VFQ

Value
Flow
Quality

Understanding your customer

VFQ

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INTRODUCTION

Selfridge's department store in London is famous for several things – fabulous window displays, hundreds of designer clothes, fancy cakes in the tea shop to name just a few… But to management gurus it is known because the man who founded it – Harry Gordon Selfridge – coined the phrase 'the customer is always right'.

Figure 1.   A flock of yellow sheep outside Selfridge's

It's a maxim that's been taken up with enthusiasm, even if not always with spectacular success. Not only retailers and manufacturers, but also service providers and government departments measure 'customer satisfaction' and include a desire to serve their customers in mission statements and visions.

It applies just as much to IT, as exemplified by the first principle of the Agile manifesto:

PRINCIPLES BEHIND THE AGILE MANIFESTO
Our highest priority is to satisfy the customer through earlyand continuous delivery of valuable software…

Figure 2.   First principle of Agile Manifesto

You can't state its importance much more clearly than that. And yet, as you'll see reading this session, it's a principle of which many organisations lose sight. Often this is because they allow themselves to become focused on the internal. **Let us state unambiguously: customers are not inside your organisation. Results within the walls of your company do not matter compared to the one which happens outside: a satisfied customer.**

At the end of this session, you will be able to:

1. Identify the four types of stakeholders in a company.

2. Understand how zero-sum thinking could affect a company.

3. Know why the customer is important.

4. Have a clear definition of who the customer is.

5. Use a set of techniques to ensure the customer is kept at the heart of solutions provided by IT.

Activity 1: Are you satisfying your customers?

The previous excerpt from the Agile Manifesto goes on to say satisfying the customer is done "through early and continuous delivery of valuable software."

State what "satisfying the customer" means to you within your role.

This activity should take around 5 minutes.

1 FINDING THE VALUE: WHY CUSTOMERS REALLY MATTER

Let's take a large step back and look at your organisation as a whole. At its most basic level, your company is made up of shareholders, suppliers, staff and customers. Even non-traditional types of company can look at themselves this way. For example, an NHS hospital has shareholders (tax-payers), suppliers, staff, and customers (patients).
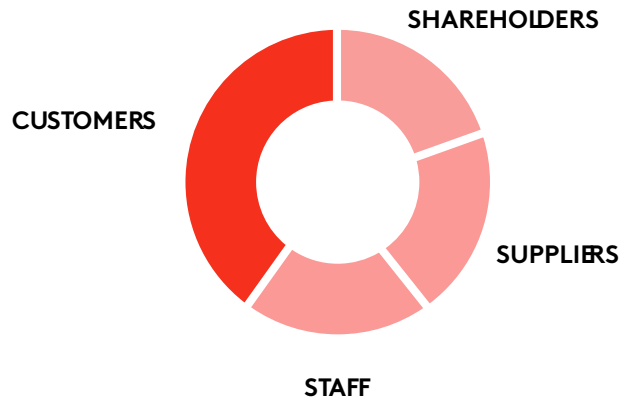
Figure 3.   A company at a basic level

All the groups contribute towards the company's success; without any one, the company ceases to function. Yet, the customer is the most important of the four, because without customers, the business has no purpose. This may sound excessively simplistic, but it's worth stating, simply because this basic principle gets buried by the very way the company is structured. When a company is separated into functional silos (split by departments each with their own goals and targets), each department often becomes inwardly focused rather than looking towards the eventual output of the whole company's flow to the customer.

Delivering value to the customer is your primary mission.

George W. Merck, CEO of the Merck Pharmaceutical company, wrote that:

"We try to remember that medicine is for the patient. We try never to forget that medicine is for the people. It is not for the profits. The profits follow, and if we have remembered that, they have never failed to appear. The better we have remembered it the larger they have been."

MERCK
Be well

Figure 4.   George W. Merck quote (from Merck Annual Report 2011)

Such ideals were applied by Merck when, after the Second World War they gave away the drug streptomycin to treat tuberculosis in Japan. They were not paid for the drug either by patients or the government. Fifteen years later, however, they were the largest American pharmaceutical company in Japan. The company believed that its early delivery of value to its customers was rewarded later on.

1.1. Going wrong: the perils of zero-sum thinking

"It's not a question of enough, pal. It's a zero-sum game, somebody wins, somebody loses. Money itself isn't lost or made, it's simply transferred from one perception to another."
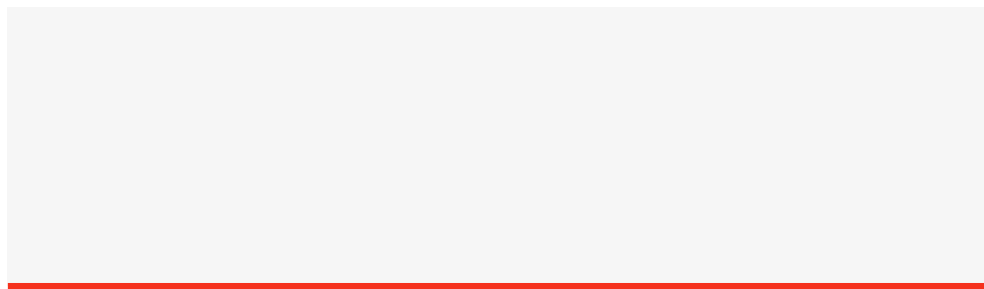
Gordon Gekko, Wall Street **(2010), 20th Century Fox.**

Activity 2: **What are your measures of success?**

Conventional management practices use various metrics to monitor the performance of activities within an organisation. These are designed with the intention of ensuring the organisation is meeting its goals.

List some of the key success measures of your organisation. Don't just think about measures that apply directly to you, think about your team, your department and wider.

This activity should take around 10 minutes.

A theme of this section is the tendency of organisations to become inwardly focused. This is especially dangerous when considering the customer. Instead of looking at wider value creation, short-term, internal measures become the focus: hit the quarterly sales target; cut costs this year; increase margin by 1%. There's a danger that such simplistic targets lead to zero-sum thinking by encouraging people to achieve the goal without creating any value for the customer. Such thinking assumes only a limited amount of value is available, and therefore the company needs to appropriate as much of it as possible for itself by driving

down costs, raising prices, squeezing suppliers, driving out competition... None of these are terrible strategies in and of themselves. The danger is that by focusing on these to the exclusion of customer value, the company undermines its raison d'être (its reason for being).
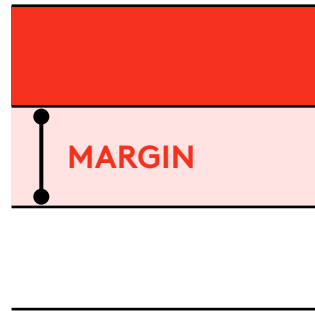
Figure 5.   Maximising margin

CASE STUDY: Amstrad and Seagate

In 1989 Amstrad launched its PC 2386 model with high hopes of its success. Amstrad had included a large hard disc, supplied by Seagate – the ST 277R. Unbeknownst to Amstrad, its supplier did not have a very high opinion of its own product. Rather than going back to the drawing board, or coming clean about the product's potential defects, the firm pushed ahead with the sale. Whether the individual salesman knew about the internal view of the product or not, he was most motivated by a desire to hit a sales target on which his bonus depended.


