver for this is legislative or because we want to. Reason being that the type of notification would be quite different depending on what the view is"

Seemingly, aligning customer interests with legislative compliance presented a cognitive dissonance for the bankers. And in the HRC, time and again, compliance was seen as a hurdle to be overcome, rather than a means of fulfilling societal expectations. As the email extract above seems to infer, who would actually WANT to comply? The notion of aligning regulatory expectations with customer interest is absent. This points to a fundamental compliance management problem in the sector; one with deep roots.

Or had 'too big to fail' in the GFC morphed into 'too big to manage' post GFC?

In the final report of the HRC, Commissioner Hayne spelt out the minimum ethical principles that the industry should adopt:

Continued from **page 15**

- Obey the law
- Do not mislead or deceive
- Act fairly;
- Provide services that are fit for purpose
- Deliver services with reasonable care and skill, and
- When acting for another, to do so in the best interests or that other. (Quoted in 'Banking Bad' p. 325).

Figure 1 - The Business Value Chain

Commissioner Hayne also pointed to the roots of the problem:

1. The tight connection between behaviour and reward, with a bonus-reward culture;
2. A power imbalance between the company and the customer;
3. Breakdown in responsibility; and
4. An environment in which corporate misconduct is not punished.

So, you may ask, what does this have to do with 'customer value'?

A financial service is a curious product.

In financial services, the product and the reward are both monetised. They are one and the same, and the more 'product' that can be captured by the firm, the greater the profit.

Indeed, it goes deeper. It can lead to the creation of jobs that exist just to make money. A 2019 study found that one in ten workers think their job is socially useless. Financial services are rife with employees turning up to work to do bulls**t jobs, just earn money, with no higher purpose ("The People vs The Banks" p. 337).

By contrast, in the ideal free market system, the money earned is the reward for a good or service that fulfils a social need. To the extent the customer values the product, and provided costs are contained and the market size is adequate, the reward of a profit may result.

Figure 1 illustrates this dynamic. Great products and services that deliver value to customers, build the customer base, enhance the price they are prepared to pay, and keeps them returning. (See also Almquist, 2020, this issue). This is commonly called 'goodwill' in a company. This creates value in the company, through reliable cashflows, profitability and confidence in future earnings and growth. Finally, the shareholders receive the benefit through the dividend payments, and possibly realisation of the company value if it is sold.

Where did the finance sector get it wrong? Without unpacking the causes, it seems that product value was deprioritised, and in some cases knowingly corrupted. Company value was based on improperly extracting value from customers, because the sector had the power to do so, siphoning customer funds to the company in transactions that lacked the essential reciprocity essential for long term company success.

There are no shortcuts to customer value. It all relies on providing products and services that customers value.

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Jeff Ryall is a former President of AOQ, and Founder of software firm RelianSys®. He is a recipient of the Juran Medal.

Out of the COVID-19 Crisis: *Refocussing on the Customer by applying Deming's System of Profound Knowledge through a Risk Lens*

Jayet Moon

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This article explores the relevance of Deming's customer centric and quality management focussed systems approach in the current global context of pandemic through a novel risk-based perspective.

Deming revolutionized many businesses by his ideas which he formulated by standing on shoulders of giants such as Walter Shewhart, Harold Dodge, Philip Hauser, Homer Sarasohn, General Leslie Simon, Peter Drucker etc. Almost twenty years after Deming's passing, this article aims to stand on his shoulders and revitalize his philosophy by marrying it with an explicit risk based approach to suit the context of a modern crisis by placing customer value creation and protection, front and centre.

W.E. Deming first published *Out of the Crisis* (Deming 2018) in 1982 with the aim of transforming the western style of management in light of a crisis which the American companies went through due to Japanese manufacturing resurgence in the 1970's. His 14 points as enumerated in this book offered practical, actionable guidance to managers. These 14 Points were framed by his all-encompassing theory, Deming's System of Profound Knowledge (SOPK), detailed in his 1994 book (posthumously published), *The New Economics*. SOPK remains relevant today, more than ever, as we attempt to overcome another economic crisis brought on by pandemic and related disruptions in customer demand and supply chain.

In the 1950's, American companies became 'comfortable'. With many economies shattered by WWII, they found ample markets for their U.S. made goods, and profits streamed in year after year. These companies started thinking that their products defined 'quality', not the customer. They overlooked the fact that customer is not static. Deming mentions the following important points in this regard in *The New Economics*:

1. Customer generates nothing but has stated or implied needs.
2. Customer invents nothing.
3. Customer expects what you and your competition lead him or her to expect.

Continued from **page 17**

4. Customer is a rapid learner.
5. Business survival depends on Quality.

Based on these realizations, Deming exhorted the organisations to do the following:

1. Do not delegate Quality to any group. It is the management's responsibility.
2. Zero defects alone do not mean Quality. Performance and style create consumer demand and are key aspects of what makes Quality.
3. Move away from siloed thinking about 'product/service' and think of your product/service as a part of a system driven by consumer, economics and economies.
4. Predict, based on objective information and knowledge gleaned from that information, the behaviour of the system, especially the consumer. See also Almquist (2020) this issue.
5. Ask "Are we in the right business?" i.e "Are we in the business of making the product (or providing a service) or are we in the business of fulfilling a customer's particular demand?"
6. Innovate based on prediction.

A major effect of the COVID crisis has been the shaking up of customers' expectations. A company that does not innovate in accordance with these new expectations is bound to fail. To truly understand customer expectations, one must understand the system within which customers and vendors operate. Once the understanding of various parts of the system and their interlinkages is obtained, sufficient context can be defined to predict system behaviour. Here, successful innovation can occur.

For example, a restaurant closed due to lockdown needs to start thinking that their product is not a 'dine-in experience' but instead as 'food'. While customer demand for dine-in experience decreased drastically, the demand for food itself remained much the same. Panera Bread in the U.S. innovated their service model by introducing grocery offerings in their stores while Burger King is looking to design touchless drive-ins. The former changed their product while the latter changed the product delivery – different parts of the system, but yet, accomplishing value addition to the bottom line and to customers' experience through innovation.

Here's where Deming's focus on quality becomes useful. Innovation is a big and intricate task, but it is just the beginning. Quality and sustenance of quality in the innovated product is what will sustain demand. If Burger King's touchless drive-ins have buggy technology which causes large delays, the cleverness of the innovation does not matter – the customer is lost.

It is important to define what Quality is. This can be done by measuring performance and its variation. The first priority is to create a stable predictable process with predictable performance. Proactive management of this process entails the study of variation in terms of common and special causes. But the acceptability of variation by the customer must also be understood – at what point does the variation go from being acceptable to unacceptable and are the organisation's specifications aligned with that.

RISK BASED SYSTEMS APPROACH

A system is a network of interdependent components that work together to accomplish an aim. And there is a temporal aspect to organisational systems: they evolve or devolve with time; they are dynamic.

Sometimes a component (or a group of components) can be mistaken for a system. This can lead to overlooking and hence ignoring key parts of a system. An example of this is recent management focus on short term shareholder value creation. Top executives focus on stock markets and towards that end, engage in downsizing, re-engineering and outsourcing so that the next quarter's balance sheet seems attractive. In this case these actions show that management's perception of the system misses the fact that the customer may not be a stockholder but is a very important stakeholder.

The pandemic has put many businesses under novel constraints in the context of a volatile global share market. Before companies again begin downsizing and outsourcing to save costs, it may bode well for the managers to review the organisational systems, interactions of its subcomponents, and *all* the stakeholders within it. Deming mentions that the consumer is the most important part of the production line. S/he is also the most important part of the system. More importantly, from this systems standpoint, a constancy of purpose for quality, productivity and service should be reviewed and where needed, revised. Bottom line is that the management's aim is to optimize a system, which can only be accomplished by first identifying it correctly.

