



**intelligent  
water  
networks**



**Victorian Water Customer**  
Water Services Needs & Values Summary Report



# Contents

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4	Foreword
7	Insights
36	Key Findings
48	Segmentation
52	Value Propositions
54	Lessons from the Electricity Industry
55	Future Directions

# Foreword

Today in Victoria, water corporations are facing a period of both opportunity and challenge. As the industry continues to respond to concerns over security of supply, changing community and regulatory expectations, and extreme weather events, new opportunities are emerging. As intelligent networks become more of a reality and the technology matures, lessons and direction can be gained from other essential service industries which started on this journey up to ten years ago. There are many challenges ahead as household expenses increase and consumer trust is placed under pressure. The Victorian water industry is now considering its future direction and the new value that it can deliver to its customers.

This summary guide is a timely overview of what customers need and want from the industry and tests whether they are ready for the next evolution of change – some of which possibly could be delivered by intelligent networks. It is critical to understand customer needs and values in order to determine which customer segments may value the potential benefits of intelligent networks and to what degree.

Even though the Victorian water industry has a well established track record of delivering high quality services to residents and businesses throughout the state, there are challenges ahead. Today more than ever, infrastructure and resourcing are under pressure. This, coupled with an increasingly demanding and sophisticated public, requires the Victorian water industry to better understand their consumers in order to deliver more value over time. What attributes of water service provision do customers want and value? How can the industry best communicate value propositions to them? What are the implications for future demands and requirements? These are just some of the questions explored in this report.

In undertaking this research effort across the 19 water companies in Victoria, it is clear that the industry can collaborate effectively to drive change from the perspective of its consumers. New targeted offerings that recognise the segments that exist within the Victorian water market and deliver real and lasting value back to those segments are the non-negotiable starting point for a better future for Victorian water customers. This can be built on the high level of trust that exists today between water corporations and Victorian consumers. However that trust needs to be actively managed and reinforced to allow for potentially difficult times lying ahead, including the need to encourage public adoption and acceptance of new intelligent technologies.

I hope you find this report interesting, revealing and stimulating. Hopefully it will challenge some of your preconceptions about water – the most essential of the essential services.

Ann V. Burns  
APAC Industry Lead – Utilities  
Accenture Australia

# The research program

This report includes a summary of insights, key findings, customer segmentation and lessons from the electricity industry

*The Victorian Water Customer - Water Services Needs and Values* research report was compiled for Victoria's metropolitan and regional water corporations to inform the VicWater Intelligent Water Networks project<sup>1</sup>.

This project has been undertaken within the context of the Government's Plan for Water. The key objectives of the Plan for Water include genuine consultation with communities regarding resource planning and to establish Victoria as a world leader in liveable cities and integrated water cycle management.

The project is being overseen by the Intelligent Water Networks (IWN) Customer Needs and Values Working Group comprising representatives from nine water corporations across Victoria.

Key objectives of this research include determining the needs and values of customers with regard to water services, identifying opportunities for improvement in product or service design, identifying potential barriers to the adoption of smart water technologies, determining the direct and indirect value impacts these technologies may have on customers and developing value propositions for different customer groups. The research relates to Victorian residential water customers only and does not consider non-residential customers.

An outline of the four distinct phases of research undertaken to ascertain the needs and values of Victorian water customers is depicted in the table below.

Research Phase	Activities
Literature Review	115 documents sourced and evaluated including water industry customer surveys from Australia and internationally, research papers, academic transcripts and industry reports
Focus Groups	Nine Focus Groups held throughout Victoria - two in metropolitan locations and seven in regional locations
Stakeholder Interviews	11 interviews conducted with senior water industry figures, CEO's of key customer welfare agencies and consumer groups, and government agencies (DPI, DSE)
Quantitative Survey	1,095 respondents - screened to be demographically representative of the Victorian population

1. An Intelligent Water Network utilises network management systems that exploit new technologies to monitor performance, remotely sense asset conditions, assess water availability and monitor real time water use to improve delivery of water, wastewater and stormwater services for the benefit of all stakeholders.



# Insights

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The following insights represent an overview and extrapolation of the findings from the research. They seek to identify and illustrate significant customer dynamics within the water industry today, and provide insight into their possible future implications. The research has focused on needs and values of customers within the wider context of the Victorian water industry.



# Insight 1

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Water corporations sit within a "trust bubble" which can be stretched to a point with augmented products and services.

If the stretch is too great, the risk is that the bubble may burst.

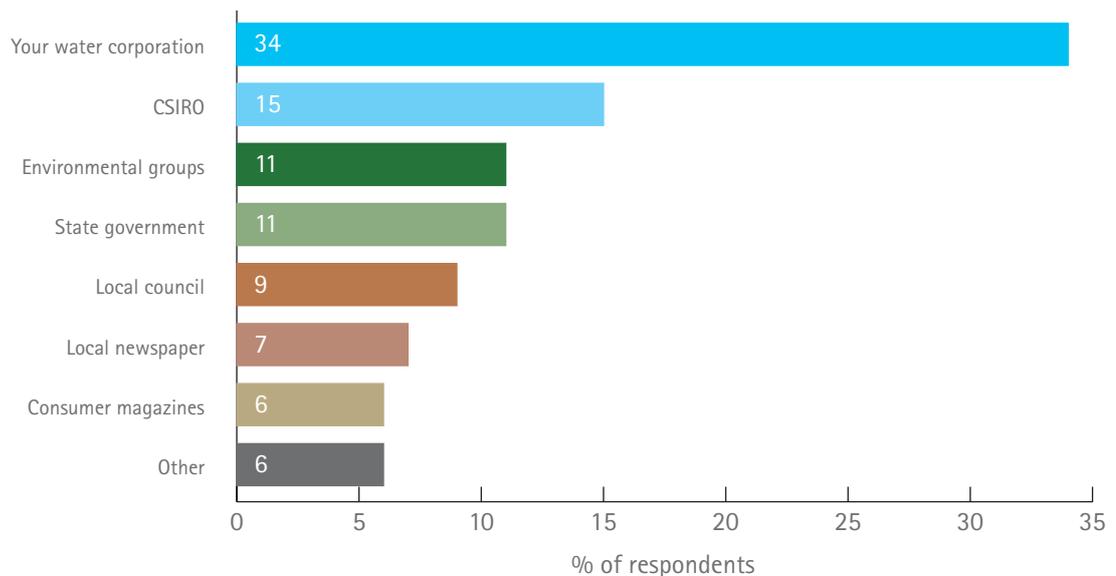
# Insight 1

**Water users have faith in their water corporation because it is one of the few things in life that is reliable and slow to change. However, there are certain things that water corporations don't have permission to do yet.**

Customers have little understanding of what their water corporation does, and do not see it as being dynamic or forward thinking. Up until now, this has generally suited them; customers would happily trade 'innovation' in the water space for predictability and safety. However, there are products and services that could be offered as part of an intelligent water network that are outside the realm of what customers consider the "territory" of their water corporation. The risk is that in attempting to be more responsive to customer needs, and despite their best endeavours, the water corporations might endanger the trust that has been built up over the years. Customers may want innovation, but don't expect this to come from their water corporation.

- Customers surveyed generally returned very high satisfaction ratings for their water corporations – much more so than for other home service providers.
- Customers generally rated their water provider poorly in relation to being adaptive to their needs.
- Only 12% of customers were comfortable with their water corporation providing usage data to third parties.
- 89% of survey respondents want the water corporation to tell them when they have a leak.

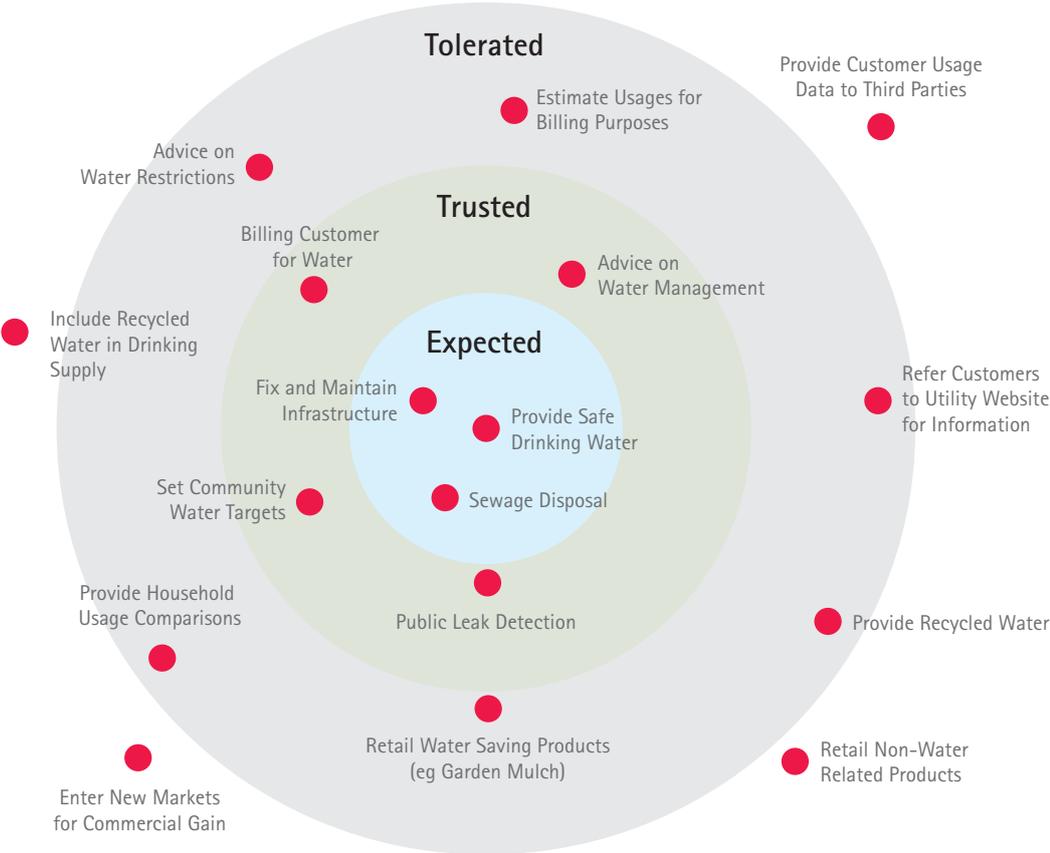
## Who would you most trust for information relating to water and water services?



If the introduction of augmented products and services is likely to lead water corporations into a positioning that is at odds with their trusted status, then an alternate means of rolling out innovative products and services should be sought. This might include partnering with a third party, or creating a sub-brand within the existing corporation's branding.

**Challenge**  
 Any change to water services must be managed in the context of a market cherishing conservative values. A proactive campaign of expectations management along with understanding of the sensitivities of customers is required to ensure "progress" does not become counterproductive.

