

INTEGRATED THINKING
An exploratory survey



SAICA

THE SOUTH AFRICA INSTITUTE
OF CHARTERED ACCOUNTANTS

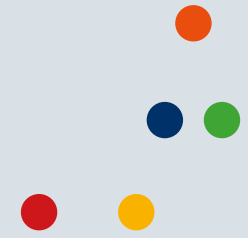
The International Integrated Reporting Council's
"... long term vision is a world in which integrated thinking is embedded within mainstream business practice in the public and private sectors, facilitated by Integrated Reporting ... as the corporate reporting norm."

International Integrated Reporting Council: *The International <IR> Framework* (2013)

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PREFACE

Organisations operate in a world of growing complexity, with a multitude of internal and external factors, interdependencies and trade-offs to consider when making decisions. They need processes that empower the board and management to make informed decisions within this reality. What is needed is integrated thinking.

Integrated thinking is about ensuring the long-term sustainability of organisations through the sustained creation of value for stakeholders.

The International Integrated Reporting Framework (Framework) published in December 2013 defines integrated thinking as “The active consideration by an organisation of the relationships between its various operating and functional units and the capitals that the organisation uses or affects. Integrated thinking leads to integrated decision-making and actions that consider the creation of value over the short, medium and long term”.¹

The Framework emphasises that effective integrated reporting is dependent upon an organisation’s ability to successfully implement integrated thinking. However, it does not discuss in any detail how integrated thinking can be achieved. The concept, as described in the Framework, is very new and relatively little has been written on the topic.

The purpose of this paper is to share the South African experience of how implementing integrated reporting

is impacting on integrated thinking and has contributed to understanding integrated thinking. The study focused on establishing if organisations in South Africa are embracing integrated thinking and if they see it to be of benefit. This paper is not intended to be an academic research project and it in no way purports to be representative of companies listed on the Johannesburg Stock Exchange (JSE). It is designed as an exploratory survey.

To obtain views and information, we sent questionnaires to selected executives in organisations that have received recognition for the quality of their integrated reports. These were mainly JSE- listed companies. We assumed that organisations producing good integrated reports would have travelled some way on the journey to embrace integrated thinking. The results of the EY Excellence in Integrated Reporting Awards 2013 were used as the source for the selection of 69 organisations. To add further value to this survey, we also selected 34 non-executive directors (mainly Chartered Accountants (South Africa)) who serve on the boards of various listed companies and state-owned entities. The non-executive director questionnaire was similar to the executive survey, but the non-executive directors were requested to answer questions more generically, based on experience they had gained from serving on different boards.

Of the 103 questionnaires sent out, we received 33 responses, which gave us an overall response rate of 32%. Most of the responses were received directly



from the persons addressed. In addition, because of the new ground that was being covered, several conversations took place with respondents to clarify understanding of questions and responses. The project group was satisfied with the overall response both from a quantitative and a qualitative perspective.

All of the executives that returned questionnaires indicated that the organisations they represent had adopted integrated thinking at least partially. All the non-executive directors had seen evidence of integrated thinking. Some of the benefits of integrated thinking that were noted in the survey include:

- improved decision-making, both at management and board levels
- enhanced information available for decision-making
- improved governance processes and risk management.

Some of the key drivers of integrated thinking mentioned by respondents include:

- changing business circumstances that required a significant change in strategy
- enlightened leadership at board and/or chief executive officer level
- meeting the needs of stakeholders, especially with regard to social and environmental issues.

It is evident that many organisations are on a journey to inculcate integrated thinking into their businesses. Various factors, including the complexity of operating and business environments, affect the readiness of organisations to adopt and implement integrated thinking. We did not set out to determine what integrated thinking is or how to implement it, however, several indicators arose from responses and discussions that may be of value to organisations. We have listed these as possible considerations. They are not in any way meant to represent guiding principles, although we expect guiding principles in this area to evolve over time.

Roy Andersen

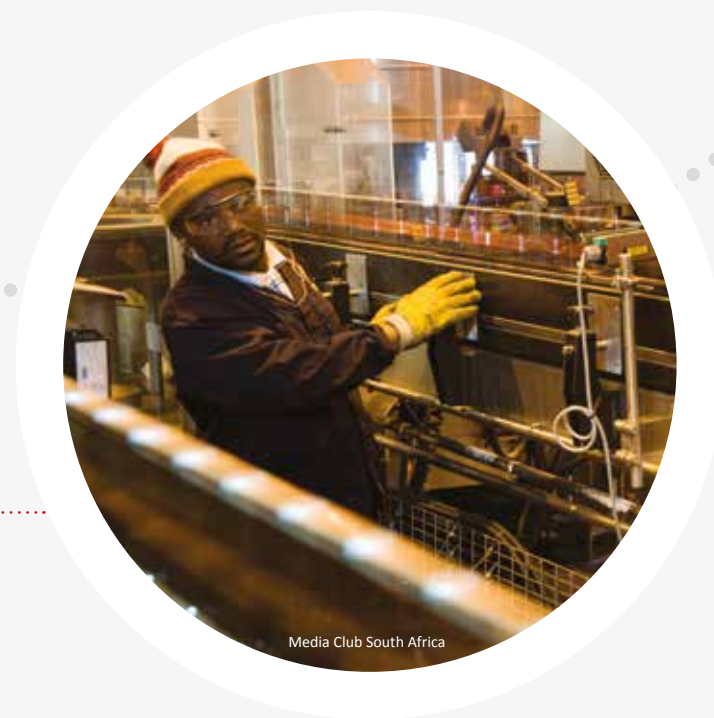
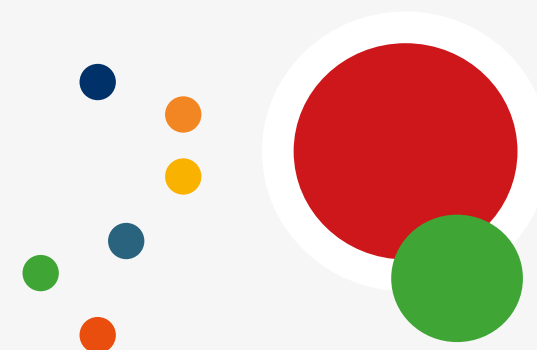
Chairman of the SAICA Integrated Thinking Project Group

We are indebted to the people who responded to the questionnaires and engaged in interviews. We thank them all for their sincere comments and frank responses.

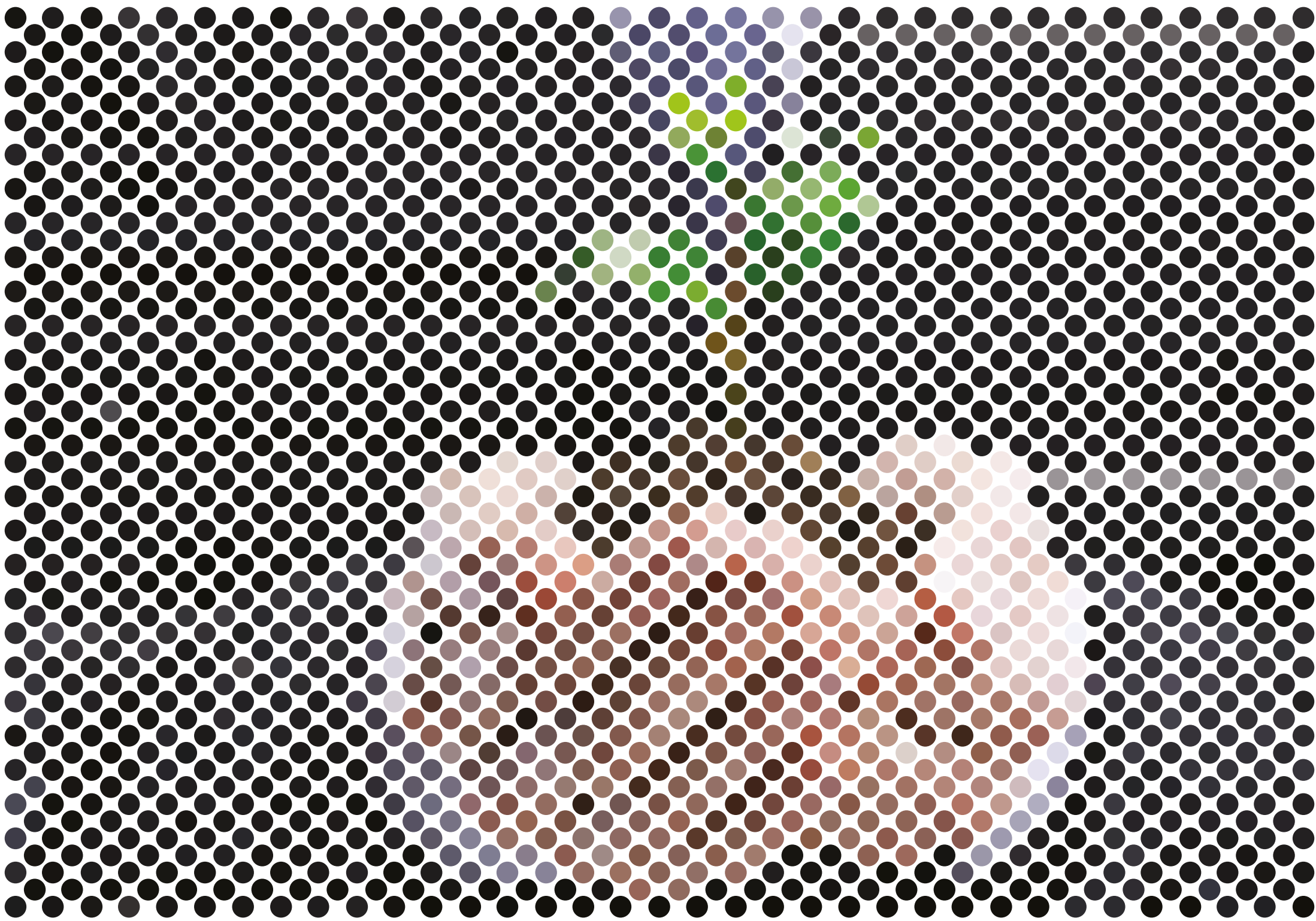
This paper is the first output of the SAICA Integrated Thinking Project Group. The group will continue working to better understand integrated thinking as it is being implemented in South Africa. This is, however, a highly complex topic and we encourage other organisations and individuals to conduct their own research projects, so that one day the IIRC's long-term vision may be achieved.

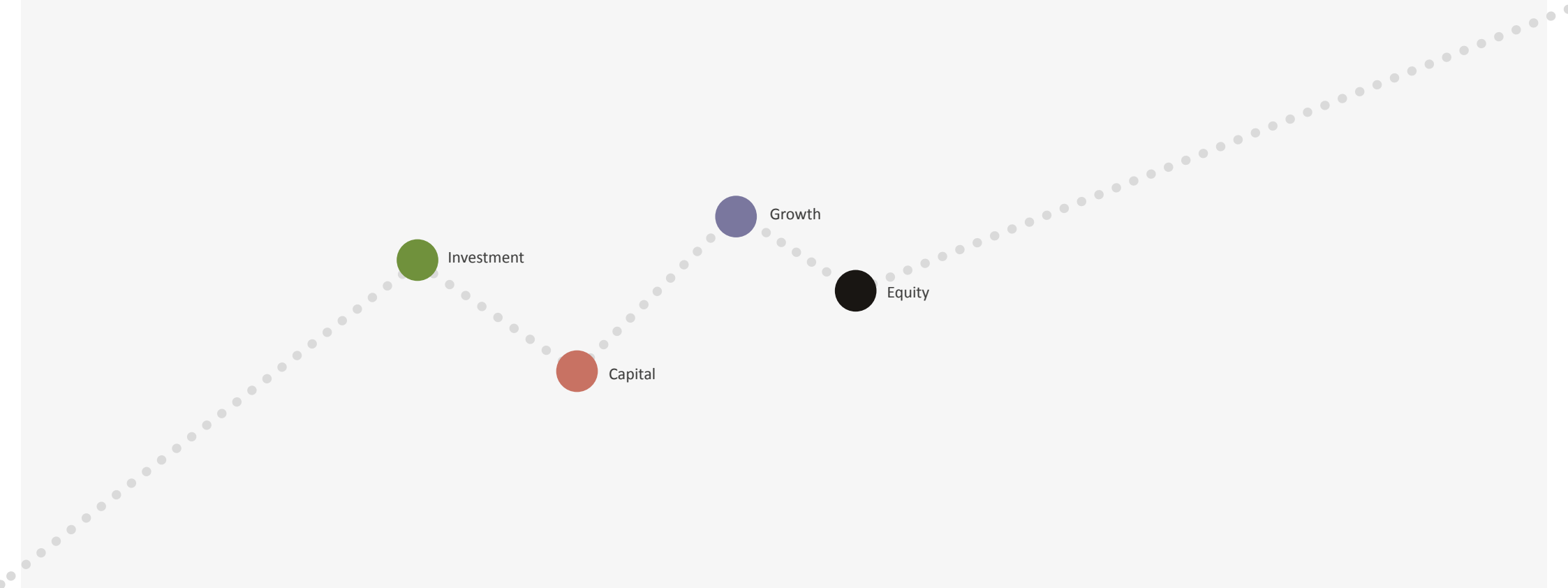
Graham Terry

Project Leader



Media Club South Africa





INTEGRATED THINKING

promotes a more holistic assessment to grow better businesses and better societies.