Companies fall short not because their management was not doing a good job at optimizing but rather they were optimizing an incompletely identified system. Furthermore, they can be so slow in identifying the system and its components that the system has changed before they do. For example, Sears Roebuck, a global consumer goods behemoth for many decades, declared bankruptcy in 2018. Every time Sears slashed jobs, downsized or acquired a company its stock price would rise but this had no correlation to customer satisfaction or value creation. Meanwhile, Amazon had changed and redefined the context in that market segment by changing customer expectations. Despite (or perhaps because of!) having decades of experience and millions in cash, Sears management was unable to grasp the changing system dynamic – it now included e-commerce which heralded a new paradigm in customer value proposition. In 2007, the Sears stock hit an all-time high in its hundred year history of USD193 on the NYSE. On the same day, Amazon's stock was worth USD35. On 14th October 2020, Sears stock is now worth USD0.19 while Amazon is USD3,400. Management must recognize the system in its entirety, threats and opportunities within it and its dynamic nature; then, with the consumer as the focus, it must be optimized.

Deming mentions that the System includes the future. This can be understood in conjunction with another of his famous statements: “Management is prediction”. So is Risk Management. System level risk management involves assessment and prediction of threats and opportunities to and for the profitable operation of the organisation with due considerations to its systemic environment. (In *The New Economics*, Deming mentions ‘constant system scanning’).

Risk, per ISO 31000:2018 is defined as:

“The effect of uncertainty on objectives”

What is the biggest risk to survival of an organisation? After reading ISO 31000, Deming would have likely said ‘an ineffective systems approach to prediction leading to poor quality, innovation and performance’.

Risk management on a systems level foremost involves identifying all components of a system. From an organisational governance standpoint, the system has many layers (See Fig.1). The moving parts of a system maybe a machine, an operator, a department, a manufacturing plant, a customer, a supplier, a county etc. However, an operational strategy governs the behaviour of many of these subcomponents. More so, an enterprise strategy governs the behaviour of operational strategy. The functional strength of this systems risk management framework forms the foundation of a risk resilience.

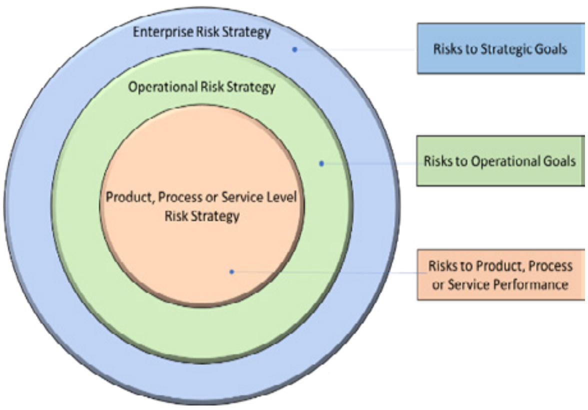

Figure 1: Risk Management Hierarchy within Organizational Systems

Risk Management is much more than calculation of probability and severity. It is:

1. Understanding the system
2. Understanding uncertainties surrounding the system
3. Understanding the probability and impact of uncertainties on the system
4. Proactively and reactively preparing for and responding to systemic and non-systemic variation.
5. Continual monitoring of the system and organisational response adjustment.

In simpler terms, following a bottom up approach, risks to quality, systemic and product/service specific can be uncovered by assessing the risks to three corners of quality as shown in Figure 2.

Figure 2: Three Corners of Quality and sources of risk (Adapted from *Out of the Crisis*, 1982)

Risk management is proactive and adaptive. A high level risk management process is shown in Fig. 3 which shows that it begins by setting scope and context, predictive risk assessments and resulting risk responses. Responses to risks previously assessed and planned should not affect system stability. It is when unplanned or unanticipated risks are realized, the system can undergo a shock and become unstable.

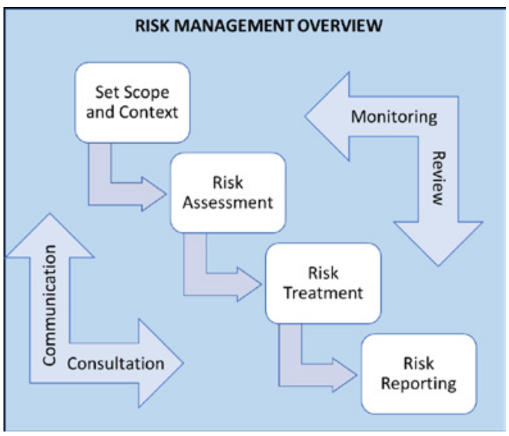

Figure 3: Risk Management structure per ISO 31000:2018

Ross Ashby proposed a ‘Law of Requisite Variety’ which, when translated to organisational systems, means that if a system is to be able to deal successfully with the diversity of challenges that its environment produces, then it needs to

Continued from **page 19**

have a repertoire of responses which are (at least) as nuanced as the problems thrown up by the environment. In a crisis like COVID, future means uncertainty. Management needs to steer the ship through this uncertainty during which a variety of challenges will be faced by the organisation. Therefore, management is responsible for creating a system which can effectively overcome and respond to the risks arising from the uncertainties – a risk resilient system. Risk resiliency begins with a structured, and well-resourced risk management process.

During this pandemic, many risk managers were taken by surprise. The reason is that the context of some systems changed due to an unanticipated external factor, its public health repercussions and societal restrictions imposed as the result. While risks like COVID can be predicted (indeed, many people did, e.g Bill Gates in 2015 predicted an epidemic would kill millions), any risk management system will not succeed in predicting 100% of external risks. It is prudent to bolster the risk management framework and improve risk resiliency by strengthening the risk response planning function such that after an unplanned and unpredicted risk has been realized, it can be responded tp with commensurate level of urgency and resource mobilization. But how can we plan if we can't predict? For this conundrum, Deming comes to our rescue. You can't predict the risk but you can predict the system, because a good system is stable under scientifically defined limits of variation. Here lies the value of system risk resiliency which speaks to organisational adaptability and flexibility (innovation, where appropriate) in face of external and internal risks to the system.

Siloed risk analysis is not sufficient for resiliency; risk resiliency involves hierarchical risk analysis through organisational layers from product/process to the enterprise level – it goes from analysis to synthesis.

What is negative risk in a system? Anything that reduces or stops creation of value for the customer.

What do we do to build a risk resilient system?

1. Understand the system in its entirety along with its interconnections of components, hidden and apparent.
2. Understand variation within the system.
3. Understand the value creating parts of the system.
4. Understand value sustaining parts of the system.
5. Assess stability of the value creating system.
6. Bolster the system and its critical components such that they are prepared for system risks which will challenge the system stability.

It is important to understand that while risk resiliency is a feature of the risk management system centred around the risk response process, it encompasses all levels of risk management as shown in Figures 1 and 3. While Fig. 1 shows the vertical cascade of risks, Fig. 4 demonstrates its potential horizontal systemic spread.

A systems approach to risk management involves awareness of the position of 'quality' and of the 'consumer' within the organizational 'system'. The famous diagram below (Fig. 4) from Deming's *Out of the Crisis*, which shows interfaces between processes and subsystems, is aptly titled in his book as 'Production viewed as a system'.

