Integrated thinking in action
A spotlight on Yorkshire Water

Case study
Integrated thinking is engrained in the discipline of making a deliberate and coordinated effort to connect the organization’s strategy, governance, performance and prospects. It is the active consideration by an organization of the relationships between its various operating and functional units and stores of value – which the Value Reporting Foundation refers to as ‘capitals’ in the International <IR> Framework – that the organization uses or effects to create value over the short, medium and long term.

It is used by businesses to improve decision-making, accountability and communication. It is therefore essential to the development of strategy and provides a valuable connection to the board.

The project aims to assess how integrated thinking is embedded within organizations through a series of interviews to understand:

- What led the organization to embed integrated thinking
- How they used integrated thinking to shape their strategy
- How integrated thinking has helped them deploy their strategy
- What the benefits have been.
Overview
30-second snapshot into integrated thinking at Yorkshire Water

Yorkshire Water delivers water, sewerage and environmental services to over five million people and 130,000 businesses. Yorkshire Water provides some of life’s most essential services to the people and businesses of Yorkshire, playing a key role in the region’s health, well-being and prosperity. The organization does this by supplying water and wastewater services and protecting essential infrastructure and the natural environment. Yorkshire Water supports the Sustainable Development Goals that the global community has formally adopted to define and drive towards sustainable development.

Yorkshire Water’s integrated thinking journey started around ten years ago. Senior management, the Board and the organizational culture have all provided strong support for this journey. Integrated thinking has enabled Yorkshire Water to expand its understanding of risk and value to drive more informed and sustainability-focused decision-making. Integrated thinking has also helped increase investor engagement on environmental, social and governance (ESG) issues and garner support from more ESG-focused investors. Embedding a multi-capital approach has helped to improve business resilience and create long-term value for the Yorkshire region’s environment, economy and society.

“We are passionate about delivering great value, both in the quality of our services and through the choices we make to maximize our wider social impact.”

Our Contribution to Yorkshire report / February 2021

Integrated thinking in action A spotlight on Yorkshire Water
Deep dive into integrated thinking at Yorkshire Water

10 minute read

This case study summarizes the journey of integrated thinking at Yorkshire Water and was developed through the conversations that Phillip Blaen, Sustainability Manager, Yorkshire Water and Lucille Hutty, Economic Modeller, Business Risk and Investment Team, Yorkshire Water had with Professor Cristiano Busco, LUISS and Roehampton University, and Dr. Irma Malafronte, Roehampton University in March 2021.
Integrated thinking in action  
A spotlight on Yorkshire Water

Yorkshire Water is a large organization employing around 3,900 people. They act as an anchor institution with an important presence in the Yorkshire region and, through their business activities, have a large impact on the region’s environment, communities and economy.

For Yorkshire Water, the integrated thinking journey represents an opportunity to respond to the needs of both customers and regulators. For example, Ofwat, the economic regulator for the water industry, is placing greater emphasis on wider issues beyond customer bills, including delivery of environmental and social (i.e. public) value.

Also, investors are becoming more and more focused on ESG factors, sustainability and long-term resilience. As such, it is increasingly important to demonstrate to investors the positive impact that their investment in Yorkshire Water generates. Integrated thinking allows Yorkshire Water to do this.

Deep dive
What led Yorkshire Water to embed integrated thinking?

We are an anchor institution with a significant presence within Yorkshire. We employ around 3,900 people, our capital is invested within the region, and we know we make a difference through the work that we do. We have a responsibility to our customers and to the region, and we want to be able to show and demonstrate the positive impacts that we’re having.”

Phillip Blaen / Sustainability Manager, Yorkshire Water
"Our debt investors are focused on ESG factors, sustainability and resilience. We have so far raised £1.2bn in sustainability debt from our ground-breaking sustainable finance framework at Yorkshire Water, and being able to demonstrate to investors that their investments are generating a positive impact is essential to us."

Chris Johns / Chief Financial Officer, Yorkshire Water
How did Yorkshire Water approach integrated thinking?

Yorkshire Water’s integrated thinking journey started around ten years ago, when they were involved in piloting some early ecosystem services assessments.

In 2014-2015, Yorkshire Water conducted a Total Impact and Value Assessment (TIVA) with the aim of gaining a holistic view of their positive and negative impacts. The TIVA uses a mix of accounting, economic and sustainability techniques to quantify Yorkshire Water’s impact across the six capitals: financial, manufactured, natural, human, intellectual and social. The output of the TIVA has helped the company take a multi-capital approach, known as the six capitals model in the International <IR> Framework, and embed that approach within their decision-making tools.

Recently, Yorkshire Water also set up a Social Value Committee that aims to enable the Board to focus on social purpose and public accountability and to consider social, natural and intellectual capitals.
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Yorkshire Water’s purpose states that “We’re proud to play water’s role in making Yorkshire a great place to be — now and always”. What this means to the organization is that today, every day and forever it’s their job to make sure that everyone in Yorkshire has the water they need for their busy lives. And, when they’ve used it, it’s Yorkshire Water’s job to take it away and return it safely back to Yorkshire’s environment.

