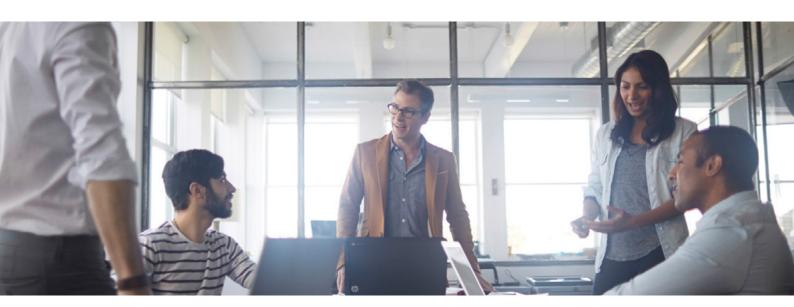
Deloitte Access Economics



The Collaborative Economy

Google

2014

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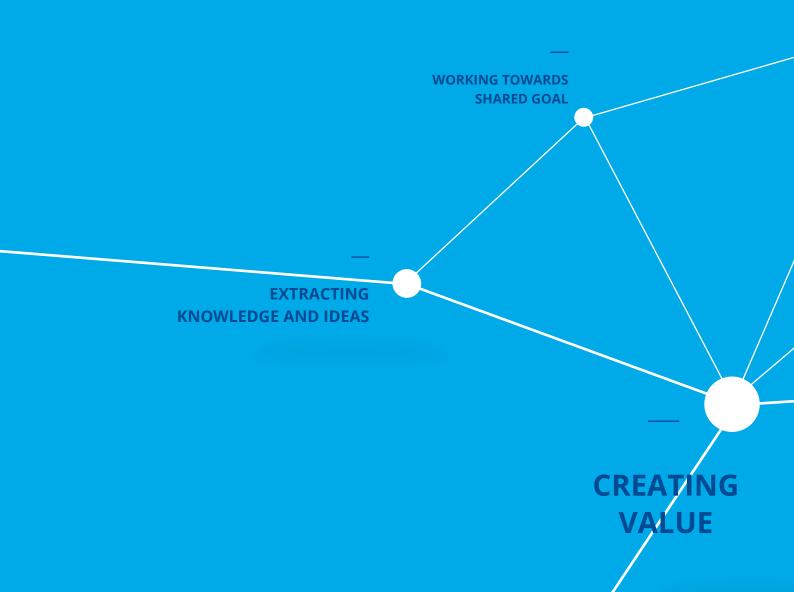
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What is collaboration?

"Collaboration is employees communicating and working together, building on each others' ideas to produce something new or do something differently."

A collaborative organisation unlocks the potential, capacity and knowledge of every employee, thereby generating value, innovation and improving productivity in its workplace.



UNLOCKING POTENTIAL COMMUNICATION BUILDING ON WORK AND IDEAS IN AN ITERATIVE WAY

PEOPLE WORKING TOGETHER

Main Findings

1

The Collaborative Economy

- Australia's collaborative economy is worth \$46 billion
- Collaboration could be worth an extra \$9 billion a year by improving strategies

When employees collaborate:

- They work 15% faster, on average;
- 73% to do better work;
- · 60% are innovative; and
- 56% are more satisfied.

Businesses with a collaborative strategy are:

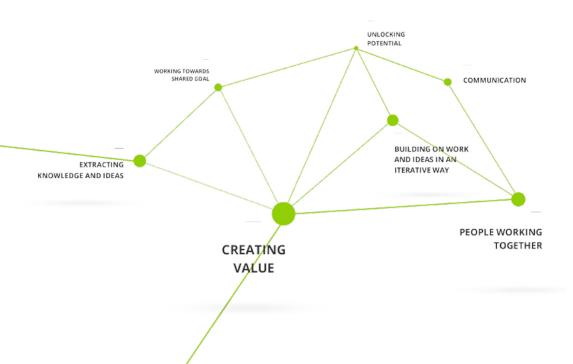
- Twice as likely to outgrow their competitors; and
- More likely to improve their profit.

The most effective drivers of collaboration are

- Technology tools like videoconferencing and real time electronic document management;
- Having the right corporate strategy and human resources policies in place.

In collaboration with Google, Deloitte Digital has developed an online benchmarking tool to help Australian businesses assess and better understand their collaboration capabilities.

For further information visit: collaborativeeconomy.deloitte.com.au



Executive summary

Google commissioned Deloitte Access Economics and Deloitte Digital to prepare a report on collaboration in Australian workplaces. It builds on previous reports commissioned by Google on the value of the internet to the economy and the role of digital technologies in modern workplaces.

This report assesses collaboration in the Australian workplace and provides insights on how organisations can respond to emerging trends in collaboration. The report considers key aspects of the role collaboration plays in the modern economy, including its value to the economy, benefits for business and employees, as well as its barriers and difficulties.

What is collaboration?

Collaboration means different things to different people and there are a range of views on the meaning of collaboration, with perspectives varying between company leaders, government and academia. There are also different views across disciplines, including economics, information technology and the creative arts. At the same time, the form of collaborative activities varies according to context – be it a traditional business, a start-up firm or an education and learning environment.

Canvassing a raft of definitions and case studies, this report identifies seven pervasive and essential elements of workplace collaboration. The seven elements interact and complement each other to deliver the optimal collaboration outcomes.

Putting this in context, workplace collaboration is employees communicating and working together, building on each other's ideas to provide something new or do something differently. A collaborative organisation unlocks the potential, capacity and knowledge of every employee, thereby generating value, innovation and improving productivity in its workplace.

The Collaborative Economy?

In this report, based on survey data collected for this project, we find that on average, Australian employees and managers spend around 10% of their time collaborating with their colleagues, which is equivalent to 4 hours a week for a full time employee. We find survey evidence of time savings and improvements in work quality from collaboration. Based on these data we estimate that collaboration has a net value add to the Australian Economy of around \$46 billion dollars a year.

Our approach is to estimate, based on the survey data, how much time employees and managers save from collaborating and what the impacts on work quality are. We use the results from our survey to estimate the value of their time based on their wages. We calculate a gross 'value of collaboration time' estimate across the economy for a single year. This is similar in principle to a factor-input approach to measuring the size of the economy and how the value of the internet economy was measured in The Connected Continent (Deloitte Access Economics 2011). There are limitations and assumptions in this approach, (discussed in the relevant sections and the appendix) but we believe this report highlights the importance of collaboration in an economy.

We estimate that collaboration has a net value add to the Australian Economy of \$46 billion dollars.

Can Australia do more collaboration better? According to our survey data, the answer is yes. Approximately 30% of respondents said that they would like more collaboration in their organisation. Based on our estimate of the value of collaboration, if the 'optimal' level of collaboration is reached, a 9% net potential increase in collaboration activity can be realised. These impacts alone represent a \$9.3 billion potential for the Australian economy, and would bring the net value added by collaboration to about \$56 billion.

Consider the following facts for the Australian Economy:

- Australia's multifactor productivity growth has been falling at an average of 0.6% a year since 2007-2008. According to Productivity Commission Chairman, Peter Harris: "our performance has been significantly worse than that of most other developed economies for more than a decade"
- Only 36.6% of Australia businesses were innovative in 2012-13 - that is, they introduced new or significantly improved goods, services operational/organisational/managerial processes, or marketing methods. This was down from 41.3% the year before (ABS, 2014).
- The Deloitte Report, Digital Disruption: Short
 Fuse, Big Bang? found that two-thirds of the
 Australian economy faces a 'big bang' scenario
 meaning a dramatic change in revenue sources
 due to emerging digital trends within the next
 five years.
- Australian businesses face additional employee costs because of staff turnover. Every year about 11% of employees change their employer and for more than one in five it is because of unsatisfactory working conditions. Employee engagement is very important.

In sum, Australian businesses and the economy faces a range of challenges that require new solutions, including in the workplace.

Collaboration is everywhere

Collaboration is a concept often associated with certain parts of the economy or particular types of employees. In the business stereotype, collaboration is something confined to the 'knowledge economy' or 'creative economy', and to employees in professional and creative roles

Contrary to our expectations, we found that collaboration is an activity that is widely adopted across industries, age groups, corporate titles, and occupations. Men spend just as much time collaborating as women, at around 10% of their time. While workers in industries such as education spend more time in collaboration with others, this is only by a modest amount, around 2-4% more than other industries

We also found that firms that occupy multiple geographic locations tend to collaborate more at 12.9% of time compared to singles offices at 11.6%.

In addition, we also observe that collaboration activity in the Australian economy is growing over time, partly driven by the increasing availability of collaboration technologies, its rising profile amongst senior business leaders, and an overall shift in work culture.

Business benefits of collaboration

In this report we found a strong relationship between collaboration strategy and business success. In particular,

- · Time-saving and productivity of employees. Over half of employees and managers identified time saved completing tasks as a benefit of collaboration. Even after some time wasting activities are taken into account, based on wages as a measure of value of time, collaboration time savings are worth around \$1,660 per employee and manager per year.
- Quality of work output. Collaboration in the workplace puts into practice the simple logic of 'two heads are better than one'. For example, if various divisions of a financial services institution collaborate to create a single web portal, it improves the customer experience and generates value. We estimate that collaboration's quality improvements are worth around \$2,517 per employee and manager per year.

Figure E.1: Collaboration a major influence on innovative thinking



Source: Deloitte Access Economics, Stancombe research and planning.

- Innovation and new ideas. Collaborating with a group of open-minded people, who can quickly validate the merits of an idea and help build upon that idea can accelerate the process of iterative thinking and bring a faster pace to the innovation process. We found that around 60% of respondents have experienced change in their way of thinking due to collaboration.
- Employee engagement and reduced turnover. An important benefit of collaboration for businesses is that employees like to do it. The 2013 Connected Workplace paper found that satisfied employees collaborated 28% of the working week, compared to 12% for those that were dissatisfied. Research for this paper has found that 56% of respondents said that they were happier when they collaborated.
- Growth. Collaboration can bring about a number of competitive advantages to businesses that make them more agile, innovative and productive, giving them the competitive edge they needed to outgrow competitors. We found that only 20% of businesses without collaboration strategies outgrew the market, compared to 30% with a middling strategy, and 52% with an important strategy. Companies that prioritise collaboration are also five times more likely to experience a considerable increase in employment, twice as likely to be profitable, and twice as likely to outgrow competitors.
- **Profitability.** Similar to overall growth, we found a strong link between profitability of an organisation and its collaboration strategy. Of the businesses that saw a significant increase in profitability over the last three years; a majority had an important collaboration strategy. In fact, businesses that consider collaboration an important component of their overall business strategy were 4 times more likely to see growth in their bottom line.

Our results above are based on underlying data from survey responses, including self-reported business performance metrics and time allocation metrics from employees. It is important to note that there are inherent issues in interpreting survey data, and that these should be considered in interpreting the results. However, we believe that our results are nevertheless indicative of the true value/measure of collaboration within a reasonable margin.

The levers of Collaboration

We found that 51% of respondents said that either their organisation had no collaboration strategy, or that they were unsure if their organisation did.

Given the range of economic and business benefits of collaboration we have identified in this report, it is surprising that most businesses had a lack of strategic focus on collaboration. It begs the questions: How can businesses overcome the barriers to collaboration? What are the key next steps Australian businesses leaders



There are three levers which businesses can use to achieve the optimal level of collaboration in their organisation. We believe businesses can place a strategic focus on collaboration in three main ways - culture and governance, workplace design and technology. These are the three overarching 'levers' available to businesses to influence the extent to which effective collaboration occurs in the day to day activities of their employees.

- Culture and Governance: The structure and cultural features of an organisation sets the tone for its collaborative atmosphere. To facilitate effective collaboration, employees need to have the opportunity to establish collaborative relationships, be encouraged to participate and have the incentive to achieve a common outcome
- Workplace design: The workplace is often overlooked. A well-designed workspace can help facilitate collaboration through lowering the barrier to employee interactions and providing readily available collaboration spaces.
- **Technology**: In itself, technology available at the workplace provides a channel through which employees can communicate and collaborate. It is also an important overarching lever as it enables and empowers the culture and workspace.