INTRODUCTION AND BACKGROUND

● The birth of integrated thinking

Over the past decade, to an increasing degree, users of corporate information have been concerned about the usefulness and effectiveness of corporate reports. This is not a new phenomenon as corporate reporting has been criticised for many years. Inevitably these criticisms reach a crescendo after corporate failures, especially when preceding corporate reports have given no indication of an impending collapse. While poor corporate reporting does not cause corporate failures, it often masks the signals that should highlight the risks.

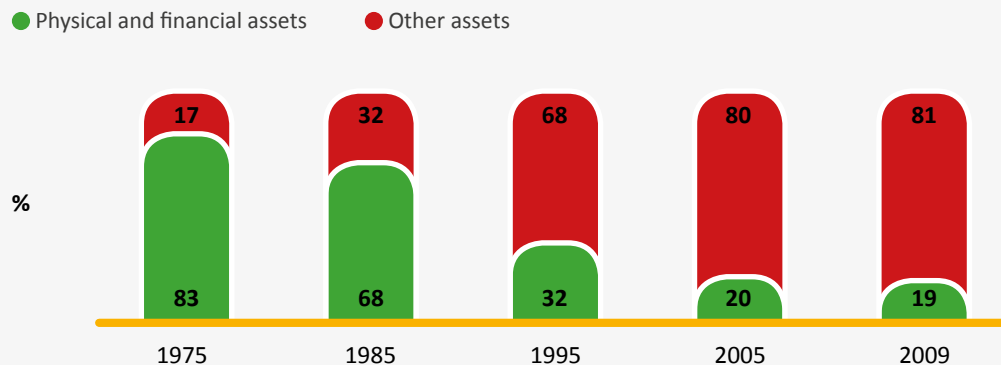
Regulators and standard-setters constantly try to enhance legislation and standards to plug identified regulatory gaps and generally improve reporting quality.

However, these initiatives have not been completely successful in a rapidly changing world. A primary reason for this is that the different aspects of corporate reporting are handled by different standard-setters (e.g. financial and sustainability reporting) and there has been no overall co-ordination of how reports should be presented.

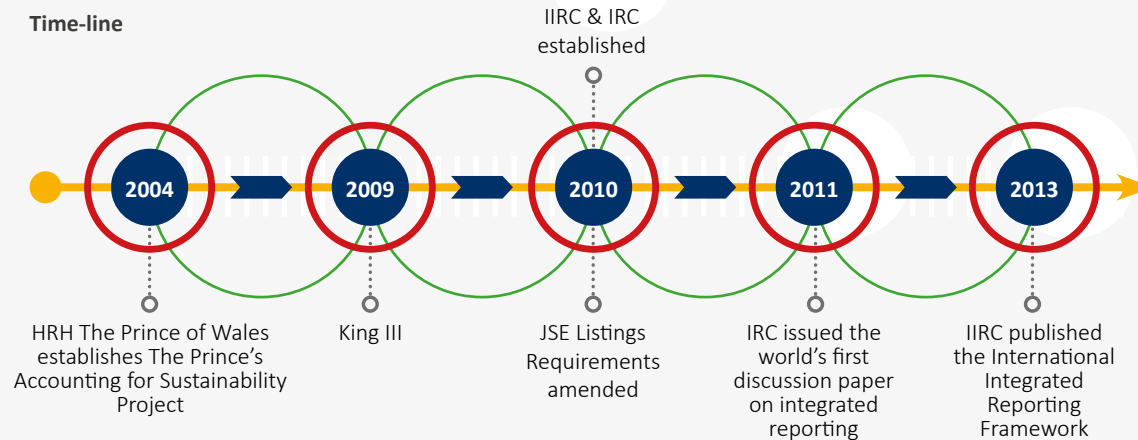
Part of the challenge is that corporate reporting and investor attention have been focused strongly on the financial aspects of business, almost to the exclusion of the other forms of capital applied in running the business. The diagram below illustrates how the components of market capitalisation value of companies forming part of the S&P 500 has changed since 1975.²

In 1975, 83% of the market capitalisation value of the S&P 500 companies was represented by physical and financial assets. The balance was attributable to what is termed 'other assets' (which included intangibles, the market's perception of the value the organisation will create in the future and other factors). Financial reporting applies substantially to physical and financial assets, yet in recent decades the proportion of intangibles has increased exponentially in relation to physical and financial assets. As a consequence, organisations realised that they had to provide more information about the intangibles, which resulted in the length of corporate reports increasing rapidly. The quality of reporting varied widely and often lacked consistency and cohesion. A major shortcoming was that often the negative aspects were conveniently left out of reports, which made it difficult for stakeholders to assess performance effectively. In addition, most of the published information was historical and did not

Diagram 1: Components of S&P 500 market value²



² International Integrated Reporting Council, *Towards Integrated Reporting: Communicating Value in the 21st Century*, 2011, 4 (adapted).



provide stakeholders with useful information to make assessments about the organisation's ability to create value in the future.

Growing awareness of the impact of climate change and various social issues have led to several reporting guidelines being developed in recent years, such as the UN Global Compact and the Global Reporting Initiative (GRI). Additional data was being provided to stakeholders through various reports and communications, but they experienced difficulty in making sense of it, as this information was not being presented within an understandable framework.

In 2009, The King Report on Corporate Governance for South Africa (King III) was released by the King Committee. It included a recommendation that organisations should issue annual integrated reports.

In 2010 the JSE Listings Requirements were amended to adopt the King III principles on an 'apply or explain' basis.

This meant that companies listed on the JSE were required to issue annual integrated reports, or explain why they did not do so.

At the time no guidelines for integrated reporting yet existed. Representatives from SAICA, the JSE, the Institute of Directors in Southern Africa (IoDSA), the Association for Savings & Investment South Africa (ASISA) and Business Unity South Africa (BUSA) decided to form a body to develop preliminary guidance on integrated reporting, so that listed companies could meet their requirements.

This body was named the Integrated Reporting Committee of South Africa (IRC) and Professor Mervyn King was invited to become the chairman. The IRC issued a discussion paper on integrated reporting in January 2011.

Globally, calls for improved corporate reporting were continuing. HRH The Prince of Wales, who for many years has been a champion of environmental protection, established The Prince's Accounting for Sustainability Project in 2004.³ This body had done valuable work in getting sustainability issues recognised by the accounting, finance and investor sectors. The Prince began hosting an annual conference at St James's Palace in London, where he challenged the worldwide accounting profession and leading businesspeople to address environmental and social issues in corporate reporting. As a result of this challenge, the International Integrated Reporting Council (IIRC) was established in 2010.

In December 2013, the IIRC published the International Integrated Reporting Framework (Framework). It was the culmination of three years' work attempting to find a more effective and meaningful way for organisations to communicate with providers of financial capital and other stakeholders. It is a principles-based document and does not purport to set standards for integrated reporting or integrated thinking.

³ See <http://www.accountingforsustainability.org>

INTRODUCTION AND BACKGROUND

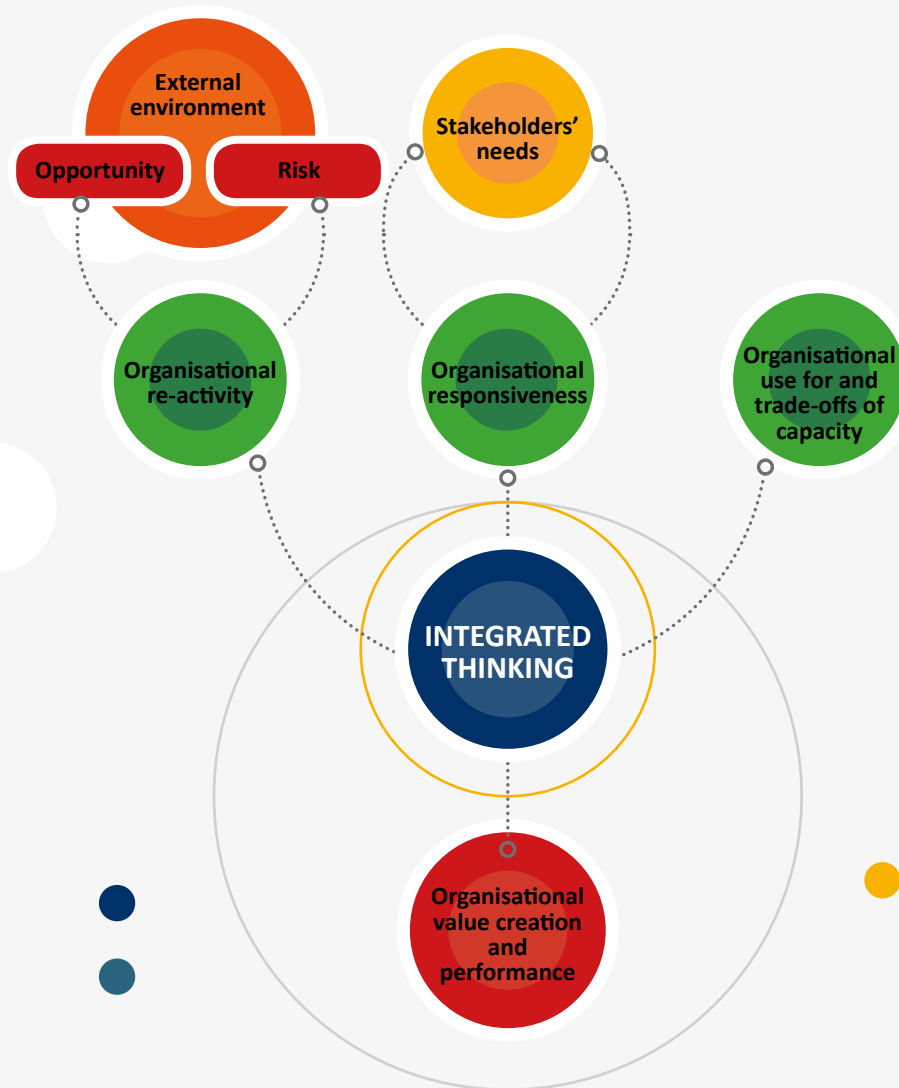
Integrated reporting aims to:

- “Improve the quality of information available to providers of financial capital to enable a more efficient and productive allocation of capital
- Promote a more cohesive and efficient approach to corporate reporting that draws on different reporting strands and communicates the full range of factors that materially affect the ability of an organisation to create value over time
- Enhance accountability and stewardship for the broad base of capitals (financial, manufactured, intellectual, human, social and relationship, and natural) and promote understanding of their interdependencies
- Support integrated thinking, decision-making and actions that focus on the creation of value over the short, medium and long term.”⁴

● The emergence of integrated thinking

The term ‘integrated thinking’ was coined by the IIRC. It had become obvious that organisations could not prepare credible integrated reports unless conditions and processes within the organisation were conducive to the effective preparation of this report. These conditions were described as integrated thinking.