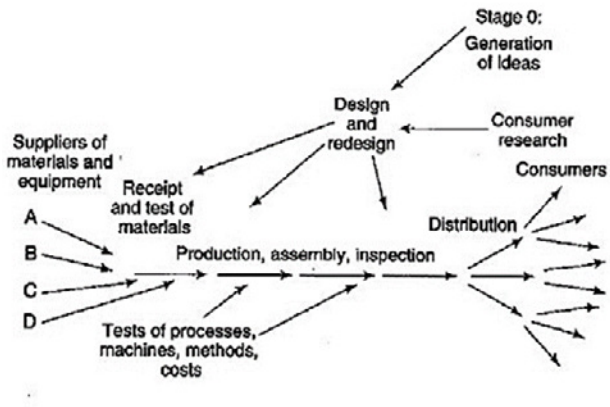

Figure 4: W.E Deming's 'Production viewed as a System'

He mentions that management of a system requires knowledge of interrelationships between all components within the system and the people working within. So does risk management, and more importantly, holistic risk response planning. SOPK holds as much value in risk management as it does for quality management.

Study of Deming's System of Profound Knowledge can help the decision makers to 'profoundly' understand the system, its threats and opportunities and holistic value of subsystems, processes, interconnections and interfaces. When this understanding is used to scientifically accomplish risk management and risk response planning, the result will be a strong risk management framework which endows inherent risk resiliency to the organization. It is a natural companion to risk management as shown below in regard to four tenets of SOPK: Appreciation of the system; Variation; Theory of knowledge; Psychology.

- Appreciation of System

Deming suggests that appreciating the value creating and sustaining components of a system is the first step in profound knowledge. There are threats and opportunities present within the system which not only apply to these value creating and sustaining components but also can be derived from the interconnections (interdependent risks) and temporal states of components and systems (future threats and opportunities).

In today's world, this means evaluating your system. What is its stable state? Who are the actors? Who are the prime movers? Who is helping the value creating and sustaining components and who is hurting them? What are the risks to system stability on both holistic system level and component level? How can the system be adapted to reduce threats and increase opportunities? This requires evaluating every component, its interface with other components and their risk environment.

- Variation

Deming says that the behaviour of a stable system can be predicted. Variation can be still present in the stable system but it is common cause variation. A special cause variation challenges us to review the capability and capacity of the system. COVID-19 was an external shock that put many systems into states of special cause variation. Risk management in this context means:

1. Re-gaining stability in the system using an appropriate risk response.
2. The new stability may be different in terms of capability, capacity and variation from the old stable state. Understand this difference and its causes/drivers.
3. Predict and innovate, being fully cognizant of the new risk paradigm.
4. Ensure innovation leads to a new and desired stable state.

- Theory of Knowledge

In this age of Industry 4.0, data and information is everywhere but knowledge is just as scant as it was 50 years ago. Information is not knowledge. Information can be processed through an enumerative or inferential study and then be converted to some knowledge about the system. Knowledge also has temporal spread and a rational system prediction using knowledge requires systemic revision. In a risk based approach, we look at this SOPK tenet as an attempt to gain knowledge about the uncertainty. Management is prediction, Deming said, based on observation and knowledge. Risk management allows us to increase the rationality of this prediction by providing us with a science to make sense of uncertainty. By use of probability theory, occurrence and likelihood of events can be scientifically predicted. In epistemological terms, this tenet of SOPK asks us to question the validity of each prediction (and associated risks) and remove subjectivity by repeated revisions based on incoming observations of the system as it moves through time.

- Psychology

Deming's final tenet of SOPK talks about understanding people, their interaction with other people, process and the system. People are the source of the greatest variation. People are the smallest but most active and important unit in the system. Motivations of people can make or break a system. Deming largely spoke about intrinsic and extrinsic motivations of employees but for a business that is trying to understand risks to its survival, understanding the motivations of their customers can provide great insights. For management, it is important to know what are the psychological perceptions of risk that affect employees' drive and morale to work through the COVID crisis. From another standpoint, a psychological study of customers may reveal perceptions and beliefs about the product or service (its quality or performance or lack thereof) which may need to be changed to ensure sustained business.

Russell Ackoff, a renowned Systems thinker, said that nothing provides a greater impetus for a change than a crisis. Overcoming a crisis requires grit, patience, flexibility, adaptability and most importantly, innovation. Deming's ideas on practical systems theory and quality management systems are timeless and are flexible and adaptable to be applied to any organisation in their journey towards operational excellence and profitability – especially, when it's in a crisis.

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LEARN

Practical Tools for Improvement: *Customers, Data and Value*

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As World Quality Day is upon us, our focus for this issue of *Quality Business* is customers and value. Of course, there are many customers for and in any organisation, and value is very much in the eye of the beholder. But statistics and data can take a leading role and drive the narrative, helping remove bias and demonstrating how great an organisation is performing!

As quality professionals our role is key as the communicators to customers, demonstrating the capabilities of our organisations. Customers of our organisations want to be assured that they are getting value, that their expectations of quality for what they ordered is what they receive. Many organisations complete certificates of assurance; some organisations are required to complete far more detail such as using statistical charts and indices to demonstrate that products and services provided are well in control and meet requirements. Your customer wants to know that they can rely on your organisation, that they will receive what they want, when they want it. A quality professional's role is to provide that assurance.

Of course, there is such a thing as too much information and too much detail! It is important to keep in focus that the customer wants assurance that they are receiving a good service; giving too much detail of how the product/service was achieved and the issues overcome in doing so can have the opposite effect. In fact, the customer can become so concerned about the issues raised, that they question whether the processes/systems in place are truly adequate.

Once customers are familiar with receiving information they expect it on a timely basis just like the product and service. Delays in providing the information can cause them to be concerned about why it is delayed. It usually creates concern over the product and service, and not the data. So, the key to communication with customers is providing sufficient amount of data to show the product or service is giving value, without creating concerns about how it was achieved, in a format the customer finds useful, that can be easily maintained, and providing the information as expected.

Figure 1:

Characteristic	Lower Specification	Upper Specification	Minimum	AverageM	aximum	Standard deviation	% out of specification	Capability
Aspect A	600	800	653	700	732	13.01	0	2.56
Aspect B	0	15	5.85	10.02	11.96	1.33	0	1.25
Aspect C	15	2.5	1.8	2	2.11	0.035	0	4.76

Figure 1 is an example of a certificate of assurance provided to a customer in manufacturing. The customer knows that if the capability is over 1 and there are no results out of specification they are satisfied. Quick and easy communication with the customer is key to gaining their trust. In manufacturing, putting this type of information together is easy; it is more challenging in the service industry, but the principles remain the same. Make it as quick and easy as possible for the customer to understand that the service you are providing is what they want!

A topical service being provided around the world is the supply of COVID-19 data by governments to the World Health Organisation and many other 3rd party websites. There is an expectation that the data is going to be available by a certain time and of a certain accuracy; when this is not the case it becomes concerning. The accuracy of this data was reviewed in the last issue of *Quality Business.* The data shows whether a country has the virus under control, it also demonstrates whether the systems are robust. Most countries have had catch-up days, this is when they have become aware of cases that were not counted earlier and are added into the daily figure so the total infections or deaths to date is accurate. Examples include Australia where 59 deaths were reported on the 4th September (15 and 11 deaths on the 3rd and 5th September), this was a catch-up on deaths over the previous month that were not reporting correctly into the system; this caused many questions regarding the validity of the data and the appropriateness of the system. The UK on the 10th of April reported 7,860 new cases, this was 1.5 times the rate around that time and on the 4th October, 22,965 cases were reported again around 1.5 times the rate of days in early October. This sudden jump in the numbers requires explanation, otherwise they causes confusion and concern among the population.