Across these three levers, the extent to which there is strategic focus on collaboration within a firm can be measured by assessing performance in relation to 21 indicators – seven related to culture and governance, six related to workplace design and eight related to technology. These are listed in Figure E.2 on the following page.

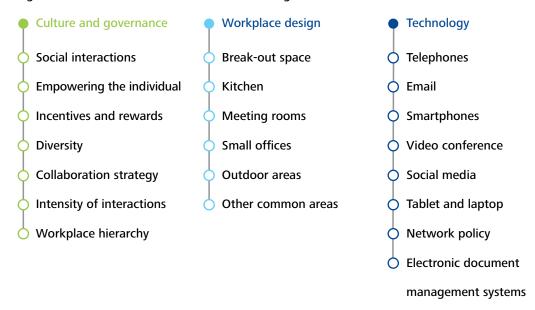
The indicators are designed to reflect the overall capability of an organisation to facilitate collaboration, rather than capturing the collaborative activity itself. Indeed, merely benchmarking collaborative ctivity can be a futile task, as the amount of collaboration often depend on the nature of the work and more is not always better. Instead, this benchmark measures the relative "ease" for employees of establishing a collaborative working including cultural, technology and physical workspace factors.

Your response plan

In this report, we have identified a range of economic and business benefits of collaboration. We know that it can lift productivity, innovation and employee engagement, and help businesses achieve growth. We have also found a lack of strategic focus on collaboration in the majority of businesses. Many employees believe collaboration is below the optimal levels.

With all these findings, it begs the questions: How can businesses overcome the barriers to collaboration? What are the key next steps Australian business leaders can take to make their organisations more collaborative and unlock these benefits? We believe the first step to solve this collaboration conundrum is to better understand the problem. Businesses must first realise the strength and weaknesses of their own organisation in facilitating collaboration before they can implement targeted collaboration strategies to improve their performance. To this end, Deloitte has developed an online benchmark tool for Australian businesses, in which businesses can readily assess their collaboration capabilities against other firms in the economy, and better understand where their organisations stand and how they can improve.

Figure E.2: The three levers of collaboration strategies



Source: Deloitte Access Economics, Stancombe Research and Planning

In the final chapter of this report, we identify five practical steps for business to improve the level of collaboration between and amongst employees and managers.

These steps will help businesses increase the level and effectiveness of collaboration and help overcome barriers to collaboration.



Make collaboration a strategic business focus

Invest in the right technology and tools for collaboration

Changing culture with the right incentives

A tailored implementation

Ensuring effective collaboration

1 Introduction

Google commissioned Deloitte Access Economics and Deloitte Digital to prepare a report on collaboration in Australian workplaces. It builds on previous reports commissioned by Google on the value of the internet to the economy and the role of digital technologies in modern workplaces.

Collaboration in workplaces has many contexts. Our starting point for looking at collaboration is the economy. With a range of emerging pressures on businesses – the need to respond to digital disruption, lift productivity, and be more innovative – leaders and managers are looking for new ways to stay competitive in the marketplace.

In many ways, collaboration is nothing new – it is simply about employers and managers working together to come up with better ideas. But ask people what collaboration is or why it is beneficial and you will get a multitude of different answers.

That's why defining collaboration is the first task of this report. We also try and measure collaboration, and quantify its benefits for businesses and the economy.

This report looks at the main drivers of collaboration, business structures, workplace culture and policies, and how tools such as technology and workplace design can be used to enhance the level and effectiveness of collaboration. It is not meant to be a report that is only read by business executives or simply ends up on bookshelves. It outlines the next steps businesses can take.

1.1 Framework for analysis

Our report is based on a review of existing literature, a new survey of over 1,000 employees and managers across Australia, and targeted consultations with business leaders. We synthesized the results from these findings to draw out the key conclusions of interest to a business and general audience. We used these results and our own know-how to devise a roadmap for business leaders crafting or trying to improve their collaboration strategies – including a range of high-level and practical action points.

The framework for analysis is summarised in Figure 1.1.

Collaborative workplace

Figure 1.1: Deloitte's research methodology



Source: Deloitte Access Economics, Stancombe Research and Planning

Chapter 2 outlines the various perspectives on collaboration and provides practical examples. While no definition of collaboration will be the final word on what it is, we identify the essential elements and have a working definition for the purposes of our paper.

Chapter 3 examines the business benefits of collaboration, based mainly on our survey and analysis. We look at the importance of collaboration for business, and its impacts on productivity, quality, innovation, employee engagement, and business growth and profitability.

Chapter 4 devises a measure of the collaborative economy, again drawing on the survey results, using a labour input measure of value of the activity of collaboration.

We quantify the net benefit of collaboration compared with working by oneself – how collaboration saves time, improves work quality, and the value of all these improvements.

We also look at how collaboration could increase in the future and what its value might be.

Chapter 5 surveys recent trends in collaboration, finding that while collaboration is on the rise, it occurs across the economy, regardless of employee/manager age, gender, occupation or industry. We find that there are a range of drivers of collaboration and tools to enable it.

Chapter 6 is the collaboration strategy piece. We define a set of key features of an organisation's collaboration strategy. Based on our survey data, we provide some indicative benchmarks of current Australian business performance. We find that strategy is indeed important for increasing collaboration, with technology tools and HR strategies being especially important. We discuss the barriers to collaboration and outline the next steps for businesses who want to increase collaboration.

What is collaboration?



MANAGEMENT

"My job is to lead a group of leaders. We have around 10,000 partners and 200,000-plus employees who operate within 47 member firms across more than 150 countries generating over \$32 billion in revenue. The only way to do that is to build a culture of collaboration ... It becomes the underpinning of everything we do."

— Barry Salzberg, Deloitte Touche Tohmatsu Limited Global CEO (2013)



GOVERNMENT

"Collabo groups of togethe agree and disagree matter if the who partnerifies about any of u

— US D

"One of the things that we've tried very hard to avoid at Google is the sort of divisional structure and the business unit structure that prevents collaboration across units. ... If people in the organization understand the values of the company, they should be able to self organize to work on the most interesting problems. And if they haven't, or are not able to do that, you haven't talked to them about what's important. You haven't built a shared value culture."

— Eric Schmidt, Google Executive Chairman (2009)

"Promoting diversity can unlock the pote of every employee in an organisation."

Lieutenant General David Morrison, AO (paraphrased)

"Collaboration is a process through which people who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible"

— Dr Barbara Gray (1989)



ACADEMIA

PERSPECTI COLLABO

ubiquitous presence in our lives and is a constant feature of modern society; 'work is always immediately social in that the object and the subject, the end and the means, the motives and the needs, the implements and the competencies, are socially mediated' (Schmidt, 1991, p. 2)"

— Patel, Pettitt & Wilson (2012) tion as an evolving process whereby two or more social entities actively and reciprocal ly engage in joint activities achieving at least one shared goal.

— Bedwell et al (2012)

"As we look ahead at how collaboration and communications continue to evolve, we believe the tools people use today — email, instant messaging, voice, videoconferencing, social — will come together and be deeply integrated into apps in ways that will speed collaboration and truly transform the way people work." — Information technology: Kurt DelBene, President of Microsoft Office Division (2013)

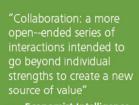
"You can't not workin want to bution that be and corpor place and I feel more cand to the — Joe Hart Solutions for ICC (2014)

"Collaborative consumption – an economic model based on sharing, swapping trading or renting products and services enabling access over ownership. It is reinventing not just what we consume but how we consume."

— Rachel Botsman, founder of Collaborative Lab, a consultancy to business and government (2013)



CONSUMPTION



— Economist Intelligence
Unit (2008)



STARTUP FIRMS

"Prismatic has more than 25,000 weekly users and \$16.5 million in funding. Much of the startup's success lies in its super collaborative, hands--on working environment where engineers work very closely with designers, researchers and the entire team. Bradford Cross, Prismatic's CEO, learned about the intricacies of design so he could be actively involved in their

— Inc. com on Prismatic

pration is a way individuals, or organizations work or to address matters they e important. They may about why some specific important, but they agree the issue is best addressed by a dong there. ... Collaboration doing make the control of the co

partment of Agriculture (n.d.)

tial, capacity and knowledge

Chief of Army (2014)

"... to be successful, a collaborative relationship... requires a delicate balance of artistic sensitivities. In our time, the term 'collaboration' has somewhat lost its original connotations of rapport. ... I would construe [collaboration] to mean work that's built through a continuous consultation and exchange of ideas and feedback."

— John Adams, Composer

ECONOMICS



CREATIVE ARTS

VES ON RATION



INFORMATION TECHNOLOGY

grow a company if you're g together as a team. You ild a culture of collabora-rings together information ate knowledge in one nelps global employees connected to one another company leadership."

sel, Manager of Client or Portals & Collaboration, "Collaboration is a working practice whereby individuals work together to a common purpose to achieve business benefit."

 Association for Information and Image Management (AIIM), provider of education, research and certification materials for information professionals "Open source collaboration and sharing for the greater good ... an excellent model for sharing knowledge in the workplace where everyone wins; contributing and benefiting in equal measure."

— Mhairi McEwan, Co-founder of Brand Learning (2014)



EDUCATION AND LEARNING

"Collaborative relationships are attractive to organisations because the synergies realised by combining effort and expertise produce benefits greater than those achieved through individual effort."

— Australian Research Alliance for Children & Youth (ARACY) (2009)

2 What is collaboration?

Collaboration in workplaces is a common feature of business strategies around Australia and the world.

Collaboration is widely discussed in business literature as important for driving innovation and productivity in firms. It is common for business leaders to argue that collaboration is important for the long term success of their company.

However, the very core elements of collaboration that differentiate it from mere co-operation, teamwork or communication are difficult to define. Does time spent in a meeting automatically qualify as a collaborative activity, even if everyone in the room has the same initial viewpoint, or if no meaningful outcome is achieved? Is collaboration different from teamwork, and if so, how? This chapter provides a framework for understanding the fundamentals of collaboration that answer these types of questions.

In this section we survey the different perspectives on collaboration, collaborative workplaces in action and the essential elements of collaboration.

2.1 Many perspectives

Collaboration means different things to different people. As demonstrated on the following page, there are a range of views on the meaning of collaboration, with perspectives varying between company leaders, government and academia. There are also different views across disciplines, including economics, information technology and the creative arts. At the same time, the form of collaborative activities varies according to context – be it a traditional business, a start-up firm or an education and learning environment. Collaboration also has relevance to relationships between companies, and for consumers on the demand-side.

These perspectives also demonstrate the difficulty in explaining what collaboration is, separate from describing its objectives, ways to undertake it, and the benefits that it creates.

2.2 Previous literature

Collaboration has received some treatment in previous academic and business literature. Adler et al. (2011) wrote "Collaborative communities encourage people to continually apply their unique talents to group projects - and to become motivated by a collective mission, not just personal gains or the intrinsic pleasure of autonomous creativity." Indeed, by marrying a sense of common purpose to a supportive structure, a collaborative organisation mobilises worker's talents and expertise in flexible, highly manageable group-work efforts. The approach fosters not only innovation and agility but also efficiency and scalability.

Bonabeau (2009) further investigaged the benefits of workplace collaboration in the framework of decision making processes. He argues that companies that adopt a collective intelligence framework through collaboration between colleagues are able to avoid common behaviour patterns that leads to sub-optimal decisions.

A key benefit businesses can expect in a collaborative workforce is the opportunity to reduce costs. Cost reduction can be achieved by syndicating capabilities, knowledge and resources across the organisation. A workplace that collaborates effectively only has to perform a particular task once, as the outcome of the task can then be utilised and benefit the organisation as a whole. Repetition of tasks across the organisation is a common waste of time and resources (News Corp).

Collaboration is often thought of as the key ingredient to 'frontier' or 'creative' innovation ('new to the world' products/services) as opposed to 'adaptive' innovation (small modification) (Department of Industry, 2006).