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Amstrad 64K Microcomputer  (v1)
©1984 Amstrad Consumer Electronics plc
        and Locomotive Software Ltd.
BASIC 1.0
Ready
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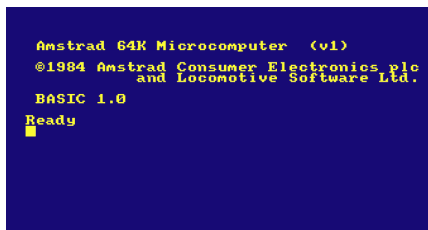
Figure 6.   Amstrad startup screen

The computer launched and almost immediately users reported problems with error messages that suggested an issue with the hard disks. Seagate repeatedly stated there was no problem with the disc and even threw the blame onto a different supplier. Amstrad was forced to recall all the machines sold and replace the parts Seagate said were at fault. Soon, Seagate discovered that there was a mechanical fix to the disk that would get round the problem, but by then Amstrad's major expense had been incurred and, worse, consumer perception of the brand had suffered.

Amstrad sued Seagate successfully, winning £57 million in damages, but the money did not help the brand recover and Amstrad lost its lead in the European PC market. A salesman's focus on his targets and Seagate's short-term focus on first marketing a shoddy product and then avoiding cost by refusing to acknowledge a problem, replaced the real focus of customer value. Everyone except the lawyers lost out in the long run – consumers, the companies themselves (which meant their staff and their shareholders) as well as numerous other suppliers.

Too many companies see value as a fixed pie, in which their job is to grab as large a slice as possible, at the expense of other groups.

Activity 3: Gone fishing!

This exercise requires between three and seven people and will take 30 minutes.

How big was the one that got away? And are there plenty more fish in the sea? In this game, each player represents a fishing operator (or fishing nation if you feel like getting political).

Objective: The objective of the game is to become the most successful fishing operator. A good score tends to be 40 fish or more.

Banker/Facilitator: Nominate someone in your group who will serve as the Banker for the game and will referee play. The Banker is NOT a player in the game. The Banker should read the rules below to the group.

Boats: A boat permits a player to catch ONE fish per round. Any boats remaining at the end of the game are added to a player's final score based on the original cost of each boat.

Preparation:

1. Print off and cut out the fish and boat template which can be found in the Additional Resources area of the VFQ website.

2. Each player is allocated the number of boats shown in the table below, dependent on the number of players.

3. Place the starting population of fish shown in the table below on a surface amongst your players.

4. All remaining fish and boats should be kept to one side as the bank.

Players	Initial boats per player	Cost of boat	Starting population of fish
2	3	3	20
3	2	3	20
4	2	3	25
5	1	2	20
6	1	2	20

Play:

1. First, each player notes down his or her intended actions for the round and hands them to the Banker. The note should include the following details:

    a. How many of their boats the player will send to sea (remember, each boat will catch one fish.

    b. How many of their fish the player wishes to trade for new boats (the cost of a boat can be found in the table - any new boats will be available for use in the next round).

2. Once all the players have submitted their actions for the round, the Banker reveals them to the group.

3. The players then:

    a. Take the number of fish they set out to catch from the fish population (equal to the number of boats they sent to sea).

    b. Receive the boats they purchased.

4. At the end of the round the Banker increases the fish population by 50% based on the number of remaining fish, rounding up if necessary.

5. At the end of 10 rounds, each player calculates their final score by:

    a. Multiplying the number of boats by the price paid.

    b. Adding on the number of fish remaining in their stock.

Rules:

1. In the first round players can not buy additional boats.

2. Players can not trade fish between themselves.

3. Once a boat has been bought, it can not be sold back to the bank.

Over Fishing:

If the fish population reaches zero before all 10 rounds have been played, the activity ends immediately. In this circumstance, if there are not enough fish to meet demand the players must agree how the remaining fish are fairly distributed. If over-fishing has ended the activity prematurely, then a different scoring system applies:

1. Adding any fish caught in the round to their existing stock, and then subtracting the sum of the cost of the boats they have (see table for details).
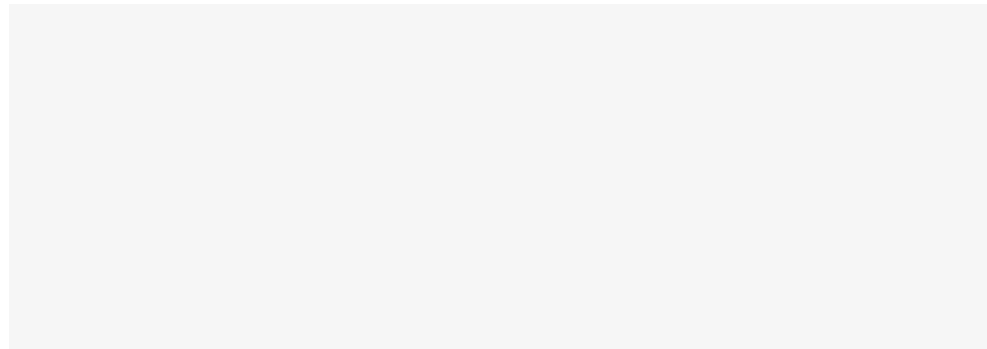
Commentary:

How did the activity finish? Was there a winner? Summarise the group's conversation below.

In most cases the competitive behaviour that emerges in the activity means that the fish population is killed off completely. If that were to happen in real life it would mean the end of an industry, with everyone that worked within it looking for a new job. Critically the customer will have lost out too - at the very least, there would no longer be fish and chips to be eaten on a Friday.

1.2.   Going right: the power of the customer

The customer can do something which explodes zero-sum thinking. When customer value is increased the customer can pay more, buy more or introduce new customers. In short, the customer can make the pie bigger, so that everyone receives a larger slice.

Funnily enough, internally the strategies can appear almost identical, yet to the external customer they appear very different. The difference is that successful companies focus on creating value for customers.

Cutting costs to increase value

A retailer such as Tesco works hard to cut costs in order to pass the value on to their customers. Their 'Value' range deliberately eschews extra packaging or design, to make it clear that customers are paying the lowest possible price for the item. This strategy can look at volume increase (i.e. customers may buy more), or increasing market share (i.e. more customers will choose to shop there).

Figure 7.   Tesco Value Cream of Tomato Soup by Banksy

VALUE

PRICE
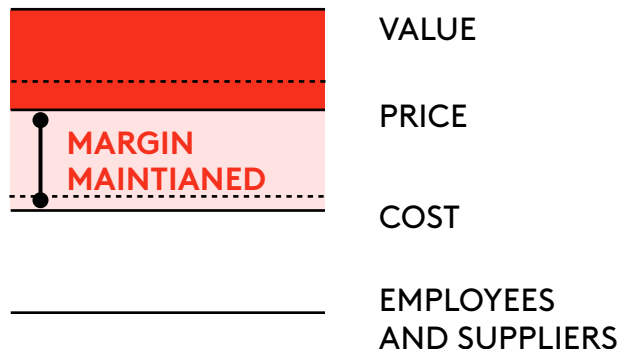
MARGIN
MAINTIANED

COST

EMPLOYEES
AND SUPPLIERS

Figure 8.   Maintaining margin

An alternative is that the company may choose to reduce its margin, either temporarily to attract customers or as a loss leader. By passing the value on to the customer, the company is likely to increase its market share.
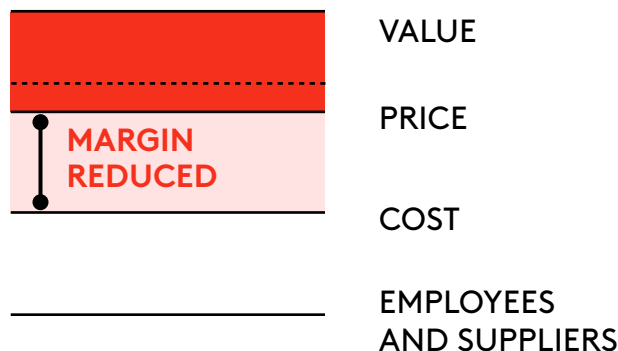
VALUE