Integrated thinking is defined as “The active consideration by an organisation of the relationships between its various operating and functional units



⁴ International Integrated Reporting Council, *The International <IR> Framework*, 2.

and the capitals that the organisation uses or affects“.⁵ In addition, “Integrated thinking leads to integrated decision-making and actions that consider the creation of value over the short, medium and long term.”⁶

In elaboration, the Framework states that: “Integrated thinking takes into account the connectivity and interdependencies between the range of factors that affect an organisation’s ability to create value over time, including:

1. The capitals that the organisation uses or affects, and the critical interdependencies, including trade-offs, between them

2. The capacity of the organisation to respond to key stakeholders’ legitimate needs and interests
3. How the organisation tailors its business model and strategy to respond to its external environment and the risks and opportunities it faces
4. The organisation’s activities, performance (financial and other) and outcomes in terms of the capitals – past, present and future.”⁷

Churet and Eccles suggest in a journal article that integrated reporting is only the tip of the iceberg: the visible part of what is happening below the surface. What is happening below the surface is

integrated thinking.⁸

Organisations that want to produce authentic integrated reports state that implementing its conditions is a journey. It takes some years to reach the position of presenting a high-quality report. It seems, therefore, that to achieve a high degree of integrated thinking in the organisation is also a journey requiring time. Some organisations seem to have reached a fairly advanced stage, while others are at various points along the road.

● So what is integrated thinking and when is it achieved?

The ultimate test would be the longevity of the organisation and its delivery of value to stakeholders. Having said that, it doesn’t mean an organisation that has survived 100 years will do so for another 100, 50 or even five years. Political, social, economic, environmental and technological factors can change that outlook rapidly. If one compares the Fortune 500 list of companies from 1980 with the current list, fewer than 50% of the companies listed in 1980 were still listed in 2014.⁹ Between 20 and 50 companies drop off the list each year. This illustrates that many factors

(both positive and negative) influence the long-term success of organisations.

The Framework states that: “The more that integrated thinking is embedded into an organisation’s activities, the more naturally will the connectivity of information flow into management reporting, analysis and decision-making. It also leads to better integration of the information systems that support internal and external reporting and communication, including preparation of the integrated report.”¹⁰

Due to the close relationship between integrated reporting and integrated thinking, it is worthwhile looking at the Framework’s description of an integrated report to gain more insight as to what integrated thinking is. It describes an integrated report as “... a concise communication about how an organisation’s strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term.”¹¹ From this, one can deduce that integrated thinking is the engine that drives value creation by integrating all of these factors. As a by-product, it

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ Churet, Cécile and Eccles, Robert G. *Integrated reporting, quality of management and financial performance*, *Journal of Applied Corporate Finance* 26(1), Winter 2014, 56–64.

⁹ Dane Stangler and Stan Arbesman, *What does Fortune 500 turnover mean?* Kansas City, Miss: Ewing Marion Kaufman Foundation, 2012.

¹⁰ International Integrated Reporting Council, *The International <IR> Framework*, 2.

¹¹ Ibid, 7.

enables organisations to describe how they create value in a clear and meaningful manner in an integrated report.

In their book entitled *Integrate: Doing Business in the 21st Century* Mervyn King and Leigh Roberts suggest that all companies are dependent on good relationships with key stakeholders and other essential resources to make money. They describe integrated thinking as "... seeing the connections of the resources and relationships, how they connect to the different functions, departments and operations in the company and getting the company as a whole working together

in achieving the strategic objectives".¹²

King and Roberts state that the interrelated, interconnected and interdependent nature of many of these resources and relationships is currently not explicitly recognised by boards. "Bringing the reality of these resources and relationships into the active awareness of the board and management leads to a better directed and managed company."¹³ From the guidance given in the Framework and comments made in articles, it is clear that integrated thinking is a culture or attitude that should begin at board level and determine the board's agenda and

method of operating. However, integrated thinking needs to cascade down and become part of the DNA of the whole organisation, extending through the whole value chain.

The antithesis of integrated thinking is said to be 'silo thinking', which exists to varying degrees in many organisations. There are numerous management approaches and theories that focus on the elimination of silo thinking and enhancing the integration of organisations. However, this is only part of the story – integrated thinking is much more than eliminating silos.

● Capitals

An important element of integrated thinking is the recognition and management of the key capitals, or resources and relationships, that the business depends on. The Framework identifies these capitals as financial, manufactured, intellectual, human, social and relationship, and natural.¹⁴ Different organisations may use different terminology for the capitals or define them in other ways. That is not important. What is important is that the key relevant capitals are recognised and managed. Not all of the six capitals are equally important to all organisations, therefore each organisation needs to identify its own relevant capitals.

Traditionally, many organisations have focused on and managed financial capital, which has always been fundamental. However, over time many organisations have grown to realise that there are other forms of capital that are equally central to the business. The graphic on the next page illustrates how the various capitals and other relevant factors influence the value of an organisation.

The Framework suggests that the capitals should be seen as stocks of value that are increased, decreased or transformed through the activities or outputs of the organisation. For example, the profit or loss of an

organisation adds to or subtracts from the financial capital.

The capitals also have an influence on each other and at times the organisation needs to trade-off between capitals. For example, an investment in staff training could deplete financial capital but enhance the human capital available to the business.

In recent years, more and more organisations have recognised the importance of social and relationship capital, which in many cases affects the organisation's social licence to operate. What is emerging is how crucial stakeholder relationships are and that they

¹² Mervyn King and Leigh Roberts, *Integrate: Doing Business in the 21st Century*. Cape Town: Juta, 2013, 55.

¹³ Ibid.

¹⁴ International Integrated Reporting Council, *The International <IR> Framework*, 4.

should be kept top of mind by the board. These are long-term considerations and their positive or negative results may only emerge several years later. To do this, the board and management need to employ processes to co-ordinate, integrate and understand the information about each capital. Recent events in the South African mining industry have highlighted the importance of developing partnerships with employees and communities.

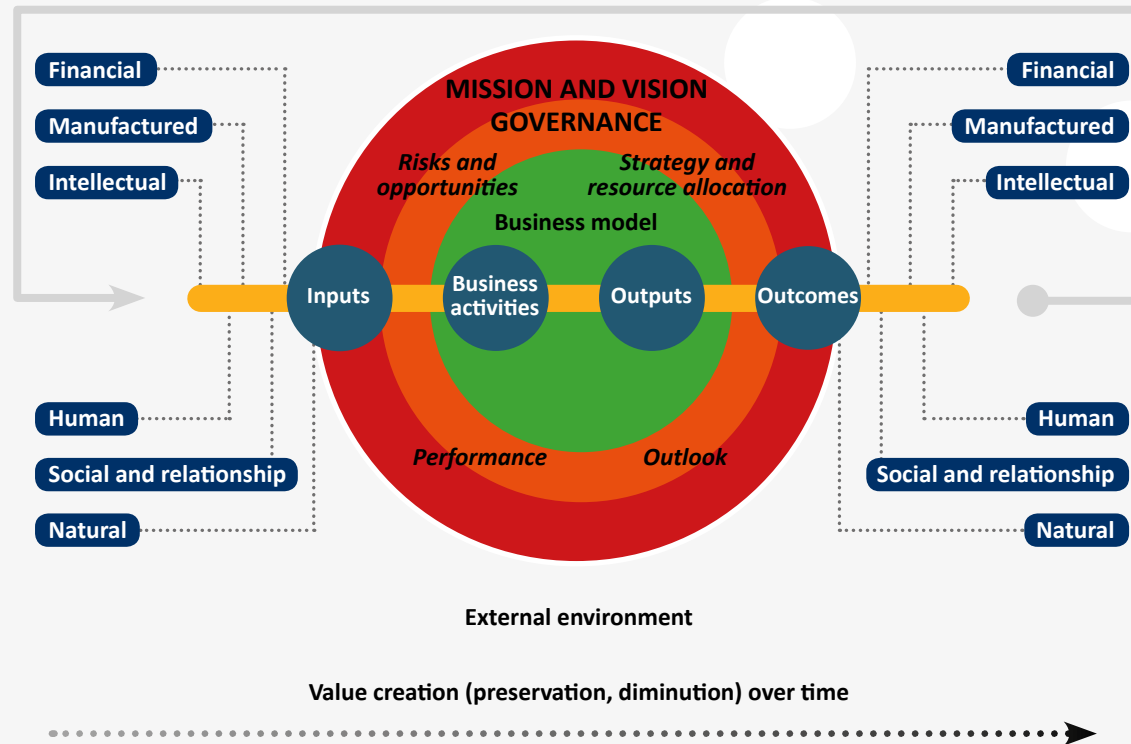
Natural capital may not be owned by the organisation, but the activities of the business may result in the erosion of natural capital, for example through the emission of greenhouse gases. To take another example, mining companies will often contaminate their natural capital (land and water resources) in the pursuance of generating profits. Some businesses have found that effective management of natural capital can lead to cost reductions and therefore enhanced financial capital, for instance through improved water and electricity management.

Recognising that the capitals can extend beyond organisational boundaries and into the supply chain is vital. Reliance on suppliers is not always perceived in terms of the capitals which need to be managed. For example, a retailer may source goods from a supplier that ignores basic human rights, resulting in dire consequences for the brand (intellectual capital). When services are outsourced, customers may interface with personnel who may not project the values and service ethic of the principal. Similarly, infrastructure used by suppliers may not be adequately maintained. These situations call for organisations to understand the capitals linked to their business and manage these as if they were their own.



Business model

Diagram 2: The value creation process¹⁵



The diagram above¹⁵, shows graphically the various factors (both internal and external) involved in the value creation process of an organisation. Every organisation will have a different business model and in the case of a conglomerate a number of business models,¹⁶ but the principles will be the same.

The diagram shows the various inputs in the form of relevant capitals. The business is driven by its mission, vision and strategy and it manages its risks, opportunities and performance. This is all carried out in accordance with the organisation's code of ethics and values and is overseen by the governance structures. In addition, there are factors in the external environment that are beyond the control of the organisation, yet which can impact it heavily. These include varying exchange rates, political events and weather conditions.

The business generates outputs which may be products or services. In addition, there are outcomes in the form of the effects on the capitals. These can be positive or negative. For example, the organisation may have generated financial capital through profitable trading. In addition it may have improved its skills base or developed intellectual capital through research and development.

However, on the negative side it may have contributed carbon emissions and eroded its customer loyalty through the sale of defective products.

¹⁵ Ibid, 13 (adapted).

¹⁶ A useful book that assists in the understanding of how the various elements of a business model interrelate is Alexander Osterwalder and Yves Pigneur, *Business Model Generation*, Wiley, 2010.

All of these factors need to be understood and taken into account by management and the board. While most organisations would claim to be doing precisely this, some organisations evidently ignore key components and perhaps place too much emphasis on certain aspects of the business at the expense of others. Often performance is measured exclusively in financial terms, which can drive certain behaviours that

are not necessarily in the longer term interests of the organisation or its key stakeholders.