Indeed, the study also found that collaborative businesses innovate 17% of the time and are 70% more likely to do so than businesses that do not collaborate. More interestingly, diversity of collaboration is found to be the most important factor; a comparable increase in collaboration intensity has only between 20% and 25% of the impact of collaboration diversity on the degree of novelty of innovation.

Employee benefits including job satisfaction, workplace engagement and productivity benefits are also closely associated with collaborative activities in the workplace. Adequate and effective collaboration inspires a sense of belonging within teams and an organisation. As people work together over time, individuals in a team become more adept in their environment and the likelihood that they value their team increases with each success (Woolworths). An added benefit to a collaborative culture is that workers also develop cross functional skills, such as critical thinking and problem solving. These skills better equip employee for their individual role specific tasks.

There are many other benefits of collaboration; for example, the Business Council of Australia (BCA, 2009) noted that closer workplace collaboration between employees and management can reduce the intensity of a highly adversarial industrial relations culture, lowering the cost of disputes. Frost and Sullivan (2006) noted that collaboration is a key driver in several elements of corporate performance, including labour productivity, sales growth and customer satisfaction.

The success of social computing has generated a host of workplace collaboration tools.

McAfee (2006) argues that the innovative and collaborative technologies are transforming how work is done, particular how they can elicit knowledge transfer in an organisation, and

make knowledge work persistent; widely and permanently visible to anyone in the company.

A McKinsey report (2013) on the social economy found that the average interaction worker spends an estimated 28% of the workweek managing emails and nearly 20% of the work week searching for information. When companies collaborate faster, more efficiently and more effectively, for example, by employing social technologies in the workplace, the search time for employees can be reduced by as much as 35%, which equates to a considerable productivity benefit.

Despite these foreseeable benefits, recent research has shown collaboration to be declining in the modern workplace, despite its relative importantance as reported by employees. The 2013 Gensler workplace design survey in the US found that knowledge workers are spending more time focusing on individual work rather than collaborating with others, with an average 20% decline on the time spent collaborating over the last 5 years. Not surprisingly, the decline in workplace collaboration is also accompanied by a 6% decline in workplace performance.

So why aren't employees collaborating? McKinney (2006) argues that organisations often found it difficult to map the value of an employee. The report documents that 80% of business executives said that effective coordination across product, functional, and geographic lines was crucial for growth; however, only 25% described their organisation as effective in tapping this potential and sharing knowledge across their business. Businesses lack the ability to map and analyse the value created (or destroyed) deep within employee networks. There's a need to establish more tangible links between collaboration, strategy, technology, workplace and business outcomes.

There are also some potential caveats to workplace collaboration. One such issue we that we have identified is a lack of discipline when collaborating. Collaboration is only effective when the process yields a positive outcome for the individual as well as the organisation (News Corp). Endless collaboration without a decisive result unlocks none of its benefits and is a waste of resources.

Establishing effective workplace collaboration is a persistent and challenging task; there exist significant barriers to collaboration. One of the biggest unseen barriers to collaboration comes from the fact that it involves sharing and using of ideas. Both cultural factors and personal factors can hinder this process when individuals are overly protective of their ideas or overly resistant to foreign innovations (News Corp).

Collaboration tends to be spontaneous rather than a planned event. Studies have found that collaborative events are commonly short, with 34% lasting less than 15mins, and 60% lasting under 30mins, small, consisting of only two or three people, and use few tools (Herman Miller, 2012). When people want to collaborate, they seek out the simplest, most convenient solution. Barriers in the form of financial incentives, lack of technological capability and lack of physical space are enough to deter collaboration. The bigger the intended collaborative community, the more barriers need to be broken down.

The issues identified in the existing literature remain fragmented and relatively unexplored in terms of how they interact. This research provides a framework in which collaboration can be conceptualised and the ability of businesses to map their collaborative potentials.

2.3 Employee and manager perceptions

Collaboration clearly means different things to different people, with a wide variation of perspectives across business, academia, government and education. What about in the workplace itself – how do employee and managers think of collaboration? Such an open question would probably yield many answers.

For this project, our survey was used to gauge employee and manager perspectives of collaboration, asking people what type of activity they most associated with collaboration. We found that respondents overwhelmingly adhere to traditional concepts such as 'team work' and 'sharing ideas'. Co-editing a document or using social media can also be collaborative but were lower down the list. There is also a perception gap between employees and managers, with managers more likely to recognise a broader range of activities as collaborative.

2.4 Collaborative workplaces in action

Although the notion of collaboration also has meaning in the context of consumption and relationships between businesses, this report focuses on workplace collaboration, within an individual company. It is therefore useful to consider the ways in which Australian businesses have collaborated effectively.

Some specific examples are provided on the following page, in relation to:

- Woolworths: Store managers use Google+ to share sales information directly, rather than traditional reporting to regional managers so they can learn about the most successful products and process improvements from one another.
- News Corporation: One local newspaper copied the design layout of an advertising section in another local newspaper to reduce design costs.

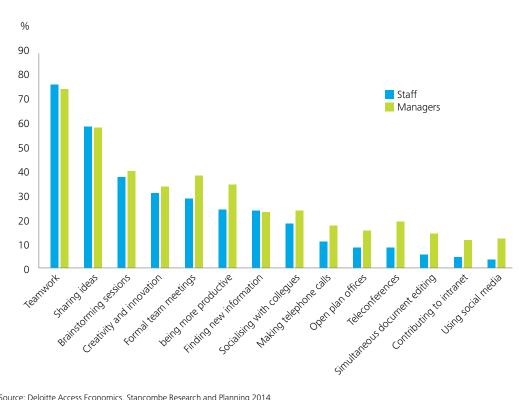


Figure 2.1: Perceptions of collaboration

Source: Deloitte Access Economics, Stancombe Research and Planning 2014

- Xero: Constantly open communication helps employees identify opportunities for collaboration to add value. Managing director Chris Ridd was sitting next to a sales staff member and was able to jump onto a call with an unsatisfied customer and manage the situation.
- Kogan: Kogan's business model is about identifying areas of high demand, delivering products at a lower price point, and having the shortest possible time to market. Collaboration across marketing, the product team, finance and operations, warehousing and logistics, is critical to creating and delivering products to the doors of shoppers as fast as possible.
- SEI: Every desk in SEI's (a global provider of outsourced investment solutions) offices is on wheels, allowing workers to constantly adapt their settings to the work at hand: When teams need a collaboration space, they roll their desks together. When they need a guiet space, they separate to allow for focused work.

2.5 Essential elements

Collaboration is an activity that occurs as a product of a number of elements. Distilling down its core features, we arrive at seven essential elements:

- 1.a group of people working together;
- 2. extraction of people's knowledge or skills, utilising the 'neural network';
- 3. some form of communication, which can take the form of physical, verbal or digital interactions;
- 4. building on the work and ideas of others in an iterative way;
- 5. unlocking the potential of participants, beyond their defined role;
- 6. working towards a shared goal or objective; and
- 7. solving a problem, producing something, and adding more value than individuals alone.

These seven essential elements of collaboration are illustrated and are described in more detail on the following page.

It is recognised that while the iterative aspect of collaboration will be fostered by real time interactions, this is not a necessary condition. For example, although there is often a time lag associated with online communications, such as email, this does not imply that collaboration is not taking place. Indeed, in the digital age, online tools are likely to play a major role in the facilitation of collaborative activities.





People working together

Naturally, an individual cannot collaborate alone. Therefore, collaboration requires the participation of a group of two or more people, working as a team.

Extracting knowledge and ideas

Most of an organisation's knowledge is stored in employee's heads, rather than on paper or in an electronic format. This unwritten, or tacit knowledge – the "know how" intuition, memory, and internalized experience that exists in and between the minds of the individuals that make up an organisation - is the knowledge that is essential to the organisation's ability to create, innovate, and produce value on a continuous basis. It is in the transfer of this knowledge, in the constant, dynamic interaction between learners and teachers that the real power of collaboration resides.

In a sense, organisations can be thought of as a large neural network, with each employee's knowledge and expertise encapsulated in a single cell. The key to tap into these resources is to create a neural pathway in which information, skill and knowledge can flow from one cell to another, in essence to create a collaboration between two or more cells. The more cells the organisation can tap into, the more intelligence it can gather and utilise.



Communication

Collaboration also requires communication. As noted above, the form of communication is flexible, such that interactions may occur through discussions face-to-face, over the phone or online, preferably in real time, but sometimes also with a time lag. What is critical is some form of reciprocal interaction between people. Leveraging someone else's idea from an online knowledge portal does not constitute collaboration, as communication is lacking.



Building on work and ideas in an iterative way

Collaboration is more than just a group of people simply brainstorming ideas. For an activity to be collaborative, it should introduce different perspectives, which in turn stimulate new thought processes and expand the understanding of each member of the group. This iterative process is critical to collaboration. In fact, without this element, an activity may be no different to the division of labour, whereby tasks are allocated to different team members, who then work in relative isolation.



Unlocking potential

Another requirement of collaboration is that it unlocks the potential of participants. While this concept has a rather broad interpretation, it has a distinct meaning in the context of the other elements of collaboration. Specifically, collaboration supports the provision of discretionary effort, by providing an opportunity to share knowledge and experience that sits beyond an individual's pre-defined role.



Working towards shared goal

Collaboration must also occur with a common goal or objective in mind. While this should not be overly restrictive, some level of direction is required to ensure that communication and knowledge sharing is productive and worthwhile.



Creating value

The final, inherent element of collaboration is that it creates a new source of value. If people are talking and working and nothing comes of it, it is not genuine collaboration. This does not mean that all collaborations will be a success. For example, people may collaborate to produce a new vehicle that experiences poor sales. We simply mean that there has to be an output not just meeting notes – for something to be collaborative activity.

5 Business benefits of collaboration

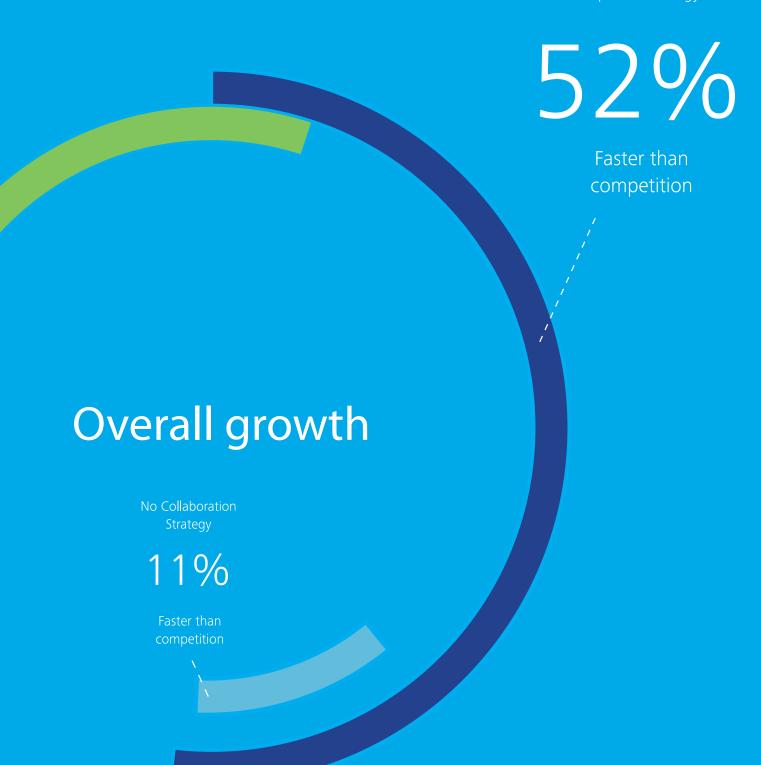
This research paper finds that collaboration has a range of commercial benefits for business.

Collaboration is somewhat important

36%

Faster than competition

Collaboration is a critical component of corporate strategy



3 Business benefits of collaboration

This research paper finds that collaboration has a range of commercial benefits for business:

- Time-saving and productivity of employees.