**The Water Corporation Trust Bubble:**  
 What does the Water Corporation currently have the Community's Permission to do?





# Insight 2

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Currently for water consumers the missing piece of the puzzle is control and comparison not cost saving.

## Insight 2

**Customers have noticed that reducing usage does not lead to significant bill reductions. Offering better monitoring, control and comparison of usage may be as (or more) attractive than promoting the idea of cost savings.**

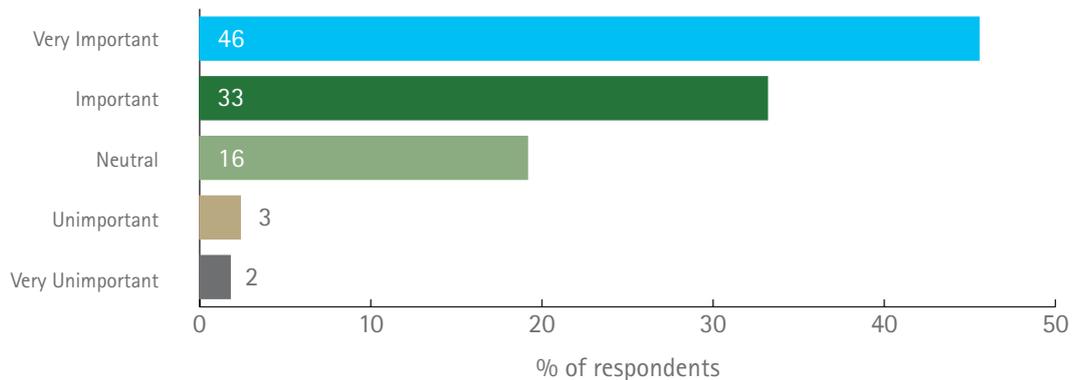
The research demonstrated that customers do not believe they can save money by saving water, and consequently a significant driver of modifying customers' water usage is blunted. This will remain the case as long as residential water costs are seen as both reasonable and predominantly comprised of fixed charges.

Water customers also demonstrated a desire to compare their usage to other reference groups such as similar households in their neighbourhood, and indicated in the Focus Groups interest in benchmark data and analysis of usage.

Many customers felt they were not currently in a position to monitor water use, or control it in any meaningful way owing to the limited amount of information available to them, and the lag between usage and billing.

- 77% of customers surveyed wanted more detailed consumption information delivered by their water provider while only 35% thought this was currently being done well.
- 80% said they would like comparison with their own consumption going back 12 months, whilst 65% said they would be interested or very interested in comparisons with similar households in their community.
- 69% of customers surveyed favoured a water usage breakdown by appliance, while 65% favoured a community comparison of their water use.
- Customers are aware that the majority of their water bill is comprised of inflexible service charges, 69% said they would prefer a bill based more predominantly on what they use.

**How important is it that your water corporation give you more detailed information on your water consumption?**

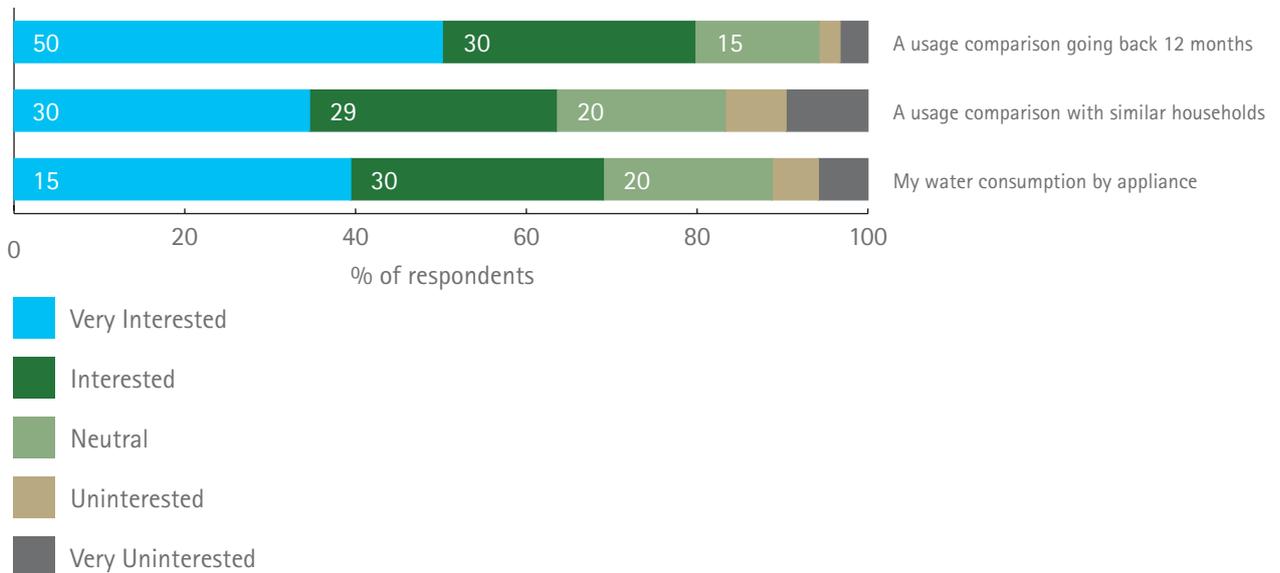


Market acceptance of intelligent water technology will not be driven by a particular device, but rather the opportunities to help users benchmark and compare their usage. An IWN has the potential to satisfy customers' need for control, and provide them with real time information. There is potential for alternate tariff schedules that leverage this information to be introduced, and further scope to use this technology to shape customer demand in a way that maximises the working life and usefulness of existing infrastructure particularly during times of peak demand.

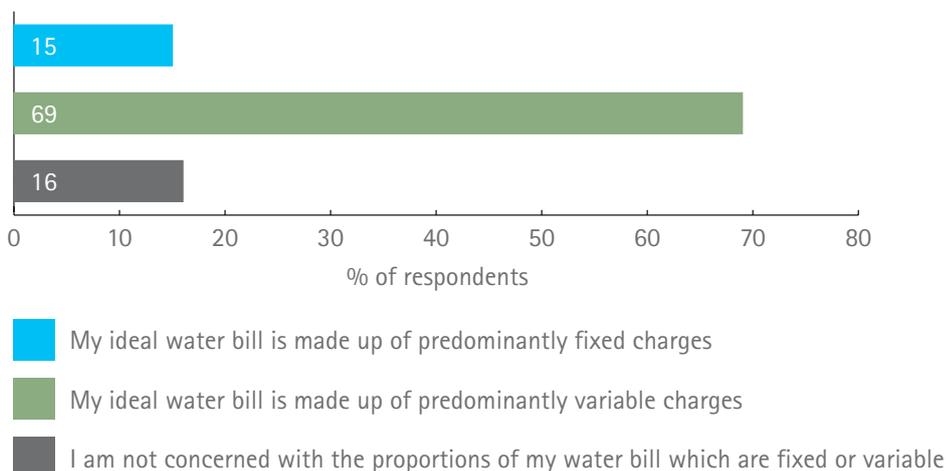
### Challenge

It is important to explain to customers how new products and initiatives will provide them with visibility of their water usage, and help them control and compare their use of water, not necessarily control their savings.

### How interested would you be in receiving the following information?



### Which of the following best describes your ideal water bill?





# Insight 3

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Water & Electricity –  
similar but intrinsically different.

## Insight 3

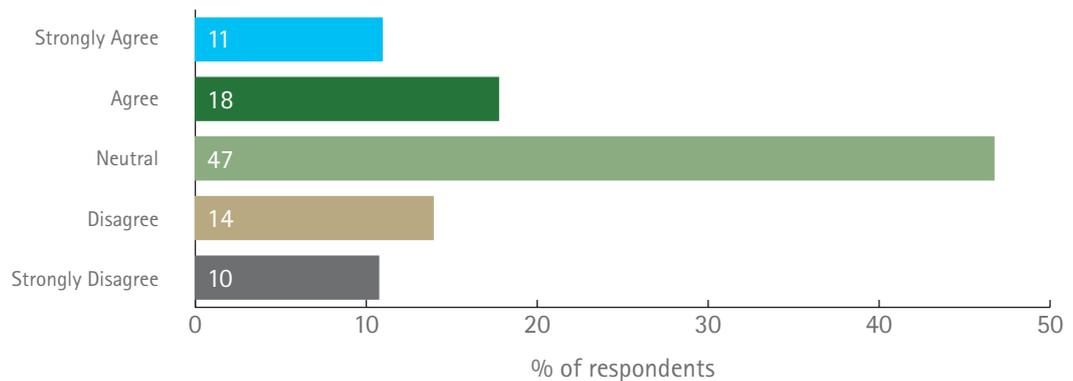
**While both are provided by utilities, water and electricity are similar in some ways, but different in others. The learnings from the electricity industry can contribute to a smooth and successful way forward for water corporations.**

From the consumer's perspective, the biggest issue in the electricity industry recently has been the mandated state-wide smart meter rollout which has caused some community concern. The industry, through a lack of investment in customer engagement and inadequate communication of the underlying rationale for a more reliable and efficient energy network, allowed misinformation from multiple sources to confuse customers. In addition there was an unfortunate coincidence of rising electricity usage prices just as the meter infrastructure was being deployed.

- Stakeholders and focus groups alike ranked water as a 'more fundamental' resource than energy.
- Despite holding generally favourable views of their water service provider, customers were only 14% more likely to view them as more community focused than their electricity provider.
- Water prices are rising more rapidly than energy prices in Victoria in percentage terms. Whilst it is acknowledged that water prices remain well below those of electricity, media attention is likely to stay focused on percentage rates of increase<sup>2</sup>.

To what extent do you agree with the following statement?

**My water corporation is more community centred than my other utilities (eg. Electricity, Gas).**



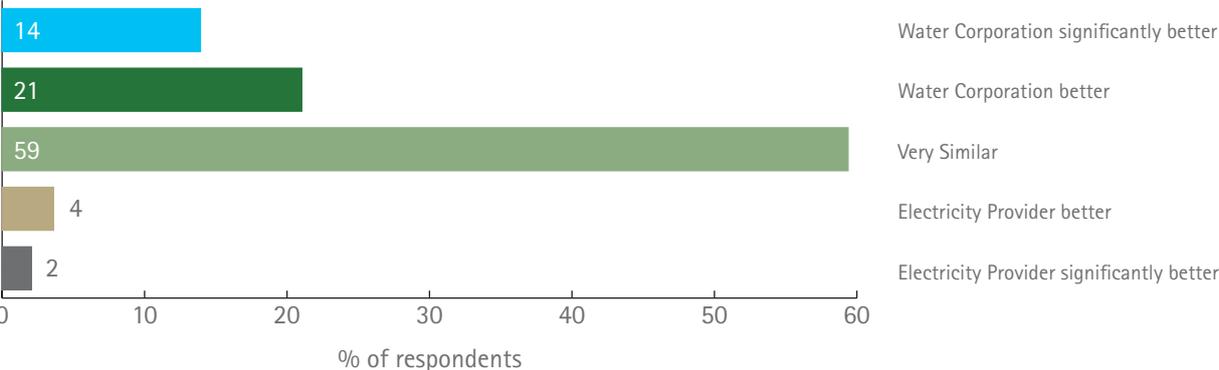
2. The Victorian media has reported that water bills are rising at close to double the rates of energy bills and do not always report the much lower base from which water bills began.