There have even be negative corrections when duplicates have been removed from the accumulated data. It raises questions: How can it happen? How do duplicates occur? Why were the cases not reported on time? Once familiarity develops with the numbers, as well as how and when they are presented, expectations develop. This needs to be remembered when preparing data for customers (the general public in the case of COVID-19), to make sure the system for reporting is robust, and can produce consistent information when it is expected. Delays in reporting create concerns in the mind of the customer, that it is more than just a data collation issue!

Of course, none of us is perfect and on occasions reporting will demonstrate issues. What are the communications with customers when there has been an issue? Few customers would want to catch up on the news with end of month reporting! Customers expect to be informed when there are issues, how they are impacted, what action is being taken to address the issue and what is being done to prevent reoccurrence. Communication of bad news is just as important as good news. If well handled it can show to customers that they are valued and respected. It is easy to destroy reputations and for the customer to not feel valued by leaving them in the dark.

Quality professionals have lots of customers who are not just external, but also internal. Communication of data and information to leadership teams through to production/front line workers is essential to maintain quality standards and trust through the organisation. While they are internal, their expectations are the same and they want accurate, easy to understand and timely information.

Leaders in organisations want to understand performance: How are we doing? Are there any areas of concern? Can I feel comfortable that the organisation is performing at a good standard? Reassuring them is as important as reassuring external customers.

Production and front-line workers need immediate knowledge of any deterioration in products and services, or any lapses in the systems in order to meet their own quality standards.

The key is getting the information or data to the people who need it in a timely and consistent way. A quality professional is a key communicator, and this World Quality Day we need to challenge ourselves by asking:

- Are we giving value to our organisation?
- Are we communicating as well as we can on the performance of our organisation?
- Do those receiving the information use or value it?
- Do they understand it?
- Is there a way of improving it?

A great tool to use is a matrix: list the customers, confirm with them what they are trying to achieve and the questions they have about the metrics in the organisation. Then determine the data/information and the frequency or timeliness of the data that needs to be provided. An example for COVID-19 data reporting from the perspective of laboratory infection tests is shown in figure 2.

Figure 2:

Customer	Aim	Questions they are trying to answer	Data/information	Frequency
World Health Organisation	Understand the spread of the virus	How widespread is the virus?	Cases	Daily
Government	Minimise the impact of the virus on the population	How widespread is the virus?	Cases	Daily
		Where are the cases occurring?	Case location to local government area	Daily
		Are there areas of higher infections?	Total cases by local government area	Daily
Hospitals/ health system	Provide healthcare to those infected by the virus	How widespread is the virus?	Cases	Daily
		Where are the cases occurring?	Case location by health area/ hospital	Daily
Companies	Minimise the impact of the virus on the business	Are there cases in the local area?	Cases/locations	Daily
		Are there cases in the industry?	Cases/industries	Daily
Individuals	Minimise the chance of catching the virus	Where are the cases occurring?	Case location to address level/ buildings such as cafes or shopping locations	Daily

Using this tool can improve communication and help give value to your customers!

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Practical Tools for Improvement: *Customers, Data and Value*

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This is translated from an article originally published in China Quality 2020, issue 05. ISSN1007-2713

Large enterprises can have many advantages over smaller ones. They typically have more sophisticated equipment and facilities, sufficient production capacity, strong legal awareness and greater emphasis on compliance management. Support from national policies and financial institutions also enable them to have a strong capability for risk resistance. Enterprises with the right strategies and which place an emphasis on the pooling of resources on major tasks often obtain technological breakthroughs and gain a competitive advantage over their rivals.

However, the culture and values of some large enterprises aren't always advanced; property rights aren't clearly defined; managements' interests and benefits aren't always balanced with their responsibilities; organizational structures and system designs aren't always optimal; and so on. We often encounter these types of shortcomings as habitual, ingrained behaviours across various industry sectors. These shortcomings promote uniquely poor management practices that can have a major impact on the operating cost and efficiency of the businesses concerned. From a problem based improvement perspective, it is important to pay particular attention to the seven poor management habits explained here.

POOR MANAGEMENT HABIT 1: UNCLEAR FOCUS

Corporate values are unclear, what the organization promotes is unclear and it is also unclear by what methods and modes are used to let staff know the organisation's values. Most organisation's in this category only promote easily measured, tangible and simple labour output goals but overlook other meaningful and valuable forms of performance and achievement. These organizations typically operate under the umbrella of short-term subjective values and strategic directions. They are influenced by subcultures and outdated values that have existed for a long time.

If the organization encounters difficult times or succumbs to the temptation of short-term interests, it will easily lose its direction. Organisations without well defined, long term strategic goals and meaningful spiritual supports tend to be affected by frequent leadership changes, each change setting a different set of goals, values and expectations. This leads to what is referred to as "boss culture" and "boss values" and when this occurs in large enterprises, it can create and conceal major governance risks.

POOR MANAGEMENT HABIT 2: EGO

Some leaders working in large-scale enterprises, regardless of their seniority, are keen on speaking at public conferences and mentoring others when important people are present. In this way they can catch the audience's attention to show off their "glamour" and satisfy their ego. This is especially true for large and medium-sized conferences. They don't realise that the high cost, low effectiveness and questionable short-term benefits associated with conferences are far less sustainable and powerful than clearly defined roles and responsibilities, teamwork and proper systems. Organisations that persistently utilise well-developed systems to solve problems and manage their business reduce randomness, managerial costs and uncertainty in the long term. They have the benefit to closely align with the business's strategic thinking and values. There is a highly effective leadership style called "sentimental leadership." Sentimental leaders motivate staff by demonstrating their strategic decisions and setting clear directions instead of endless speeches and snowflake like documentation. For an example, our President Xi Jinping spent 20 Chinese Yuan to have Qingfeng steamed buns for lunch from the street shop. He has clearly shown our leaders by his own behaviour not to be separated from the masses, pursuing ostentation and excessive expenditure.

Continued from **page 25**

POOR MANAGEMENT HABIT 3: ENCOURAGEMENT THROUGH PUNISHMENT

Many business enterprises either stipulate or rely on black-letter rules instead of setting up goals and mechanisms to promote productivity and improve service quality when it comes to developing systems documentation or making work arrangements. Rules and mandatory stipulation only tell staff what they should and shouldn't be doing. They don't stimulate staff willingness from their hearts; rather they make it impossible to keep staff motivated. People who really want to do things, especially those with extreme passion, are most likely driven by their beliefs and motivation rather than rules. Healthy corporate culture, common goals and incentive-compatible work arrangements are the keys to encouraging employees to contribute willingly and actively to the business' success. There are two extremes of this poor management habit: preaching hollow ideology or exercising punishment based command and control. These concepts and practices are far behind modern enterprise management theories and professional growth expectation of the new generation. Both extremes are very unwise choices. Recognition and motivation are what drives people and are fundamental to the science of human behaviour. Organizations should incorporate the values that they advocate and make strategic decisions into the recognition and incentive programs. Employee engagement should not only meet each individual staff member's interest and realise their areas of personal professional development but also align with the organisation's mission, vision and objectives. If this is done, employees will then want to actively and willingly make a positive contribution to themselves and the organisation as a whole.