 Over half of employees and managers identified time saved completing tasks as a benefit of collaboration. Even once some time wasting activities are taken into account, based on wages as a measure of value of time, collaboration time savings are worth around \$1,660 per employee and manager per year.
- Quality of work output. Collaboration in the workplace puts into practice the simple logic of 'two heads are better than one'. For example, if various divisions of a financial services institution collaborate to create a single web portal, it improves the customer experience and generates value. We estimate that collaboration's quality improvements are worth around \$2,517 per employee and manager per year.
- Innovation and new ideas. Collaborating with a group of open-minded people, who can quickly validate the merits of an idea and help build upon that idea can accelerate the process of iterative thinking and bring a faster pace to the innovation process. We found that around 60% of respondents have experienced change in their way of thinking due to collaboration

- Employee engagement and reduced turnover. An important benefit of collaboration for businesses is that employees like to do it. The 2013 Connected Workplace paper found that satisfied employees collaborated 28% of the working week, compared to 12% for those that were dissatisfied. Research for this paper has found that 56% of respondents said that they were happier when they collaborated.
- **Growth.** Collaboration can bring about a number of competitive advantages to businesses that make them more agile, innovative and productive, giving them the competitive edge they needed to outgrow competitors. We found that only 20% of businesses without collaboration strategies outgrew the market, compared to 30% with a middling strategy, and 52% with an important strategy. Companies that prioritise collaboration are also five times more likely to experience a considerable increase in employment, twice as likely to be profitable, and twice as likely to outgrow competitors
- Profitability. Similar to overall growth, we found a strong link between profitability of an organisation and its collaboration strategy. Of the businesses that saw a significant increase in profitability over the last three years; a majority had an important collaboration strategy. In fact, businesses that consider collaboration an important component of their overall business strategy were 4 times more likely to see growth in their bottom line.

The results above are based on underlying data from survey responses, including self-reported business performance metrics and time allocation metrics from employees. Whilst, we aimed to canvass a representative survey sample, it is important to recognise that it is impossible to fully replicate the real businesses composition in the Economy. We believe that our results are nevertheless indicative of the true value/measure within a reasonable margin.

- First, it is possible that there are biases in the survey sample. We have used a representative sample of 1,000 employees and managers, using quotas for sub-categories and reweighting responses according the economywide divisions of employees and managers.
- Second, it is possible that survey respondents interpret questions differently. This is a particular problem when dealing with a concept like collaboration.
- Third, it is possible that survey respondents systematically misjudge the nature of their employment or business and cause inaccuracies - for example, understating how much time they spend socialising at work, or overstating how profitable their business activities are.

Finally, there is the general issue of causality. It is possible that high levels of collaboration are associated with strong business metrics but that either causation runs the opposite way or that there are other unobservable variables driving the links. Causation could run the other way if strongly performing businesses had more time or resources to undertake collaboration. But that rationale only goes so far – it is hard to see why profitable businesses need to be more collaborative.

In economics, causality is often difficult to establish but it is nevertheless important to try. Without comprehensive understanding of the how the different elements interact in the system, one often come to the wrong conclusion. To overcome this issue, we have supplemented our quantitative analysis with case studies in this report. This exercise helps us to gain a better understanding of how collaboration affect businesses. It is clear from these case studies how collaboration activity is used to save time or improve quality of work – the exact items measured in our approach. Further, the results are consistent across a range of metrics and do not seem to be a mere aberration.

3.1 Importance of collaboration to business success

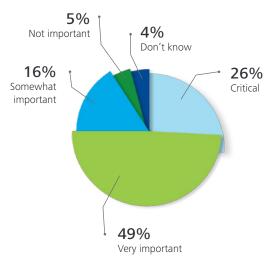
Collaboration may be considered important by employees and managers for a range of reasons – because it is an efficient way of doing business, is important for employee engagement, or is fundamental to what a business does.

Our research confirms that collaboration, in the perception of employees and managers, is indeed important to business success, with around three-quarters of respondents in our survey identifying collaboration as either critical or very important to organisational success. This is shown in Figure 3.1.

3.2 Time-saving for employees

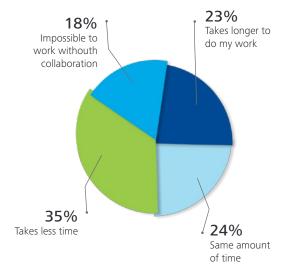
The results from this research shown in Figure 3.2 indicate that in Australia around 53% of respondents believed that to some degree, they will save time when they collaborate instead of working by themselves. On average, these employees reported they work 15% faster when they collaborate with others.

Figure 3.1: Collaboration is considered important for success by most



Source: Deloitte Access Economics, Stancombe Research and Planning (2014)

Figure 3.2: Collaborative employees work faster



Source: Deloitte Access Economics, Stancombe Research and Planning (2014) Even after some time wasting activities are taken into account, based on wages as a measure of value of time, collaboration time savings are worth around \$1,660 per employee and manager per year.

We also found that Australian workers on average waste 1 hour a week looking for information or replicating work because they can't find appropriate information on their organisation's intranet, server or website. Collaboration is essential to mitigate this inefficiency, connecting people to information within their organisation.

The results are supported by previous findings in other reports. A Butler Group report (2006) concluded that over 50% of staff costs in the UK are allocated to employees performing information work. As a result, the typical information worker now spends up to one quarter of his or her day searching for the right information to complete a given task. The report contends that as much as 10% of a company's salary costs are wasted as employees scramble to find adequate and accurate information to perform their overall jobs and complete assigned tasks. Similarly, when people work collaboratively, they simplify communication and shorten decision cycles by bringing people and information together more efficiently. A previous Deloitte UK report (2013) found links between digital collaboration and productivity, shown below.

% of Response 80% 709 60% 50% 409 30% 209 109 Improve productivity Improve quality of communication Increase transparency France Netherlands UK Sweden

Figure 3.3: Benefits of collaboration

Source: Deloitte UK

News Corp Australia: doing things once and working across geographies

News Corp is a global, diversified media and information services company. Headquartered in New York, its activities are conducted primarily in the United States, Australia, and the United Kingdom.

The company's Australian arm operates over 150 newspaper, magazine and online brands, as well as Fox Sports and its 50% ownership of Foxtel. News Corp also owns a majority stake in realestate.com.au.

Collaboration is one of four strategic priorities of News Corp Australia, along with being customer centric, accountable and boldly creative.

According to Tom Quinn, Chief Technology Officer for News Corp Australia, the main driver of collaboration is the need to improve efficiency in an increasingly competitive market: "As an organisation, we need to run like a start-up, which means lean and fast. We certainly can't afford to do things twice, and instead need to collaborate across business units from around the world to share the best ideas."

Collaboration is working together, in a team, for the same goals, and gaining outcomes for the firm

"Collaboration is working together, in a team, for the same goals, and gaining outcomes for the firm", according to Quinn. It is not just about communication. "Communication is necessary but not sufficient for collaboration. Communication is one-way broadcast and can be informative; whereas collaboration is consistently two-way communications and is focused on creating something, an outcome."

There are many examples of collaboration at different levels. In editorial, journalists in a central network can produce content that other journalists can add to, tailoring for local markets or specific sections of newspapers.

For example, the 'World' sections of News owned newspapers are centralised and created at a single location; the contents are then distributed and tailored locally. Similar strategies are being implemented in other areas such as entertainment, health and style. Such structure allows the group to syndicate their efforts by focusing on their own area of expertise, and enables the best available content to be pushed out across the organisation. In other situations, what is produced for one state-based masthead can be shared with others, with local variations. Collaboration is also present on the corporate side of the company. In sales, people can share ideas on internal social media tools and use tools that avoid IT upgrade costs.

Quinn also has some lessons for the unwary. While collaboration is important, it must be undertaken in a decision-making context so that it produces something and is not just endless communication. While collaboration can support employee engagement, it needs to be justified by a business outcome, with tangible results. Successful collaboration in teams needs to be balanced with individual responsibility for decisions: that means a single point of accountability. Collaborative tools cannot be cost prohibitive or confined to the board room, they need to be inexpensive so they can be used by all people within a firm. And beware the other barrier to collaboration: staff or managers resisting ideas that are not their own.

3.3 Quality of work

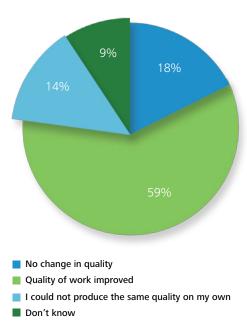
In the field of operations research, when individuals perform tasks or solve a problem, they are often subject to various biases. For example, when we generate solutions to a problem, we often tend to seek information that confirms our assumptions (self-serving bias) and to maintain those beliefs even in the face of contrary evidence (belief perseverance). We also tend to follow our own logical pattern and ignore information that lies beyond it.

Collaboration can help mitigate the effects of these biases when we work. It can provide a diversity of views and inputs that can deter these biases. In addition, the collective effort of collaboration also allows individual workers to be more specialised in one area. Rather than completing the entire task alone, individuals can focus on their strengths and combine their effort with other collaborators. These benefits of collaboration can bring about better solutions and higher quality products than employees could produce alone.

How do you measure the value of work quality? Indeed, the value of work quality will vary depending on the nature of work and the monetary value associated with its production. It is thus impossible to capture across the economy in its current form. Instead, we assume that all work can be done by an individual given enough time, and that the improvement in work quality due to collaboration is simply the amount time individual would save if they otherwise worked alone.

Using this concept, we found that over 73% of respondents said that collaboration helps them improve the quality of their work, of which 14% said it would be impossible for them to produce work of the same quality themselves.

Figure 3.4: Employees produce better work if they collaborate



Source: Deloitte Access Economics, Stancombe Research and Planning (2014)

3.4 Innovation

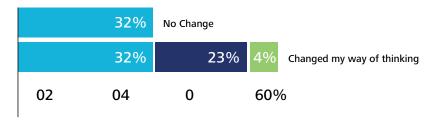
An innovative solution is often a combination of ideas, from conception to delivery. Robert Weisberg once suggested that creative production results from "chains" of connected ideas that flesh out original thinking. Collaborating with a group of open-minded people, who can quickly validate the merits of an idea and help build upon that idea can accelerate the process of iterative thinking and bring a faster pace to the innovation process.

Indeed, a study by the Department of Industry found that collaborative businesses innovate 17% of the time and are 70% more likely to innovate than businesses that do not collaborate. More interestingly, diversity of collaboration is found to be the most important factor; a comparable increase in collaboration intensity has only between 20% and 25% the impact of collaboration diversity on the degree of novelty of innovation (Department of Industry, 2006).

In this research, we found that around 60% of respondents said that collaboration had in some way changed their way of thinking, of which 27% said collaboration had either had a great impact in the way they work or completely transformed their processes.

The value of innovation goes beyond changing how the way employees think. Thoughts are merely the first steps towards an innovative solution or a product, and these can be invaluable at times. But how do you measure an idea? Indeed, ideas are far from homogenous. An idea's ultimate outcome and value depends on a range of factors and circumstances. Instead, our research focuses on taking the first step in understanding the relationship between collaboration and the innovation process inside organisations. We examine how collaborative working can influence the opportunities in which innovation can arise, rather than innovation itself.

Figure 3.5: Collaboration an important factor for innovative thinking



Note: Some impact (32%) Great impact (23%) Complete transformation (4%)

Source: Deloitte Access Economics, Stancombe Research and Planning 2014

3.5 Employee engagement

Adequate and effective collaboration inspires a sense of belonging within teams and an organisation. As people work together over time, individuals in the team become more adept in that environment and the likelihood that they value their team increases with each success.

Notwithstanding the benefits businesses can derive from a more engaged workforce, in an increasingly competitive market, the loss of a worker is likely to represent a profound corporate knowledge asset loss. Some 65% of business leaders have identified talent acquisition and retention as one of their organisations top 3 priorities in the next 2 to 3 years (McKinsey, 2012). A satisfied and engaged workforce can help businesses reduce costs related to recruiting, training and experience loss due to workers leaving the workforce.