As discussed later in this report, when it comes to the introduction of new products and services, the trust inherent in the community towards water corporations will help facilitate this introduction, but water corporations still need to monitor and learn from parallel experiences in other sectors. Water corporations certainly have a better reputation in Victoria than energy providers currently<sup>3</sup>, but the water industry cannot afford to rest on its trusted laurels – energy providers will learn from the mistakes they have made and are already offering diversified products and services that will become the benchmark for utilities in future. Heeding these lessons will increase the likelihood of a smooth and successful implementation of an intelligent water network.

**Challenge**

When introducing considerable customer facing change, the water sector can benefit from understanding the areas of difference, and the areas of overlap with similar roll outs in the electricity sector, and use these insights to guide their planning and implementation.

How would you compare the service you receive from your water corporation to that of your electricity provider?



3. Complaints regarding water providers accounted for only 2.2% of all complaints to the Victorian Energy and Water Ombudsman in 2009 / 2010. See Energy and Water Ombudsman (Victoria), *Annual Report, 2010*.



# Insight 4

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Beware the green Pandora's Box.

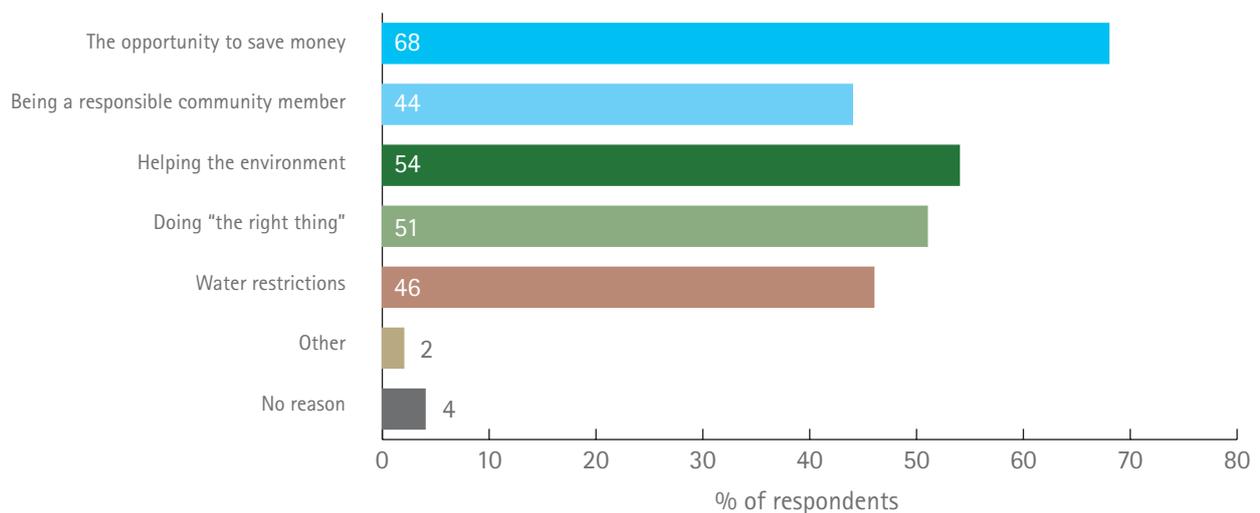
## Insight 4

**Water customers broadly expect their water corporation to act in an environmentally responsible manner. However, aligning new products and services specifically as 'green' needs to be executed with caution.**

A significant portion of customers feel that they save water for the environment. Water restrictions were viewed by some as an 'environmental good' even though this was not the intended message. Research indicates that customers are increasingly demonstrating scepticism about brands and products that portray themselves as 'green'<sup>4</sup>, demanding more evidence of action from these companies. In Australia particularly the proliferation of environmental messages and recent community scepticism around environmental public policy makes appealing to customers' environmental conscience a more risky proposition than it has been in the past. Once a water provider brands itself as 'green' it exposes itself to the prospect of not being green enough for conscientious customers and possibly too green for sceptical ones.

- 53% of survey respondents said they would save water to "assist the environment".
- Global trends reported in research papers demonstrate that consumers are becoming more sceptical towards claims of environmental responsibility.
- 83% of survey respondents said it was important or very important that their provider "cared about the environment".

**Which of the following would motivate you to save water?  
(pick as many as are applicable)**

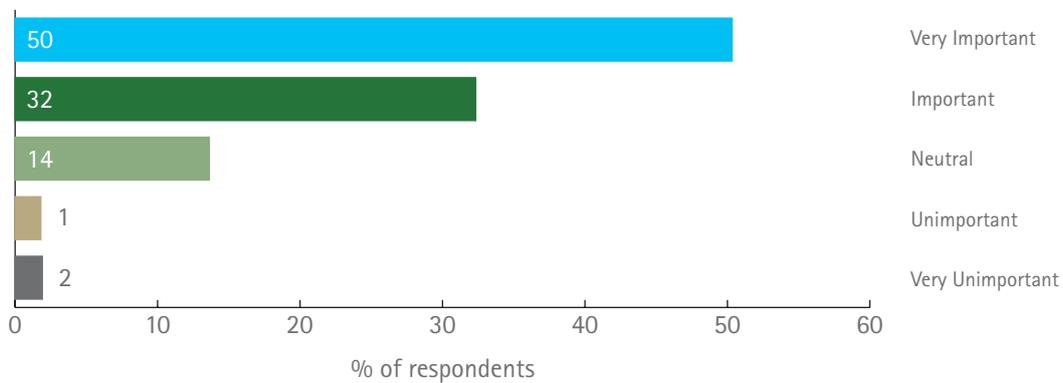


The environment is still a key motivator, but the terms 'green' and 'environmentally friendly' must be used judiciously, and must be supported with credible and impactful activity.

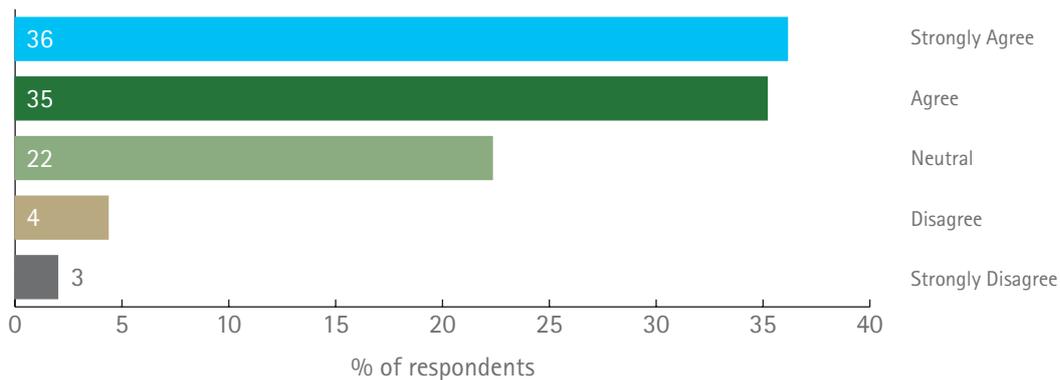
### Challenge

Water corporations must overcome the problems associated with constant changes in community attitudes toward 'green' messages, and control the ramifications of such a message once it is in the public domain.

How important is it that your water corporation cares for the natural environment?



To what extent do you agree with the following statement?  
I have a good understanding of the future impact on the environment if we do not conserve water





# Insight 5

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The comfortable status quo will not last  
– complacency is the largest threat.

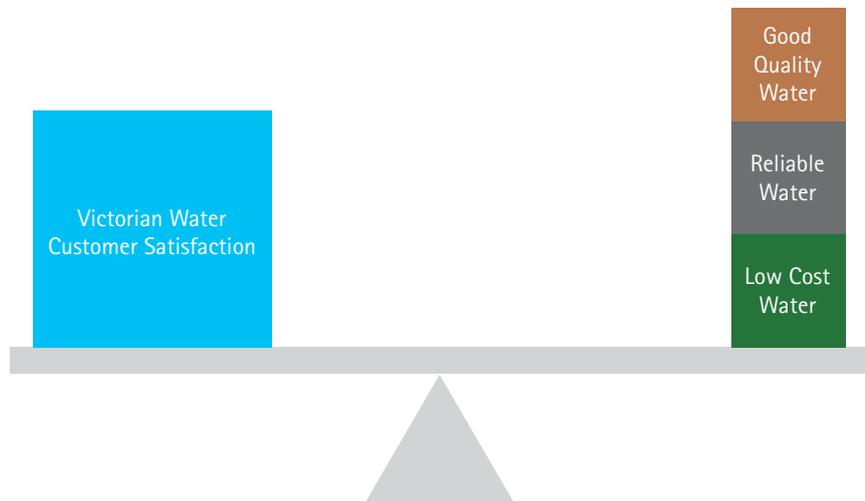
## Insight 5

A comfort level has been achieved through years of water corporations providing good water delivered consistently at low cost. These aspects of past performance may not be as easily attainable in future years for a number of structural and exogenous reasons.

Research has indicated that Victorian customers feel that they have been well served by their water corporations. There is significant goodwill shown by customers demonstrating patience and understanding in following water restrictions resulting from the drought. The status quo has been supported by unfailingly high standards of service delivery from providers around the state often under difficult conditions.

However this goodwill has been founded on three attributes that cannot be guaranteed into the future:

- **Quality of supply:** Use of diversified water sources is likely to impact on the taste perceptions of a variety of water customers in both metropolitan and regional settings. Customers may perceive this water to be of lower quality.
- **Low prices:** Water prices are to increase by up to 14.9 per cent annually from 2008 to 2013.
- **Consistent delivery:** Infrastructure upgrades may impact consistency of delivery and perceptions of quality. Whilst long-term, quality outcomes may improve, in the short term the customer perception that different equals worse must be overcome.



5. Although this increase will not be uniform across all water corporations, some prices will rise by considerably lower percentages. See: Essential Services Commission, *Overview of Final Decision on Water Prices 2008 – 2013*.

