

Creating a Culture of Continuous Learning: The Bedrock of Innovation

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*“Knowledge is like
money: to be of value
it must circulate.”*



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“Organisational learning is a way of resource acquisition through the accumulation of knowledge” and “a prerequisite of a flexible organisation because it allows adapting to a changing environment”³

The decline of once market-leader, Nokia, is one of the better-known examples of what happens when organisations fail to learn. Whilst the introduction of the smartphone is often credited as triggering Nokia’s fall from power, research identifies that the organisation had, over time, switched off its learning radar. Senior managers shut down key learning mechanisms, until it was too late to compete¹.

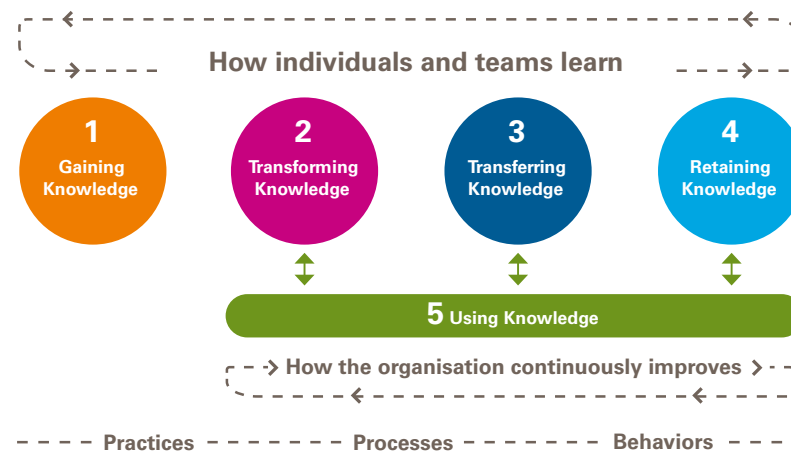
Since Nokia’s cataclysmic decline, the escalation of technological developments has created an imperative for organisations to constantly learn on the move. We live in a time of intense and persistent change. Research reveals that for organisations to remain future ready, able to operate in unpredictable environments and respond to unforeseen circumstances more quickly than competitors, they must become a learning organisation². This paper highlights how intentionally creating organisational learning opportunities and following those up with the application of knowledge gained is necessary to become a learning organisation. But knowledge of ‘what’ organisations need to aim for is not enough; this paper also presents practical steps that share ‘how’ organisations can facilitate continuous learning at every level.

What is Organisational Learning?

Organisational learning creates intellectual capital; by constantly learning, organisations are equipped to operate in a game with constantly moving goalposts. It requires the creation of personal learning experiences, socialisation with others' knowledge, reflection on personal and collective knowledge, and finally, the internalisation of new knowledge gained⁵. This process forms a continuous improvement cycle by which organisations develop and retain collective knowledge.

Based on Nonaka's Organisational Knowledge Creation Theory⁴, organisational learning can be broken down into 4 distinct activities:

- 1 Gaining knowledge** - how individuals gain knowledge and learning.
 - 2 Transforming knowledge** - how individuals and teams reflect upon and combine existing and new knowledge.
 - 3 Communicating knowledge** - how individuals, teams and the organisation communicates what it learns.
 - 4 Retaining knowledge** - how teams and the organisation retain collective knowledge.
- Based on our own and existing research, we propose a fifth element, which runs concurrently alongside stages 2, 3 and 4, to leverage the learning organisation:
- 5 Using knowledge** – how individuals, teams and the organisation uses the knowledge that it gains to continuously improve and innovate.



Consequently, through this process of organisational learning "organizations change or modify their mental models, rules, processes or knowledge, maintaining or improving their performance."⁶ This modification process implicitly influences the development of culture, so the critical question for all organisations, therefore, is: How do we explicitly create a culture of organisational learning?

Figure 1: Extending Nonaka's Organisational Learning Process⁴ to include a concurrent 5th stage – to use the knowledge to continuously improve.