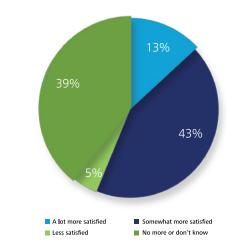
Employee satisfaction has many contributing factors. Putting this in context, a Deloitte UK study (2013), noted some of the potential factors influencing employee satisfaction. Factors such as having a working relationship with colleagues and feeling valued are among the top 3.

DAE's previous work in The Connected Workplace (2013) also found significant linkage between

collaboration and employee satisfaction, with satisfied employees collaborating 28% of the working week, compared to 12% for those that were dissatisfied.

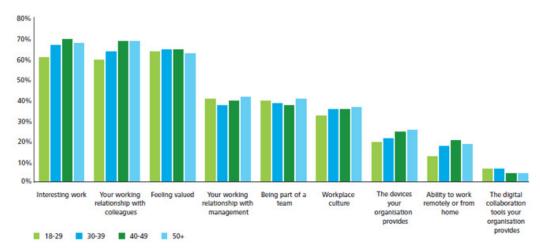
In this report, we found further evidence to support the linkage between collaboration and employee satisfaction. Around 56% of respondents said that they were happier when they were collaborating with others, while only 5% said that they were unhappier.

Figure 3.6: Collaborative Employees are happy employees



Source: Deloitte Access Economics. Stancombe Research and Planning (2014)

Figure 3.7: Factors contributing to employee satisfaction



Source: Deloitte UK

Woolworths: empowering employees and unlocking the potential through collaboration

Woolworths Limited manages some of Australia's most recognised and trusted brands. It operates more than 3,000 stores across Australia and New Zealand, spanning food, liquor, petrol, general merchandise, home improvement and hotels. Woolworths employs more than 198,000 staff to support these businesses.

Woolworths has facilitated greater collaboration through technology change and adoption. In August 2012, Woolworth rolled out iPads supported by Google apps to store managers. The apps package included "tap for support" which serves as a support network between store managers and Woolworths' Service Desk. It then migrated its enterprise solutions under the "LEAP" program, which included the full Google Apps for Business collaboration suite, before extending that suite to the 175,000 store and distribution centre support staff who had never before had an online corporate identity. This year, it is working on replacing existing PCs with Chrome devices.

Community network collaboration platforms such as Google+ have empowered communications between all levels of employees. Teams are encouraged to form communities within a store, a regional area or an interest group and share their opinions, stories and ideas. Such networks break the traditional bounds of command and control, and allow staff to share their experiences and innovations. Such interactions have led to tangible business benefits for Woolworths, including innovative product lines, operational improvements and productivity gains. The new suite of collaboration tools also serves

to better connect people with information. The power of crowdsourcing has significantly decreased the information search costs of workers. This has translated to improvements in productivity as, 12 weeks into the program, 38% of employees reported that collaboration was easier and 42% said that they worked more efficiently.

Furthermore, improvements in workplace collaboration have also had a profound impact on employee engagement.

Furthermore, improvements in workplace collaboration have also had a profound impact on employee engagement. The proportion of employees who reported feeling proud of their company rose from an initial 38%, after 2 weeks, to 58%, after 8 months. Alongside productivity growth and more flexible working, lifting employee engagement is one of the less well-known dividends of collaboration.

3.6 Growth

In this paper, we found that 52% of businesses who integrated collaboration as a core component of their corporate strategy have grown faster than their competitors, compared to 20% that didn't have a collaboration strategy. More importantly,

we observe that having a collaboration strategy is not enough; it can only help you to get on par with your competitors. A collaboration strategy must be an important component of yout corporate plan and be clearly communicated to employees.

Table 3.1: Overall Growth

Overall growth	Faster than competition	Same pace as competition	Slower than competition	N=
Collaboration is a critical component of corporate strategy	52%	37%	11%	222
Collaboration is somewhat important	30%	62%	8%	216
No Collaboration Strategy	20%	60%	20%	183

Despite its importance, collaboration is often viewed as an accessory to other business strategies. However, collaboration can bring about a number of competitive advantages to businesses that make them more agile, innovation and productive, giving them the competitive edge they need to outgrow competitors.

A key consideration for effective collaboration is having the right strategy. It is one of the key methods in which an organisation can successfully facilitate, foster and manage collaboration activity among its employees and business units. Our findings are consistent with previous reports on collaboration. According to a McKinsey report in 2006, 80% of business executives said that effective collaboration across product, functional, and geographic lines was crucial for growth. However,

only 25% described their organisation as effective in tapping this potential and sharing knowledge across their business. Businesses need the ability to map and analyse the value created (or destroyed) deep within employee networks.

We also found that businesses that considered collaboration to be critical to their corporate strategy were almost 5 times more likely to experience a considerable increase in employment than businesses that had no collaboration strategy.

Table 3.2: Employment Growth

Employment growth	Considerable Increase	Some increase	No change	Decline	N=
Collaboration is a critical component of corporate strategy	32%	33%	21%	14%	232
Collaboration is somewhat important	10%	41%	35%	14%	231
No Collaboration Strategy	7%	30%	43%	20%	250

3.7 Profitability

A key benefit businesses see in a collaborative workforce is the opportunity to reduce costs. Cost reduction can be achieved by sharing capabilities, knowledge and resources across an organisation. A workplace that collaborative effectively only has to perform a particular task once. The outcome of the task can then be utilised and benefit the organisation as a whole. Repetition of tasks across the organisation is a waste of time and resources and can be avoided through more effective collaboration between employees. Substantial profitability benefits can also be derived through productivity, quality of output and innovation improvements.

In this research, we found that organisations that have a collaboration strategy were 60% less likely to see a decline in profitably over time. Similarly, businesses that had an important collaboration strategy were nearly 4 times as likely to have a considerable increase in profit.

Table 3.3: Collaboration linked to profitability

Profitablity	Considerable Increase	Some increase	No change	Decline	N=
Collaboration is a critical component of corporate strategy	38%	44%	11%	7%	213
Collaboration is somewhat important	16%	57%	21%	6%	212
No Collaboration Strategy	10%	40%	33%	7%	16

4 Australia's Collaborative Economy



Productivity and time saving

Quality improvement

-\$5.4b

\$46b

ssociated costs

Australia's Collaborative Economy

4 Australia's Collaborative Economy

In Chapter 3 we found that collaboration has a range of benefits for individual businesses, including higher growth and profitability. By increasing employee engagement, collaboration also has the potential reduce turnover and associated costs for businesses.

But beyond the individual business, what is the value of collaboration to the entire economy?

For this exercise we need to look beyond changes that will help one business compared with its competitors, and instead look at the net benefits of improved work practices.

In this Chapter we present an experimental methodology for measuring the collaborative economy. Drawing on the results of our survey data, we use a labour-input approach to valuation, analysing the time saving, quality improvement, and time costs of collaboration.

4.1 Economic context

To begin, we provide some broader context of Australia's economic challenges. These have been well documented, but highlight that collaboration can assist in addressing both business and national challenges:

Consider the following facts for the Australian Economy:

- Falling productivity: Australia's multifactor productivity growth has been falling at an average of 0.6% a year since 2007-2008.
 According to Productivity Commission Chairman, Peter Harris: "our performance has been significantly worse than that of most other developed economies for more than a decade.
- Innovation: only 36.6% of Australia businesses were innovative in 2012-13 that is, they introduced new or significantly improved goods, services, operational/organisational/managerial processes, or marketing methods. This was down from 41.3% the year before (ABS, 2014).
- **Digital Disruption:** The Deloitte Report, Digital Disruption: Short Fuse, Big Bang? found that two-thirds of the Australian economy faces a 'big bang' scenario meaning a dramatic change in revenue sources due to emerging digital trends within the next five years.
- War for Talent: Australian businesses face additional employee costs because of staff turnover. Every year about 11% of employees change their employer and for more than one in five it is because of unsatisfactory working conditions. Employee engagement is very important.

In sum, Australian businesses and the economy face a range of challenges that require new solutions.

4.2 Measuring collaboration: Our approach

This section provides a measure of the value of workplace collaboration to the economy. We are not aware of any previous attempts to calculate such a value. We believe that this has not been done because collaboration, by its nature, is a workplace activity that is hard to define and whose benefits are hard to separate from other contributors to the value of goods and services in the economy.

There are a range of assumptions and steps that need to be taken to measure the value of collaboration in an economy. Our approach is as follows:

- First, we define collaboration. Collaboration is as an activity that individual employees and managers undertake as part of their daily work.
- **Second**, we decide to value collaboration by valuing the activity (rather than its outputs). The assumption we are making here is that, overall at least, employees and managers collaborate because it helps them do their jobs.
- Third, we use the results of our survey of 1,000 employees and managers to quantify the time they spent collaborating. We note that this has limitations respondents may overstate or understate levels of collaboration.
- Fourth, we use the results from our survey to estimate the value of their time based on their wages. From here we calculate a gross 'value of collaboration time' estimate across the economy for a single year. We note that this is similar in principle to a factor-input approach to measuring the size of the economy and how the value of the internet economy was measured in The Connected Continent (Deloitte Access Economics 2011).

- Fifth, we identify the benefits of collaboration (as opposed to working individually) as the time saved by collaborating and the improvement in work quality. We use the results from our survey to estimate how much time people saved. For quality improvements we make the simplifying assumption that a similar level of work output could be achieved by an individual if they had more time. We worded our survey question as being about time avoided based on the view that it would be easier for respondents to answer the question this way.
- Sixth, we identify the costs of collaboration as time wasted in bad collaborations and the distractions it can cause in the workplace. Based on the survey, these are removed from the benefits.
- Seventh, we calculate the 'net' benefits of collaboration based on time saved and work quality, multiplied by wages of the respondents, and then scaled up to the full value of the workforce. This assumes survey respondent experiences are replicated in the broader workforce.

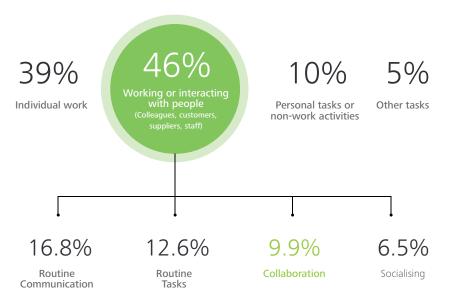
We recognise a number of limitations in this approach. If the survey respondent experiences are typical or if respondents' answers are not accurate, so too will the measure of the collaboration economy be. Further, it is possible that some collaborations produce high values despite being done quickly, while other collaborations could take lots of time for little benefit.

4.3 The level of collaboration activity

As illustrated in Figure 4.1, on average, Australian employees and managers spend approximately 46% of their time working with people, and around 10% of that is collaboration. This is consistent with our findings in businesses consultations. While collaboration occupies a relatively small proportion of an employee's work time, it plays an important role in helping employees perform their individual work better and faster.

While our survey is broadly representative across parameters including industry, age, gender and income, we do acknowledge the inherent self-reported biases and inaccuracies of the survey results. However, we believe that our results are nevertheless indicative of the true value/measure within a reasonable margin.

Figure 4.1: Average employee spend 10% of their day collaborating - Division of typical workday for Australian workers



4.4 The value of collaboration

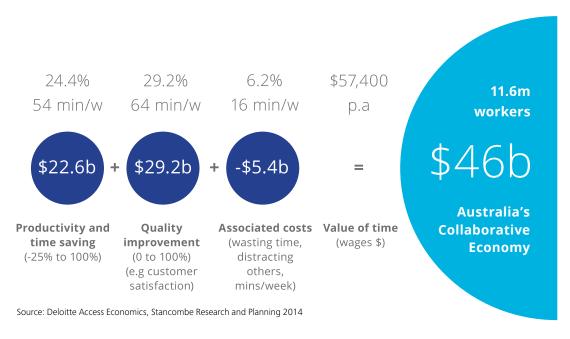
A collaborative workplace greatly amplifies our ability to interact simultaneously with large numbers of people. The iterative and interactive exchange between employees offers significant improvements in their ability to generate, capture, and share knowledge, find helpful colleagues and information, tap into new sources of innovation and expertise, and harness the collective wisdom within an organisation. Collaboration holds out the promise of many other business benefits.