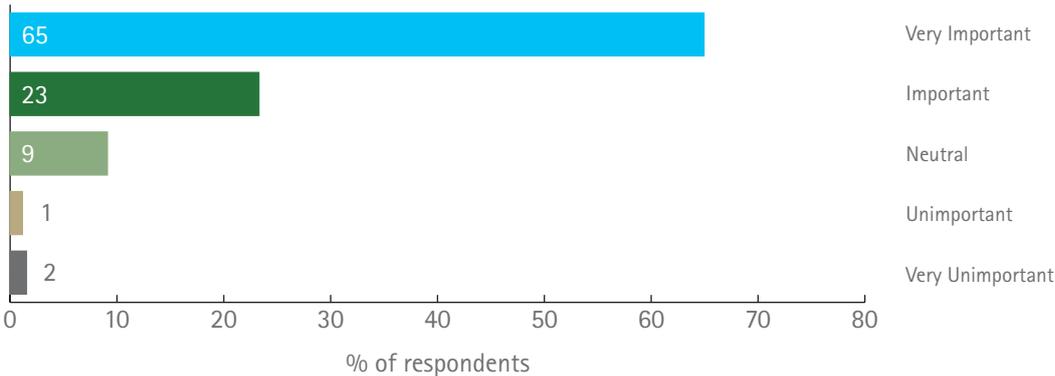
Any of these factors could cause dissatisfaction in the minds of customers and compromise the further introduction of new products and services.

Additionally there is the potential for external factors like another drought occurring, or even structural changes from the political process which could impact customers' perceptions of quality, supply and trust.

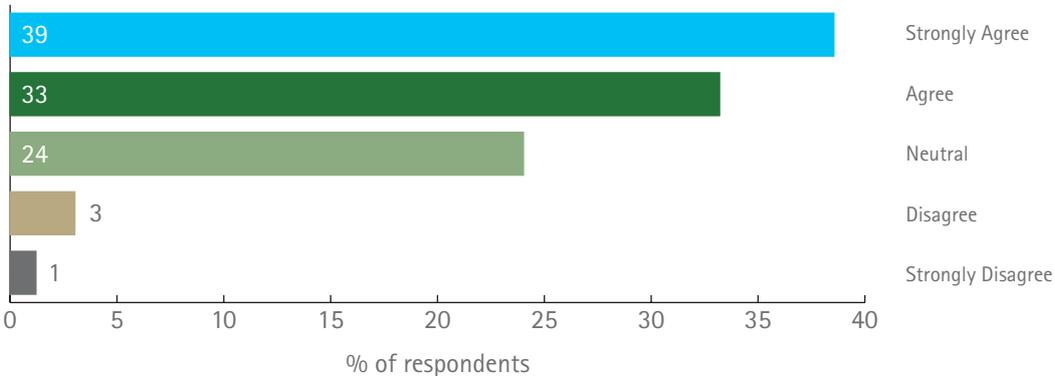
Proactive programs of engagement that reinforce the existing relationship, and provide a basis for enhanced trust between provider and customer in the future are essential.

**Challenge**  
 To face the likely future challenges, water corporations must take their relationship with the customer to a new level of engagement.

How important is it that your water corporation ensures all members of society have access to affordable water?



To what extent do you agree with the following statement?  
 I would like to see more effort from my water corporation to ensure the sustainability of the water supply





# Insight 6

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Tap water has no brand.  
Does it need one?

## Insight 6

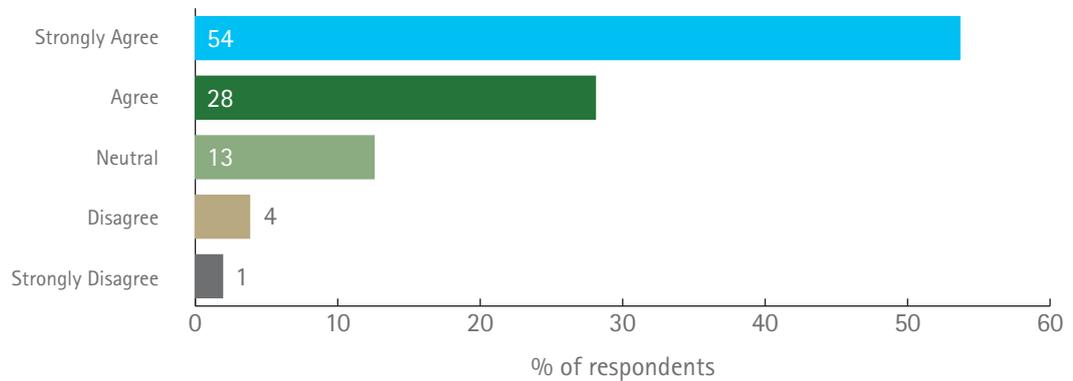
### Few unbranded goods command loyalty. Could branding tap water provide a means of engaging customers?

Water is an unbranded good. No water utility is differentiated in any meaningful sense from any other – partly because of market structure, but mostly because it has not been a priority. It is unusual for an unbranded good to command loyalty and there is generally limited scope for improving value to either water corporation or customer.

- Customers generally have little idea what their water corporation does; only 53% thought they were engaged in sewage removal while 8% thought they sold energy plans.
- The vast majority of customers surveyed were content with the attributes of their water supply such as taste, odour and clarity.
- 82% of customers surveyed said they had no contact with their water provider outside of paying their bill; it is clear that water is a low involvement product for most Victorians.

To what extent do you agree with the following statement?

I have no contact with my water provider beyond paying my bill

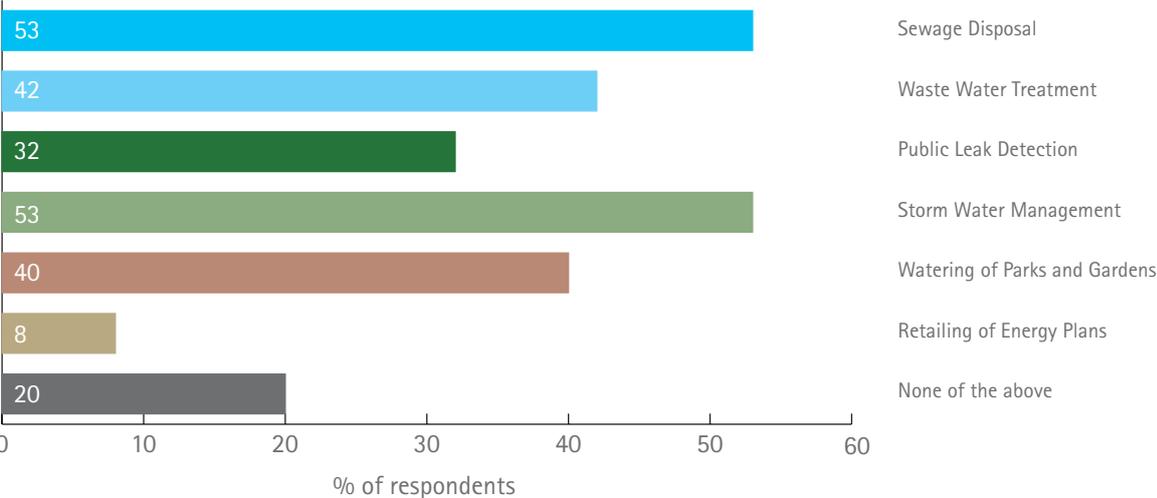


The challenge for Victorian water corporations is to deliver greater value to customers over time. Can an essentially undifferentiated product with no brand attributes, no brand equity, and only passive loyalty drive value creation?<sup>6</sup> The government of Venice, Italy has rebranded its domestic water supply with the name "Acqua Veritas," and provided branded carafes to city residents. In doing so it could be argued that they have put a name to what makes the product special, and provided a lever for enhanced engagement.

**Challenge**

Transitioning commodity water to a branded good could assist in water corporations moving from simply suppliers of services, to active partners in value creation. This would have the benefit of building customer trust and assist in the value-positioning of water to provide a platform for engaging customers that does not rely on drought or restrictions.

Which of the following services does your water corporation engage in?  
(select all that apply)



6. While it is understood that a trial of branding Melbourne Water took place in the 1990s, consumer expectations have changed to the extent that this strategy could now be revisited.



# Insight 7

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The future is happening –  
now is the time to partner for change.

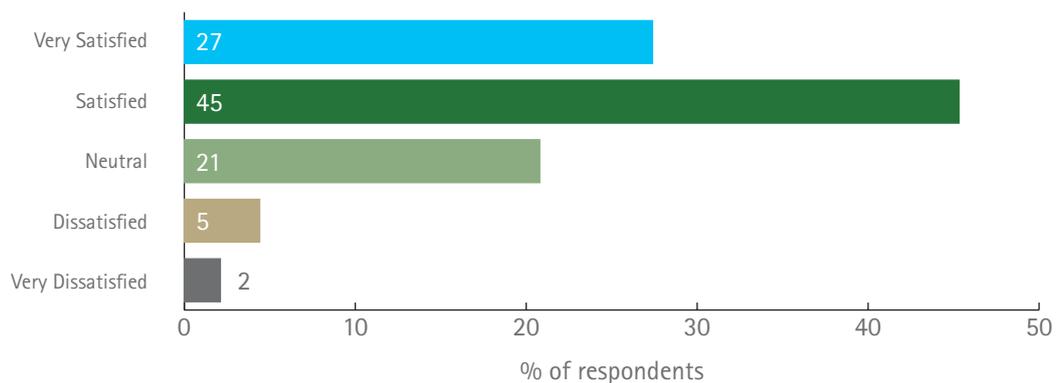
## Insight 7

Customers are becoming increasingly sophisticated and demanding. Water is arguably just another home service (although an essential one). As other home services offer customers more choice and control water may be at risk of being unfavourably compared. Water corporations can more easily keep abreast of these changes by working collaboratively and with specialised long-term partners.

Consumer markets are becoming increasingly dynamic and the expectations that customers have about the personalisation of products and services offered to them is also growing. In the utilities sector, privatised energy retailers are actively redefining the customer experience and dictating the future concept of what a utility does, and how it should behave. Water corporations, while having concentrated on basics to good effect, do not appear to have kept pace, and there is a risk that the market could move away from them.

- Despite thinking favourably of their water corporation generally, customers did not rank the service they received as notably better than that received from other service providers (including banks, phone companies and public transport).
- There is a movement towards diversified products and individual capabilities in other water markets<sup>7</sup>.
- 71% of customers said it was important or very important that their water corporation communicated in a way that was personalised and meaningful to them.
- A clear global customer demand for more personalised service is evident across utilities<sup>8</sup>.

How satisfied are you with your water corporation's service?