PRICE

MARGIN
REDUCED

COST

EMPLOYEES
AND SUPPLIERS

Figure 9.   Reducing margin

Innovating to increase value

Gillette razors are the market leader in men's shaving. Every year (sometimes more frequently) Gillette launches an improvement to its product, and every year they are able to raise the price-point of their offering. Extra blades, moisturising strips, vibrating head, precision trimmer – these are innovations intended to address the underlying customer need: a smoother, more comfortable shave. In order to maintain customer satisfaction, Gillette continues to support older models. This is important because it means that customers can choose to adopt innovation and a higher price point, but they are not forced to do so.
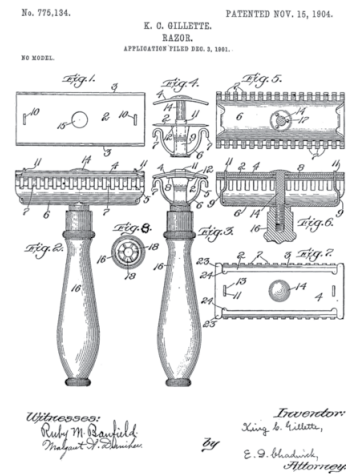
Figure 10.   Gillette's original patent
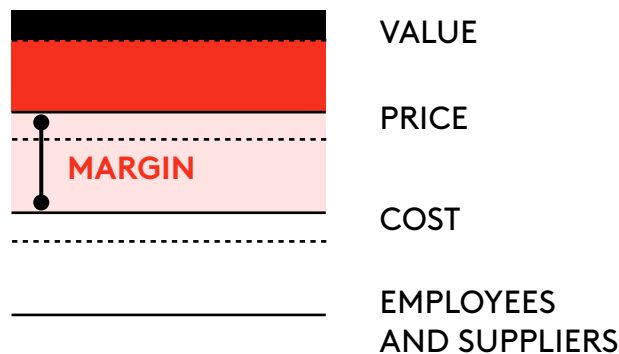
Figure 11.   Increasing value through innovation

Value is not a set of rules

Increasing value for the customer is not a pre-set template to be applied to every business. Some companies will focus on providing a one-size-fits-all product which is very affordable; others will do the opposite and provide a highly-targeted service which a customer is happy to pay for because it exactly matches their needs. A company like IKEA changed the market when it realised that customers might be prepared to organise their own delivery and put their own furniture together in exchange for lower prices.
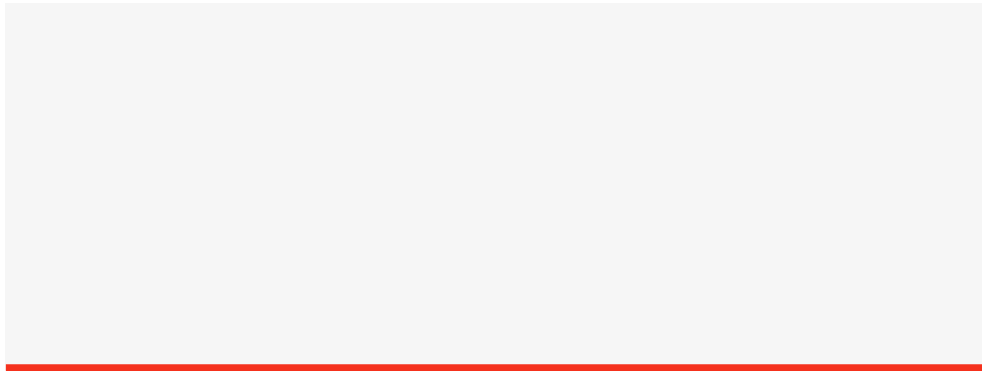
Just to return to Seagate for a moment… their cardinal sin lay less in the flawed product design itself, than in their determination to deceive their customer. An upfront sales pitch that had equated a very cheap disc with some potential faults, making the risks clear to the customer, would not have led to a court case. Given that when Seagate searched hard enough, they found a fix for the problem – an upfront pitch might even have gained the salesman his sale, and his bonus.

Activity 4: **How do you contribute to the value creation for your organisation's customers?**

Write down a list of the ways in which your company creates value for your customer. These will be the things that your company publicly espouses and is known for such as 'next day world-wide delivery' in the case of DHL or 'cheapest air fares' for Ryanair.

Now consider how your work affects the way your company creates value for your customer. For each of the items on your list describe how what you do has an impact on the value delivered to your customer.

This activity should take around 15 minutes.

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The Emergn View

When looked at properly, the interests of customers, employees, shareholders and suppliers are inextricably linked. By focusing on the customer as the crucial element in creating a positive-sum game, the benefits can increase for all.

Your entire company is a system designed to drive value to the customer. This is why we describe all of the work process as 'flow' – value should be flowing to the customer. When interests are misaligned, the flow will also be broken. Anything that blocks the flow means value is not delivered to the customer and can therefore endanger the whole company.

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2 FINDING THE CUSTOMER

The customer is the person who orders your product or service. Surely that's obvious! But if you're a company that makes mobile phones, is your customer the high street store that sells the phones or the guy wandering around the store? If you design call centre software as part of an IT department, is your customer the department managing its call centre, or the mum ringing up to say her credit card's been stolen?

Go back to thinking of your company as a system designed to deliver value. That means your job doesn't stop with your contribution. You still need to be aware of how to increase value all the way along the chain and how you might be able to help this by changing your own role. But this chain can be quite complicated – along the way many different groups will have their own particular needs and priorities; stakeholders who use, support, pay for and derive value from the product. This is the reason that many companies or IT departments get themselves in a bit of a muddle. They try to treat every one of these groups as a customer, or focus on only the one with whom the department has an immediate relationship.

Activity 5: How does value flow to your customer?

In Activity 4 we asked you to describe the way in which you contribute value to your organisation. We will now look at how that value flows to the customer. In completing this activity you will construct a flow diagram to represent the flow of value to the customer – keep it, as we'll use it as the basis for a later activity.

Starting with yourself, ask the following questions (noting down the answers as you go to construct your diagram):

1. What process does the work that you produce feed in to, and what is the output of that process?

2. Who's the beneficiary of that output? Go and ask them Question 1 and continue doing this until you reach the customer.

You should end up with a diagram that resembles the one overleaf.
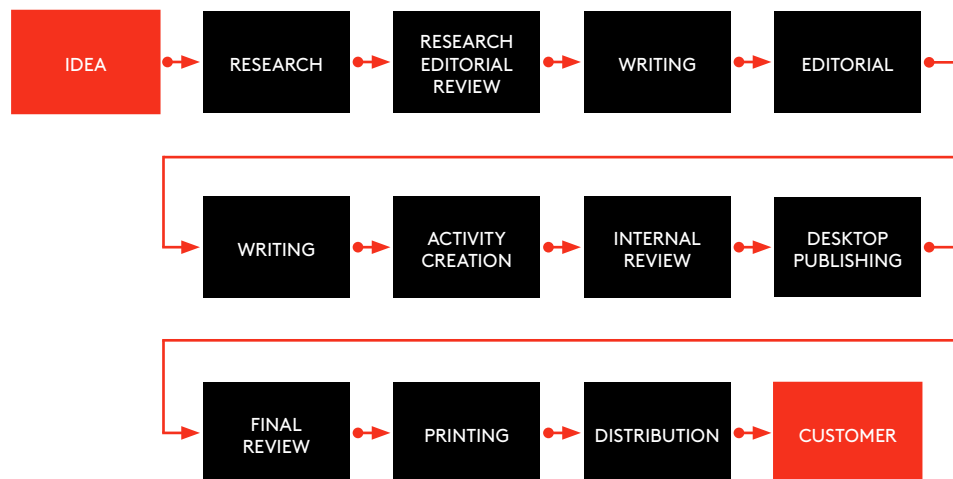
Figure 12.   Example flow diagram

Who did you end up identifying as your customer?