How Do We Create a Culture of Continuous Learning?

Organisational learning is underpinned by the Japanese concept of Kaizen – reviewing actions to change for the better. It requires deliberate action and constant awareness. Deliberate action involves effective learning routines and processes to be established which prompt learning through review and adjustment, with regular balancing of long and short-term objectives.

Once embedded across organisational culture, learning becomes a habit for individuals and teams; people ask questions and learn on the job. Continuous learning becomes a golden thread that ties together information, experiences, and knowledge so that it promotes constant evolution.



Myth: Formal training is the only way people learn

It is a long-standing misconception that people only, or mainly, learn through formal training. Whilst this may be the case in working environments where employees have highly routine tasks with little or no variance, in the knowledge economy, where highly skilled people are hired to use those skills, most learning occurs “on the move” – whilst working, whilst problem solving and whilst collaborating.

The 70:20:10 model of learning and development proposes that approximately 10% of learning happens through formal learning, such as training courses or webinars, approximately 20% from social interactions; observing/listening to others and asking questions; and approximately 70% from on-the-job experience, when people use their knowledge and experience of how it works in the real world. Although the exact proportions should be taken lightly since their basis is largely anecdotal, there

is empirical evidence to support the notion that the majority (in the region of 70%) of learning takes place informally, through on the job experiences⁷.

If people learn most from experience, it's imperative that organisations facilitate opportunities for people to learn on the job.

To become a learning organisation, it's important to first understand the organisational learning process and key techniques that facilitate each stage to maximise learning.

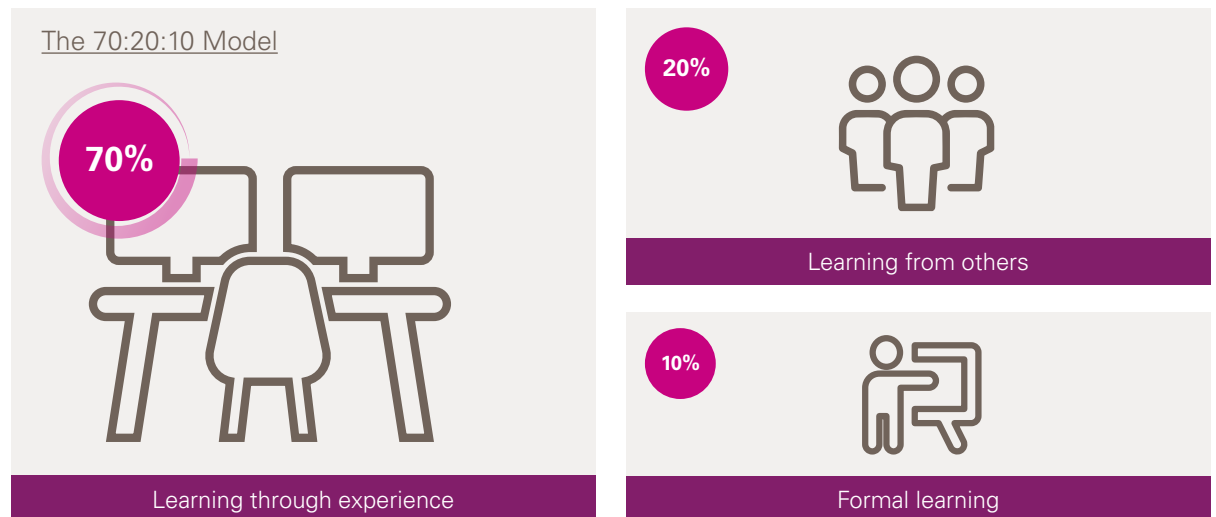


Figure 2: The 70:20:10 Model of Learning and Development

Gaining Knowledge

Gaining knowledge outside of formal learning happens in organisations in two ways: learning from experience and learning from others. Although not explicitly acknowledged in Nonaka's Organisational Learning Process, learning first requires people to be open to new information and have the capacity to take on new information. The foundation for this is a learning or growth mindset⁸; being curious and open to new information and learning. Not only does a wealth of research support the benefits of a growth mindset, but evidence can also be seen in practice.