Integrated thinking is about understanding all the important factors affecting the business model and applying appropriate judgement in managing the business and its capitals, so that it creates value in the short, medium and long term. If one considers

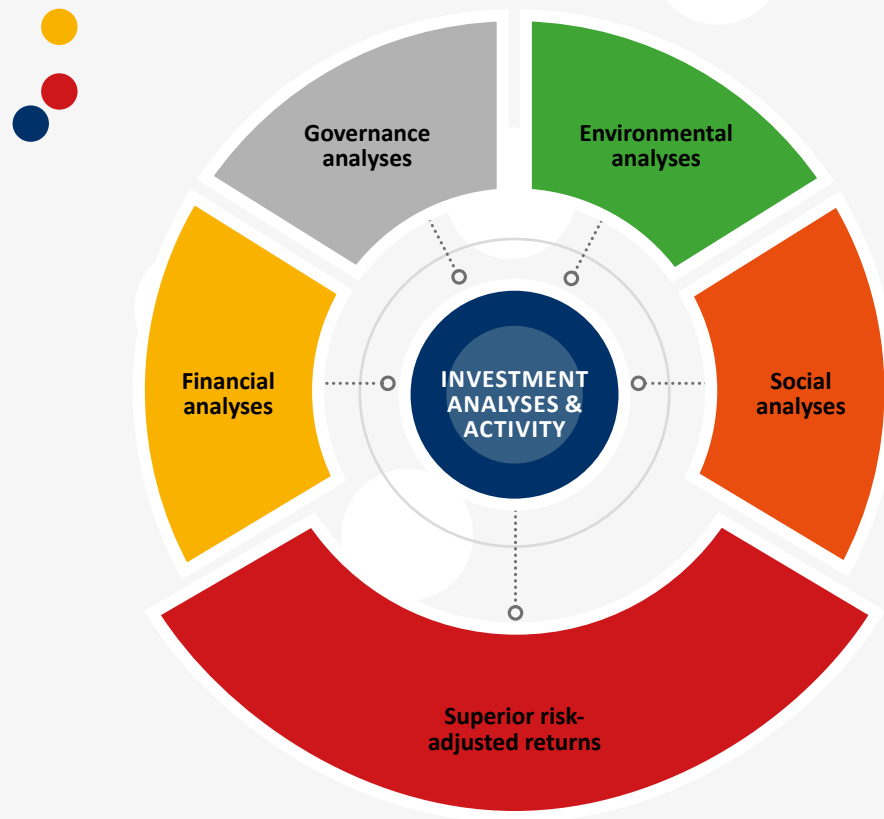
the different elements to be taken into account when running a modern business, one can understand that measuring the impacts and interrelationships between these factors and the capitals can be highly complex. Tools for helping to make decisions are available. These are discussed further on in this paper from page 24 under the heading 'Tools, models and techniques'.

King and Roberts suggest some pointers regarding what constitutes integrated thinking:¹⁷

“How do you know when a company has achieved integrated thinking?”

When there is no longer separation between non-financial and financial performance on the company-wide acceptance that each affects the other.

When all functions and divisions share in the company's strategy and work together to achieve it. When decision-making is carried out with a longer-term view on value creation and how the decisions impact on the company's resources and its relationships.”



Investor perspective

An important element driving corporate performance is how investors view the organisation and what their expectations are. Today, a large proportion of investment is held through institutions. This would include investments held in pension funds, unit trusts and insurance vehicles. These investors are represented by asset managers, who can often view corporate performance in terms of traditional financial metrics and pay little attention to information contained in integrated reports. This is disappointing, especially when viewed in the light of the Code for Responsible Investing in South Africa (CRISA).¹⁸

CRISA suggests that institutional investors should incorporate sustainability considerations, including those relating to environmental, social and governance,

into their investment analysis and investment activities, with the aim of delivering superior risk-adjusted returns to their clients.

It must be said that not all asset managers are short sighted. Indeed, as recent research commissioned

by the Institute of Directors in Southern Africa shows, there is a growing number that promote the benefits of integrated reporting – and in time others will no doubt follow.¹⁹ It does, however, suggest that the owners of investments should be more vigilant as to where their funds are being invested.

An article by Knauer and Serafeim published in 2014 shows that a commitment to integrated thinking and

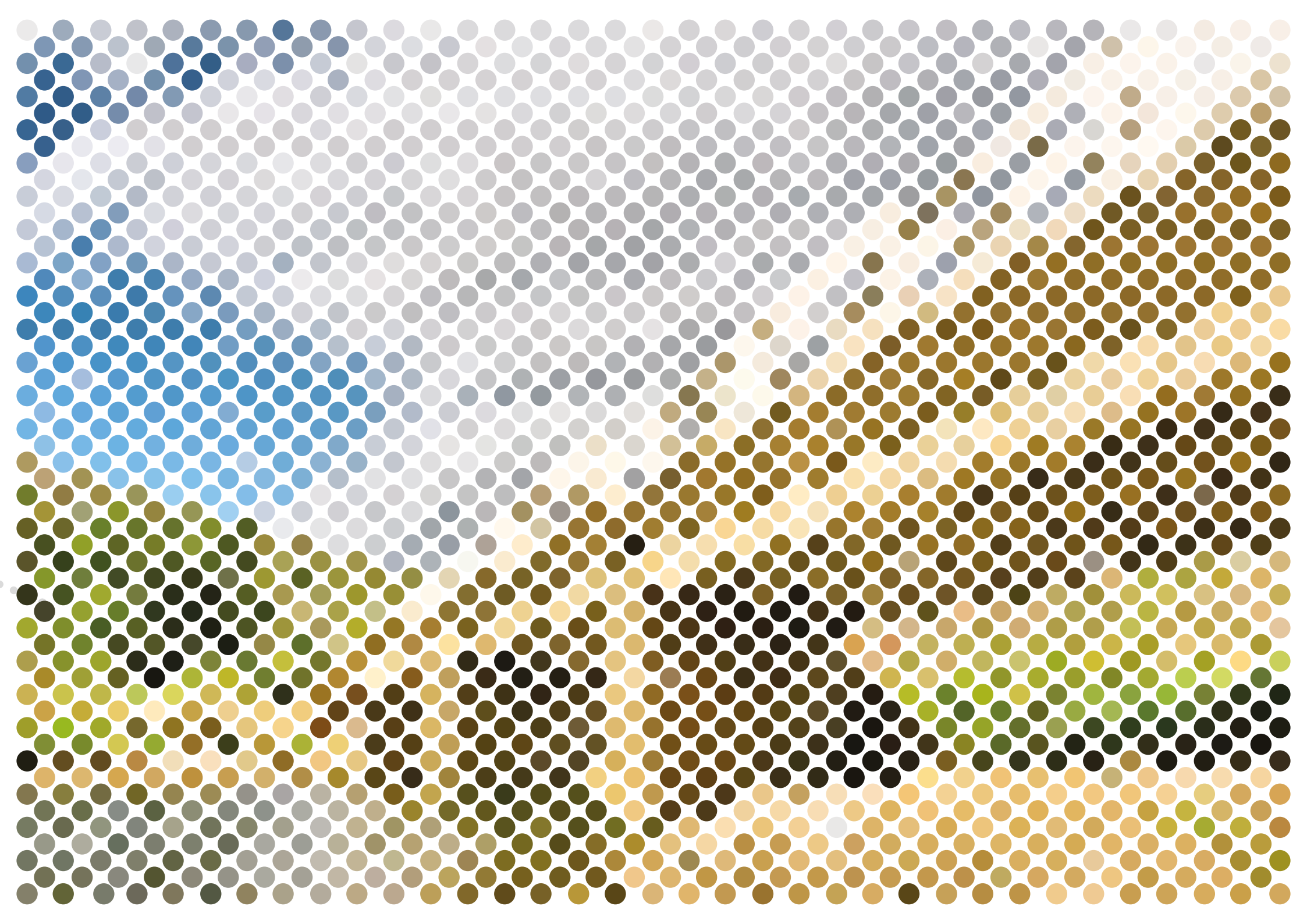
the adoption of integrated reporting appears to play a role in changing the composition of a company's investor base to those with a longer-term orientation.²⁰ The concepts of integrated reporting and integrated thinking are new to investors and asset managers. They are embarking on their own journeys of discovery, which we can only hope will be mercifully short, as investors should ideally be putting pressure on organisations to improve efficiencies and enhance transparency, and by so doing, society and the broader economy we rely on will benefit.

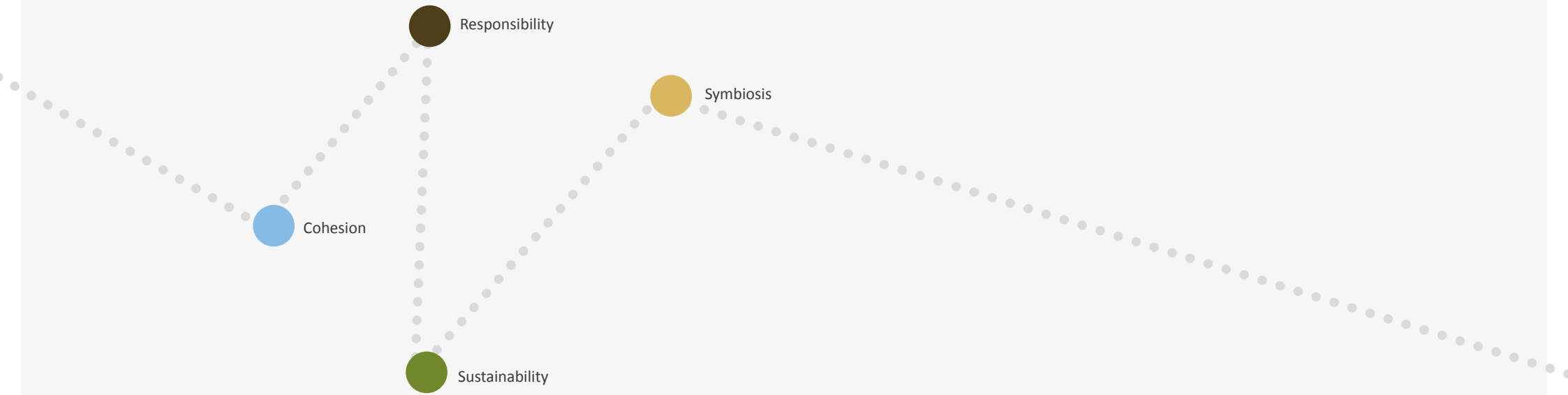


¹⁸ Institute of Directors in Southern Africa, *Code for Responsible Investing in South Africa*, 2011.

¹⁹ Ibid.

²⁰ Andrew Knauer and George Serafeim, Attracting long-term investors through integrated thinking and reporting: a clinical study of a biopharmaceutical company, *Journal of Applied Corporate Finance* 26(2), Spring 2014, 57–64.





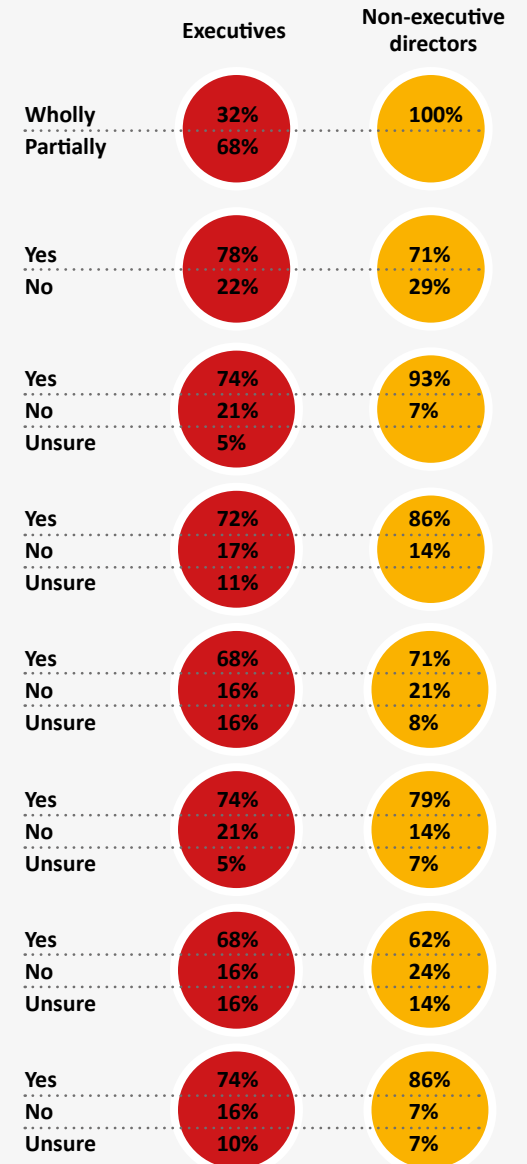
CROSSING TO A NEW APPROACH

that makes the most of connectivity, communication and 'bigger picture' thinking.