We are being strict about the term customer.

- Customers are not in your organisation.

- A real customer has a choice about whether to use your product or service.

This does not mean you ignore the other groups, merely that you keep your eyes focused on the real customer, and ensure that the things you are doing are aligned to the overall customer needs.

Still sounding obvious?

The problem is that because customers are not in your organisation, it's a lot easier, and very human, to be focused on achieving what the Project Management Office is demanding, or ensuring compliance with what maintenance tell you they can support, or incorporating the features marketing tell you are a 'must-have' nowadays.

The Idea of the Internal Customer

Joseph Juran was a brilliant thinker who helped create the 'quality' mindset that revolutionised Japanese manufacturing and whose books are among the foundations of management science. Like many great thinkers, he is also frequently misunderstood and misinterpreted.

Precisely because organisational structure makes it so difficult to stay focused on the overall customer (the external customer as he calls it), Juran recommended identifying a series of internal customers. As Juran set out the idea in his seminal work The Quality Handbook, he wasn't advocating ignoring the needs of the external customer – rather this was a tool to assist in thinking about the customer all the way through the organisation. The idea was that by being focused on the next department's needs, even the link furthest from the real customer, would still be aligned correctly.

Figure 13.   Juran's Quality Handbook

Unfortunately, the idea was stripped of its original context, and companies used the idea of an internal customer to strengthen divisions between functional silos, not to reduce them, as Juran advocated.

One of the most common places for this misapplication of Juran's ideas is around IT – and not only in businesses where IT is a 'cost-centre' function, but where it is at the heart of the business. Instead of viewing all decisions and projects as business decisions, a strange new entity called 'the business' became the 'customer' of IT. Hived off in such a manner, the company ends up with a 'them and us' struggle at its heart which means you stop focusing on the value.

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Activity 6: The external customer

In Activity 5, we gave you the task of chasing down your customer by asking you to follow the flow of value that you provide to the next person, the value that they provide to the next person, and so on until the recipient was the customer.

Using the information that we gave you in the first section of this session, categorise the person that you identified as the customer who is the ultimate recipient of the value you provide the organisation.

If the recipient was anyone other than the customer (i.e. somebody external to, and able to introduce more value in to, the organisation), before moving on to the rest of this activity repeat Activity 5 so that this time, you identify the real customer.

Okay, so you've identified the customer. Now, what about the value that is being generated? Is that being passed to the customer or is it being distributed between the other parties in the group (shareholders, suppliers or staff)?
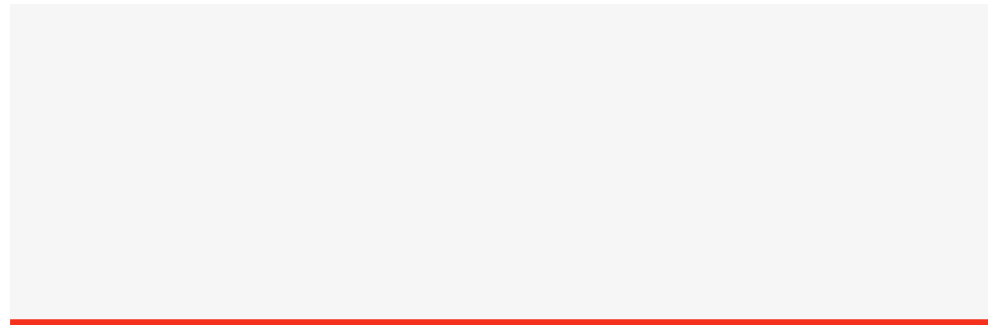
CASE STUDY: Getting it wrong

Nokia, the Finnish mobile phone company with a still-impressive market share, realised by February 2011 that it was doing something wrong. As one company employee quipped, Chinese manufacturers of cheap handsets were cranking out models faster than Nokia could get out a PowerPoint presentation.

What had happened?

Instead of being focused on the needs of their external customers, Nokia was wasting time on its own internal structure. Mary McDowell, head of the mobile phones division, commented 'somewhere along the way, the process became the product'.

For example, in India - where Nokia was the most trusted mobile phone brand - customers wanted dual sim capability in order to switch sim cards between different regional providers. But internal concerns meant that nothing was agreed and local teams lost sales.

Figure 14.   Nokia handset

The aim seemed to be to gain internal sign off and hit internal targets, not to deliver innovation and value to the customer.
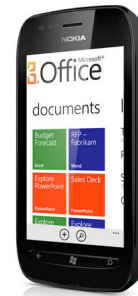
Activity 7:   Become more externally focused

We've just given you evidence that suggests how an internal focus affected Nokia. They are not alone in having a bias towards an internal focus – in fact it is commonplace and understandable in some circumstances, to find evidence of such practices in most companies.

In this activity, which will take 30 minutes, you will identify the aspects of your role that are focused on internal targets. You will use a tool to understand the effects that they having, and then make a change in an attempt to provide a more external focus. We'll use a tool called a fishbone diagram to help with this activity, it is explained briefly below but further explanation can be found on the web should you need it.
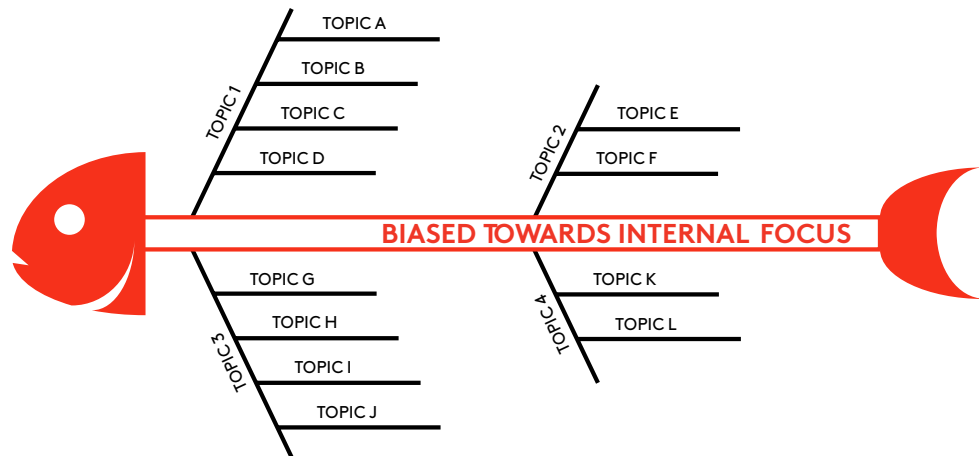
You can do this activity alone, but the results will be improved if you include people who perform a similar role to you. On a large piece of paper, draw a diagram similar to the one above. In a fishbone diagram the spine of the fish is used to represent the problem under investigation. Ensure that you label your fish with 'Biased towards internal focus'. Add spines to the fishbone for each of the potential causes of the problem that you identify. For each of those problems add additional spines with further causes of the problem as you identify them.

Once you've generated all of the ideas you have in relation to the topic, identify one that you think that you can change to benefit your customers. Establish and document why you think a change should be made, and the assumption you have for the benefit in making the change. Make this change and after a period of four weeks observe whether the benefits you assumed would be received have been. Could alterations be made either to further improve the benefits you're receiving or better ensure that you are receiving those benefits.

Commentary:

It's understandable why companies and their personnel become internally focused, but without reminders that an external focus is essential and the right measures in place to assist in instilling that behaviour, the point can become lost. It is everyone's responsibility to ensure that the customer is at the heart of everything they are doing.