Microsoft, for instance, credits its growth in recent years to creating a growth mindset culture⁹. When Satya Nadella joined Microsoft in 2014, he found a culture that required people to 'know' everything rather than 'learn' everything. Shifting to a growth mindset culture enabled people to recognize that there are many ways to solve challenges, and this keeps people open to receiving new information.¹⁰ It needs to be acknowledged, however, that some people more naturally absorb learning or are more open to learning than others. Therefore, maximising gaining knowledge requires intentional practice from individuals and support from team leads.

Learning from experience

Gaining knowledge based on personal experience forms part of the first stage of organisational learning, since most learning is experiential, taking place 'on the job'. No matter what skills a person acquires in formal training, in using them they learn so much more through a process of:

- trial and error
- deliberate experimentation
- formal and informal feedback
- testing
- thought refinement
- problem solving
- concept reinforcement

A continuous learning mindset is underpinned by openness to change.

Learning from others

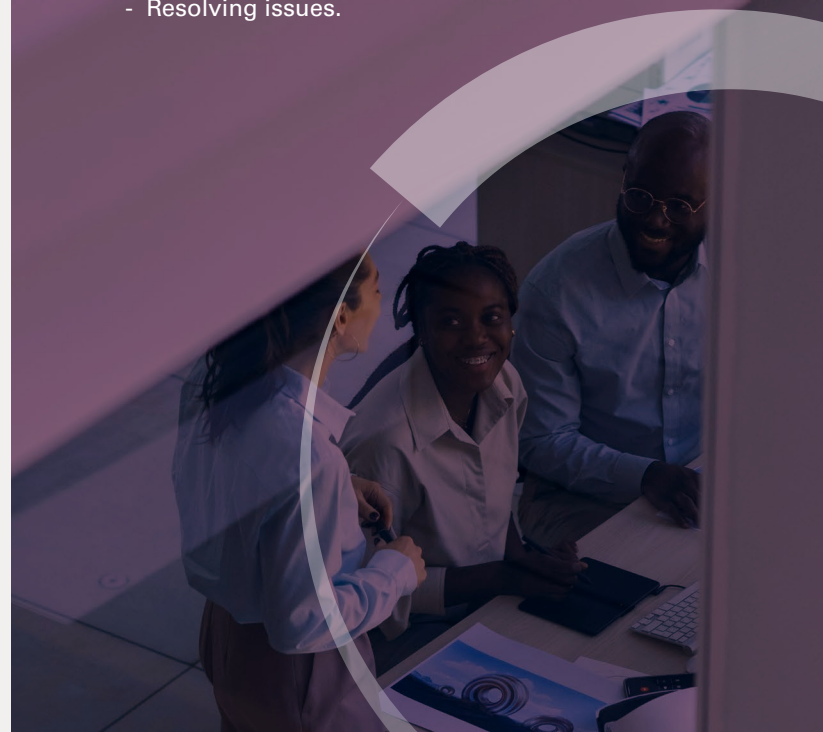
As the 70:20:10 model proposes, and reinforced by social learning theories, colleagues present a valuable source of learning. An individual's development is accelerated when they learn from others¹¹. This happens because a person's mental models, reference points and mindsets become apparent in the face of alternative information and are expanded as they are shared, questioned, and negotiated. This sharing of knowledge and learning between people not only benefits individuals, but also expands an organisation's capacity for effective coordinated action¹¹. Learning from others enables individuals to:

- Become aware of assumptions, beliefs, and knowledge gaps.
- Observe alternative perspectives that were previously unknown or not perceived as relevant.
- Gain experience vicariously from others' lived experiences.
- Ask questions to develop knowledge, learning and experience.