7. Andrew Jeffers, *Intelligent Water Networks*, 2011.

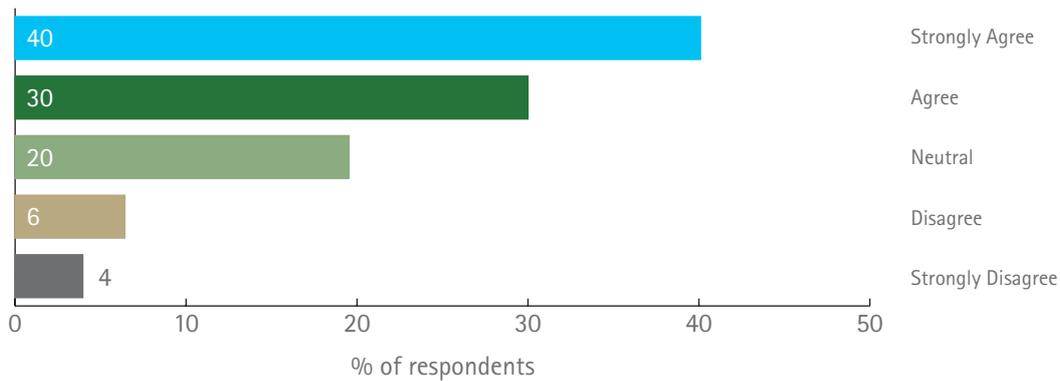
8. Accenture, *The New Energy Consumer - Strategic Perspectives on the Evolving Marketplace*, 2011.

Remaining static in an evolving competitive environment may lead to undesirable outcomes for both the water corporation and the customer. Water corporations can benefit from extending their presence in consumer markets through the development of competencies that may not already be present. Partnering with specialist service providers will enable water corporations to build credibility in areas such as customer relationship management, technology and complementary products and services, as well as keeping pace with customer expectations.

**Challenge**

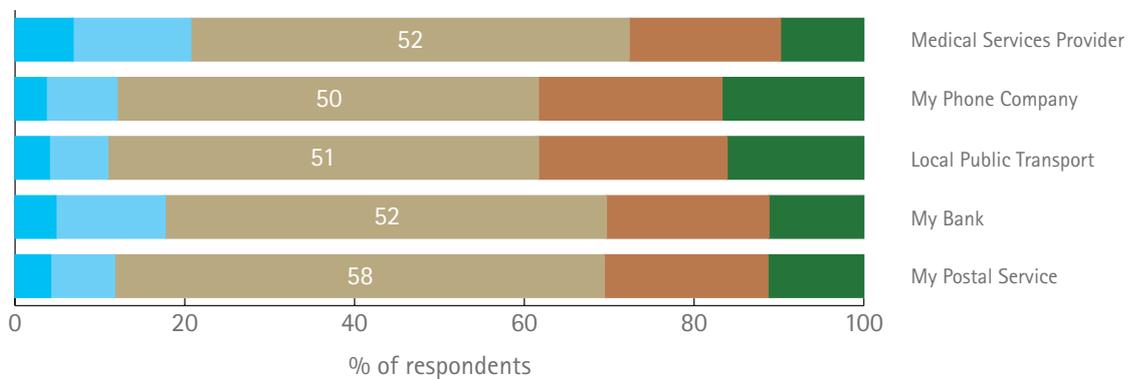
To meet the challenges of new consumer trends and changing expectations water corporations should work together and partner with specialist external organisations to gain the skills and experiences needed to capitalise on the opportunities afforded by an IWN

To what extent do you agree with the following statement?  
I am concerned that we may experience water shortages in the future



How would you rate your water corporation's service against that provided by these other organisations?

(1 = Other provider's service is better, 5 = Water corporation's service is better)



# Key findings

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The following key findings flow from the quantitative survey undertaken in August 2011.

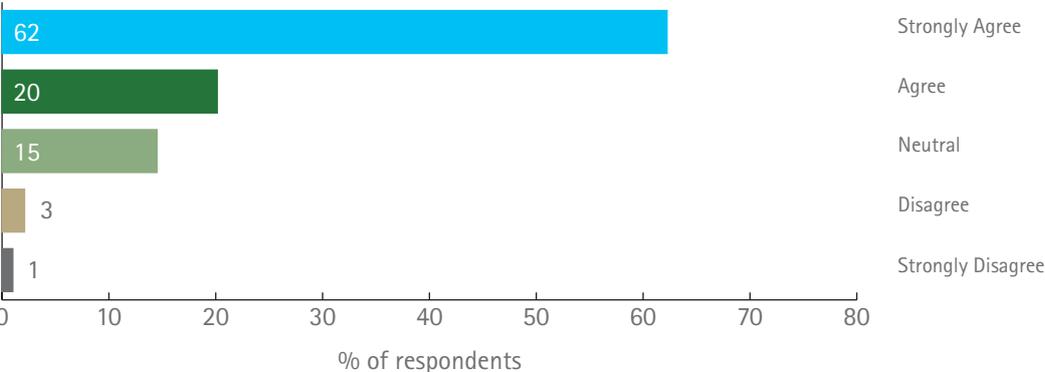
An earlier stage of research was undertaken which included a global literature review, Focus Groups held throughout the state, and a series of stakeholder interviews. From this body of knowledge was derived a set of hypotheses that articulated a general view of the water industry, and Victorian water customers' needs and values. These hypotheses were then comprehensively tested by a demographically representative online survey completed by over 1,000 respondents.

A selection of key findings, along with supporting data follows:

# Water is the most essential of the essential services

Water and energy are both essential services, but the depth of involvement customers feel in relation to water goes well beyond that of energy. Water is tangible and it is viewed as more essential for life. Water even evoked religious connotations in some customers. Customers view water as a community resource, not an individual resource. Affordable water for all seems to be basic tenet of a civilised community and its provision must be safeguarded at all times.

To what extent do you agree with the following statement?  
Water is the most basic of essentials and should be offered at a low cost.

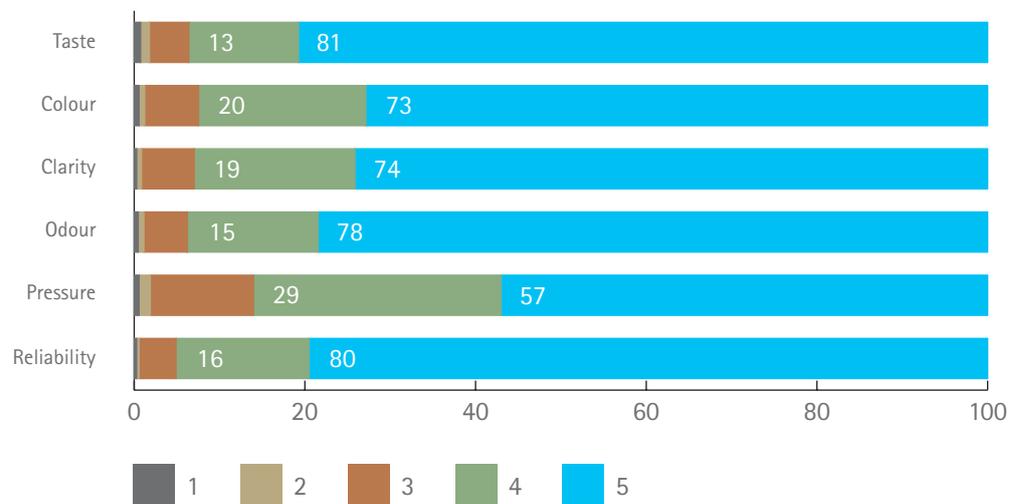


**Implication**  
For many customers, most consumption of water is not discretionary and availability of a clean, reliable and affordable water supply is considered essential. New products and services should be designed to ensure that the essential features of water are not compromised.

## The needs of water customers rest on three pillars: Safety, Reliability and Affordability.

The current needs of water customers in Victoria are not complex and centre predominantly on a safe, reliable and affordable product. In all three of these aspects Victorian water corporations are currently doing well, contributing to a positive, but finely balanced customer relationship.

How important are the following attributes of household water?  
(1 = Very Unimportant, 5 = Very Important)



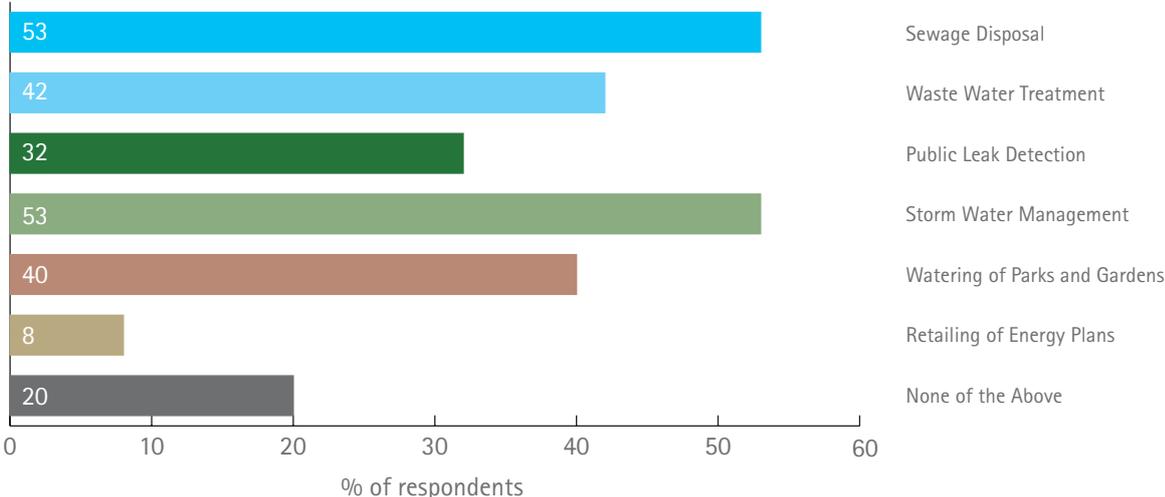
### Implication

It is unlikely to be possible to improve the reliability and safety of Victorian water in the eyes of the majority of customers. With the expectation being that water prices will rise in the short-term, water corporations must be proactive to ensure water remains 'affordable' or put their good relationship with customers at risk.

# Customers do not understand the full range of services that water corporations provide, but still view them favourably.

The relationship between customers and water corporations has mostly been managed reactively, with corporations responding to current circumstances and customer requests rather than pursuing strategic outcomes. While outreach by water corporations has clearly been attempted it is equally apparent that customers across all segments are unable to nominate the value created in this manner, or understand the depth of involvement most water corporations have in the lives of their customers.