SUMMARY OF RESPONSES

The diagram below indicates the responses to the survey.

- Have organisations embraced integrated thinking?
- Has integrated reporting been a driver towards achieving integrated thinking?
- Has integrated thinking improved decision-making at management level?
- Has integrated thinking improved decision-making at board level?
- Has integrated thinking helped organisations develop a more cohesive approach to reporting (such as systems, internal controls, regular management review, etc.)?
- Has integrated thinking increased the quality of organisations' dialogue with providers of financial capital and other stakeholders?
- Have organisations derived any other benefits from integrated thinking?
- Will organisations derive further benefits in the short, medium and long term from integrated thinking?



FEEDBACK FROM RESPONDENTS

Overall findings

The survey shows that several of the top 100 companies listed on the JSE – and the leading state-owned entities included in the sample – have recognised the benefits of integrated thinking and are reaping the rewards.

All the executives that returned questionnaires indicated that they have adopted integrated thinking at least partially, with 32% believing they have fully embraced integrated thinking. Many offered the opinion that they remain on ‘the journey’ and have not yet reached full integration. All the non-executive directors indicated that they see evidence of integrated thinking in organisations in which they are involved, although its extent varied from organisation to organisation. They also said that many organisations were still hindered by their business components being separated and operating in ‘silos’.

Over 70% of the executives and non-executive directors felt that decision-making, both at management and board levels, had improved as a result of integrated thinking being embraced. They are also of the opinion that integrated thinking has helped to improve corporate reporting and the dialogue with stakeholders, including providers of financial capital.

Some 74% of executives agree that they would derive further benefits from integrated thinking, with 86% of non-executive directors foreseeing further benefits

accruing to organisations in the future.

These results demonstrate that executive management and non-executive directors believe that the years spent preparing integrated reports has helped to improve the way businesses operate. This investment in leadership time and reporting costs has not been in vain. The results also confirm why the World Economic Forum rates corporate reporting in South Africa so highly.

Many of the respondents suggested that implementing integrated reporting and adopting integrated thinking were linked journeys that evolved over time and that the full benefits would only materialise when integrated thinking had become integral to the organisation. As awareness of its value spreads, organisations will adopt integrated thinking in the spirit of enlightened self-interest and long-term business sustainability. Some respondents went further to suggest that organisations that did not introduce integrated thinking would not be sustainable in the long term.

Some respondents expressed the view that well-managed organisations would naturally have implemented integrated thinking – that was why they were successful. This view was not shared by all respondents. Some indicated that success in the short to medium term did not mean integrated thinking was

being embraced; however, to achieve long term success integrated thinking was an important ingredient.

Quite a few respondents referred to the fact that integrated thinking uses a significant amount of non-financial information and that the systems and controls validating this information are not as advanced as those applied to financial information. However, several respondents indicated that organisations were addressing this deficiency.

Some non-executive directors felt that organisations needed to ensure that non-financial data was assured because of its importance in decision-making. An interesting observation made by one respondent was that the collective skills and knowledge requirements for audit committee duties had changed substantially in recent years, so that these committees needed members with a broader understanding of the capitals.

A point made over and over again was that the pace and degree of success of integrated thinking was highly dependent on strong and enlightened leadership, both within the board and in the management team. One respondent remarked that the likelihood of an organisation adopting integrated thinking can be assessed simply by looking at who serves on the board.

What are the main drivers of integrated thinking in organisations?

Over 70% of executive and non-executive director respondents felt integrated reporting was a catalyst to enhancing integrated thinking in organisations. Some respondents indicated that their organisations had already achieved integrated thinking before integrated reporting was launched, with some suggesting that integrated thinking was evident in all successful organisations and flowed from their strategies. Most respondents, however, felt that integrated reporting had assisted in refining and improving integrated thinking in their organisations.

Some of the other key drivers of integrated thinking mentioned by respondents included:

- changing business circumstances that required a significant change in strategy
- enlightened leadership at board or chief executive officer level
- meeting the needs of stakeholders, especially with regard to social and environmental issues
- the complexity of the business
- a need to enhance risk management
- adoption of matrix organisation structures
- a remuneration strategy linked to improved integration, coupled with appropriate key performance indicators (KPIs).



● What hinders organisations in achieving integrated thinking?

A large proportion of the respondents mentioned silo mentality and 'protection of turf' as major inhibitors of integrated thinking. Other factors included:

- reliability and accuracy of information, especially non-financial information
- an historical precedent of focusing on financial information and the needs of providers of

financial capital

- understanding the relationships between the capitals
- inappropriate KPIs, both for the organisation and for executive remuneration. Often these are set primarily against financial targets.

Respondents were asked how these challenges were being addressed. Most of the respondents mentioned improved information systems and training, as well as the formation of cross-function teams to enhance integration and eliminate internal silos.

● How has integrated thinking helped management decision-making?

An important element mentioned in responses was the enhanced information generated for decision-making. Information was more accurate and spread across the capitals. Some organisations mentioned that they were now considering the capitals specifically and this had greatly improved their appreciation of the role that these play in the business. Several respondents,

both executives and non-executive directors, were of the opinion that integrated thinking had improved risk management as it broadened the lens through which risks were considered. Managements were taking into account the entire value chain and not just reviewing the business in terms of its financial and legal boundaries.

Most non-executive directors said that its impact varied from organisation to organisation. It was also suggested that well-managed businesses had always achieved these goals in any case, but many pointed out that integrated reporting had made a significant contribution to doing so.

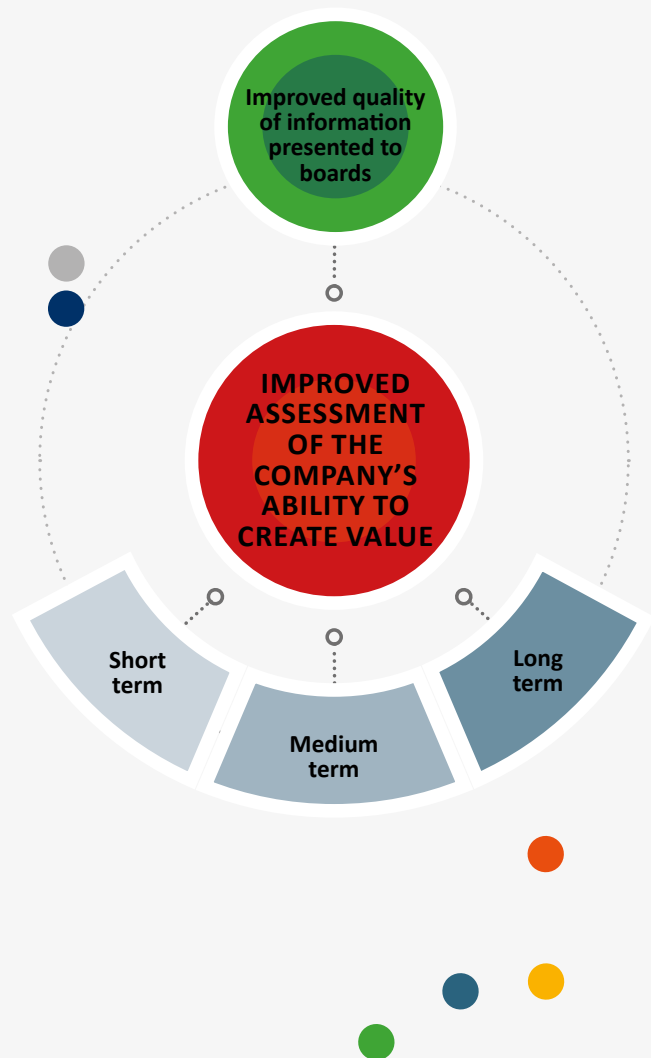
● How has integrated thinking helped decision-making at board level?

Several respondents noted an improvement in the quality of information presented to company boards. Some expressed concern about the reliability of non-financial information that had not been subjected to robust assurance processes. This presents a risk to board members. Several respondents referred to an improved focus on value creation and on the longer term horizon. They also pointed out that the quality of

debate had improved due to enhanced information quality. It was mentioned that some organisations were considering the capitals specifically to provide a better framework for assessing the business's ability to create value in the short, medium and long term. One respondent remarked that organisations need to see integrated reporting as integral to decision-making – not just a matter of compliance.

Other factors mentioned include:

- enhanced risk identification and management, improved performance measurement through linkages to value creation
- a clearer relationship between remuneration and value creation
- more efficient allocation of resources.



A minority of respondents said that they had seen little change.

● How has integrated thinking introduced a more cohesive approach to reporting?

The executives and non-executive directors felt that integrated thinking had led to internal reporting becoming more focused and succinct. It was also suggested that dialogue between management, the board and board committees had improved. It was mentioned that periodic reporting was more in line with matters reported in the annual integrated report. The integrated report was no longer viewed

as a separate, unrelated exercise carried out at the end of the year. Some felt that this was work-in-progress, but there had been improvements. Validation and accuracy of information were mentioned as concerns, although it was also mentioned that a more integrated approach had led to improved controls.

● How has integrated thinking increased the quality of dialogue with providers of financial capital and other stakeholders?

A motivation for integrated thinking is to improve relationships with stakeholders. Most respondents said that integrated reporting had assisted in improving these relationships as information was well organised and the reports were easy to read. Unlike before, these provided a useful and holistic picture of the organisation's performance and prospects. It was also suggested that integrated reporting brought greater transparency and therefore stakeholders could make more informed assessments.

Some respondents were concerned that many asset managers still focus exclusively on the traditional metrics and financial information. This inhibited their ability to make balanced assessments and in some cases organisations were unfairly penalised. The point was also made that executive remuneration in some organisations needs to be more transparently reported and clearly linked to the long term sustainability of the organisation.

● Have organisations derived any other benefits from integrated thinking?

Respondents suggested that integrated thinking had assisted in improving efficiency in many areas, including optimisation of skills, supply chain management, energy usage and enhanced information systems. Several respondents felt that governance processes

had improved because organisations had developed a more inclusive culture that made employees feel empowered. Several respondents were of the opinion that risk management had improved.

Respondents from organisations using the six capitals per the Framework said that they had gained a better understanding of the capitals and their interrelationships within the context of their organisations.

● Does integrated thinking offer short, medium and long term benefits?

Executives and non-executive directors felt confident that organisations would gain definite benefits. Those benefits realised so far would be consolidated and organisations would gain further advantages from improved controls governing non-financial information and from enhanced efficiencies (more effective

management of capitals). It was also suggested that integrated thinking creates an environment for innovation.

Several respondents suggested that more transparent integrated reporting should – over time – create greater trust between organisations

and stakeholders, resulting in enhanced corporate reputations. Some non-executive directors made the point that those organisations at the beginning of their reporting journey would have the most to gain. The very survival of those that did not assimilate integrated thinking may be threatened.

● How integrated thinking helps organisations identify and manage capitals

There were mixed responses to this question. This is probably because the six capitals concept is new to many. While organisations already manage various elements of the capitals in day-to-day business, the Framework has presented the capitals in a new light. Some respondents said that they had always addressed the capitals, while others were still in early stages of trying to understand the capitals inter-relationships in their particular circumstances.