Transforming Knowledge

Transforming knowledge from the initial, subjective view through the socialisation of shared knowledge is the second stage of organisational learning. At this point individuals have absorbed knowledge and learning gained in social networks and begin to assimilate this knowledge – transforming it into more objective knowledge which individuals can use for problem solving. There are certain key characteristics that some individuals and teams possess, which others can develop, and this enables them to maximise knowledge transformation. Transforming knowledge involves:

- Being open to new information.
- Understanding the principles of new information.
- Considering how new knowledge can be combined with existing knowledge.
- Identifying opportunities and problems.
- Resolving issues.



3

Communicating/ Transferring Knowledge

Individuals engaging in learning alone is not sufficient to make a learning organisation. Every organisation is full of individuals who have valuable knowledge. It is the transference / communication of that knowledge so that others may learn and use the knowledge (i.e., they begin their own journey at stage 1: learning from others) that begins the organisational learning process and ensures knowledge is expanded and retained in the organisation. Sharing knowledge widely, beyond organisational silos in systematic and clearly defined ways, ensures that organisational learning is expanded as others incorporate this knowledge into their own learning and practice. Transferring knowledge enables people to:

- See things from another perspective.
- Gain new knowledge from others.
- Begin to transform knowledge.
- Consider the applicability of knowledge shared.



Myth: As long as individuals learn, the organisation will learn.

4

Retaining Knowledge

In a knowledge economy, when experts leave an organisation their unshared knowledge leaves with them. This highlights the importance of both sharing and storing knowledge outside of individuals, as “a form of organisational memory”¹² which others can refer to later when similar issues arise. Knowledge is retained in organisations when it is shared widely with others in stage 3, and when it is stored in knowledge repositories that are easily accessible to all. Of course, stored knowledge is only as good as the technology that is used to store it. A file on a manager’s hard drive is not accessible to all, so organisations need to give thought to how they will retain knowledge and learning, ensure that everyone knows where it is and can easily access/search it. As the pace of change is fast in technology, an additional consideration is that stored knowledge must also be updated and managed.

5

Using Knowledge

To become a learning organisation, it is necessary for organisations to facilitate delivery of stages 1 – 4 of the learning process, which ensures that people and the organisation are constantly learning. However, unless that learning is put to good use to solve company issues or devise customer solutions, then all the organisation has done is upskill employees for future employers. It is vital therefore that organisations use and apply developed knowledge, modifying processes, practices, and decisions in light of new insights¹³ (see Figure 1). Stage 5 doesn’t happen at the end of the process, rather runs concurrently alongside stages 2, 3 and 4 and feeds back into stage 1. This forms a crucial, and often missed, part of the learning cycle.

Learning organisations don’t happen by accident. They are brought into being through aligned processes, practices and behaviours at the individual, team, and organisational levels which create routines and dialogue that exemplify continuous learning. By doing so, organisations become adept at accruing, sharing, retaining, and using knowledge to continuously improve, benefiting both internal and external stakeholders, and creating constant opportunities for innovation. Therefore, the key to becoming a learning organisation lies in discovering the secrets of learning cultures, i.e., the processes that maximize organisational learning and the practices that create a culture of learning. Therefore, the next two sections share insights from academic research, which reveals key mechanisms to becoming a learning organisation and how to develop a learning culture for continuous learning.

“The organization that is capable of transforming organisational learning into the engine of knowledge creation aiming at building up a competitive advantage, may become a learning organization.”¹³

Techniques to Facilitate Organisational Learning and Learning Organisations

There are many ways in which companies can intentionally facilitate organisational learning, some of which address the entire organisational learning process, whilst others target specific stages. We have mapped the findings of research onto each stage of the organisational learning process in the tables opposite to demonstrate the wide range of techniques that organisations can use to facilitate organisational learning at each stage of the process.

It is only through addressing practices, policies, and behaviours in a joined-up way, recognising their systemic influences on one another, that organisational learning becomes embedded in organisational culture, and in turn, culture generates organisational learning. The technique-mapping opposite enables leaders to review processes, practices, and behaviours to ensure that there is alignment and support for organisational learning across all levels of the organisation.