CASE STUDY: Getting it right
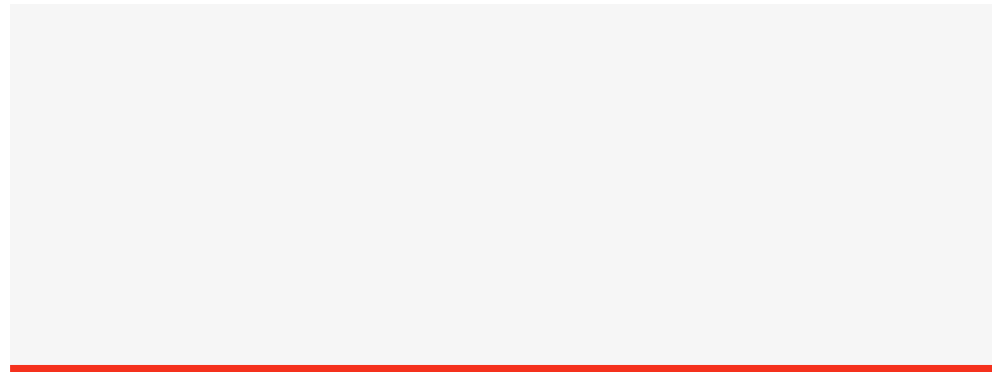
Philips, the electronics manufacturer, discovered that 78% of purchasing decisions are made from peer-to-peer recommendations, and only 14% come from advertising. So it decided to use a very simple tool – the Net Promoter Score (NPS). The NPS asks customers one question: how likely would you be to recommend our company? Answers are on a scale of 0 to 10 where 0 is to persuade people NOT to use your company, and 10 is very likely to recommend.

Philips began making changes based directly on customer experiences as measured by the NPS. Customers who bought a TV on the weekend, for example, were unable to get technical support if anything went wrong until Monday. The frustration was extreme (imagine scrabbling around with a tangle of wires while your 5 year old jumps up and down screaming for the film they were promised). Since this experience had a big impact on the NPS, Philips decided to introduce weekend call centre opening hours. Note that such a change meant a significant increase in cost to the company at a point after the sale had been made. To make this decision required a long-term view of customer value.

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Activity 8: **What services do you recommend, and why?**

Consider the services that you have used in the past, either in a personal or professional capacity. Identify one that you then went on to recommend.

What made a sufficient difference for you to recommend this company over another offering the same service? What incentive was there for you to recommend them? What do you think your recommendation was worth to that company?

3 UNDERSTANDING THE CUSTOMER NEED

Have you already noticed that your company is actually a system for delivering value? When there is a large, complex system, it is natural for people working in each particular area to focus on their own individual processes and goals. It is hard to step outside your specific role or function to gain an overview of the whole. Yet only by understanding the system's overall purpose can we appreciate how to create customer value. We call that kind of perspective Systems Thinking. It helps lift us out of narrow, silo thinking and, by looking at the broader context of the system, allows us to respond to a customer's unique needs and demands.

There are typically two types of demand: value demand and failure demand.

Value demand is what the customer wants – what the company exists to serve. Making sure we understand this properly is crucial to an organisation's long-term success. And getting it right is not always either a cheap, or an easy process.

CASE STUDY: **Understanding the customers problem before committing to a solution**

When Max Ventilla and Damon Horowitz started up their company Aardvark they wanted to try and answer the subjective questions that humans answer so well, and search-engines answer with such difficulty. Which is the highest mountain in the world? Easy – Google will tell you in a fraction of a second. However, when asked the question which is the best mountain to climb given that I am very unfit but like a challenge? Hopeless. Google will bring up a list of connected but not very helpful websites about climbing, fitness and challenge. Ask your colleagues while making a coffee, and you will get several recommendations – one of which will be from someone whose judgement you trust when it comes to mountain climbing (and assessing your fitness).

Figure 15.   Aardvark website

The pair's solution to the problem was not reached through a technological break-through, but by studying people's actual needs and interactions. In development, rather than building complex software models, they used people to replicate the back end. So when a customer typed in a question, rather than developing the algorithm which Aardvark would eventually need, the company used people to do the research, make the connections, classify the material and then provide the answer. In short, they made sure the product was exactly what its customers wanted before trying to solve any of the technical difficulties. The result was a highly desirable tool – so desirable in fact, that Google acquired Aardvark for $50 million in 2010.

By contrast, failure demand is what happens when something has gone wrong with the original value that the customer expects. Phillips in the case study quoted above, observed a customer need/demand, and then looked at the areas within the business that needed to respond to it. However, it was really responding to failure demand. Something had already gone wrong. The real question should be – why did the customer need to call and get help? What could have been changed to ensure that failure did not exist? Are instructions insufficiently clear? Are extra cables or connections required which are not included with the TV? What additional material could help ensure there is no need to call to complain or ask for help?

Failure demand is an expensive way of serving the customer. Anyone who has looked at the operating costs of a customer service centre can tell you that. And yet it is essential to respond to customer complaints and requests. In most companies, the answer is to use low-level personnel with little knowledge or decision-making capacity to deal 'efficiently but repetitively' with the customer. By contrast a company that approaches problems holistically would assign employees with a high-level of knowledge to liaise with the customer and not only solve that specific problem, but identify its source. The customer service team's recommendations would need to be acted on as a permanent fix, to ensure no customer need complain again.

Activity 9: Let's not waste time in delivering to the customer

Using the process map that you generated in Activity 5, add the following information to each of the activities within the process (see Figure 12 below for an example):

- Record the time the activity takes - from the point that work begins on the task, until that work is complete. The value you record is the Value Add Time.

- Record any time spent waiting in between two consecutive processes. This value is the Handover Time.

Now do the following:

- Sum all of the Value Add Time values together; the result is the Value Add Time.

- Sum all of the values that you have recorded; the result is the Total Lead Time.

- The process map you started in Activity 5 should now look like the diagram below.

Figure 16.   Example flow diagram
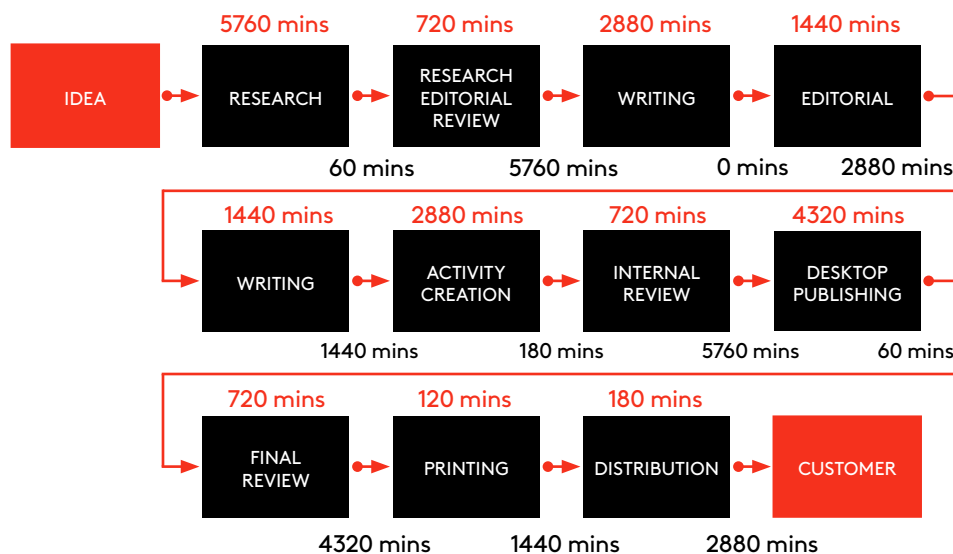
The next part of this activity will take you through calculating the efficiency of your process. Michael George and Stephen Wilson in their book Conquering Complexity in Your Business introduced the following equation. Use the equation to calculate the Process Cycle Efficiency for your process.

$$\text{Process Cycle Efficiency (PCE)} = \frac{\text{Value Add Time}}{\text{Total Lead Time}}$$

What does this number tell you about the process you chose to map?