POOR MANAGEMENT HABIT 4: CONFUSED PLANNING

Illogical business management planning that results in a 'bottom up' approach in the planning of systems and related measures and a "top down" approach in the development of work instructions. This occurs when leaders simply don't understand that systems and procedures are ways to convey corporate governance, business strategy, management thinking, risk response and tools for operational managers. How can a "bottom up" approach be adopted for the key drivers noted above? Work instructions are the mechanisms to ensure consistency of the processes and effectiveness of end results. They are used as training material for operators and guidelines to achieve operational standards. The onsite frontline operators are the masters of operational details, tools, etc. Even those with some familiarity to the tasks at hand like senior engineering and technical personnel have a lesser hands-on understanding than the operators. It is therefore sensible to take the "bottom up" approach to develop work instructions. It is essential to have both the "top down" institutional approach for defining systems and related measures and a "bottom up" approach for documenting work instructions. The system will otherwise become impractical and the work instructions will deviate from what is actually required. In many instances when management doesn't understand how to properly implement a new system or process, they instinctively rely on their ill informed assessment and impose penalties or their authority to threaten employees to follow the flawed system. The end result is often a dislike or strong resistance from employees and when the highly dominant managers have left the business, the new system or process is set aside. Effective leadership that combines proper process management and incentive mechanisms to promote efficient operation of the organisation's system can achieve twice the result with half the effort.

POOR MANAGEMENT HABIT 5: ASSIGNING BLAME

When it comes to undertaking an internal investigation following a workplace accident, the focus of the investigation seldom tracks down the actual source of the incident and its root cause. Even if required, corrective actions are seldom made to upgrade the systems or processes to minimise the chance of a reoccurrence. The usual response to a workplace accident is to blame the workers and criticize them for negligent behaviour; i.e. to have them take the primary responsibility for trigging the accident. Managers aren't held accountable for determining the root causes of the accident. Research into workplace accidents confirm that the underlying cause of the majority of workplace accidents, whether related to employees not following work place guidelines or lack of knowledge about what they are doing, stem from the organisations' inaction or misconduct in this important area. As pointed out in system safety theory: "An accident is trigged by an individual and created by the organisation". The way to properly deal with a workplace accident is to identify and adopt corrective measures that address the root causes and incorporate the processes involved into an intrinsic safety management system.

POOR MANAGEMENT HABIT 6: MYOPIC THINKING

When departmental managers participate in business-wide research, they are accustomed to consider issues from the perspective of their own department, their own job responsibilities, and their own workload, rather than from a business-wide view of the company's overall interests and risks. This kind of habitual thinking often leads to concluding that a business or managerial problem is at an entry level or so called transactional problem. Senior management seldom demonstrate an interest in end-to-end process improvement and appear to spend lots of time engaged in trivial debate that achieves very little other than wasting time and resources. Many employees working in a functional area of a business see their jobs as just completing a task. They only pay attention to how many forms they have to fill out to complete the task, what reports they need to write up, whether they can pass the inspections and whether their managers will accept their work. They don't show an interest in how the content in the form may impact the process or future activities or how relevant and valuable the data and conclusions contained in the report might be. Employees are not encouraged to think about what they are doing, how it fits into the overall business and how to drive process improvement and innovation. With this foundation in place, it is little wonder that when operators are promoted into managerial roles the shortcomings associated with this problem continue into the future.

POOR MANAGEMENT HABIT 7: INEFFECTIVE RISK CONTROL

Some companies do not understand risk control. They think that approval is risk control. It's thought that the higher the level of approval and the more managers involved in the approval process, the more effective the risk control will be. This type of poor habit is likely to lead to two negative impacts. The first impact is that middle managers become irresponsible and become messengers as they see the responsibility for risk control lies with more senior managers above them. The second impact is that senior managers are accustomed to signing off at the end of the process without being involved in specific business research, risk assessment and risk control. The result is the organisation structures are becoming hollow functions. In fact this kind of process design leads to business executives being pressured to do actions that narrowly benefit the business. To address this issue, it is suggested to reduce repetitive approvals in the process and encourage proactive leadership activities. Position descriptions, job responsibilities and authorities for managers at all levels in an organisation need to be clearly defined and documented. Individuals occupying managerial roles also need to have their performance reviewed and evaluated in regular performance appraisals.

The common issues, poor management habits and other adverse characteristics noted above are common across many large-scale enterprises. However they are only a minor part of a much bigger problem. The underlying fundamental problem has little to do with the business operators or shop floor workers. It is related to a much deeper level of common issues that play a governing role in an organisation – things such as ownership rights, organisational culture, values, structures and system designs, etc.

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QB China Quality Journal Editor

Article originally published in China Quality 2020, issue 05 ISSN:1007-2713. Article selected and edited/translated by Janet Johnson - QB China Quality Journal Editor.

Demystifying Value

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INTRODUCTION

What is value? How do you define it? Can you measure it? Is it really important? What are our products and services actually worth to customers? Do our customers value what they give or what they get? Remarkably, few suppliers are able to answer those questions. Value can be a mysterious concept to understand and many people grapple with it and mistakenly use satisfaction as a measure of value. Indeed, from my experience many leaders and consultants believe that high customer satisfaction scores (e.g. NPS [Net Promoter Score]) equate to profitability. But customer satisfaction is not enough! Satisfaction is not the end game. From my research it is the penultimate goal with customer perceptions of value being the ultimate goal.

This is particularly true as research has posited that some 70% of satisfied customers will switch suppliers if they believe they will get better 'value' elsewhere (Gillespie 1999; Silcox 2013). It has never been more important to identify the value the consumer receives from your product or service especially if you want loyalty and repurchase decisions.

RELATED MAJOR MANAGEMENT CONCEPTS

Over my 50 years of working life I have seen many management concepts come and go. Concepts move through the Boston Consulting Group's well-known phases: Introduction ('Pioneer') – Growth ('Cash Cow') – Maturity ('Star') to Decline ('Dog'). Many concepts are seen as fads.

The major concepts that I will discuss here are Price, Quality, Service, and Value – and as I will show, they are all related.

The expectations of the consumer change over time and we need to follow and predict these changes if we are to remain successful and sustainable. I have followed these changes since the post war' years. Then, price was the major consideration as there just was not much cash around. But consumers got tired of spending their hard-earned cash on cheap goods that lacked quality and did not work well. This led to the concept of Total Quality Management (TQM), which became dominant in management thinking in the 1970's (Shewhart 1931, Deming 1986, Conway 1992). TQM moved into the maturity stage in the late 1980's with the development of the Australian Business Excellence Awards, and was underpinned by the international standard ISO 9001, which became the mantra in many tender specifications. Unfortunately, quality went into a decline stage as it was found to be a philosophy hard to implement that needed dedicated commitment over a period of time; many CEOs lacked this as they were driven by generating high profits for shareholders and they had only short careers (3-6 years on average).

Fortunately, quality is having a resurgence recently.

Understanding the difference between quality and value is quite simple really. Quality relates to excellence or fitness ('high grade' or 'superior'). Value relates to worth or desirability. To demonstrate this, let me ask: What is the best quality car – a Rolls Royce, a Toyota Camry or a $200 old bomb? One would think it would be the Rolls Royce as it is seen as superior to the others and this is reflected in the price tag. But what if I had asked: Which is the best value car? Well, that depends on my situation! If I'm a student, the $200 old bomb might be the best value to me as it's about affordability and it lets me have flexibility I need to get to university when I want rather than juggling bus timetables.

In the 1980's the concept of customer service started to build on the TQM philosophy and concepts such as 'Moments of Truth' (Carlzon 1987) made organisations become outward looking and start to measure customers' experiences.

No matter the obvious importance of quality and customer service, what is really needed is to know what the customer values about what we do (See fig 1). This concept of customer value is becoming extremely important in the 2000's. To give some context, value is when a consumer perceives that they will get a good (better) deal from the company, brand, product, or service. Customer satisfaction, on the other hand, occurs during and after the consumer has become a customer, that is after they have purchased the product or have had dealings with a service firm. That is why managing the experience is important.