If we were to simply measure the time spent collaborating – 10% of the time at market wage levels – which would not provide a true measure of collaboration. Because we would also be measuring the value of people working, that is, doing their jobs. If collaboration is about doing things faster or better, we should be measuring those improvements instead.

Our approach is to estimate, based on the survey data, how much time employees and managers save from collaborating and what the impacts on work quality are. The calculation is done on an individual basis, where an individual wage is multiplied by their reported collaboration time each week. It is not the average wage across the economy. We take the individual responses and wage levels and aggregate them across the economy.

As shown in Figure 4.2, time saving from collaboration is equal to about a quarter of the time spent collaborating, or 54 minutes per week. Aggregated across the economy, this is worth around \$22.6 billion a year. Quality improvement from collaboration is the equivalent of saving about 29% of the time spent collaborating, 64 minutes per week, worth \$29.2 billion a year. Quality improvement was based on how long employees thought tasks would take them if they did the work by themselves.

Figure 4.2: Collaboration worth \$46 billion to the Australian Economy



Whilst collaboration brings about many benefits to the workplace, we also recognise that ineffective collaboration can have a negative impact on business outcomes. Collaboration can be ineffective when participants feel undermined and are unwilling to contribute, lack trust, are poorly disciplined or when issues are ill defined. These factors can render a collaborative effort useless and waste valuable time for all involved. In addition, collaboration in an open environment can often lead to distraction for others trying to focus. We estimate the combined effect of these two elements – time wasted due to collaboration – is around 16 minutes per week, worth around \$5.4 billion a year. We note that this does not include time wasted during other activities closely related to collaboration, such as ineffective meetings or general distractions from people in the office doing routine communication or socialising.

Taken as a whole – time saved, quality improvements and time wasted – collaboration activities have a value of around \$46 billion to the Australian economy each year. This is the equivalent of around 3% of economic activity and makes collaboration about as significant as a major industry grouping such as agriculture or utilities. Collaboration is an important part of the economy.

We recognise a range of limitations in measuring collaboration this way. We have not taken into account the impact of collaboration on innovation, for example, which is a key driver of long term change in business. According a 2008 report from IBM, approximately 75% of CEOs cited collaboration as important to their innovation efforts. Similarly, in this research, we found that over 60% of respondents identified collaboration as key factor that have led to a new way of thinking for them. However, unlike productivity and quality improvement, the value of an idea or a breakthrough is difficult to capture using the time saved by employees. In addition, measuring collaboration based on time spent and employees and managers' perceived benefits has a range of obvious limitations, to the extent that they can have a biased view of what they do each day at work and what it is worth.

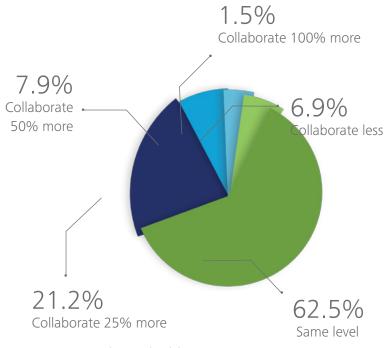
4.5 The potential of collaboration

Having measured the value of collaboration to the economy, a question arises: Can Australia collaborate more and what would that be worth?

Our survey data shows that the Australian economy could indeed have more collaboration. Approximately 30% of respondent said that they would like more collaboration in their organisation. Based on our estimate of the value of collaboration, if the optimal level is reached, a 9% net potential increase in collaboration activity could be realised. These impacts alone represent a \$9.3 billion potential for the Australian economy, bringing the net value added by collaboration to about \$56 billion.

We see this as a conservative estimate of the potential future benefits of collaboration based on current perception and collaboration models. If collaboration's effectiveness could be improved, its level and value could increase much more.

Figure 4.3: Australia has tremendous collaboration potential

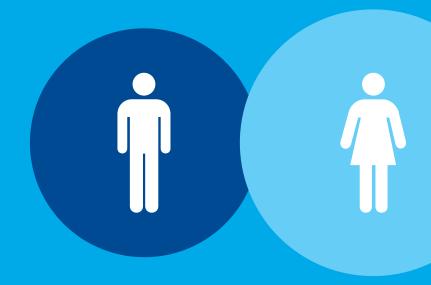


5 Collaboration trends

Collaboration exists in parallel across all sectors of economy, among different professions, and between genders and age groups.

COLLABORATION ACTIVITY

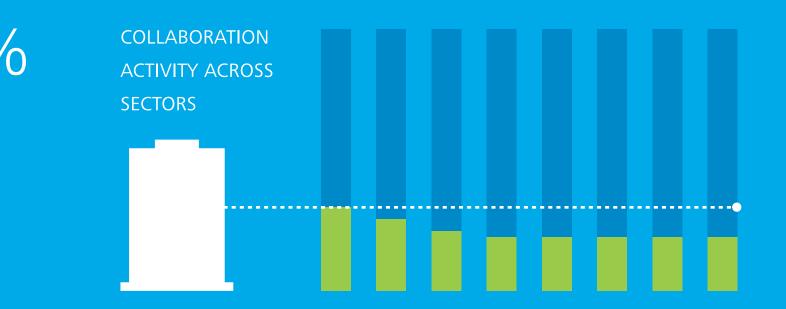
ACROSS GENDERS



9.8% 10.2%



COLLABORATION ACTIVITY
ACROSS AGE GROUPS



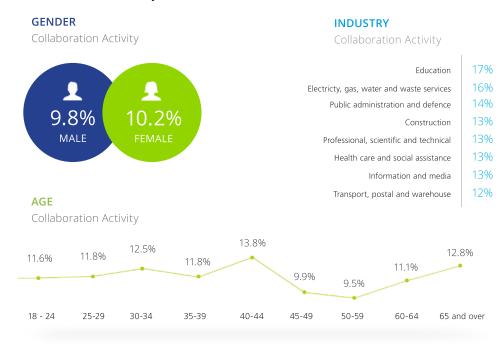
5 Collaboration trends

Collaboration is an activity that is widely spread across economy.

5.1 Collaboration is everywhere

Collaboration is a concept often associated with certain parts of the economy or particular types of employees. In the business stereotype, collaboration is something confined to the 'knowledge economy' or 'creative economy'. It is employees in professional and creative roles, brainstorming ideas and writing on white boards that collaborate.

Figure 5.1: Collaboration is everywhere



Note: Proportion of working week spent collaborating

When we analysed our survey data and our case study businesses, we were expecting to identify collaboration 'hot spots' - industries and occupations with high levels of collaborative activities. We expected that traditional areas of business, or processed-based occupations to have low level of collaboration.

However, we found the opposite – collaboration is an activity that is widely spread across industries and occupations. It forced us to think more broadly about how collaboration can be beneficial in a much wider set of circumstances.

As shown in Figure 5.1, we found that collaboration exists in parallel across all sectors of economy, among different professions, and between genders and age groups.

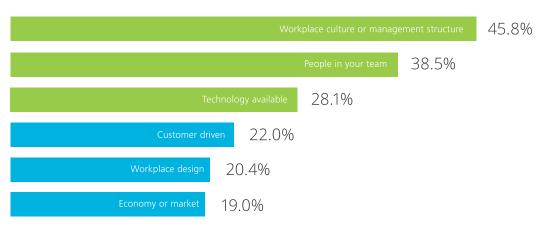
We found only a small gap in collaboration levels between the genders, with women slightly outscoring men. This contrasts with previous research, such as a 2012 paper by Danish consultancy, Innovisor, which found a large gap between women and men's collaboration desires. Age was not a distinguishing factor in terms of how much people were collaborating. We expected to see a downward trend in collaboration, with young people being the most active and a progressive decrease in collaboration as people get older. However, our research shows that the collaboration activities are fairly consistent across age groups, between 9.5% and 13.8%. People aged between 40 to 44 and 65+ were among the most collaborative workers.

5.2 Collaboration over time

We found that over 36% of people said that their organisation had become more collaborative in the last 3 years versus 6% said that it had declined. Figure 5.2 shows that respondent believes the top three drivers of this change were changes in workplace culture or management structure, people and technology available.

Customer and market pressure were among the factors respondents believed were driving the increase in collaboration levels. Indeed, Australian businesses continue to operate in an increasingly competitive market. Firms are therefore forced to adopt a more collaborative and efficient approach to the way they do business, challenging their workplace culture and processes.

Figure 5.2: Top drivers of collaboration activity (% of responses)



5.3 Collaboration tools

Advances in information and communications technologies have enabled businesses to become truly collaborative. Technologies have transformed the way that firms operate. The ability to communicate information almost instantaneously and interact iteratively have allowed critical improvements in virtually all aspects of work and business operations.

An indirect impact of technology is that it is leading to fundamental changes in where, how and when today's knowledge workers perform their jobs. The confluence of these forces is resulting in new performance drivers for today's workplace and a series of new and exciting questions about what the workplace is – and more importantly what it should be.

Figure 5.3: What enables collaboration? (% of responses)

In this research, we asked respondents to identify the key technology and workplace tools or features that enabled them to collaborate more effectively. Among the top factors, shared electronic resources, common areas and meeting rooms were the most influential. We will return to this result in the following chapter when we look at ways in which firms can increase the level and effectiveness of collaboration over time.

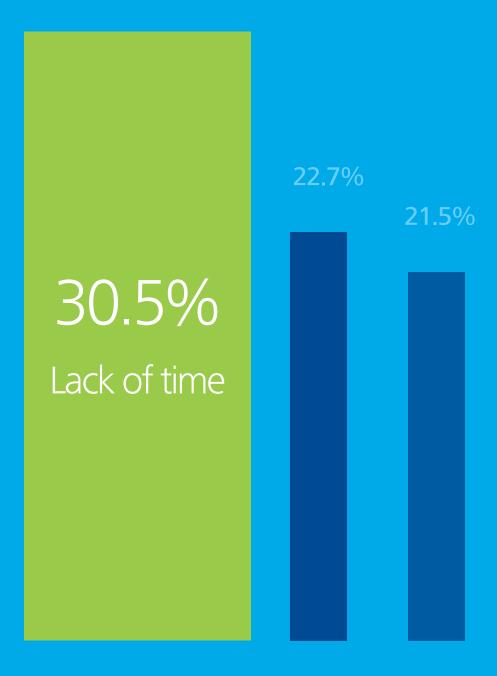
66% 49% 46% 43% 43%

36%

Source: Deloitte Access Economics, Stancombe Research and Planning 2014

69%

6 Collaboration strategy







BARRIERS TO COLLABORATION



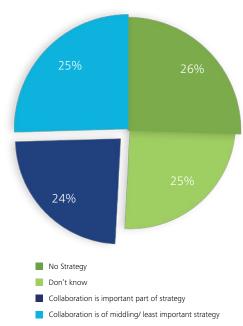
6 Collaboration stategy

So far we have analysed what collaboration is, recent trends and its benefits for businesses and the economy. But it leaves us with a question: How can businesses change their strategies to increase collaboration or do it more effectively?

It's a relevant question for all Australian businesses. It matters for the 51% of businesses that either have no collaboration strategy, or are unsure if they do. It matters for the 25% of businesses who have a collaboration strategy of middling importance. Even for the 24% of businesses that have a strategy and take it seriously, there will still be opportunities to improve the effectiveness of collaboration, so workplaces can be more productive and innovative.

We begin by defining collaboration strategies and the levers businesses can pull to increase collaboration. We identify which levers are the most important and why. Then we analyse the barriers to increased collaboration and step out ways in which businesses can reshape their strategy to drive more collaboration.

Figure 6.1 Half the businesses in Australia do not have a strategy for collaboration



6.1 Collaboration strategy – what is it and where are Australian businesses?

Workplace collaboration is important, but how can we measure whether firms are collaborative or not? This section assesses collaboration strategies in terms of three levers and 21 indicators, and provides benchmarks for the progress of firms in Australia.

What is a collaboration strategy?