You've just done a basic Value Stream Mapping exercise. In undertaking the tasks in Activities 5 and 9, we demonstrated the parts of the process that are adding value to the customer and those that aren't, as well as identifying how long each process itself takes. Review the information you have generated with people involved in the process you inspected. Discuss whether there are any improvements that could be made that would benefit the customer.
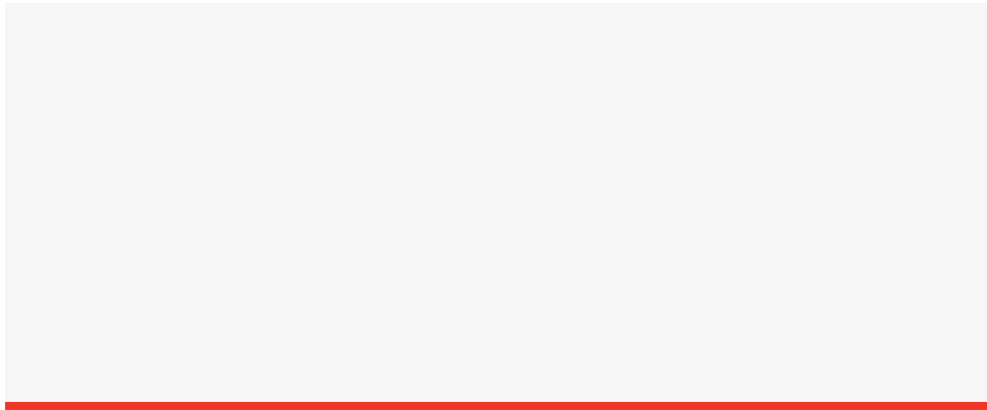
3.1.   Focus on those who focus on customers

"Your most unhappy customers are your greatest source of learning."
Bill Gates

Customer-focused companies know how to value and listen to those who work on the frontline, dealing with customers. Their senior management also know to lead by example, and make a point of paying close attention to what customers say and to the staff who deal with them. Every year, Amazon CEO, Jeff Bezos, spends a week in the call centre handling complaints to find out about the customer experience. Indeed, every new employee to Amazon has to begin by spending two days in the fulfilment centre.

3.2.   Building your product from the customer's point of view

The economist Theodore Levitt once said, 'People don't want a quarter-inch drill, they want a quarter-inch hole'.

It's a classic exposition of Systems Thinking – when you remove yourself from preconceived expectations you can see that there might be several solutions to a customer's underlying need. Your job is to make sure that your product addresses his or her need better than any other.

On an iPhone, for example, the touch-screen is an attribute designed to address the customer's need for 'ease of use'. It is not the only solution – Binatone recently launched a 'Big Button Phone' which is targeted at the elderly customer's specific ease-of-use needs. With all the extra features stripped away, it has large buttons and a brightly-lit display. Amongst its target market it scores as much easier to use than a touch screen. If a designer gets into the mind-set that phones must be touch-screen, she will miss opportunities because the vision is not centred around the true customer need.

CASE STUDY: Google News

Google wished to launch Google News. The team was still working on the product and wanted to add a filter – should they filter news by date or location? The decision was made to launch the product without either. Within days 300 requests had been received to see the news filtered by date and only 3 by location. The team worked on the date filter first, released a new version, and then went back to work on the location filter. They launched early, incorporated real feedback, and then continued to refine and improve.

Figure 17.   Google News' 'Suggest a feature' page

Note that they did not say to themselves 'oh not many people wanted location, we won't do it'. If 3 people asked for it, there was undoubtedly a much larger pool of people who would have liked the feature, but couldn't be bothered to write and say so. The team recognised that a location filter was still an important function, but that it was not the top priority.

3.3. Managing value throughout the company

One company that has worked hard to ensure that everything they do is focused on driving end-to-end value to the customer is Tesco.

Tesco introduced a balanced scorecard known as the steering wheel – even the targets on which success will be measured are carefully composed in a customer's language, not management-speak. 'I don't want to queue' and 'I can get what I want'.

Figure 18.   Tesco's balanced scorecard - the steering wheel

Every one of Tesco's corporate values mentions its customers:

• No-one tries harder for customers

• Understand customers better than anyone

• Be energetic, innovative and first for customers

• Look after our people so they can look after our customers

• Use our strengths to deliver unbeatable value to our customers

Tesco's motto is 'Better, simpler, cheaper'. Everything the company does needs to pass through a filter in order of priority: better for customers, simpler for staff, cheaper for Tesco. It is a simple, easily understood concept that is applied to every aspect of the retail business, from logistics to marketing. Even Corporate Responsibility is driven by customer priorities in this area (recycling, local sourcing, organics and the Computers for Schools scheme).

The whole structure of the company is also set up to support customer engagement, with a flat management hierarchy of six levels between CEO and till staff. To stay responsive, the company focuses on 'local leaders' and believes that success is measured by 'what each member of staff does for each customer'. Terry Leahy, Chairman of Tesco has repeatedly stated that the customer steering wheel is the tool which turned Tesco around, as he stated: 'The customer is a great place from which to run a business'.

4 SO WHAT DOES THIS MEAN FOR IT?

The strategy does not suddenly shift as soon as IT enters the picture. Tesco Group IT Director Colin Cobain writes that 'Tesco is only interested in IT if it supports our processes and ultimately delivers value for our staff or our customers'. The strategy of the Tesco checklist remains the same in IT – is it easier for customers, is it easier for our staff and does it add value for Tesco? This shows itself in the kinds of projects that receive priority. Tesco knew customers didn't want to queue at the tills. Managers were expected to open more tills at busy periods to ensure that there was only 'one in front' (one other person in front of you at any one time). To help managers, Tesco's IT department deployed cameras using thermal imaging technology to predict and measure the arrival of customers at the checkout. Managers could react in real-time to ensure they had the right number of tills open.

A less sexy, but equally important project involved porting Tesco's legacy supply chain software to run on IBM servers and not the expensive mainframe systems used in the UK. In order to support international expansion, the systems needed to be able to work with newer technologies on differing servers, using standardised data, including regional variations (from legal compliance to language character sets). The business need was to have a standard operating system that ran cost-effectively, without losing the customised specialisation that was part of Tesco's competitive edge. As Cobain stated, IT's role is to focus 'on what is best for the customer and business first and how IT can meet these needs. It is as simple as that.'

4.1. What does focusing on the customer mean for IT?

As we saw with Tesco, the principles of customer focus are not only relevant, but essential to IT departments and companies. Below we suggest a range of tools and practical tips to assist IT staff in connecting to the customer and ensuring their organisation is customer-focused.

The more time you spend understanding your customer, the better.

- Spend time with actual customers. Continually developing your understanding of your customers problems and needs will help you focus on what improvements they will want. The Lean Startup methodology encourages getting out of your office on the likelihood that the customer cannot come to you. This is key even for the deepest of internal functions.

- Visualise your customers. In the US elections, in which the population seemed split down the middle, analysts identified a likely group of swing voters. To help politicians and strategists focus on them, they gave them a name that has become famous in its own right: 'Soccer Mom'. Create a persona, give it a name and provide a picture to illustrate your types of customer.

Activity 10: Who's your 'Soccer Mom'?

It's ideal to spend as much time talking directly with your customer as you can. The reality though is that it is very difficult to put this into practice. As a step on the way to having that interaction, you can describe personas.

In the previous activities we have asked you to spend a lot of time understanding aspects of your organisation's customers and the way in which you interact with them. Now it's time to put you in their shoes.

This activity can be done on your own, or with a group.