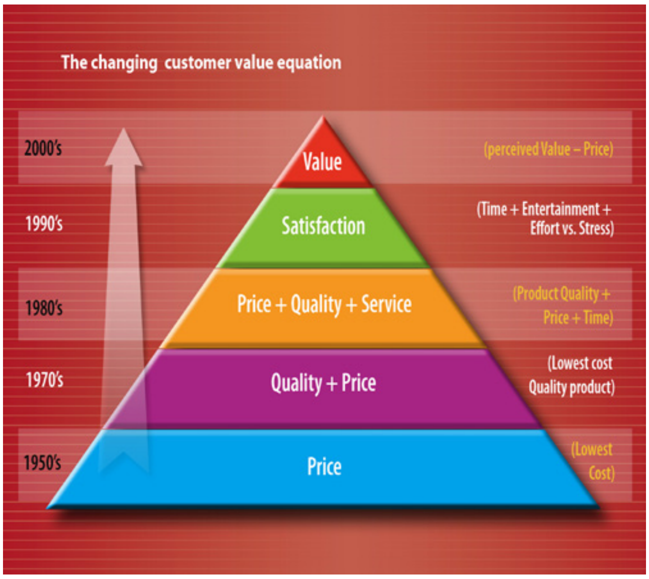

Figure 1: The change in customer perceptions of value over time

According to 2013 Nielsen study on customer loyalty, brand switching globally happens for five main reasons:

1. Better Price (41%)
2. Better Quality (26%)
3. Better Agreements (15%)
4. Better Selection (10%)
5. Better Features (8%).

As products, services and prices have become increasingly similar in recent years, organisations need to find new ways to differentiate themselves if they are to attract and retain customers. Managers and marketers have come to recognise that value can be critically important in creating such differentiation. It is not surprising, therefore, to find that consumer value has emerged as a major strategic imperative (Sweeney and Soutar 2001; Bolton and Drew 1991). From a consumer's perspective, obtaining value is a fundamental purchase goal. If organisations can position themselves as reliable suppliers that offer 'value-able' products or services, it is likely consumers will become, and remain, their customers. This is as true in a service context as it is in a product context.

DEMYSTIFYING VALUE

To demystify the concept of (perceived) value we (Silcox and Soutar 2009) undertook a study and found that value is in fact multidimensional; it is an antecedent to customers' satisfaction and their desire to repurchase from suppliers and more importantly to the development of a long term, committed relationship with a company – in other words, to becoming a loyal customer. (See fig 2) Importantly, we found a number of very significant relationships; for example, that value and satisfaction accounted for a significant proportion of people's buying intentions, but ***the predictive power of value appears to almost double that of satisfaction.***

Value therefore, positively and directly influences satisfaction, and value has a significant positive relationship with customer commitment; that is, as value increased, the more satisfied customers were with their experience, and the greater would be their loyalty.

We also identified that positive perceptions of the service delivered to a customer (and service includes the technical knowledge of the salesperson) directly influenced the customer's perceptions (positively) of the quality of the product which in turn lowered the perceived risk (price) associated with the purchase. Further, the perceptions or feeling towards both the quality of the product and the reduction in the apparent risk of the purchase were critical precursors to the customer opinions of value and therefore led to the consumer being more prepared to repurchase.

Additionally, it was found that the better the customer service a consumer received directly enhanced the consumer's perceived view of the quality of product they were about to buy. In other words, if the customer had a great customer experience during the transaction, they thought the quality of the product was higher…good customer service therefore leads the customer to think the thing s/he is buying or experiencing is of a greater value than a purchase if I did not get good service.

As stated earlier, the 'value' construct itself was found to be multidimensional, with various aspects influencing customer perceptions. Value is not one thing; it is a bundle of things. For example, the degree of emotion a customer brings to a purchase increases the perceived value of the product to them; marketers understand this and exploit it.

Additionally, functional value (how well product performs compared to expectations) has a significant and direct impact on the perceptions of value. Whether the product is value

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for money is determined by the purchaser in an holistic assessment taking into account all the factors outlined here.

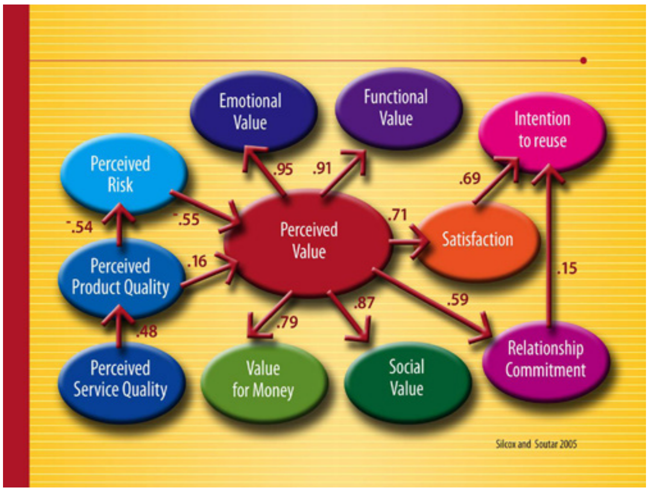

Figure 2: Dimensions of value

Lastly social value ('it is good to be seen in this restaurant', 'having certain brand clothing enhances how others see me', etc) also impacts on perceptions of the overall perceived value of the product or service received.

What this means is that companies should try to understand which particular value driver(s) significantly influence their customers' buying intentions, rather than just measuring satisfaction levels and thinking this will make customers repurchase and remain loyal. As value drives satisfaction, not the other way around, by exploring what consumers actually value and delivering it, the customer not only becomes more satisfied but is also more prepared to repurchase. This by identifying your value drivers (your unique value proposition) you create a strategic competitive advantage. The old view that value is a trade-off, or ratio, between quality and price is no longer relevant because as we have found it is more complex than that.

So, our research suggests service and quality sit as basic foundation stones to value; without these you are a loser in a competitive marketplace. This means ensuring all the features they get with a purchase (the technical quality).

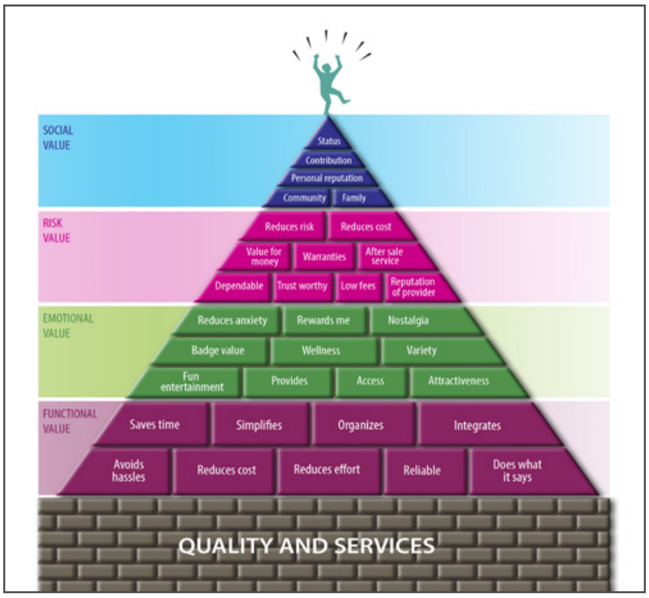

Figure 3: The customer's quest for value

Companies need to:

- offer products and services that perform, give consumers what they expect, and
- at realistic pricing,
- give buyers the facts that underpin the value proposition,
- provide organisational-wide commitment to service and sales support,
- make sure customers are aware of the value they are providing and to manage their perceptions,
- link all jobs to value-adding outcomes.