Central to their long-term strategy is the recognition that their long-term business success is tied to the well-being of the customers they serve and the health of the environment in which they operate. To help Yorkshire Water make sure that their decision making directly accounts for these matters, they are using an integrated six capitals approach to help them recognize, protect and grow value in its broadest sense.

The six capitals approach provides a framework to measure how they deliver public value. The approach not only allows them to understand the positive and negative impacts of their activities but also enables Yorkshire Water to articulate these impacts to their stakeholders and understand trends over time.

Phillip Blaen / Sustainability Manager, Yorkshire Water

How has integrated thinking helped Yorkshire Water articulate its strategy?

“In terms of strategy, we’re working to become a more purpose-led organization, and that means thinking about what delivers the best long-term value for our customers and wider society rather than just focusing on cost efficiencies.”
4. About Yorkshire Water

We provide some of life’s most essential services to the people and businesses of Yorkshire, playing a key role in the region’s health, wellbeing and prosperity. We do this by supplying water and wastewater services, and being custodians of essential infrastructure and the natural environment.

Our purpose
why we exist
We’re proud to play water’s role in making Yorkshire a brilliant place to be - now and always.

Our resources
what we rely on
Financial capital
Manufactured capital
Natural capital

Our behaviours
how we act
we own it
we’re always learning
we’re better together
we have heart

Our objectives
our big goals
putting people first
being great with water
love our environment
being a great partner
keeping services affordable

Our outcomes
the result of our work
We support the Sustainable Development Goals (SDGs) that the global community has formally adopted to define and drive towards sustainable development.

Figure 1
In line with their purpose, the six capitals approach shapes Yorkshire Water’s activities and work to ensure they deliver their services really well, as measured by their Five Big Goals (see below), and deliver their services in a sustainable way, protecting both the future of the organization and enhancing regional resilience.

Yorkshire Water’s Five Big Goals represent our top priorities over the long term: people, water, environment, partnerships and affordability.

Putting people first
We’re proud to be a people-focused business and a leading employer. We need the most engaged and capable colleagues to ensure we deliver a positive impact on our customers and stakeholders every day. We’ll develop a deep understanding of both our customers and colleagues to ensure we design best-in-class experiences.

Being great with water
We want to play an active role in helping everyone in Yorkshire work together to look after our water. Our customers rely on us to provide safe water, take away and recycle wastewater, work smart to minimize the amount lost through leaks and reduce pollution and flood risk.

Love our environment
We want to protect the environment in whatever we do. Our customers trust us to look after and sustainably manage the land we own by creating broader value for society and supporting the health and well-being of the communities we impact. We’ll lead by example in Yorkshire on big environmental issues like committing to net zero carbon emissions by 2030.

Being a great partner
We’ll use best practices from around the globe in order to lead by example in Yorkshire. We’ll be open about what we do, work in collaboration with customers and in partnership with others to help our region, and our business, grow. We’ll celebrate the diversity we have in Yorkshire, opening up opportunities for as many people as possible by providing jobs, skills and resources in partnership with others.

Keeping services affordable
We want our services and bills to be affordable for everyone so no one need worry about having to pay. To do this, we drive high quality and operational excellence with a culture that champions customer and colleague needs, continuous improvement and innovation.

How has integrated thinking helped Yorkshire Water articulate its strategy?
How has integrated thinking helped Yorkshire Water deploy its strategy?

Yorkshire Water's senior management and Board have been supportive of the integrated thinking journey. The approach has enabled them to embed a holistic culture throughout the organization and to look at short-, medium- and long-term targets.

Several initiatives support the implementation of the company’s strategy:

Yorkshire Water has implemented the Decision-Making Framework (DMF), an asset and risk management framework, to improve decision-making and support their five-year business plans. To deliver efficiency, resilience and excellent customer service, the DMF is built on good governance, competent and skilled colleagues and a suite of processes, systems, and software. In the DMF, a six capitals framework is used to quantify risk and value, to optimize investment and management decisions about assets and operations, and to help provide the greatest net benefit to Yorkshire Water’s customers and wider society.

A Six Capitals Land Tool is currently under development to guide Yorkshire Water’s land management activities. As one of the largest landowners in Yorkshire, they manage 70,000 acres to enhance water quality, reduce flood risk and sequester carbon. The tool helps the organization assess the value of their natural capital assets and identify opportunities to create further value, such as providing recreational access (social capital) or educational opportunities (intellectual capital).
The **Social Value Committee** helps implement the six capitals approach within the company strategy and is supported by Yorkshire Water’s governance structure. A new capital dashboard will support internal reporting and help the Board and the Social Value Committee analyze and improve the company’s approach.