*all of these behaviours are characteristics of psychological safety

Practices Supported by the organisation, led and role modelled by managers.	Organisational Learning Stage					
	Gaining knowledge from others	Gaining knowledge from experience	Transforming knowledge	Transferring knowledge	Retaining knowledge	Using knowledge
Collective reflection	✓	✓	✓	✓	✓	✓
Knowledge Managers	✓	✓	✓	✓	✓	✓
Communities of Practice	✓	✓	✓	✓	✓	✓
Peopled supported to improve organisation	✓	✓	✓	✓		✓
Recruit continual learners	✓	✓	✓	✓	✓	✓
Leaders drive knowledge sharing	✓	✓	✓	✓	✓	✓
Leaver's debriefing	✓			✓	✓	
Stretch assignments		✓	✓	✓	✓	✓
Job or project rotation		✓		✓	✓	✓
Job crafting opportunities		✓	✓			✓
Sharing industry trends	✓		✓	✓	✓	

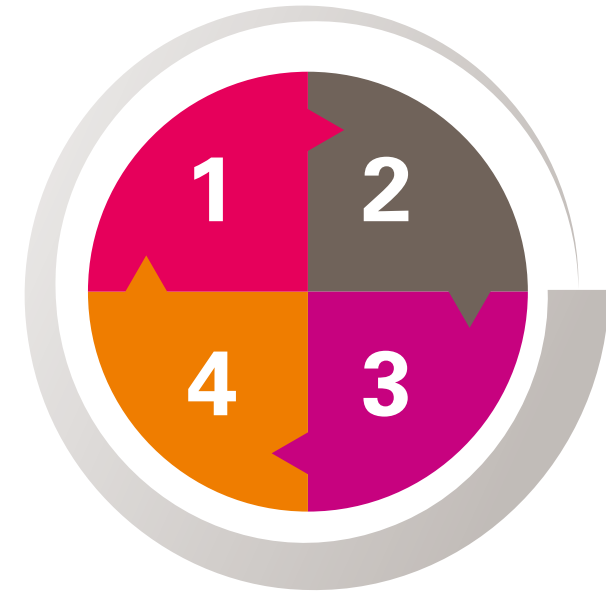
Processes Instigated by the organisation, supported by managers.						
Learning is part of strategy	✓	✓	✓	✓	✓	✓
Systems facilitate learning	✓	✓	✓	✓		
Accessible knowledge stores	✓		✓	✓	✓	✓
Training	✓		✓			
Coaching		✓	✓			✓
Mentoring	✓		✓	✓	✓	✓

Behaviors Exhibited by everyone in the organisation, role modelled and led by managers						
Destigmatise failures*	✓	✓	✓	✓	✓	✓
Quality feedback*	✓	✓	✓	✓	✓	✓
Learning mindset*	✓	✓	✓	✓	✓	✓
Collaboration across silos*	✓		✓	✓		✓
Seek alternative perspectives*	✓		✓	✓	✓	
Supportive accountability for learning	✓	✓	✓	✓	✓	✓
Personal reflection	✓	✓	✓			✓

Top 4 Tips for Becoming a Learning Organisation

Organisational culture has a big impact on how effective organisational learning is likely to be and the likelihood of becoming a learning organisation.

Organisational culture is created through the meaning, attitudes, and behaviours that individuals adopt – replicated across groups of people, these become the norm and therefore influence how people across the organisation act and react. Culture is strongly influenced by the systems, structures, practices, and behaviours which generate unwritten rules by which people interpret what is required of them. This in turn influences the way that people across an organisation learn, by determining priorities, establishing expectations, and guiding behaviours. If organisations actively promote, support and value learning and knowledge development, people will be more likely to engage in experiential learning opportunities, share their learning with others, grow their own knowledge and support the development of others.¹⁴ This raises the question, what can an organisation do to promote learning and knowledge development?