Which of the following services does your water corporation engage in?  
(select all that apply)



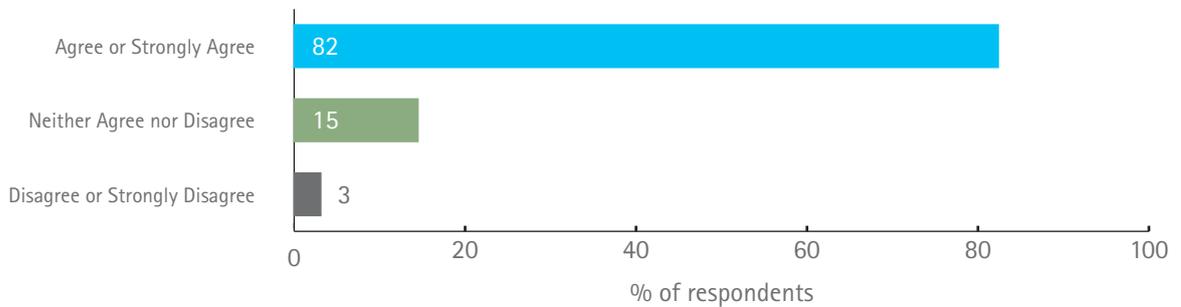
### Implication

Victorian water corporations have a great story to tell. Through credibly sharing that story, water corporations could further enhance and develop the trust relationship with their customers through strategic messaging and customer interactions.

## Victorians believe affordable water should be for everyone.

There is a strongly held community expectation that affordable water will be continuously available to all. This must not just be honoured, it must be seen to be honoured. If the value of a product or service to the most vulnerable members of society is not made clear by their water corporations, there is no shortage of advocacy groups willing to step in and own the social equity agenda, and their messages may not be so sympathetic to the water corporation's goals. There is a need to proactively engage and partner with the community to maximise benefits for all.

To what extent do you agree with the following statement?  
Water is the most basic of essentials and should be offered at a low cost.



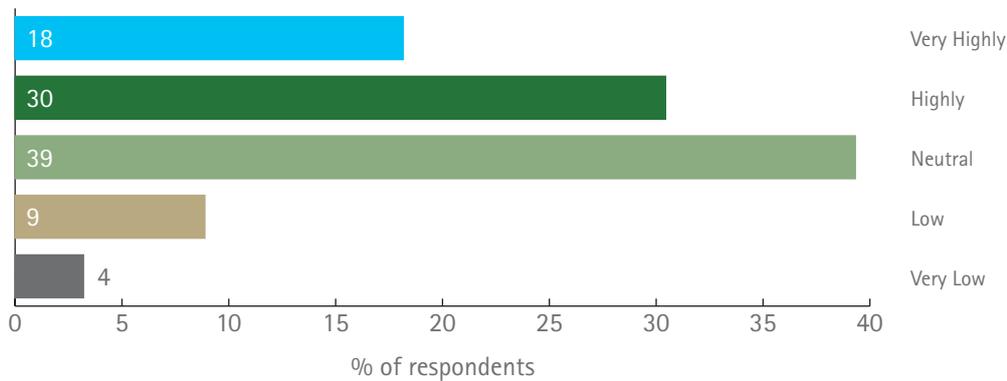
### Implication

Introduction of any innovation within the water industry must not further disadvantage vulnerable and 'at risk' consumers. The water corporation must explain out how each initiative will help vulnerable groups and sell this message to advocacy groups. This concern for social equity needs to be a baseline consideration for every new product or initiative – not an add-on or product variant.

## Victorians have noticed that lately there has been a communications vacuum.

Victorian water users have come to rely on guidance provided by their water corporation. Lately, customers haven't heard from their water corporation, but have an expectation as circumstances change over time their water corporation will continue to provide information about matters related to water consumption.

How do you rate your water corporation's performance in providing education to the community about water management?



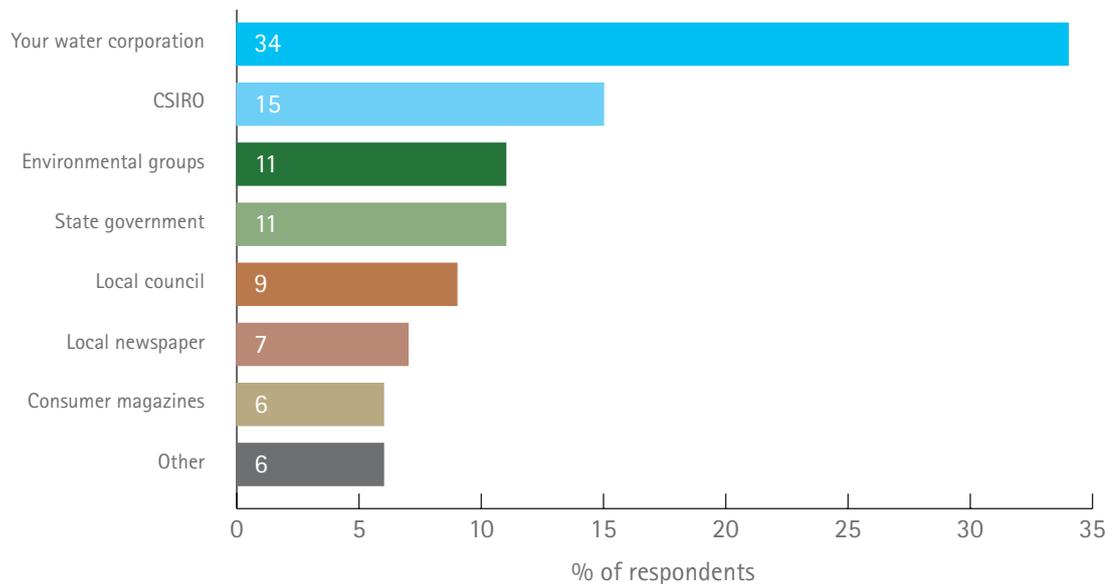
### Implication

The goodwill that has been created over recent years could be at risk. The 'platform' from which water corporations communicate needs to be readdressed and reinvigorated, and the communication should resume.

## Water corporations are currently trusted sources of information but this trust should not be taken for granted.

There is currently a good relationship between the customer and their water corporation. Water corporations are seen as community minded, reliable and truthful. This is a prime mechanism by which the water corporations can influence their customer base without using price signals. The majority of survey respondents want to be recognised for their water saving efforts, which suggests that the relationship between customers and their water corporation is meaningful.

### Who would you most trust for information relating to water and water services?



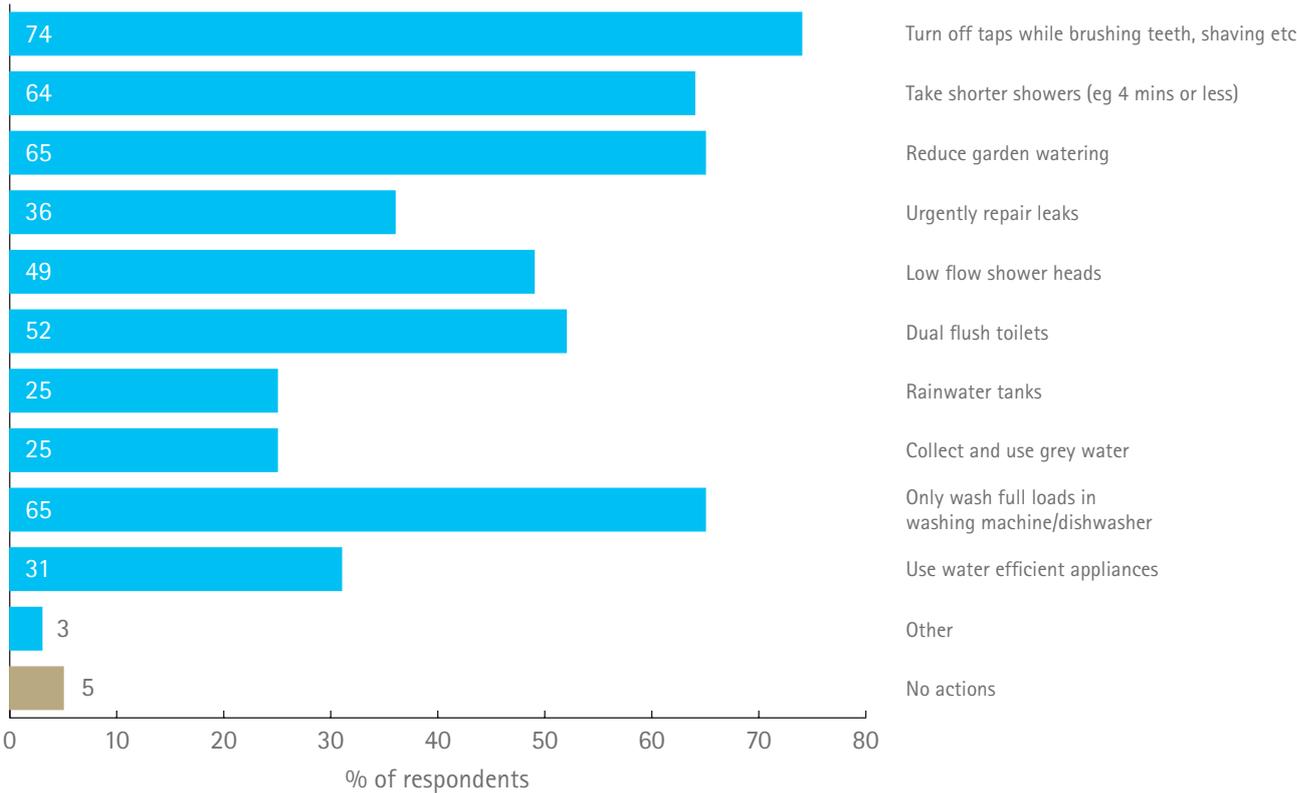
#### Implication

The basis of the trusting relationship between water corporations and customers is currently sound; as a result, when they appeal to customers to change behaviours, customers listen. However, if the trust in this relationship was to break down water corporations would be left with few options, other than price movements, to impact customer usage behaviours.

# Customers want to keep saving water.

Despite the Victorian drought ending, customers' propensity to save water has not declined.

What actions have you taken over the past 12 months to reduce your water usage?

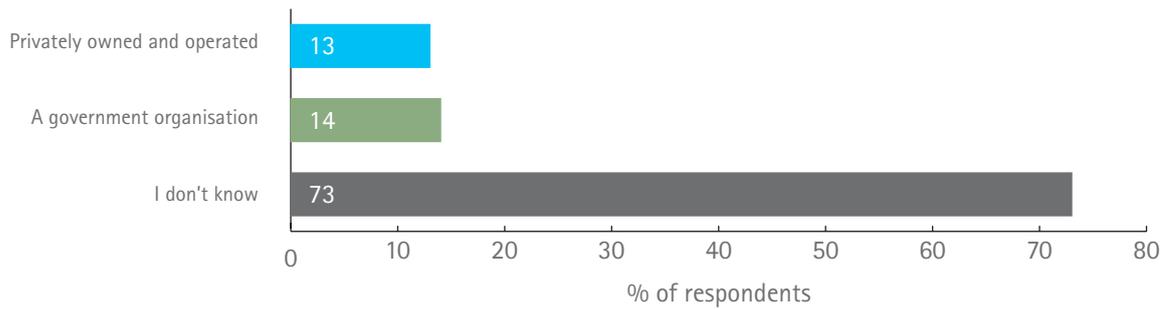


**Implication**  
 There is an opportunity to take advantage of customer momentum in water saving behaviour and attitudes toward water conservation. The challenge is to provide the customer with a reason to continue current behaviours for the strategic purposes of the water corporation.