A review of literature on workplace collaboration and analysis of Australian firms suggests businesses can place a strategic focus on collaboration in three main ways - culture and governance, workplace design and technology. These are the three overarching 'levers' available to businesses to influence the extent to which effective collaboration occurs in the day to day activities of their employees.

Across these three levers, the extent to which there is strategic focus on collaboration within a firm can be measured by assessing performance in relation to 21 indicators – seven related to culture and governance, six related to workplace design and eight related to technology. These are listed in Figure 6.2 below



Figure 6.2: The three levers of collaboration strategies



Using the results of the survey, an index for the performance of Australian firms in relation to each of these indicators has been developed. A higher score reflects greater support for collaboration in the workplace. The average scores for each indicator provide a benchmark against which businesses can assess their strategic focus on collaboration, relative to other firms.

Overall, the benchmark for firms in Australia across all three levers of collaboration is a score of 42.7 out of 100.

Firms that achieve a higher score can be recognised as above average performers, while those that achieve a lower score are below average, with strong opportunities for improvement.

The elements that make up this benchmark score are described in turn below.

Culture and governance

Businesses can influence the opportunities for collaboration among their employees through development of a supportive firm culture and governance structure. The extent to which business culture and governance fosters collaboration can be measured according to the following seven indicators:

- **Social interactions:** the frequency of social interactions between colleagues;
- Empowering the individual: the value placed on the opinions of individual employees;
- Incentives and rewards: the importance of collaboration in performance, remuneration and promotion criteria;
- **Diversity of workplace:** whether collaboration tends to occur among employees with common or different roles and responsibilities;
- Collaboration strategy: whether collaboration forms part of the firms' HR or business strategy, and how much importance is placed on it within the strategy;
- Intensity of interactions: the number of different people that employees tend to collaborate with; and
- Workplace hierarchy: whether the management structure is hierarchical or flat.

We calculate an Australian wide benchmark score based on the average responses in our survey. As shown in Figure 6.3, the benchmark scores for these indicators range between 43.4 for workplace hierarchy, to 65.3 for social interactions. The overall benchmark for culture and governance is 54.3 out of 100.

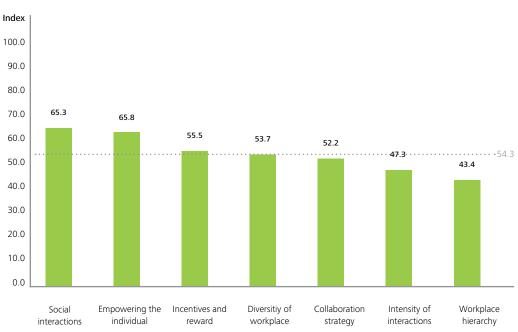


Figure 6.3: Culture and governance indicator benchmarks

Technology

The second lever available to businesses to encourage workplace collaboration relates to making available, and encouraging the use of facilitating technology. The eight indicators associated with this lever encompass the range of options that can be used in collaborative activities – from the traditional desk phone and email, to internal social media networks and real time electronic document management systems that allow multiple users to make changes to a file simultaneously.

The benchmark scores illustrated in Figure 6.4 below take into account two aspects of the availability of technology for collaboration – first, whether the technology is available, and second, how frequently the technology is used.

Overall, the benchmark for technology as part of a business' collaboration strategy is 35.5 out of 100.

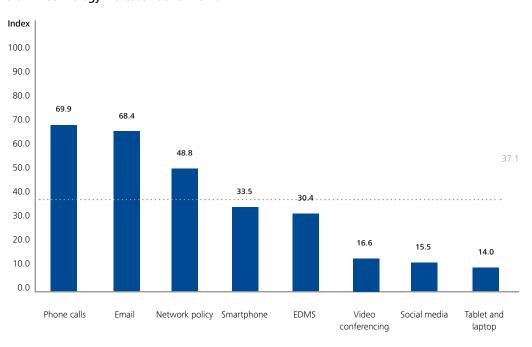


Figure 6.4: Technology indicator benchmarks

Workplace design

The other main way in which firms can encourage workplace collaboration is through workplace design. This captures the extent to which different physical spaces are made available to employees to undertake collaborative activities.

As illustrated in Figure 6.5 below, meeting rooms are the most common area made available by firms for collaborative activities, while break out spaces are a less prevalent feature of workplace design.

Overall, firms in Australia score 38.2 out of 100, on average in relation to this collaboration strategy lever.

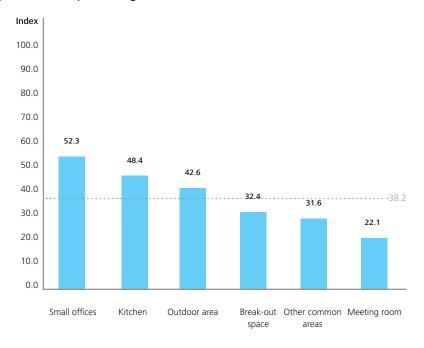


Figure 6.5: Workplace design indicator benchmarks

Xero: A collaboration culture

Xero is a software company that that offers a range of cloud based financial platforms to businesses. Founded in 2006, Xero is now one of the top 20 companies on the New Zealand Stock Exchange and is widely recognised as one of the most innovative businesses in the world.

According to Chris Ridd, the Managing Director of Xero in Australia, collaboration is encouraged through flat management, open communication, and transparency with senior leaders regularly sharing information with employees and being approachable: "Collaboration culture can't be manufactured or forced...it's not about what is written in a document, it's everywhere at Xero." Social interaction between employees encourages collaboration. A self-organised 'good-times crew' coordinates a range of corporate events and functions including Friday day night music jams. Also, employees are discouraged from eating lunch at their desks, instead, everyone gathers in the kitchen at lunch time.

Workspace design facilitates open communication and a flat hierarchical structure. For example, no one at Xero has their own office; all employees share an open plan environment where they can easily communicate with one another. This is particularly important in sales, where employees are constantly informed and updated through conversations in their vicinity. In situations where the work demands a more private environment, employees can sit elsewhere. There's also an abundance of chat rooms and quiet workspaces available.

Incentives are also important – by issuing equity employees have more 'buy in' and benefit when the whole company benefits, not just when they meet individual targets.

6.2 The link between strategy, activity and benefits

Recognising the importance of collaboration in a business strategy is a critical step for firms that want to take advantage of the benefits of a collaborative workplace. The previous section demonstrates that this can be pursued in a number of ways - outlining 21 indicators of the strength of a collaboration strategy.

However, business leaders will appreciate that there is a difference between delivery of a strategy and the follow up activities undertaken by employees on the ground. Therefore, to ensure that strategies are appropriately targeted, it is useful to consider the strength of the links between strategic elements and actual collaborative activities.

We find that technology in the workplace is the strongest driver of collaborative activities. Of the types of technology considered, the availability of video conferencing systems and electronic document management systems have the strongest association with collaboration in the workplace, each with correlations of around 0.16 with collaborative activities.

In terms of culture and governance, recognition of collaboration within staff performance, remuneration and promotion criteria is the strongest driver of collaboration activities. The correlation coefficient of 0.19 means that for every 1% increase the human resources lever, there was around a 0.2% increase collaborative activity. Unsurprisingly, aligning individual incentives to collaborate with those of the firm is key to driving employee engagement.

Furthermore, firms that place a high importance on collaboration as part of their business strategy are also correlated with higher collaboration in action (0.15).

Workplace design is also important. Most significantly, collaborative activities have a strong positive association with the availability of meeting rooms, small offices and common outdoor areas, with correlations of 0.17, 0.12 and 0.10 respectively.

We observe that the correlations identified in this report are not massive, at least not individually. Any one lever is not enough to unlock collaborative activity. However, we believe that used together, they can be very effective.

Figure 6.6: Links between strategy and collaborative activity



6.3 Barriers analysis

Efforts to promoting a collaborative workplace should also respond to the common barriers to collaboration identified by employees. These are highlighted in Figure 6.7 below.

The biggest barrier to collaboration is lack of time, identified by over 30% of respondents. This is followed by a number of issues related to

culture and governance, including overall culture (22.7%), management structure (21.5%), individual resistance (20.5%) and lack of interest (19%).

Meanwhile, lack of technology (11.1%) and the physical layout of the workplace (14.0%) are less likely to be identified as barriers to collaboration. This supports the findings of the Connected Workplace study.

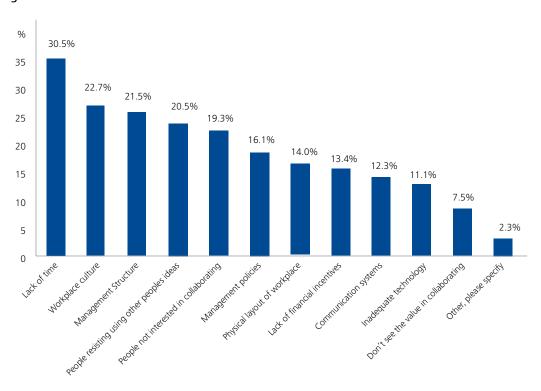


Figure 6.7: Barriers to collaboration

This found that traditional human resource issues, like workplace culture and management structures, were the biggest barriers to employee collaboration (32% and 28% of employees respectively). Furthermore, satisfied employees had higher reported levels of collaboration, collaborating 28% of the working week with colleagues, compared to 12% of the working week for employees that were not satisfied with their current employer.

Interestingly, almost one fifth of respondents did not identify any barriers to collaborating, and less than 10% of respondents reported that they did not see the value of collaboration. This suggests that willingness to participate in workplace collaboration is reasonably high, a promising outlook for businesses in Australia.

Kogan.com: collaboration is how we deliver products fast and at a low price

Kogan.com is an Australian online retailer of consumer electronics. The company, founded in 2006, delivers products to customers in a number of countries. The company has several hundreds of millions of dollars a year in revenue.

According to founder Ruslan Kogan, "collaboration was key to maintaining quality control as Kogan expands". Collaborative software such as Google Docs, allows employees to document their working process, facilitating quality control by more senior employees as well as providing learning opportunities for new hires. Such technologies can also help break down barriers of communication across offices and geographical locations as the firm expands.

Kogan's business model is about identifying areas of high demand, delivering the product at the lower price point, and having the shortest possible time to market. Collaboration across marketing, the product team, finance and operations, warehousing and logistics, is critical to creating and delivering the products to the doors of shoppers as fast as possible.

Kogan believed that smaller firms tend to be more agile and more collaborative as established players are often weighed down by build-up of bureaucracy overtime and don't have a culture of driving collaboration. "Technology is our culture," says Kogan, who has entrenched collaboration in the company's HR strategy – with recruitment and promotion decisions based on collaboration criteria.

6.4 Next steps

We have identified a range of economic and business benefits of collaboration. We know that it can lift productivity, innovation and employee engagement, and help businesses achieve their key growth and profit aspirations. And yet, we have also found a lack of strategic focus on collaboration in the majority of businesses. Many employees believe collaboration is below the optimal levels.

With all these findings, it begs the questions: how can businesses overcome the barriers to collaboration? What are the key next steps Australian business leaders can take to make their organisations more collaborative and unlock these benefits?

We close out this report with a discussion of the key next steps. We identify five practical steps for business to improve the level of collaboration between and amongst employees and managers, as presented in Figure 6.4 below. Following these steps will enable firms to systematically address the barriers to collaboration. They include strategic focus, technology and tools, getting employees to communicate more and have stronger relationships, changing culture with the right incentives, supporting transformation, increasing collaboration effectiveness, and monitoring and consistently collaborating over time.

Figure 6.4: Next steps for Australian businesses



Make collaboration a strategic business focus



Invest in the right technology and tools for collaboration



Changing culture with the right incentives



A tailored implementation



Ensuring effective collaboration

Step 1: Make collaboration a strategic business focus

Leadership from the top is clearly very important. This report demonstrates clear links between collaboration strategy and it being taken seriously with a wide range of business metrics including profit, growth and innovation. Collaboration cannot be strategic and important without senior leadership 'buy-in'.