To help make sense of all this, I provide a graphic of some of the basic features that organisations may offer and where they fit into the dimensions of value I have discussed. Refer to Fig. 3. Uncovering what customers value will identify who are the end users and their needs, desires and expectations; what distribution channels are the preferred purchasing platforms; which products or services should be offered with what features; how best to communicate to the consumer; and at what price-premium, parity or discount. Organisations need to understand the consumer just like you and me, see value through the prism of complex dimensions called the 'total customer benefit' (TCB), and assess these against the cost-time, money, energy, and psychic, etc called the 'total customer cost' (TCC) with gives the 'delivered value' (TCB/TCC = DV).

Additional factors to be considered in unpacking value include that many people demand products and services that are:

- personalised and customised
- transparent so they know exactly what they are

purchasing

- entertaining as they don't want to be bored, and
- fast.

Any of these can add to the value proposition.

This article has explored value in terms of the consumer. There are two other dimensions of value:

- value to the business (market size, productivity, margin growth, cost reduction, future products and service lines etc), and
- cultural value (relevance, reputation, identity, exclusivity, staff engagement, etc)

Maybe these are topics for future article.

The hunt for value is an exciting journey that can offer and create a competitive strategic advantage for your organisation. Do not be put off by the apparent complexity. At the end of the day the fundamental mission of business should not be about profit *per se*, rather value creation which is the key to long-term, sustainable profit.

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The perception of a complaint

Farisha Firoz (BMLS) is a scientist with RCPAQAP (Royal College of Pathologists of Australasia Quality Assurance Programs), an external quality assurance provider for pathology laboratories. Her undergraduate studies consisted of a Bachelor of Medical Laboratory Science and she is currently finishing a Master of Business Administration degree. She has worked as a scientist for over 10 years, both in New Zealand and Australia, with a strong focus on quality improvement

We all know how to identify a complaint, don't we? Do we really have to log all minor grumbles from customers? Surely, not everything is important enough to document?

The term 'customer value' brings several things to mind when being viewed from the product/service provider. These include providing quality products, services and support that will result in not only tangible customer value, that is, value for money, but also intangible customer value that comes from customer satisfaction. How is quality linked to value? Monetary value is relatively easier to measure than customer satisfaction. In the words of Peter Drucker, "If you can't measure it, you can't improve it." So, we have value, quality and satisfaction.

But what if the customer is buying for an organisation where there is a regulatory requirement to buy a certain type of product/service?

Organisations such as National Association of Testing Authorities (NATA) or the Royal College of Pathologists of Australasia Quality Assurance Programs (RCPAQAP) are examples of organisations where customers don't have much choice for providers of specific services to meet regulatory requirements. RCPAQAP is an external quality assurance provider. To maintain mandatory accreditation, pathology laboratories have to be enrolled in an external quality assurance program. Overall performance of a laboratory is assessed by NATA/RCPA (Royal College of Pathologists of Australasia) as happens in other industries. The RCPAQAP is part of a niche market that places it in its own special category of customer-provider relationship. But being a regulatory requirement does not stop you growing and improving on customer value.

Increasing customer value is an important part of organisational strategic goals. How do we then measure customer value? Data collected from customers regarding complaints, general feedback and satisfaction rating provides us with a lot of information. This enables us to narrow down areas within an organisation that need improvement, i.e. those processes that impact directly on customer value. But how do we capture this data?

In many organisations, customer relationship management (CRM) software is used to log and track trends in different customer interactions with the organisation. CRM categories are allocated manually within organisations according to their needs. The data presented in Figure 1 are adapted from RCPAQAP's KPI report from August 2020. It shows that the 'Feedback and Improvement' category has one of the lowest number of requests created. Customers provide unsolicited feedback via e-mails or phone calls and the data from these sources may not always get logged in the CRM, perhaps due to time constraints on staff or whether they perceived it important enough to log. When logged, the data may not be classified into appropriate categories as they may address more than one issue alone and cannot be logged under multiple categories due to the CRM design. Unfortunately, not all relevant data pertaining to customer satisfaction or complaints may be captured because different staff have different perceptions of what this is.

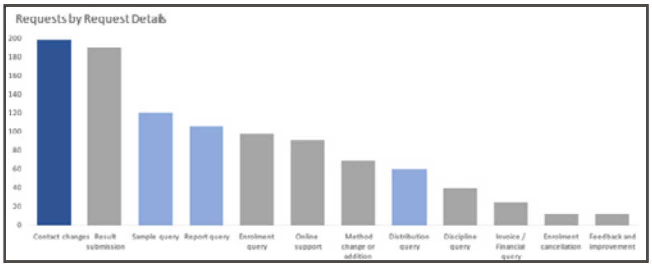

Figure 1: Number of customer interactions by category.

Other sources of customer satisfaction data include requesting feedback or performance evaluations from customers through specially designed surveys. However, customers may not always have to time or patience for this. Data obtained from a CRM are a valuable resource that can help identify defects in the current system. Organisations may have unique requirements for their customers, however, capturing data is essential in all industries in order to determine relevant trends. But what data are important for customers?

Arguably, customer value applies across different industries. In the health sector, patient outcomes are prioritised. Medical professionals are provided with intensive technical training. Some of these individuals may be perceived to have no customer interaction in their workplace and therefore, they receive no formal training in this area. There are however organisations such as NATA or RCPAQAP where technical, interpersonal and customer service skills are all necessary. To enhance customer value in organisations where expertise in all these areas are needed, customer value, quality, and satisfaction need to be defined, and must be applied consistently between individuals.

How often do organisations ask themselves whether there is a difference in definitions and perceptions of customer value between staff members? Do organisations assume that everyone can identify a complaint? Findings from a customer complaints audit at RCPAQAP revealed that a scientist's view of a customer complaint was different to that of the Quality Manager or the Logistics Manager. Data from this audit showed a difference in the perception of what is understood to be a customer complaint within the organisation.

The scientists had a very technical approach. Their definition of a complaint was where a customer had explicitly expressed dissatisfaction with a product or service. This showed that a scientist felt that a complaint reflected deeply on their work on a personal level rather than it being part of a process. A manager's definition of a complaint involved situations where customers had to follow up on any products, services, or information that they should have already been supplied with by the organisation. This showed more a customer-centric mindset where any customer dissatisfaction is important to understand and minimise or possibly eliminate as part of overall process improvement and adding to customer value.

With the perceptions being different, there is a risk of classifying complaints differently leading to an incomplete and/or inaccurate collection of data that will be used to generate KPI reports. As discussed, KPI reports enable organisations to measure performance of categorised items. Hence, more importantly, it is how we set the KPIs that contribute to an understanding of areas that could be easily improved upon. Factors that determine what a value adding KPI might be depends on the organisation. Figure 2 demonstrates the core process map of RCPAQAP showing that developing KPI's and metrics are part of the strategic process.

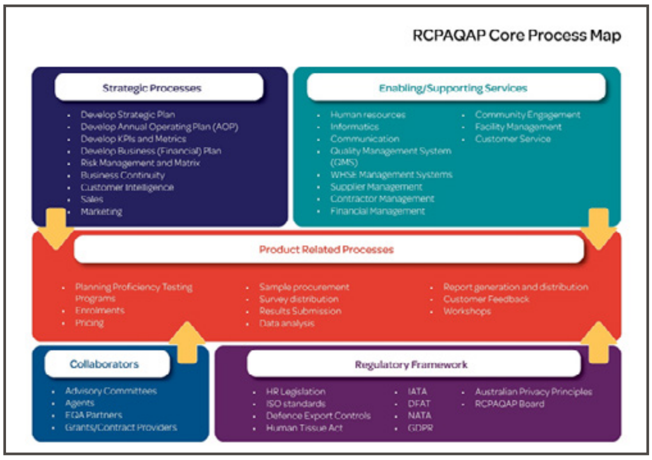

Figure 2: RCPAQAP Core Process Map.