Using a piece of flip chart paper or similar, draw a poster that others can use to understand more about your customer. Remember, this poster should act as a stand in for the customer who can't be with you, it should be written from the perspective of the customer – it should include their:

- Fictitious name

- Fictitious profile picture - you can either draw your own here, or better still take an image from the internet that you think best represents them

- Background, for example a description of who they are, what job they do, how old they are

- Motivations

- Expectations of the service

- Personal goals.

When you've completed this exercise, present the persona to others on your project. What does it tell them about their customer that they didn't already know? Ask them how it could be improved.
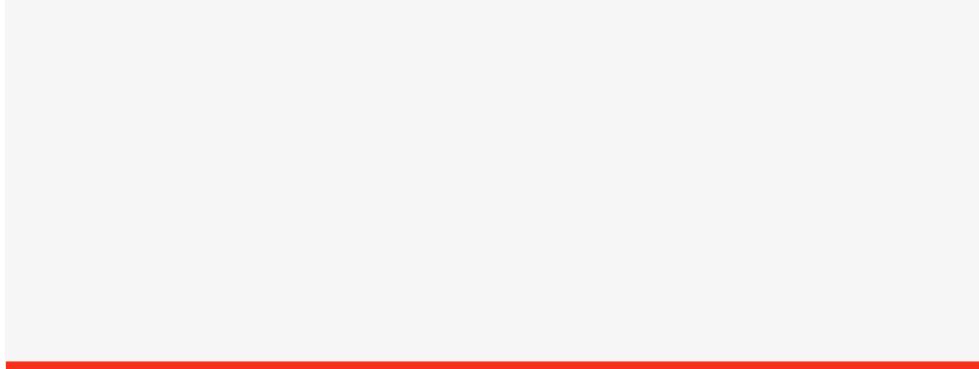
Never be satisfied with requirements that are not customer focused.

Always check you understand the customer's underlying need. Every development team needs to understand the benefits and capabilities that lie behind the requirements. What is the customer's underlying need? How will our product solve it? Why can we do it better than anyone else?

All too often business cases demand features, rather than explaining needs. For example: 'we want a very small phone', or 'the website should use drop-down menus'. The feature described may not be the only, the best or the simplest answer to the underlying need.

Even with internal requirements, we still need to consider the end customer's needs. If an integration project made your internal operations more efficient but stopped you developing a product for a customer, which should take priority? Questions like these are essential to ensuring IT is recognised as part of the overall business value flow. Indeed, a very useful tool is to map your value chain to show how your work is contributing to the external customer.

Activity 11: **What's the customer benefit?**

Projects will include requirements whose reason for being is unclear. In this activity, we would like you to analyse a current project within your organisation for evidence of this.

Having selected a project, identify each and every one of the current requirements. Inspect each of the requirements, listing those that can clearly be tied to a customer need and those that can't separately. When you have completed this part of the exercise, contrast how many requirements you could tie to a customer need against those that you couldn't. What is the ratio? Is it high or low in respect of those requirements focused directly on a customer need?

If the ratio is high, or indeed there are some requirements that seem to completely ignore the customer, use the information and techniques you have learnt in this session. Present to those involved in generating the requirements for the project why a focus on the customer is beneficial, and offer information and examples of how they might refactor their requirements so that they do focus on the customer.

If on the other hand, the amount of requirements you found that couldn't directly be tied to a customer need was low, or better still you found none, identify why this is. What techniques are being applied to ensure a continued focus on the customer? Are these practices universal across all projects within your organisation? If not, work with the people involved in the project to compile a presentation about their use, the benefits and the issues faced and present this information to another project that you think would benefit from an awareness of these practices.
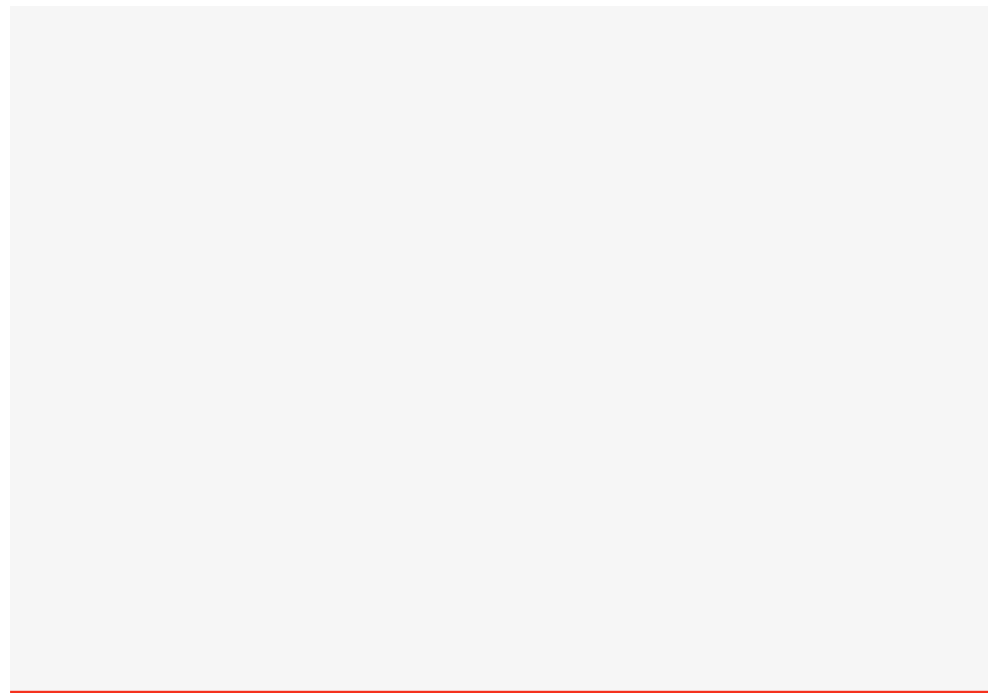
Validated learning.

Asking questions of the customer to understand their needs is important, but customers are not mystics. If in 1996 publishers had asked 10 year old children – 'what will make you read books?', they would not have been able to answer: 'a series about a boy wizard who goes away to magic boarding school'. They didn't know that Harry Potter was what they wanted until J. K. Rowling came along and wrote it.
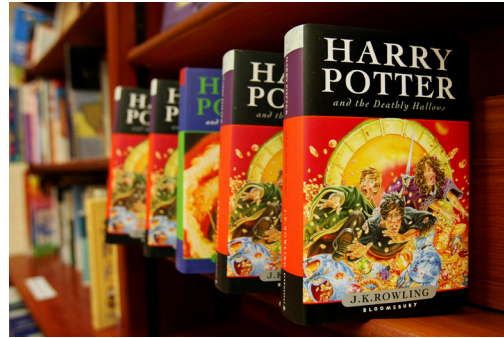

Figure 19.   Harry Potter books

Customers do not always know what they want until they see it. They may not even know they have a 'need' until a product arrives that does something unexpected. This is why large quantities of research and analysis can lead to paralysis rather than action. Since marketplaces change fast and new products by definition operate with a large amount of uncertainty, rather than trying to anticipate every possible need in some enormous and comprehensive product specification, it is far more important for IT to validate learning as quickly as possible.

Market testing - Just like the Google News case study quoted above, the marketplace is the best place that can tell you about how customers make decisions. Real-life testing allows you to change and refine your product for success, and it enables you to spot new opportunities.

Such a change might sound simple, but incorporating real-life behaviour can mean organisations have to look at projects very differently. If when a product is launched the team has already been disbanded and assigned to other work, it will be far harder to make changes and adapt swiftly to customer reactions. When a company called Expertcity launched a new interactive technical support system, sales proved disappointing. However, customers did seem to like a desktop-sharing function, which they used to administer computers remotely. Expertcity exploited this unforeseen use by launching a separate product as a remote administration tool, which they named gotomypc. The feedback and new product led to Expertcity being successfully acquired by Cisco for $225 million. The principle of trial, feedback, refine needs to be embedded in the organisational structure.