This analysis finds that 51% of firms are either unsure, or know for sure that collaboration is not recognised in their HR or business strategy. Furthermore, an additional 25% of firms recognise collaboration in their corporate strategy, but do not regard it as an important component.

Accordingly, around 75% of businesses in Australia still face the first challenge in achieving a collaborative workplace. Without the emphasis of the importance of collaboration from business leaders, employees cannot be expected to participate in collaborative activities, and benefits for firms will remain unrealised.

Around 75% of businesses in Australia still face the first challenge in achieving a collaborative workplace

Taking this step will also help overcome two of the top three barriers to collaboration – workplace culture and management structure, which were each cited by over 20% of employees as collaboration barriers.

This step, it either requires either staff or managers to convince leaders of the importance of collaboration, or more ideally, for leaders themselves to drive change.

Step 2: Invest in the right technology and tools for collaboration

This report finds that collaboration cannot just be about talk or strategy – it has to be backed by

the right technology and tools. Without these, employees and managers simply do not have the means to collaborate. Technology and tools are the supporting infrastructure for sound collaboration strategies. Whether it's being able to access video conferencing facilities, or having real time electronic document management systems, technology and tools are strongly correlated with more collaborative activity.

We recognise that smart investments by firms in discretionary items like social media tools or new office designs are likely to have an important signalling effect to staff that senior leadership take collaboration seriously and are willing to make an investment. It also makes collaboration new and fun rather than just a change in work practices.

It is also important to note that technology often acts as an enabler to other levers of collaboration. For culture and governance, technology provides an opportunity to connect employees and information. It can help break down communication barriers arising from geography and function and can also be used to improve social interactions through social networks. For workspace, technology enables a new spectrum of work options including telework and real time editing.

The optimal mix of tools will vary from business to business, depending on the nature of employee outputs, location, and other features of organisation structure. Here, efforts should concentrate on identifying technologies and features of workplace design that will be most effective in enabling collaboration activities, making them available, and promoting use by employees.

We also note that changes in the digital industry mean that technology solutions for collaboration have never been more accessible or affordable, even for smaller businesses or those with limited financial means. What might once have involved major capital investments and transition periods are now more manageable. Consider that:

- Cloud-based service providers often have pricing structures that allow small businesses to use tools without the need for major capital investment;
- Alongside high-quality full-service telepresence options, a range of cheaper, laptop based communications tools are now available; and
- Businesses may even find cost-saving opportunities from collaboration tools, such as activity-based working, which can reduce occupancy costs.

Step 3: Changing culture with the right incentives

Beyond the supply of tools for collaboration, firms must promote a cultural environment that is supportive of collaboration. This involves tackling some of the major barriers to collaboration identified in this report, including management structure, management policies and financial incentives.

Overcoming these challenges, embodied through management hierarchies and the value placed on individual opinions, requires a concerted effort over the long term by both business leaders and middle management, in a way that empowers employees and builds engagement.

Ultimately, in collaborating, employees and managers will respond like they do to any business issue – based on their incentives. If people are recruited, paid and promoted for collaborating, they will do so. If people are assessed individually, without recognition for collaborating, they will not collaborate. This report finds that getting the HR part of collaboration strategy right is the single most important culture and governance lever businesses can use to drive collaboration. We know that, in general, employees and managers want to collaborate – it makes them more satisfied and engaged at work – and that the challenge is inz crafting HR strategy and governance systems to reflect that.

Step 4: A tailored implementation

Collaboration is not something that occurs in a vacuum, or something that can be done in isolation from adjacent activities. A firm needs to have employees and managers who work in teams, brainstorm ideas and iterate over solutions. But as outlined in Chapter 2, collaboration depends upon communication. If people do not talk to each other, do not know whatother people, or lack strong relationships, they are unlikely to collaborate because they won't be aware of the opportunities or benefits available.

Over time, more communication should not only share functional information about the business and employee roles, but also build up soft capital between people – in the form of trust. This also recognises that collaboration is not just a business process or procedure, it's a deeply behavioural activity, and encouraging it is not simply about pulling mechanistic levers.

Driving a new collaborative culture requires a tailored implementation strategy for the circumstances of a particular business and workforce. Some examples:

- Driving collaboration might involve regular sessions with senior management to discuss ideas and the direction of the firm, to show that leadership is invested in collaboration;
- Introducing new collaboration tools like cloudbased file sharing might be focused on at a big event with a 'flick the switch day' to create buzz;
- Firms might allow employees to choose what technology and workspace they want to use, providing options so that collaboration can grow organically, with more employee 'buy in';
- Leaders could ask employees to come forward to be collaboration leaders, so that alongside their day-jobs, they also have an extra-curricular role of facilitating collaboration or looking for opportunities;

These are just a few ways in which businesses can

actively introduce collaboration into the workplace. The point is not that there is any one set formula to have people working together, but that thinking through the transition process is important.

Collaboration activities also need to be monitored over time to make sure that they continue to be effective and meet business objectives.

Step 5: Ensuring effective collaboration

Beyond increasing the level of collaboration, it is important for all firms – including those with an existing high level of collaboration already – to ensure the effectiveness of collaboration. Effective collaboration will help overcome the greatest barrier – lack of time. If employees can see time saving benefits, they are more likely to collaborate as part of how they work, rather than something additional that they 'have to do'.

If employees can see time saving benefits, they are more likely to have collaboration as part of how they work.

There are many ways to turn collaboration from a time wasting activity to being productive. Here are just a few ideas:

- Giving employees choices is clearly important the more say they have over what meetings or conversations they are a part of, the more likely they are to engage;
- · Seek employee views on the effectiveness of activities – if they think certain types of collaboration are a waste of time, stop doing them;
- Having the right technology and tools is important – if you have electronic document management it is easier to track changes and edits than old-style word processing software; if you have dedicated collaboration space, other employees are less likely to be disturbed;
- Consider whether it is appropriate to have some informal rules about collaboration - like regularly checking the time and seeing if progress is being made, having the discipline to close

- meetings early, or putting someone in charge of a collaboration session – while keeping in mind that many of the most successful collaborations are organic, spontaneous, don't have rules and sometimes still work; and
- Champion individual efforts and successes as well – if the collaboration message goes too far, to the exclusion of solid individual efforts and concentration it is more likely to result in some ineffective collaboration activities.

Building a collaborative culture is not an overnight transformation where everything in the organisation is suddenly collaborative. It is something that builds momentum over time, based on the growth of trust, familiarity between people, and tangible collaboration success stories.

Business leaders also need to recognise that early efforts to stimulate collaboration may not be immediately successful. After all, those first attempts are where people are just finding out about each other's roles, or how they like or do not like to collaborate. Ineffective collaborations need not be persisted with if people do not want to.

Over time, however, it is likely that where trust and relationships build, employees will become more aware of how to collaborate effectively. Collaborating consistently will help this. Ideally, businesses would be able to achieve a workplace scenario where collaboration does not require all the formal components of a collaboration strategy and instead happens seamlessly and without friction.

Conclusion

With these steps, businesses can change how they think about collaboration, devise a strategy, link it to tools, technology and other strategies, and try to lift the level and effectiveness of collaboration over time. The results of this report suggest that these changes can have a profound impact on how we work and have significant benefits for business and the economy in the long term.

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Appendix B Methodology

This appendix provides some additional methodological detail for our study.

Survey design

The survey was designed by Deloitte Access Economics in consultation with Google and Stancombe Research and Planning.

The survey was implemented by Stancombe Research and Planning in June 2014 as an online survey, successfully completed by 1014 employee and manager respondents across Australia.

The targeted respondent of this research was broadly representative, with the exception of those who were not working and under 18, who were excluded from the analysis.

Key characteristics including age, gender, role, occupation and industry were used to weight survey responses to ensure that the survey would broadly reflect economy wide measures.

In addition to a range of questions that were used to classify respondents, by income, educational background, occupation, industry etc, the survey covered different aspects of collaborative working environment, including benefits, costs, tools, trends, and workspace design.

Survey responses included self-reported business performance metrics and time allocation metrics from employees. It is important to note that there are inherent issues in interpreting survey data, and that these should be considered in interpreting the results. However, we believe that our results are nevertheless indicative of the true value/measure within a reasonable margin.

- First, it is possible that there are biases in the survey sample. We have used a representative sample of 1,000 employees and managers, using quotas for sub-categories and reweighting responses according the economywide division of employees and managers.
- Second, it is possible that survey respondents interpret questions differently. This is a particular problem when dealing with a concept like collaboration.
- Third, it is possible that survey respondents systematically misjudged the nature of their employment or business – for example, understating how much time they spent socialising at work, or overstating how profitable their business activities were.

Finally, there is the general issue of correlation. It is possible that high levels of collaboration are associated with strong business metrics but that either causation runs the opposite way or that there are other unobservable variables driving the links. Causation could run the other way if strongly performing businesses had more time or resources to undertake collaboration. But that rationale only goes so far – it is hard to see why profitable businesses need to be more collaborative. Further we have supplemented our quantitative analysis in this report with case studies to gain a better standing of the impact of collaboration in businesses. It is clear from these case studies how collaboration activity is used to save time or improve the quality of work – the exact items measured in our approach. Further, the results are consistent across a range of metrics and do not seem to be a mere aberration.

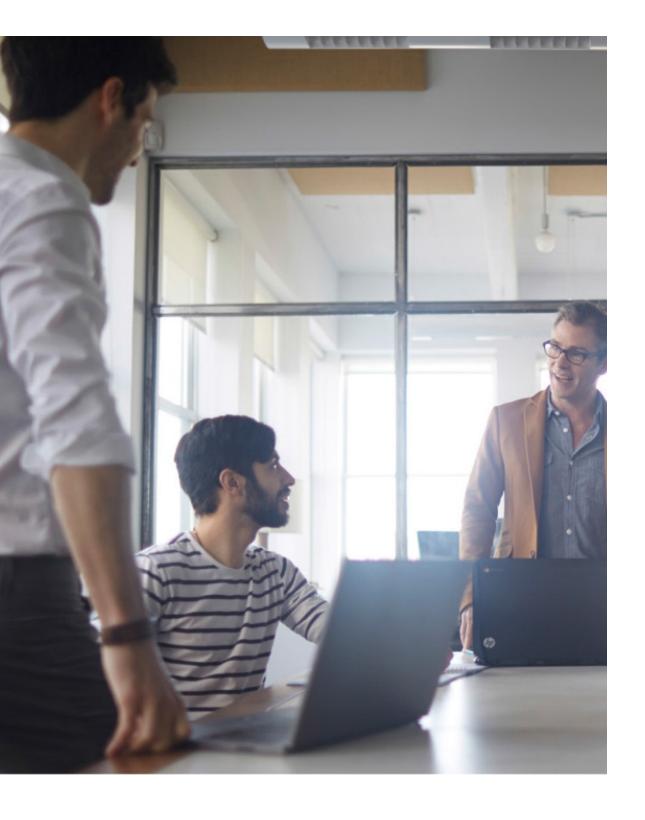
Consultations

The consultations were conducted by the Deloitte Access Economics team during March 2014 to July 2014. Five consultations were specifically chosen to cover multiple industries.

The interviewees responded to a number of questions on collaboration, corporate strategies, workplace design, incentive design and technology use. The consultations provided insights into the current state and future planning of the organisation.

The following interviews were conducted:

- News Corporation Tom Quinn (CIO)
- Woolworths Deon Ludick (Leap program
- Xero Chris Ridd (Managing Director ANZ)
- Kogan Ruslan Kogan (Founder and CEO)
- Another major Australian firm









John O'Mahony
Director
Tel: +61 2 9322 7877
email: joomahony@deloitte.com.au





Frank Farrall
Partner
Tel: +61 3 9671 6562
email: ffarall@deloitte.com.au

Jason Qu Analyst Tel: +61 499 993 367 email: jasonqu@deloitte.com.au

Deloitte. Digital

Contact us

Deloitte Access Economics ACN: 149 633 116

Level 1 225 George St Sydney NSW 2000 Australia

Tel: +61 2 9322 7772 Fax: +61 2 9322 7001

www.deloitte.com/au/economics

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