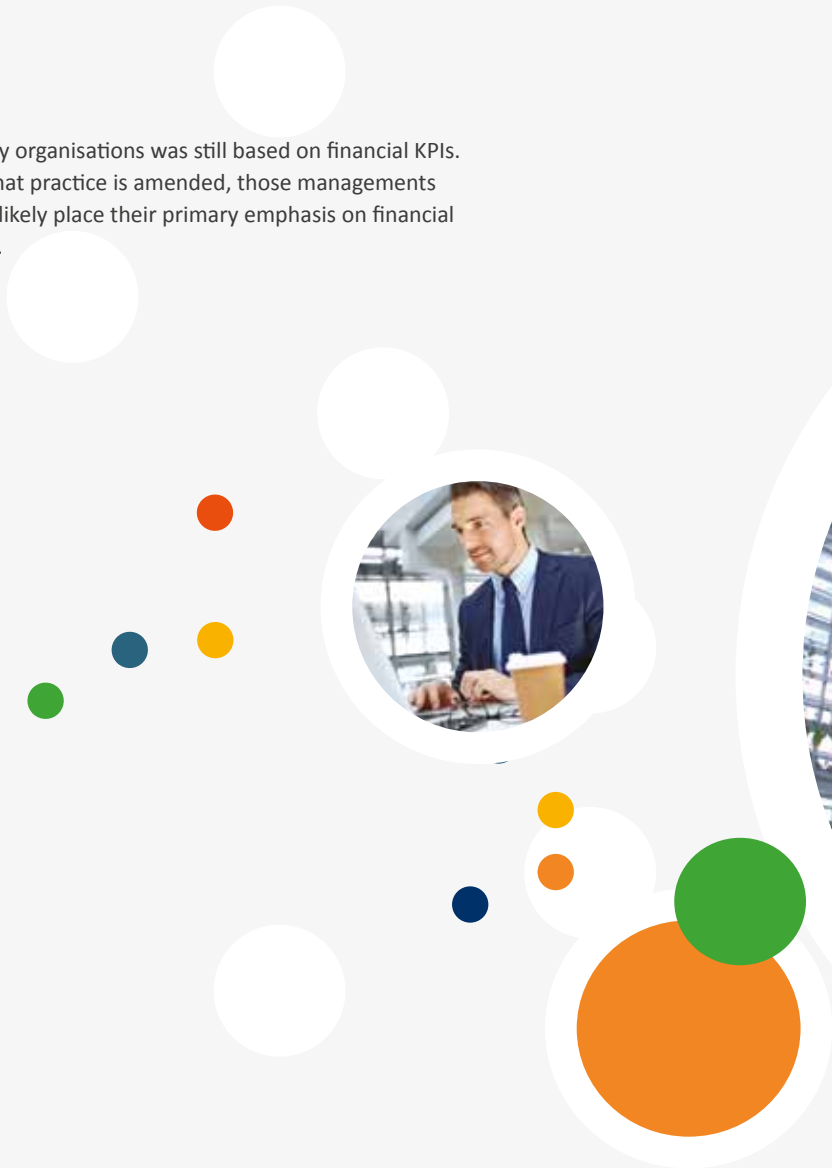
Certain respondents said that their organisations had embraced the Framework model and changed the way they recognised and managed capitals.

It was pointed out that mining companies now pay closer attention to human capital, social capital and natural capital due to heightened industrial action and social unrest. The capitals approach has provided a more relevant model for that industry.

It has also highlighted the fact that the capitals are interdependent and understanding these relationships is not straightforward.

Other respondents replied that the capitals model provides a useful basis for understanding value creation in the short, medium and long term, with some organisations adopting a matrix approach to managing them. On the other hand, management remuneration

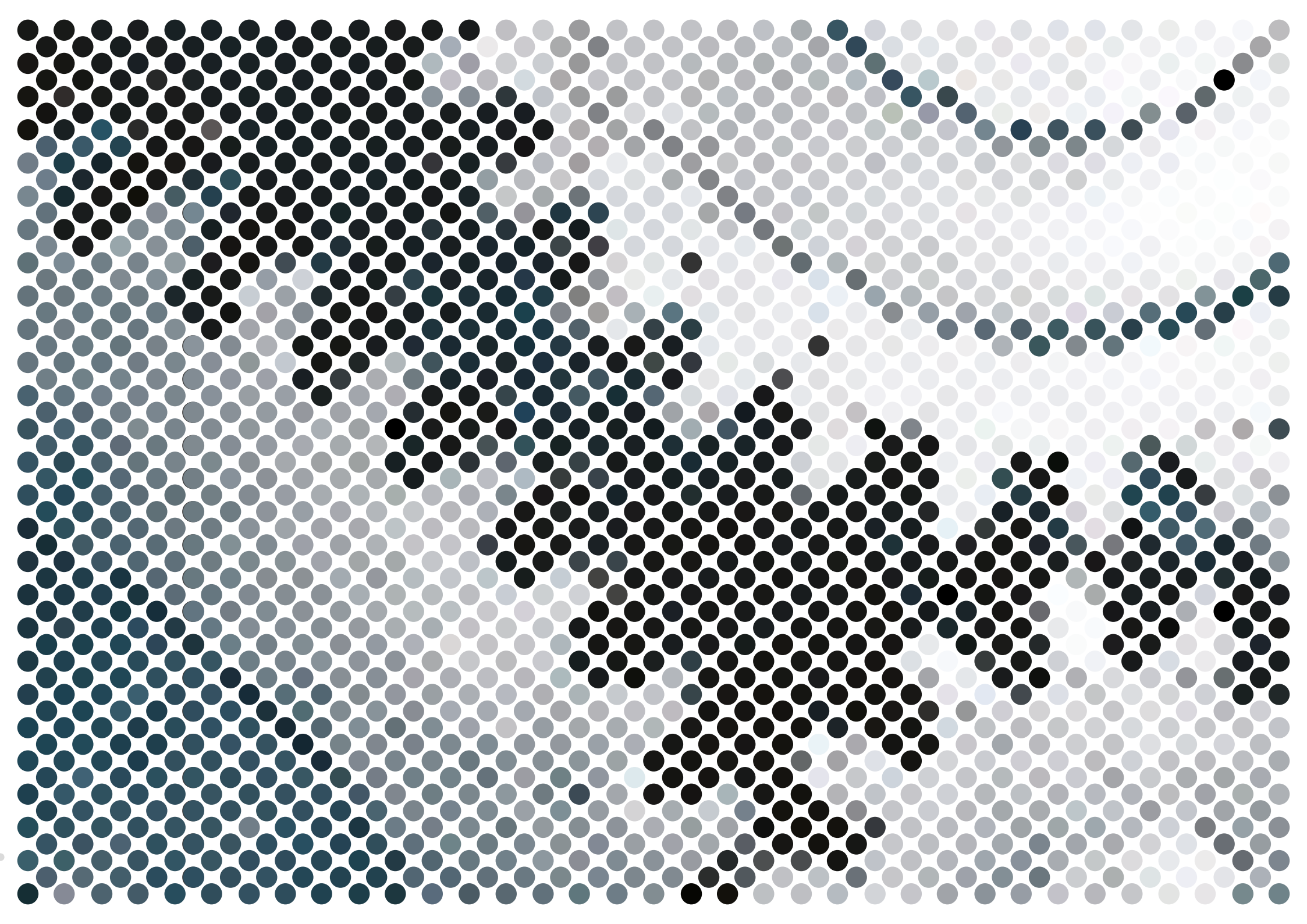
in many organisations was still based on financial KPIs. Until that practice is amended, those managements would likely place their primary emphasis on financial capital.



THE RIGHT MECHANISMS

must be in place before Integrated Thinking can permeate an organisation.





TOOLS, MODELS AND TECHNIQUES

In the survey, executives were asked if their organisations were using any specific tools, models or techniques (tools) to assist them in enhancing integrated thinking. Similarly, the non-executive directors were asked if organisations they were involved with were using any specific tools.

Many respondents indicated that their organisations used KPIs to drive performance, with others using the balanced scorecard. One executive said that 'systems thinking' is used in the organisation, but not specifically to drive integrated thinking. Others indicated that their organisations use computer models for processes such as logistics and risk management. Performance measurement is part of integrated thinking, but by no means all of it. Performance measurement tends to be backward looking, while a critical element of integrated thinking is forward looking.

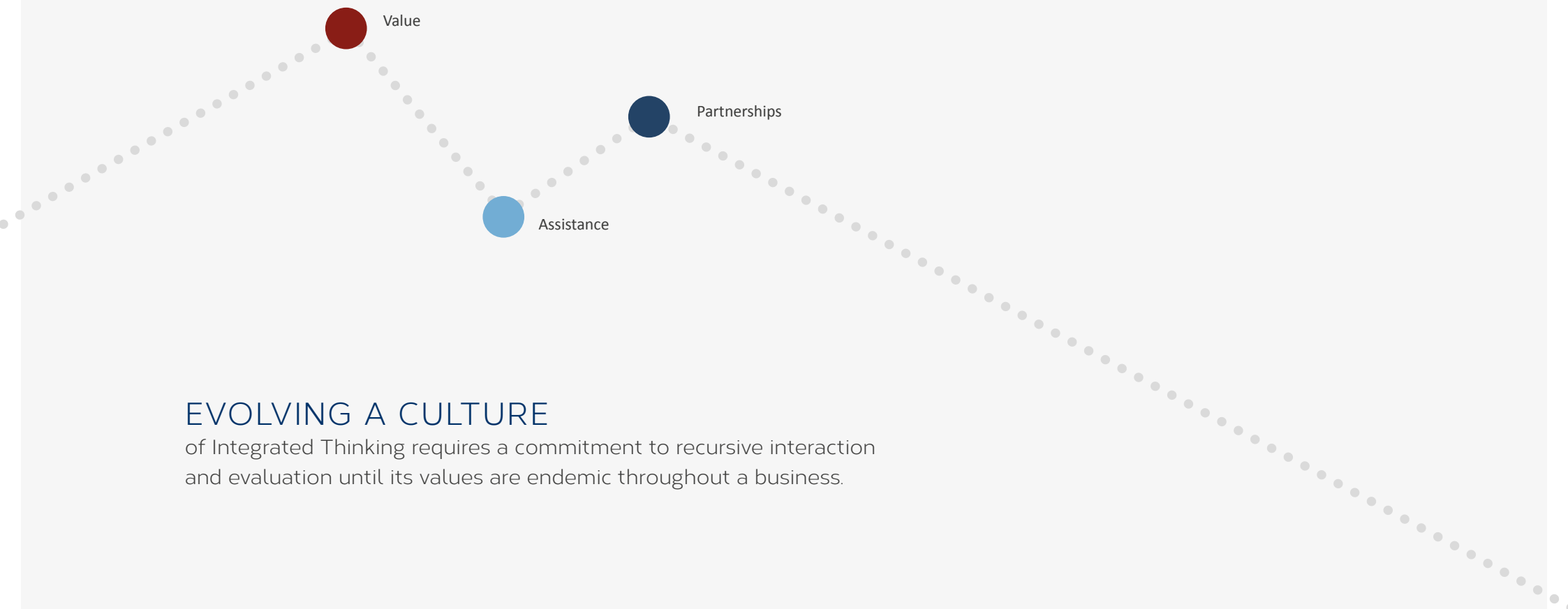
From the evidence gathered, only one organisation appeared to use tools specifically to support integrated thinking. This is probably as most are in the early stages of their journey to implement integrated thinking.

However, organisations will probably soon begin using tools specifically to extract information for integrated thinking aspects, such as measuring the trade-offs between capitals. In an interview one executive disclosed that his organisation was developing software to support management of the capitals.

Tools are used in business and other spheres to assist decision-making in complex situations. A few are discussed briefly in Appendix II, although this paper will not venture into a comprehensive discussion on available tools. It is intended to stimulate organisations and researchers to explore ways in which integrated thinking can be enhanced through dedicated tools. It is worth noting that the IIRC has, in response to the feedback received through the IIRC Pilot Programme, embarked upon a 'technology initiative'.