The outcomes of the customer complaints audit led to a process that ensured the organisation defined a customer complaint consistently for all levels of staff. It also included customer service training for all staff. It is expected that this would translate into more accurate KPIs that could then be improved upon in order to enhance customer value.

Professionals who only have technical training are not likely to provide, or have been provided with, the same level of customer service training as many other industry professionals might. Those in management may obtain the required training formally or through experience. However, it is important to note that junior technical professionals may also require some level of training when it comes to customer management in a business setting. Technical assessors working for regulatory bodies or technical staff, such as scientists or engineers, for example, working for businesses that require customer interaction are likely to face this issue. Rather than gaining customer service experience over time, individuals should be given relevant training to understand, enhance and maintain customer value provided by an organisation. This not only enhances professional development for the staff member but also improves overall customer value provided by an organisation.

In conclusion, consistency in data collection as well as in understanding what data are meaningful is important in establishing value adding KPIs and extracting relevant information from a CRM to enhance customer value.

AOQ President's Message

Pictured - AOQ Board Directors, Jackie Stone (President), Jeff Ryall, Branka Malinovic, Richard Jenkins (Treasurer), Martin Andrew (Company Secretary), Maree Stuart and Ravi Fernando.

VOLUNTEER VALUE

Each year we celebrate World Quality Day in November. The theme for 2020 is Creating Customer Value and for AOQ, it is our members; our volunteers, who create exceptional value for our wider cohort of members.

Our volunteers: Board Directors, Returning Officer, Chapter Leads (and Committees), Standards Australia Committee Representatives, Qualcon Committee Members, Editors, Event Presenters, Moderators and Organisers (and many others), enable AOQ to achieve its mission, vision, and purpose. Without them it would not be possible.

Volunteer value can never be underestimated, and we sincerely thank our volunteers for their ongoing contributions and support.

Here, some of our volunteers share why they volunteer.

Cathy O'Dwyer

Special Interest Group – Laboratories
Former Board Director
Active Melbourne Chapter Participant

"I joined AOQ to learn about quality and to find a quality support crew and this need has been heartily fulfilled. As the years have gone by my love of laboratories in particular, "sciency stuff", laboratory systems and accreditation have not diminished. So, it was with great excitement that I worked with Maree Stuart to start a Laboratories SIG (Special Interest Group) earlier this year. It turned out to be remarkably easy to get the group going. We have solid attendance at each meeting, with members bringing a variety of levels of experience in different aspects of quality management, from compliance through to improvement and developing a quality culture. It is extremely rewarding to be able to create a space for people to share their knowledge and experience with each other. If you are looking for like-minded people to share your quality experiences with, then they may be looking for you too. Set up a SIG and see how it goes!".

Louise Edgley

Quality Business Profile Editor
Brisbane Chapter Committee Member

"With a depth of experience in quality and risk, I am at that stage in my career where I am keen to give back something to the profession, especially contributing to continuous improvement and mentoring of upcoming people in the industry. I see participation in AOQ as an excellent opportunity to fulfil these needs. I get great pleasure out of learning about the people of AOQ through the Quality Business bios that I edit; it is a timely reminder that all these people have entire lives behind them and outside of their chosen role, and that everyone has something valuable to contribute. I have met some wonderful people though the Brisbane Chapter events and the wider webinars. I would recommend getting involved in a volunteer capacity as it gives back so much".

Jim Kefaloukos

Qualcon Committee Governance
Active Melbourne Chapter Participant

"Excellence is not an act; it is a habit – so said my very distant relative Aristotle ~ 340 BC. My 30 years' experience as a Quality professional, in manufacturing and professional services companies, as well as being a father to four adult sons, has provided me with an incredible number of learning opportunities. Sharing stories or strategic thoughts with Local Chapter and National members opens opportunities for further learning. BUT – I feel the greatest value any of us can provide is to identify and commend the excellence we see in our peers".

Debbie Costin

Returning Officer 2020
AOQ Gold Coast Chapter Lead

"Over 25 years' experience in quality, audit and governance within state government and private industries, I am at that stage in my career where I would like to contribute and support quality practitioners and promote good governance principles for ongoing business improvement. Sharing stories and ideas as one of the Chapter Leads, has allowed me to meet some wonderful professional industry-like people and to help each other with future learning development opportunities. I have been fortunate to be the Returning Officer for 2020 and participate and support the AOQ outside my daily role. I always believe volunteering grows you as a person by networking with wonderful people, participating in different forums and aids you with your own learning and development skill set".

If you are keen to volunteer, please contact me at president@aoq.net.au.

Jacqueline Stone
President, AOQ

NZOQ Board Update

Dan Forsman

Chair NZOQ

The past few months have been a time of significant challenge for NZOQ. In the first instance I wish to acknowledge the vital work done by our national office staff and associates as we navigated difficult times. We are still sustainable but somewhat vulnerable and going forward if I was going to stress a key action point for November it would be for you all to renew your 2021 NZOQ membership now. However, positive things continue to happen. A few highlights below.

LISA CAMBRIDGE NOW A NZOQ CERTIFIED QUALITY MANAGER.

Lisa Cambridge

NZOQ Member

NZOQ has a diverse range of members and offers both training and certification recognition to help members to grow their expertise.

Lisa Cambridge, a member since 2012, has attained her NZOQ Certified Quality Manager (CQM) certification. Lisa has also progressed through a range of NZOQ qualifications including the CQA (awarded A+) in 2011 and the DQA (with Distinction) in 2015). Also, Lisa has completed the Internal Auditing course in 2013 and the Excellence for Quality Managers in 2019.

She has also completed the Otago Polytechnic Capable NZ assessment process to be awarded a relevant tertiary qualification – the Bachelor of Applied Management (Business Excellence) with Distinction – in 2019. Otago Polytechnic Capable NZ has commenced promoting its services in our NZOQ ezines.

Lisa is a Quality Systems Manager at Pacific Edge Limited, a Dunedin based cancer diagnostics company. We all wish her well as she progresses her career.

Lifelong tertiary learning and certification with NZOQ should be encouraged to ensure we all meet relevant skills requirements.

QUALITY BUSINESS CONTINUES POSITIVE INTERNATIONAL RECOGNITION.

Nigel Grigg

Professor of Quality Systems,
Massey University.

QB author’s articles continue to be selected for the publication in China Quality, the prestigious publication of the China Association for Quality (CAQ).

“Whilst the professional journals of the major quality organisations have larger readership and circulation relative to QB, a major plus for publishing in QB, besides the very important audience of local practitioners, is this relationship with CAQ which is a gateway to their potential audience of around 300,000 quality practitioners” says Nigel Grigg from Massey University.

Last month China Quality editors selected a further three 2020 QB articles for future republication in 2020/2021.

CONTINUING INTERNATIONAL LINKS

Abraham Fenn

President - NZOQ

Abraham Fenn advises that “APQO 2021 is still on and I continue to contribute to AOQ to ensure Australia puts up a truly international conference next year”. Also, Abraham, was formally invited by China to make a presentation at their online International Quality Innovation Forum this month. Abraham has participated in a range of international Asian quality events for a number of years including key roles in APQO.

Dan Forsman | Chair NZOQ

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