The **executive remuneration policy** is linked to integrated thinking. For example, executive bonuses are tied to carbon emissions reduction. The remuneration policy is also published in their annual performance report that is prepared according to Ofwat’s regulatory accounting guidelines.

The **TIVA** enhances understanding of Yorkshire Water’s impact on customers and the environment, both positive and negative, across the six capitals. This innovative approach provides a broader view of the risks and the value created for society, and it highlights opportunities to enhance their impact and value.

Yorkshire Water has a **Sustainable Finance Framework** that fully aligns with its corporate strategy and allows sustainable debt to be raised in a variety of formats to finance and refinance nearly all of its capital and operational expenditures.

The timeline on the left shows Yorkshire Water’s integrated thinking journey.

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**Figure 2**
For a detailed view of the model please consult page 19 of *Our Contribution to Yorkshire, February 2021*. 

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How has embedding integrated thinking benefited Yorkshire Water?

Embedding integrated thinking across Yorkshire Water has provided several benefits. Integrated thinking expands the organization’s understanding of risk and value to make decision-making more informed and sustainability-focused.

Integrating a six capitals approach into a variety of business areas (e.g. asset management, land and property) ensures they understand not only the operational costs and benefits, but also the social and environmental impacts of potential investments. Recognizing and measuring the company’s dependencies and impacts across all six capitals improves business resilience, and creates long-term benefits for the Yorkshire region’s environment, economy and society.

Yorkshire Water publishes an annual report describing the results of the Total Impact and Value Assessment (TIVA), titled "Our Contribution to Yorkshire". The assessment shows the impact of Yorkshire Water’s business activities across all six capitals. The assessment also includes metrics that indicate asset extent and condition, annual impacts, monetized impact values and trends over time.

Liz Barber / Chief Executive Officer, Yorkshire Water
Further benefits of embedding integrated thinking relate to investors, who show increased engagement on ESG issues. There’s also greater support from more ESG-focused investors for debt issues via Yorkshire Water’s Sustainable Finance Framework, which to date has raised over £1.2bn of sustainability debt to finance and refinance assets and expenditures. The TIVA exercise allows the organization to demonstrate net positive benefits to investors with an annual investor impact report, which enables debtholders to estimate the impacts of their investments across all six capitals. Yorkshire Water has seen increased engagement on ESG issues in recent months and received positive feedback from a variety of stakeholders, including investors, about their holistic and integrated approach towards impact reporting.

These are the key findings of Yorkshire Water’s latest six capitals TIVA report:

1. **We make a strong and growing net-positive contribution to society**
   The six capitals assessment of impact and value shows Yorkshire Water has improved how it protects public health and the environment and needs to take additional action to secure long-term affordability for customers and business resilience.

2. **The six capitals are delivering real benefits**
   The concept of the six capitals provides a broad view of the performance, the risks and the value created for customers, investors, and other stakeholders.

3. **We’re continuing to improve our approach**
   Yorkshire Water uses the latest and best available data and economic techniques to quantify impact and value and openly shares the methodology and the maturity of different projects.
Below we provide a visual summary of the findings of our assessment with examples of the extent and condition of the assets on which we rely and the impact we have made through our actions. The figures are for the year 2019/20 and the arrow symbol shows the average trend over the last five years (full definition on page 7). More detail, including a five year view, can be found in the findings section of this report with a chapter on each of the six capitals, and also in the accompanying methodology report www.yorkshirewater.com/capitals.

Human capital
- Total employees 3,480
- Share of workforce female 23%
- Share of workforce BAME 5%

Intellectual capital
- Innovative partnership projects 11
- Open access data releases 100
- Smart network sensors 43,000

Social capital
- Employees trained 276,000 hrs
- Open access data releases 100
- Employees used 1,800

Financial capital
- Regulatory capital value £9,959m
- Pension funds Net not yet assessed
- Total debt £9,606m

Manufactured capital
- Length of mains 32,000km
- Length of sewers 52,000km
- Waste produced 7m tonnes
- Energy used 54.25Wh

Natural capital
- Land occupied 28,000ha
- Reservoirs 129
- Water abstracted 446,000Ml
- Net carbon emissions 249,000tCO₂

5. Our assets and our impacts 2019/20

Figure 3
For a detailed view of the model please consult page 12-13 of Our Contribution to Yorkshire, February 2021
The Value Reporting Foundation is a global nonprofit organization that offers a comprehensive suite of resources designed to help businesses and investors develop a shared understanding of enterprise value — how it is created, preserved or eroded over time. The resources — including Integrated Thinking Principles, the Integrated Reporting Framework and SASB Standards — can be used alone or in combination, depending on business needs. These tools, already adopted in over 70 countries, comprise the 21st century market infrastructure needed to develop, manage and communicate strategy that creates long-term value and drives improved performance.