## The Victorian water market structure is not understood by customers.

Customers don't know that their water corporation is government owned (only 14% of customers surveyed accurately identified ownership). This is important as it has been shown that government oversight increases customer trust in the utilities sector.

### Is your water corporation...



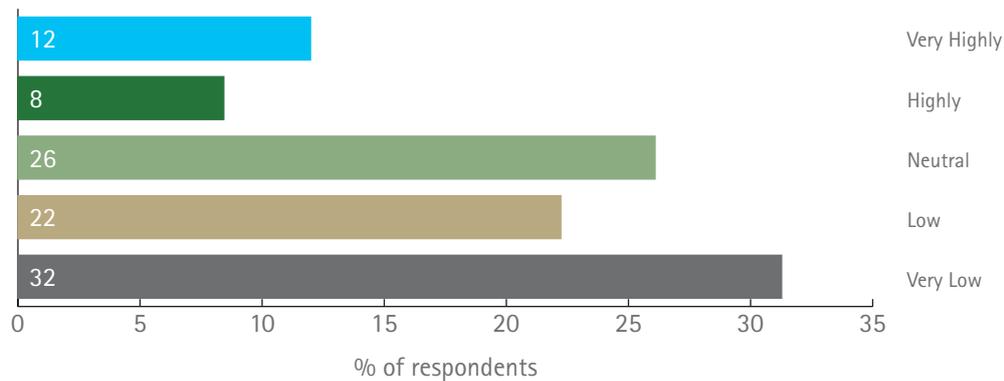
#### Implication

It may be advantageous to explain to customers that water corporations are government owned to enhance the level of trust in order to smooth the introduction of new products and services.

## As cost of supply increases, the relationship between customers and water corporations may become more tense.

Our research has shown that customers have been unhappy when they work hard at reducing their water consumption, only to incur higher water bills. This occurs due to increasing water prices raising service and delivery costs, which make up the majority of the average Victorian water bill and are beyond the control of the customer. If water corporations do not introduce additional value streams as prices rise, they risk becoming an industry defined by increasing costs, rather than trust and reliability.

How do you rate your water corporation's performance in reducing cost?



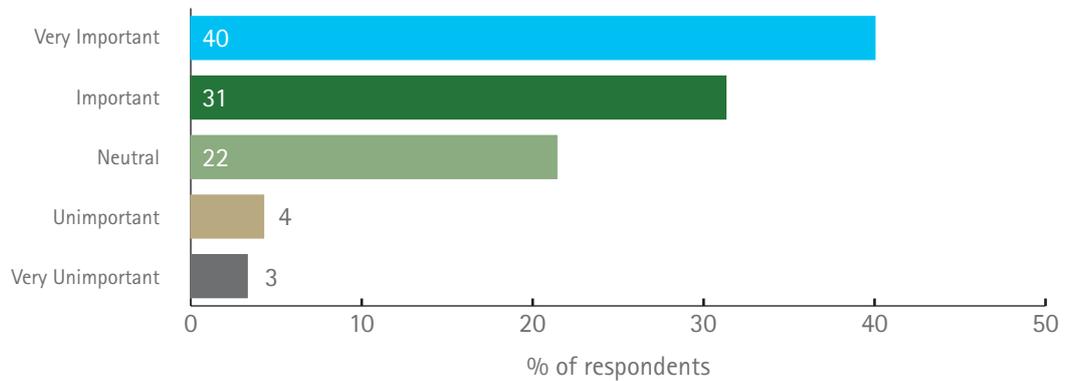
### Implication

Price increases should be communicated in a way that creates an understanding of the reason they are rising and generates goodwill and positive comment.

## Product personalisation is now common, without it water corporations risk lagging behind when compared to other service providers.

Customers are increasingly expecting that the services they receive will be personalised to their needs. This is a trend in many other industries. The slow but safe image that water corporations have amongst customers may shield them from needing to address this trend early on, but increasingly, products that are not personalised will seem outdated and lacking value, particularly if prices rise.

How important is it that your water corporation communicates with you in a way that is personalised and meaningful to you?



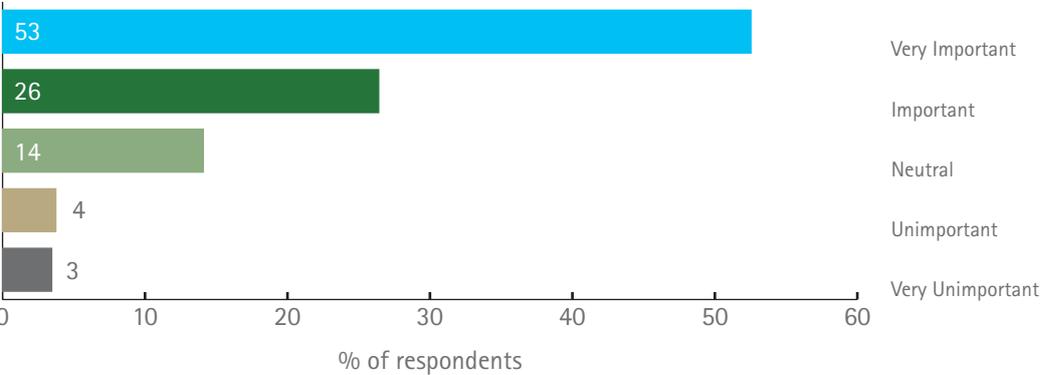
### Implication

To keep pace with current practice in other service industries, water corporations must make efforts to provide personalised and more dynamic product and service offerings.

# Customers want to do, and be recognised for doing "the right thing".

In the current environment, striving to reduce water use is a community norm, albeit one that does not necessarily result in monetary savings for the individual customer. Conversely, customers are willing to invest their own money into buying water tanks so that their water use does not adversely affect the community supply. In this context, many customers would keenly welcome any form of recognition they might receive for 'doing the right thing' by using water sparingly.

How important is it that your water corporation recognise or reward your water saving efforts?



**Implication**  
A scheme to recognise achievement in water management would be a key value-add for Victorian water customers and one that would likely boost the uptake of products and services that promote reductions in water usage or other forms of water management.

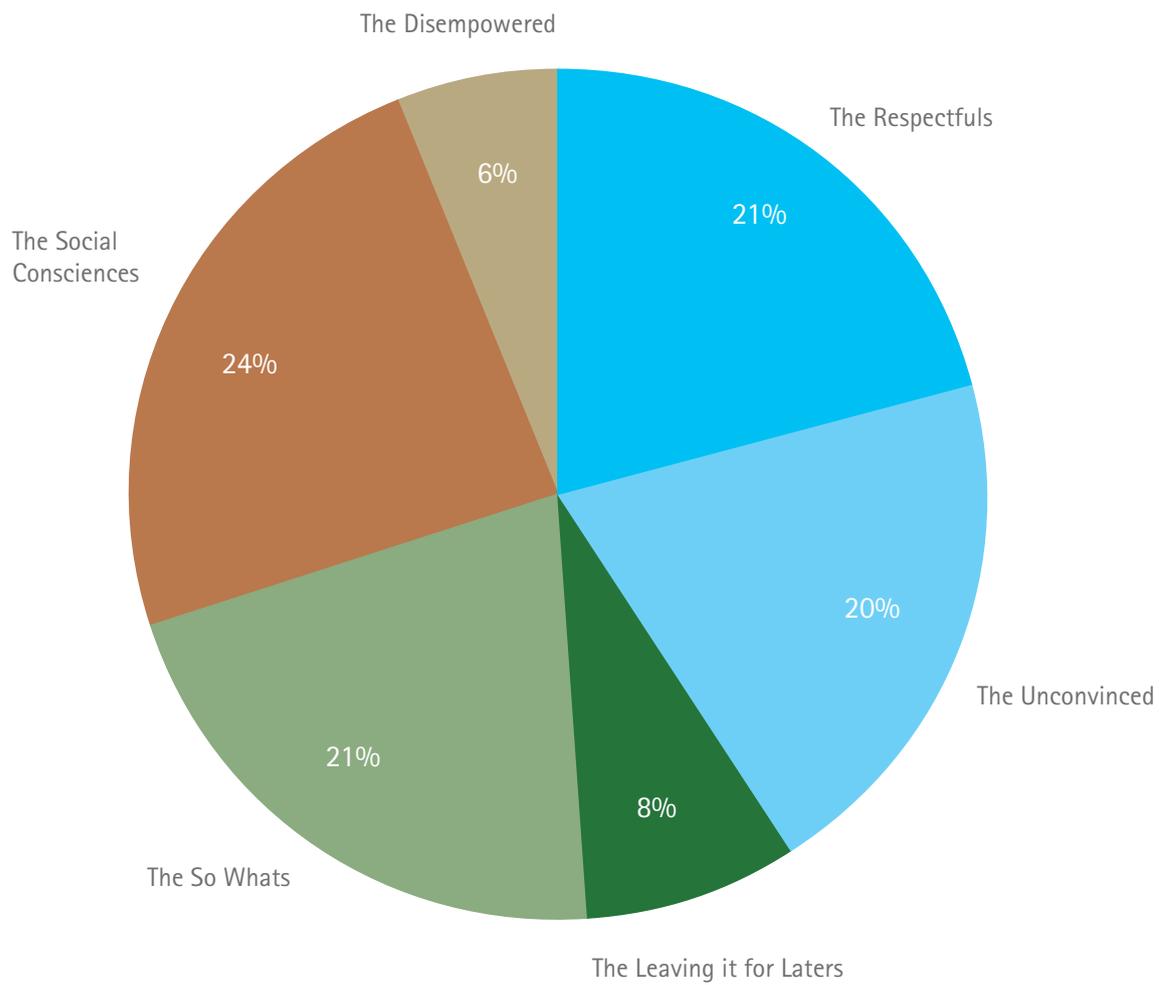
# Customer Segmentation

To generate deeper insights into customer's behaviours and attitudes towards water the research identified a balanced distribution of six core customer segments each with distinct characteristics.

Customers were segmented following statistical analysis based on the full spectrum of responses they gave to the quantitative survey. The ANOVA (Analysis of Variants) technique was used to determine patterns amongst the responses. This form of segmentation helps predict the value levers which each segment will be most responsive to, and define a high level picture of products and services they may be likely to adopt.