Testing with customers - When market testing is impossible, a company should still look to get a real product into people's hands to see how they use it. Sometimes surprises occur. A product that tested perfectly in the lab may test very differently when it turns out that customers aren't prepared to switch off and switch on their computer twice a day in order to reload an application. In his book The Lean Startup, Eric Ries tells of how he spent six months building an Instant Messaging system for IMVU, only to discover that customers wouldn't use it. As Ries humorously but ruefully writes, 'bit by bit, customers tore apart our seemingly brilliant strategy'.

Prototype testing - When ideas are very new, or customers are vague about what they want, it is more important to build a prototype quickly and cheaply to gain real feedback and then refine and rebuild. Again keep in mind the work Aardvark did. They weren't building the real software they knew they would need eventually, they were testing the idea with customers – something which actually worked rather than talking about an idea. When IDEO wanted to showcase games about

Figure 20.   IDEO creating giant mock iPhone

Sesame Street on the iPhone, they created a giant mock iPhone designed to give adults an insight into how things might appear from a child's view.

Each type of testing provides different benefits, but also has associated limitations and risks. With lots of good potential ideas, the successful business is one which will not invest enormous amounts of resource in a single project which may or may not fail. Rather it will test a large number of ideas, weeding out failures cheaply and quickly in order to test more.

Activity 12: Validated learning

Delivering what your customers need, when they do not know what they want. Now there's a conundrum. As you have just seen though, there are techniques that enable you to better understand whether what you're developing for your customer will provide them with some value.

Review the practices that are currently in use for testing assumptions in your organisation. Identify a project that you think would benefit from the use of one of the techniques that we've discussed. Discuss with others involved in the project and apply the practice. Document which of the practices you selected and why, and the results you achieved.
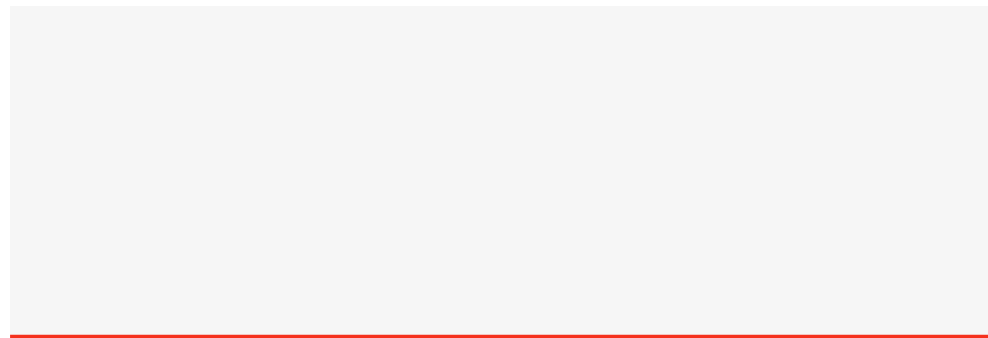
4.2.   Taking responsibility for the customer

Given that the customer is busy, and given how incredibly important their feedback and concerns are, the Scrum framework created a role called the 'Product Owner' to sit within the team, (other frameworks and methodologies had the same idea but gave the role different names, in XP the same role is simply called the customer). The Product Owner is the proxy customer, assisting with refining user stories, prioritising the backlog and defining acceptance criteria.

BUT...

Customers are not inside your organisation.

Jeff Sutherland described his ideal Product Owner for a Scrum team at his company PatientKeeper, developing health-care information systems, as:

> "... a domain expert, preferably a practising physician a couple of days a week at one of the leading hospitals... an engineering expert, preferably written some apps themselves... an expert in user stories, use cases, and software specifications in general and healthcare in particular... really good with customers and sales people to elicit requirements and recruit physician experts to test-drive prototypes of new functionality... own the business, the revenue, the customer and sales relationship with respect to features... including all analysis that is related to what the customer wants."
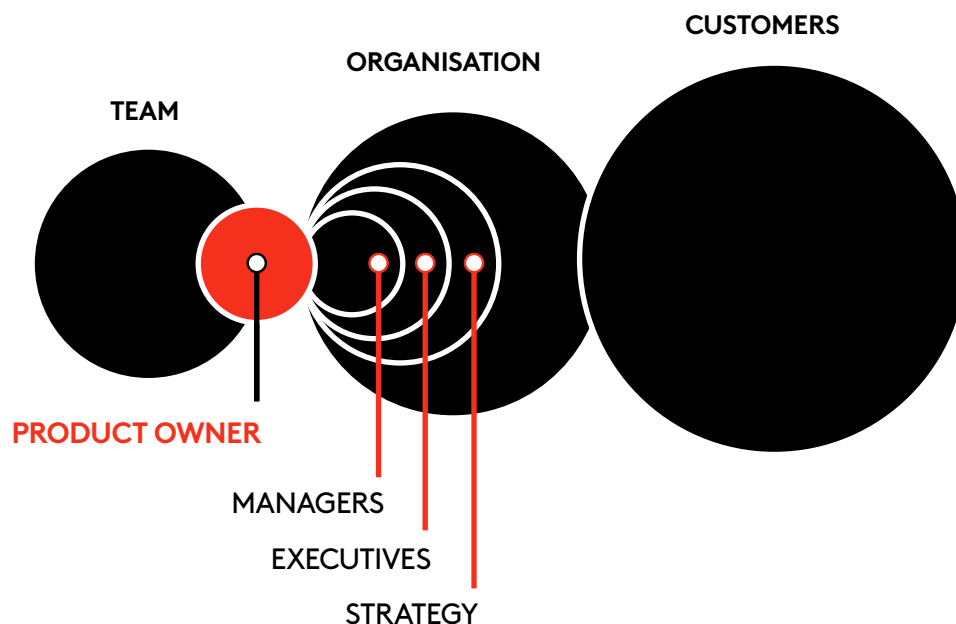

Figure 21.   The relationship between the Product Owner and customers

Actually, this is a truncated version of Sutherland's full list. He adds, 'the first couple of hires we made couldn't do this'. Really? The wonder is that such a paragon exists at all.

A more helpful way of looking at a Product Owner is to consider that they take the primary (but not sole) responsibility for bringing data to the team regarding customer needs and then translating those needs into possible features and functions.

The Emergn View

When we use language like 'the business', we reveal a deep disconnect at the heart of our company. It suggests that IT decisions are not business decisions. But since an IT team represents a significant investment of time and money, its resource must be used for the company's overall value delivery to the customer. This holds true whether IT is a direct part of the value offering or not.

IT is integral to all companies today, it is important that the teams understand the needs of the customer. Each feature is part of a business case in which the value to the customer must be weighed up against cost and time. There should never be a chance for individuals to encumber the project with personal requirements that do not have a solid business case attached to them.

Reject the terminology of 'the business' as separated from IT. Champion the integral nature of the end-to-end business, and IT's role in promoting the interests of the customer. In the Emergn view there is no such thing as an IT project – only a business project.

5 CONCLUSION

In this session we have looked at keeping the customer's needs at the heart of your organisation because of the value they represent. This has meant moving beyond the separation that often distances IT from the real customer through a proxy internal customer. Through mapping the value flow, you should have been able to see both the barriers and connections between IT and the customer and provide a customer-centred appraisal of value to every project you are working on.

Learning outcomes

Now that you have completed this session, you will be able to:

- Identify the four types of stakeholders in your company, and analyse any examples of zero-sum thinking

- Appreciate why the customer is important and have a clear definition both of who your customer is, and how the value chain flows through your organisation as a whole – with particular focus on the dependencies where it reaches your own department

- Understand a set of techniques that help keep the customer at the heart of solutions provided by IT

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