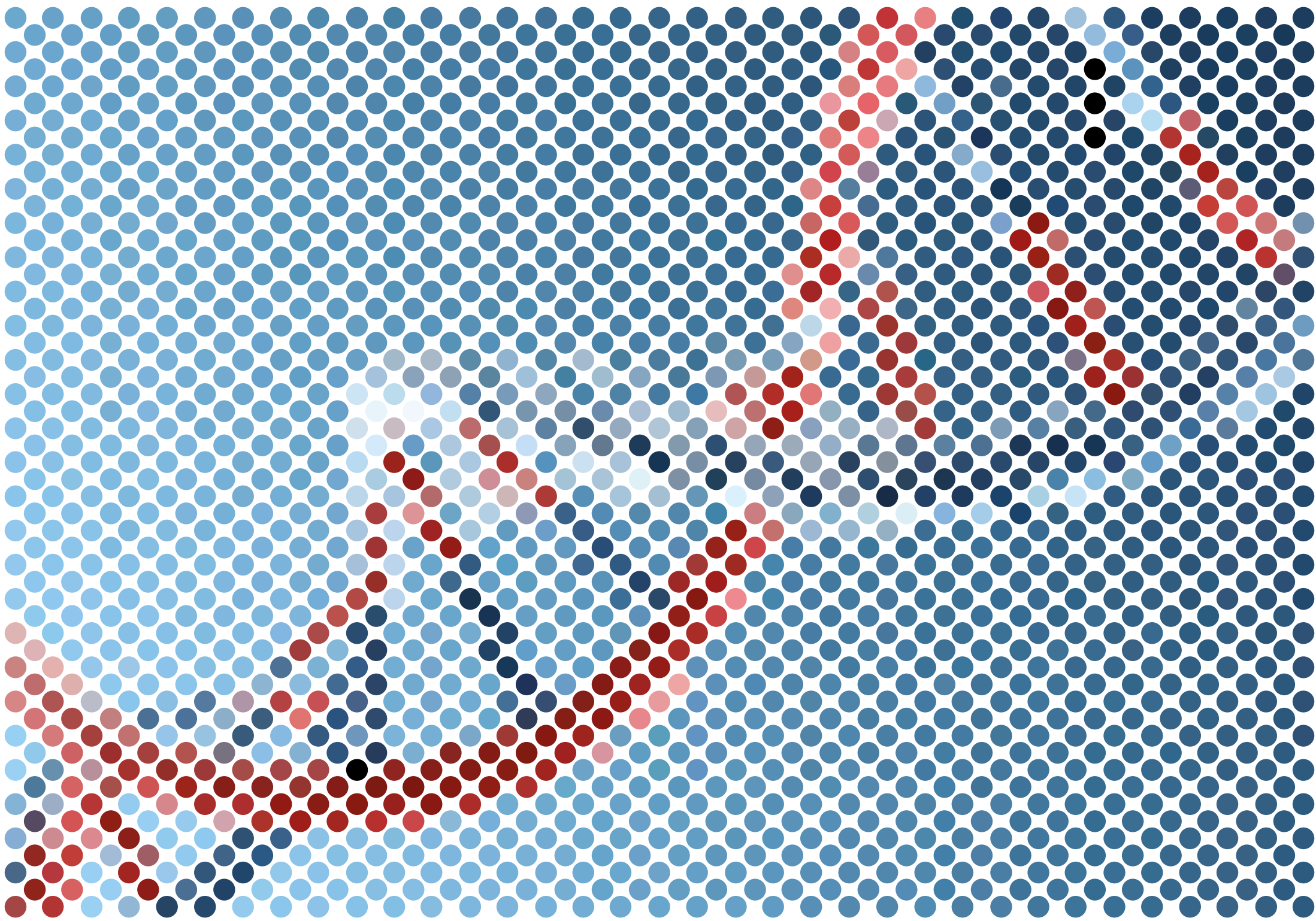
Its objective is to provide a platform for technology companies and reporting organisations to collaborate in finding ways to enable integrated thinking and reporting through technology. This area requires more research, although certain existing tools may well be adapted for this purpose.





EVOLVING A CULTURE

of Integrated Thinking requires a commitment to recursive interaction and evaluation until its values are endemic throughout a business.



INDICATORS OF INTEGRATED THINKING

The project group did not launch this survey with the intention of trying to define integrated thinking or to provide guidance on how to implement integrated thinking. Rather it was conducted to distil a perspective on the current state of practice in South Africa. It was clear from responses received and interviews held that what integrated thinking is and how it should be implemented is not yet widely understood. Some respondents see integrated thinking as integrated processes, which ensure that the organisation functions efficiently and effectively with a minimum of wastage.

They believe that their organisations have substantially achieved the desired level of integrated thinking. Others see it as a much broader concept, encompassing the entire business and its value chain, its capitals, relationships and interdependencies. They see themselves on a journey to implement it effectively.

Taking into account the input received, the project group shares some indicators of integrated thinking that may assist organisations as they proceed on their journey to implement integrated thinking. These are not meant to be guiding principles, but can be seen as a first step towards establishing guiding principles in the future.

The factors set out below apply to organisations to different degrees; however they should not be seen in isolation. Integrated thinking incorporates many interdependent processes:

- Integrated thinking begins with the board and cascades down throughout the organisation to become part of its DNA

- Development of relevant capitals and responsible management thereof is essential for long term value creation
- The capitals of organisations extend beyond their legal boundaries to incorporate their entire supply chains
- Organisations strategise and plan for the short, medium and long term, including the trade-offs between different capitals
- Organisations create value for a range of stakeholders, including their providers of financial capital, employees, and the communities they operate in
- Long term success is underpinned by strong ethics and responsible leadership
- Organisations develop and implement reliable financial and other information systems that enable effective decision-making
- Boards and management use various tools to measure, understand and manage interdependencies.



CONCLUSION

The survey shows that among those organisations that produce high-quality and authentic integrated reports, there is a strong awareness of the concept of integrated thinking and how it benefits the organisation.

The survey did not attempt to gain an understanding of how organisations perceive integrated thinking; neither did it attempt to establish how organisations were implementing integrated thinking. Rather the purpose was to distil a perspective on the current state of integrated thinking practice in South Africa. It is clear that the respondents have diverse perceptions as to what integrated thinking is and how integrated thinking should be implemented. This is understandable, it is a fresh concept that has evolved with integrated reporting with no set standards or guides yet available on how to implement it. Moreover, greater integration within organisational processes has been an objective for many years and is a principle underpinning many management and governance theories. Nevertheless, this integration is being approached in various ways.

Several respondents indicated that, like integrated reporting, the implementation of integrated thinking is a journey that an organisation needs to undergo. It is clear that organisations are scattered along various stages in this journey. It is unlikely, however, that many organisations have yet reached the ideal envisaged in the Framework.

To date few organisations seem to be using the capitals model outlined in the Framework to identify and

manage their capitals, but there does seem to be an awareness of the six capitals and that these contribute to the value creation process. We believe that as organisations become more familiar with the concept, much greater emphasis will be placed on the six generic capitals from a strategic and operational point of view.

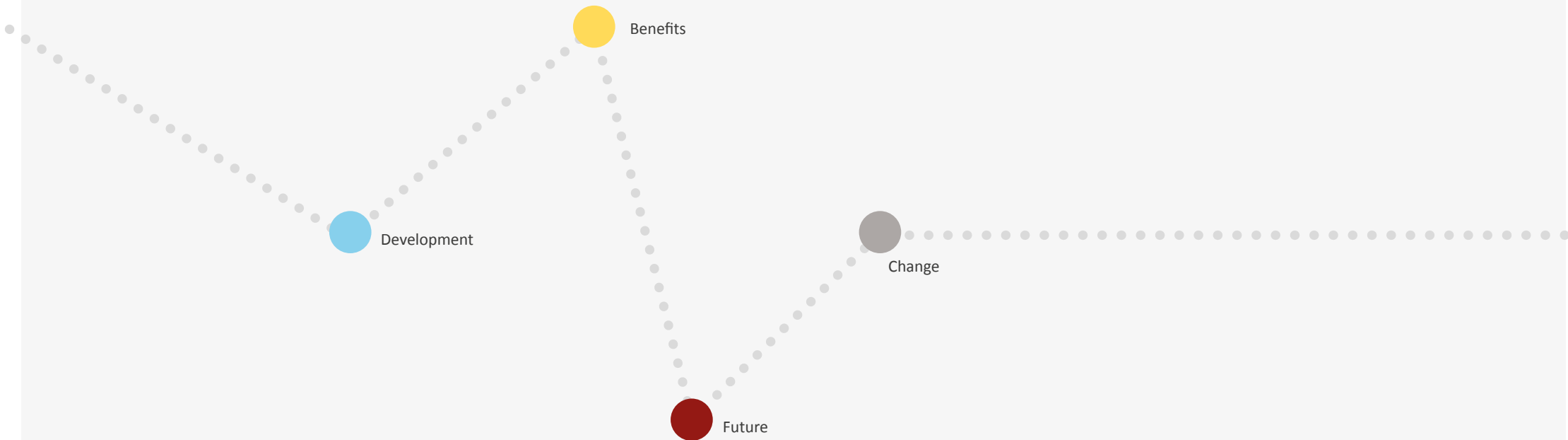
Apart from one respondent, it was indicated that the organisations linked to the respondents do not use special tools to measure or manage the impact that capitals have on the business, or on each other, or to enhance integrated thinking. We find this surprising given the complexities of doing business – particularly in global markets. We believe that organisations will be looking for tools and software to enhance their businesses as they progress on the journey of assimilating integrated thinking.

This project has highlighted that many aspects of integrated thinking are not yet understood. Much research and development is needed to guide organisations on the road they must travel to integrated thinking and its consequent reporting. Looking to the future, we believe that organisations will increasingly recognise the significant benefits of integrated thinking to enhance their competitiveness and support their sustainability from all perspectives.



BY PUTTING TOGETHER

all the information – economic, social and environmental – that affects a modern business, Integrated Thinking delivers a complete picture.





APPENDIX I – SURVEY STATISTICS

The survey questionnaire was sent to the CFOs of organisations that had been commended for the quality of their integrated reports in the EY Excellence in Integrated Reporting awards 2013. In addition, a similar questionnaire was sent to non-executive directors (mainly Chartered Accountants (South Africa)) who serve on listed company boards and state-owned entity boards.

Category of recipient	Number of questionnaires sent	Responses received	Percentage response
CFOs			
Listed companies	61	14	23%
State-owned entities	5	3	60%
Other companies	3	2	67%
	69	19	28%
Non-executive directors			
	34	14	41%
OVERALL	103	33	32%



The overall response rate was 32%. Participants could either submit the questionnaire electronically through an online portal, or a completed questionnaire via email, or a printed version by hand.

APPENDIX II – TOOLS, MODELS AND TECHNIQUES

Some tools, models and techniques for enhancing decision-making are discussed briefly below.

● Systems thinking

Integrated thinking has a lot in common with what is termed 'systems thinking' by virtue of its concern with connectivity and interdependencies between various factors. The early roots of systems thinking can be found in the work of the biologist Ludwig von Bertalanffy. His work laid the foundation for what become known as General Systems Theory.

Systems thinking is not a particular science or discipline; it is a catch-all of practices, techniques and approaches used to understand how systems behave.

Systems thinking tries to make sense of the behaviour of a system, where the system can be described as a whole comprising a number of interrelated parts that interact to produce the behaviour of the whole, for example a motor vehicle is a method of transport comprising many parts. In this example, a part from one motor vehicle cannot be swapped with a part of another without it having an impact on overall performance.

Similarly, an organisation comprises a number of functions, divisions and activities that interact to achieve the organisation's objectives. Changes in how these functions, divisions and activities interact can have a significant effect on the achievement of the organisation's objectives.

Traditional methods of analysis used in business tend to focus on analysing the parts of a whole, whereas systems thinking concentrates on the whole.

Systems thinkers have observed that interventions in systems often produce unintended consequences. This can be due to a variety of reasons including the following:

Feedback

Because of the interdependency of connected variables in a system, actions taken in respect of some variables have an effect on other variables.