The six segments identified are listed below, with their key characteristics and individual value propositions on the following pages.

## Water Customer Segments





### The Respectfuls

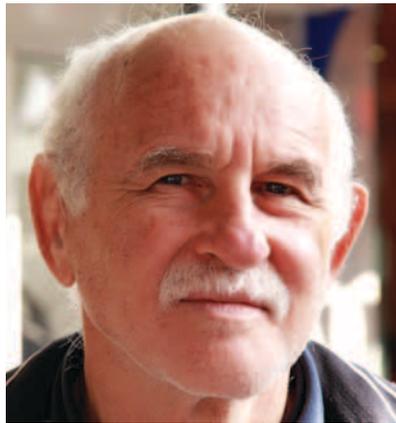
*"...need direction on how to manage their water use in the future."*

*"...value being, and being seen to be, good community members."*

This segment is careful about their water usage. They value it as a resource and take steps in their everyday lives to preserve it including installing rainwater tanks and using grey water on their gardens. **The Respectfuls** have built up these behaviours over a long period of time and are proud of their responsible attitudes. While they feel that conserving water is 'doing the right thing' they would also value greater recognition of their efforts. **The Respectfuls** are not sure why water restrictions have been relaxed. This segment is the most interested in receiving more information that will assist them in their water saving efforts or provide them with comparisons against other households.

#### Demographics:

Higher than average proportions of older people and retirees, slightly skewed toward women with higher than average numbers of home owners.



### The Unconvinced

*"...need their water corporation to do a better job of providing quality water at low cost."*

*"...value the fundamentals, good quality water provided to their house."*

This segment is sceptical about water saving and the activities of water corporations generally. They value cost reductions rather than additional services or initiatives. Largely home owners and bill payers, **The Unconvinced** are the most sensitive to water charges and are attuned to any rise in prices. **The Unconvinced** are the segment most consistently critical of their water corporation, from the quality of the product they provide to the information they circulate. 28% of this segment indicated they had had financial difficulties paying a water bill in the last 12 months (survey average = 17%).

#### Demographics:

Very high numbers of home owners with an over-representation of males. The most likely segment to live outside of the metropolitan Melbourne area.



### The So Whats

*"...need to be informed about water in a way that captures their attention."*

*"...value their time; they don't care a lot about water, this segment is hard to reach."*

This segment is the least likely to want to save water for the good of the community and second least likely to think that saving water is 'doing the right thing'. **The So Whats** have lower than average uptake rates across almost all water efficient products and techniques and feel that adopting these behaviours is either too costly or too time consuming. Only 61% of this segment believed they knew the name of their water corporation, significantly lower than the survey average of 74%. Also fewer than average correctly identified the services their water corporation provided.

#### Demographics:

Skewed significantly toward males and tending to be younger than average with over 50% in their 20's or 30's (survey average = 40%). Higher than average levels of tertiary education but low levels of home ownership.



### The Leaving it for Laters

*"...need to understand how their water use impacts the long-term issues they care about."*

*"...value water sustainability, but water is not their priority right now."*

Similar to the 'So Whats', this segment is ambivalent about water services and is not well informed about the services their water corporation provides. However, members of the **Leaving it for Laters** are 9% more likely than average to say that they would save water to assist the environment. The **Leaving it for Laters** consistently demonstrate a strong concern for the environment and social equity. Higher than average numbers think it is important to manage water use and this segment was the most likely to agree with the statement that 'Water is the most basic of essentials and should be offered at a low cost'. Additionally this segment was the least likely to feel they had "done all they could do in order to save water".

#### Demographics:

Skewed toward females and predominantly younger, with 18-24 year olds specifically over-represented. Many more than average are at university currently with a disproportionately high number renting.



### The Social Consciences

*"...need to know that the water they use is as sustainably and ethically sourced as possible."*

*"...value the environment and community; they care about the long-term."*

The **Social Consciences** consider managing their water use to be almost a moral obligation. 54% of this segment would think more highly of a neighbour who was involved in a water management scheme (survey average = 43%). The **Social Consciences** are the only segment in which the desire to assist the environment was selected by more respondents as a reason to save water than the desire to save money. Reliability is the most important of water attributes to this segment and water corporations are generally given good scores for the provision of quality water. This segment is the least likely to feel they can use as much water as they want, but the most likely to want bills based on usage and not fixed charges.

#### Demographics:

Skewed toward older age groups with many in the middle aged bracket. Slightly higher than average incomes and high levels of home ownership. Numbers are skewed toward women.



### The Disempowered

*"...need to concentrate on just getting by, water is not a priority concern."*

*"...value being thought of; often they feel ignored."*

The smallest of the six segments The **Disempowered** are highly disengaged from water activities. This segment was the least likely to know who their water provider was and the least likely to know whether it was a government or private enterprise. They are the least satisfied overall with their water corporation, but they are happy with the product itself. They are not highly motivated to save water for the environment or for the community, and also showed the lowest interest in saving water to save money. The **Disempowered** segment could be a particularly difficult segment to communicate with given their level of disengagement.

#### Demographics:

Skewed significantly toward females and toward metropolitan Melbourne residents. The **Disempowered** is the lowest income segment of all with 14% having nil income (survey average = 1%)<sup>9</sup>. The most likely segment to be renting.

9. It is assumed that due to very low income levels, The **Disempowered** segment will contain a disproportionately high number of customers in financial hardship. However, 66% of this segment answered the question "Have you experienced financial difficulties in paying a water bill in the last 12 months?" with "I don't know" (survey average = 8%).

# Lessons from the electricity industry

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## **Similarities, Differences and Learnings.**

A key area of interest for this research project was to contrast and compare the energy industry in Victoria to determine what, if any, lessons can be learnt. It is widely understood by many stakeholders that the energy industry has been the subject of much criticism especially in relation to the Advanced Metering Infrastructure (AMI) project which includes the mandatory rollout of smart meters to every household in Victoria.

In many ways Intelligent Water Networks are similar in concept and customer value proposition to Smart Energy Grids. Both aim to enhance the value of the provision of an essential service, both are facing challenges from rising prices and a history of low customer engagement. Also it is the same household that is supplied with energy and water so the same consumer being educated and impacted by the introduction of smarter technologies in essential services. This means that there is much for the water industry to learn from those organisations that have already started to implement some of the capabilities of intelligent networks in the energy industry.

**The research has highlighted that in many ways, customers' relationship with their water corporation differs from their relationship with their energy utility, this is primarily due to:**

- The tangible nature of the product itself – people can touch and feel water
- The structure of the market – water corporations are government owned and regulated
- The impact of the drought – customers have been left with a heightened sense of responsibility around their personal usage

**Interestingly customers display similar attitudes and behaviours toward both energy and water in regards to their:**

- Understanding of the benefits of technology for water and energy supply and usage
- Price sensitivity and
- Concerns about technology's ability to interfere with their own control

**However water customers display more positive attitudes than energy customers in the following attributes:**

- More engaged and aware of their own usage
- More consistent in their actions and understanding
- More trusting of their water corporation's actions and motivations

Given the similarities between energy and water customers several lessons from the experience of Victorian energy sector can be applied to the water industry. Perhaps the most important similarity between the two is the similar low levels of customer understanding of how both industries are structured and what technology can do to enable and improve the services.

For the energy smart meter program a lack of investment in customer engagement has led to significant opposition amongst some customer advocacy groups. These groups were simultaneously unsympathetic toward the need to replace ageing infrastructure and acutely concerned about customers' rising utility bills. As a result, customers found themselves paying an increased service charge to cover the rollout of smart energy meters, without understanding any of the potential benefits these meters would give them. This was considered a significant issue for those customers considered 'at risk' or on low incomes.

Additionally there has been an unfortunate coincidence of rising electricity usage prices just as the meter infrastructure is being updated and deployed. This has confused some consumers and enraged others - especially those who thought that smart meters were supposed to bring overall cost reductions and empower households with greater control over their usage and costs.

Misinformation presented in the media has also further confused consumers and done little to dissociate the two unrelated issues. Complaints as a result have risen dramatically.

However there are also some inherent advantages which the water industry can leverage. Amongst these is a greater level of trust placed in the water corporations by the customers and a more aggregated market structure which may lend itself to greater co-operation between water corporations. The trust afforded to water providers also results in them receiving less complaints than their energy counterparts, with only 2.2% of complaints made to the Energy and Water Ombudsman of Victoria (EWOV) in 2009 /2010 relating to water while the remaining 97.8% related to energy. There are several key implications for Victorian water corporations in heeding the lessons learned through the experience of the energy smart meter rollout. If deploying an IWN the Victorian water industry must:

1. Educate, engage and motivate customers and prompt them to achieve sustained behaviour change required by the new initiative.
2. Engage customer advocacy groups to build grass roots support from Day 1 and throughout any extended program.
3. Proactively develop and publicise 'hardship' programs to ensure the most vulnerable members of society do not have to pay more to retain access to an essential service.
4. Identify and head off any misinformation that circulates in the public sphere. Brief the media with fact based information and provide an open Q&A forum.
5. Address potential regulatory constraints to reflect changed conditions.
6. Define robust and common standards to facilitate full scale deployment (specifically with immature technology).
7. Manage the inevitable constraints on capital over time when the business case relies upon strict cost control and tough to realise benefits.
8. Focus on re-skilling and replacing the workforce where necessary and meeting the increased demands on subject matter advisers.
9. Manage upgrades of ageing infrastructure whilst supplying water which the customer continues to view as safe and reliable (in most cases this means maintain the status quo).

Many of these lessons may be easier to apply to water customers than they were for energy customers due to the considerable trust which exists between the water corporations and customers. But water corporations in Victoria cannot assume the trust they engender and the nature of their product makes them immune to those problems being encountered by the Victorian energy industry.

# Future Directions

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It is critical that the Victorian water industry gains the benefit of the lessons from other industries that have implemented similar operational change and smart technologies - especially the other essential service, energy. Once a strategic direction has been settled upon, understanding and integrating the experience from pilot programs and trials undertaken around the world will provide a short-cut to more effectively managing whichever implementation process is chosen for Victoria.

It is similarly important that both the supply side of any new initiative as well as the more obvious customer facing technologies are considered in the context of customer needs and values. The benefits that customers will receive from supply (i.e. network leak detection) and customer facing technologies should be factored into value propositions, as ultimately it is the customers who will need to be convinced of their value.

The water industry should consider the benefits delivered to individual customer segments and importantly avoid a one-size-fits-all approach. In addition, unmet customer needs should be a core input into choosing, developing and implementing an intelligent water network.

### [About Accenture](#)

Accenture is a global management consulting, technology services and outsourcing company, with more than 223,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. Its home page is [www.accenture.com](http://www.accenture.com).

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