This feedback effect can have either a reinforcing response to the action or a negating response. The effect of feedback is illustrated in an article by Adam Mann, 'What's up with that: building bigger roads

actually makes traffic worse'.²¹ The article shows that building new roads to alleviate traffic congestion does not necessarily achieve the desired outcome. The article suggests that new roads draw new drivers, resulting in the traffic intensity remaining the same. This is an example of feedback affecting the expected outcome.

²¹ Adam Mann, What's up with that: building bigger roads makes traffic worse, available at <http://www.wired.com/2014/06/wuwt-traffic-induced-demand/>.

Non-linearity

Non-linearity simply means that an action may have an effect in a system that is disproportionate to the action itself. An illustration of this is that an excessive increase in the workload of a workforce will not necessarily

produce an output proportionate to that produced at the lower workload. This can be due to effects such as lower morale and increased stress.

Time delays

The short term and long term outcomes of an action in a system can differ due to the effect of time delays. An illustration of this is that sometimes the short term response to a corrective action is continued deterioration before improvements are seen. The combined effect of these factors is illustrated in what has become known in supply chain management

as the 'bullwhip', 'whiplash' or 'whipsaw' effect. This effect can for example result in excessive inventory investment across supply chains due to their participants stockpiling in response to variability in demand information, which is amplified further up the chain.

In his book *Business dynamics: systems thinking and modeling for a complex world*, John Sterman writes that people generally adopt an understanding of the behaviour of systems that is deficient by virtue of not taking into account the factors that may influence the system as described above.²²



²² John D Sterman, *Business dynamics: systems thinking and modeling for a complex world*, McGraw-Hill/Irwin, 2000.

However, there are techniques in a systems thinking toolbox that can be used to help deal with this challenge. Some of these techniques are described below.

Causal loop diagrams

A causal loop diagram is a diagrammatical representation of the relationships between collections of interconnected variables. The relationship between two interconnected variables is shown by drawing an arrow between the variables with the direction of the arrow showing the direction of influence between the variables. If the influence is positive the arrow head is accompanied by a '+' sign; if the influence is negative the arrow head is accompanied by a '-' sign.

Feedback loops are an important feature of causal loop diagrams. Feedback loops arise when two variables are interdependent, for example A has an effect on B but B also has an effect on A. The effect of B on A can be in the same direction as the effect of A on B and this would be termed a reinforcing feedback loop. A reinforcing feedback loop is denoted with either an 'R' or a '+' in the centre of the loop, together with a circular arrow showing the direction of the reinforcing behaviour. On the other hand, the effect of B on A could be in the opposite direction to the effect of A on B and this would be termed a balancing feedback loop. A balancing feedback loop is denoted with either a 'B' or a '-' in the centre of the loop, together with a circular arrow showing the balancing behaviour. Feedback loops usually operate with a delayed effect.

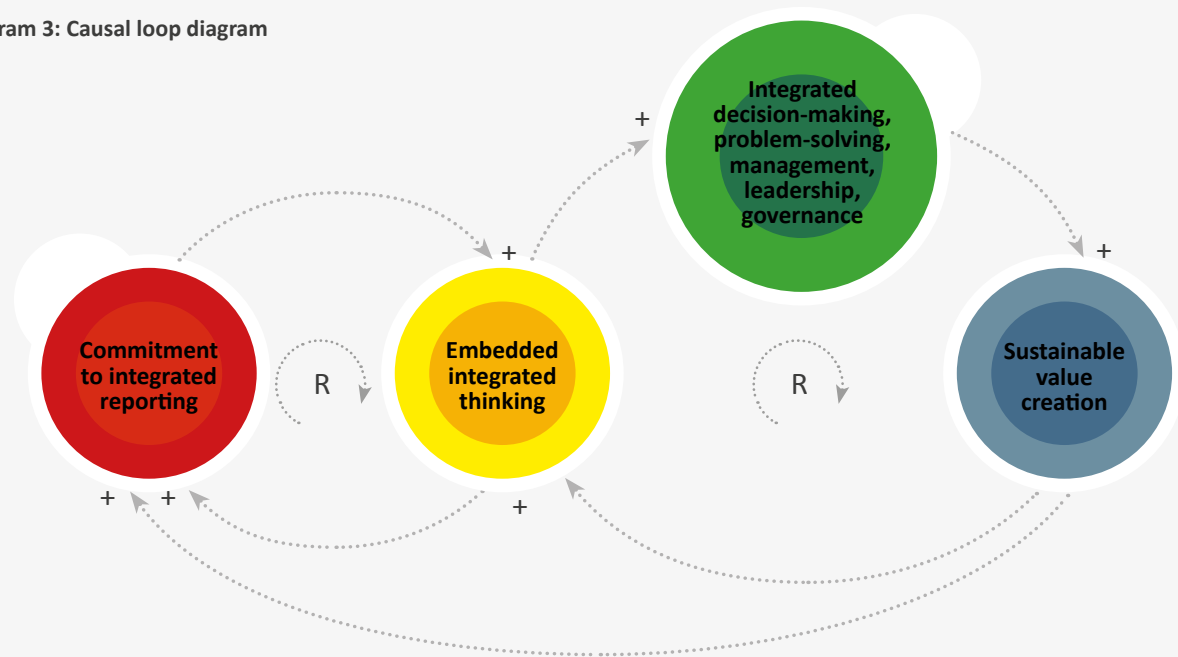
The causal loop diagram below shows the relationship between integrated reporting, integrated thinking

and sustainable value creation. A reinforcing feedback loop is shown between the 'commitment to integrated reporting' and 'embedded integrated thinking'.

A commitment to integrated reporting contributes to embedding integrated thinking, which in turn strengthens the commitment to integrated reporting.

However, embedded integrated thinking also affects decision-making, problem-solving, management, leadership and governance, which in turn contributes to sustainable value creation. This will embed integrated thinking more firmly and also strengthen the commitment to integrated reporting by organisations.

Diagram 3: Causal loop diagram



System dynamics modelling

In their book *Systems concepts in action: a practitioner's toolkit* Williams and Hummelbrunner²³ define system dynamics as an approach for understanding the dynamic behaviour of systems, in particular social systems. They say that these behaviours defy intuitive solutions and attempting to apply ordinary processes of description and analysis leads to inconsistencies and contradictions.

System dynamics is a method of modelling that facilitates understanding the behaviour arising from connectivity and interdependencies between variables. The method makes it possible to model the factors referred to earlier that give rise to the unintended consequences of interventions in systems and to systems behaviour that is counterintuitive, such as feedback, non-linearity and time delays. Furthermore, the modelling is done in the context of stocks and flows

and this can assist organisations to better understand the relationships and interdependencies between the capitals.

Models can be built using software developed for that purpose. Such models make it possible to do simulations, scenarios and risk assessments.

Balanced scorecard

Several of the organisations that responded to the survey mentioned that they use the balanced scorecard for strategic planning and performance management. According to the Balanced Scorecard Institute, the technique was originated by Robert Kaplan (Harvard Business School) and David Norton. It is a performance measurement framework that adds strategic non-financial performance measures to traditional financial

metrics, giving managers and executives a more 'balanced' view of organisational performance.²⁴ Since its initial launch, Kaplan and Norton have published several books expanding and enhancing the model. It can be easily adapted to cater for the capitals, although on its own it does not provide a mechanism for measuring the dependencies.

In their book *The strategy-focused organization*, Kaplan and Norton²⁵ write of the benefits that Grupo Bal, a diversified Mexican business group, had experienced in using systems thinking principles, including building a system dynamics model, to support its balanced scorecard initiative.

Scenario planning

Scenario planning (or scenario thinking) is a well-known technique used by many organisations. The concept of scenarios means thinking out various alternative futures that help organisations to identify future opportunities,

avoid or minimise risks and configure resources in an optimal manner. It can be a very useful tool to assist integrated thinking and plan capital requirements.

Scenario planning is often used with systems thinking to recognise the effects of combining complex systems, so that issues like non-linearity, feedback and timing differences can be taken into account.

²³ Bob Williams and Richard Hummelbrunner, *Systems concepts in action: a practitioner's toolkit*, Stanford, Calif: Stanford University Press, 2010.

²⁴ Balanced Scorecard Institute, see <http://balancedscorecard.org/>.

²⁵ Robert S Kaplan and David P Norton, *The strategy-focused organization: how balanced scorecard companies thrive in the new business environment*, Boston, Mass: Harvard Business School Press, 2001.

APPENDIX III – CAPITALS

Financial capital: The pool of funds that is:

- available to an organisation for use in the production of goods or the provision of services
- obtained through financing, such as debt, equity or grants, or generated through operations or investments.²⁶

Human capital: People’s competencies, capabilities and experience, and their motivations to innovate, including their:

- alignment with and support for an organisation’s governance framework, risk management approach, and ethical values
- ability to understand, develop and implement an organisation’s strategy
- loyalties and motivations for improving processes, goods and services, including their ability to lead, manage and collaborate.²⁶

Intellectual capital: Organisational, knowledge-based intangibles, including:

- intellectual property such as patents, copyrights, software, rights and licences
- ‘organisational capital’ such as tacit knowledge, systems, procedures and protocols.²⁶

Manufactured capital: Manufactured physical objects (as distinct from natural physical objects) that are available to an organisation for use in the production of goods or the provision of services, including:

- buildings
- equipment
- infrastructure (such as roads, ports, bridges, and waste and water treatment plants).

Manufactured capital is often created by other organisations, but includes assets manufactured by the reporting organisation for sale or when they are retained for its own use.²⁶

Natural capital: All renewable and non-renewable environmental resources and processes that provide goods or services that support the past, current or future prosperity of an organisation. It includes:

- air, water, land, minerals and forests
- biodiversity and eco-system health.²⁶

Social and relationship capital: The institutions and the relationships within and between communities, groups of stakeholders and other networks, and the ability to share information to enhance individual and collective well-being. Social and relationship capital includes:

- shared norms, and common values and behaviours
- key stakeholder relationships, and the trust and willingness to engage that an organisation has developed and strives to build and protect with external stakeholders
- intangibles associated with the brand and reputation that an organisation has developed
- an organisation’s social licence to operate.²⁶



APPENDIX IV – REFERENCES

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APPENDIX V – GLOSSARY OF TERMS

Business model: A business model describes the rationale of how an organisation creates, delivers and captures value.²⁸

Capitals: Stocks of value on which all organisations depend for their success as inputs to their business model, and which are increased, decreased or transformed through the organisation's business activities and outputs. The capitals are categorised in this Framework as financial, manufactured, intellectual, human, social and relationship, and natural.²⁷

Integrated report: A concise communication about how an organisation's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term.²⁷

Integrated reporting: A process founded on integrated thinking that results in a periodic integrated report by an organisation about value creation over time and related communications regarding aspects of value creation.²⁷

Integrated thinking: The active consideration by an organisation of the relationships between its various operating and functional units and the capitals that the organisation uses or affects. Integrated thinking leads to integrated decision-making and actions that consider the creation of value over the short, medium and long term.²⁷

Stakeholders: Those groups or individuals that can reasonably be expected to be significantly affected by an organisation's business activities, outputs or outcomes, or whose actions can reasonably be expected to significantly affect the ability of the organisation to create value over time. Stakeholders may include providers of financial capital, employees, customers, suppliers, business partners, local communities, NGOs, environmental groups, legislators, regulators, and policy-makers.²⁷

Value creation: The process that results in increases, decreases or transformations of the capitals caused by the organisation's business activities and outputs.²⁷



²⁷ Ibid, Glossary.

²⁸ Alexander Osterwalder and Yves Pigneur, *Business model generation*, (Wiley 2010).

APPENDIX VI – MEMBERS OF THE INTEGRATED THINKING PROJECT GROUP

Roy Andersen – Project Group Chairman

Graham Terry – Project Leader

Eddie Drost

Magdel Fick

Mark Graham

Nasiegh Hamdulay

Alan Hartdegen

Muneer Hassan

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Bertie Loots

Sven Lunsche

Paul O’Flaherty

Leigh Roberts

Stephen Roper

Lelanie Sherman

Monica Singer