1	Develop a psychologically safe work environment
2	Create vision alignment
3	Use on-the-job reflection
4	Leadership values continuous learning

Figure 3: Four high-impact research-based techniques to develop a learning organisation.



Develop Psychological Safety

To learn effectively, people must feel safe to give, ask for and listen to feedback – safe to ask questions, share ideas or concerns, challenge the status quo and one another, and ask for help. When people have this level of trust in their co-workers, this is called psychological safety. Psychological safety not only paves the way for learning; it also facilitates innovation and inclusion.

How do we know that this kind of work environment is important for learning? Neuroscience shows that when people do not experience trust, and feel unsure of others, the amygdala, the part of the brain responsible for emotion – part of our survival instinct, gets ‘hijacked’. The brain launches the well-known fight, flight or freeze response, and a series of physiological changes are triggered: heart rate increases, breathing quickens, digestion slows, tunnel vision and hearing loss can even occur if the threat is considered severe enough. The threat response is draining and often all-consuming. It diverts mental resources to the ‘emotion centre’ of the brain, the amygdala, removing energy from other parts of the brain, which impedes rational thinking, problem solving ability and memory – all processes which are central to learning. When people do not feel safe to contribute, their physiological responses prevent them from getting involved, restricting individual, team, and organisational learning.

Practical examples of the impact of lack of organisational learning due to low psychological safety have been documented in the Federal Reserve Bank of New York and at NASA. For instance, following the

global financial crisis of 2008-2009, research revealed that regulatory officers who were responsible for monitoring bank’s processes, policies, investments, and proposed transactions, worked in a poor culture where unique observations were not welcome.

This resulted in organisational learning being missed: warning signs were ignored, gaining consensus was more important than learning what was happening – the culture silenced regulatory officers, which resulted in the biggest financial system collapse since the 1930s¹⁵.

As for NASA, the world stood still in horror when the Challenger and Columbia space shuttle disasters occurred. Ensuing investigations revealed that highly skilled workers knew or suspected there were issues that needed addressing but they were discouraged from raising concerns or speaking to senior managers, and when they did, their voices were ignored. Rather than listen to alternative perspectives, learn, and take corrective action, the culture made it feel unsafe for people to speak up, to share potential bad news, or highlight concerns. This resulted in a culture of silence or dismissal of issues¹⁵. In NASA’s case, this prevented learning at the level of the decision-makers and culminated in an unnecessary loss of 14 lives.

Psychological safety isn’t just a preventative measure. When teams operate in a psychologically safe way, there is a mindset of continuous learning, respect for different experiences and perspectives, an expectation that people raise concerns, question actions, suggest alternatives and take responsibility for collectively improved outcomes. This creates a culture of accountability and high standards. Project Aristotle, a long-term study at Google, found that the single predictor of the highest performing teams is psychological safety – it’s not a ‘nice to have’, it’s crucial to mental and physical health, positive employee experience, business reputation and business outcomes.¹⁶

What can we do to develop psychological safety?

- 1 Demonstrate how important psychological safety is to continuous improvement.
- 2 Provide management training on establishing and maintaining psychological safety.
- 3 Measure psychological safety and hold team leads accountable for it.
- 4 Measure candidates’ psychological safety skills and recruit role models.
- 5 Include evidence of psychologically safe behaviours as part of the criteria for appointments / promotions.

“Psychological safety is not a perk; it’s essential to producing high performance in a VUCA world.”¹⁵



Myth: Psychological safety means low accountability and standards



Generate Alignment with The Vision

If innovation is central to an organisation's strategy, then organisational learning is an imperative. Research indicates that to be an innovative organisation, it must first be a learning organisation,^{15,18} and therefore being a learning organisation is implicit to strategic delivery. Alignment to the organisation's Vision is an important part of learning organisations. It is only when people understand that learning is central to organisational agility, growth, and success, will individual and collective learning be attributed the importance it needs. Without understanding and alignment, organisational learning will be considered as separate to the 'day job' and deprioritised.

To enable vision alignment, people must be able to understand the organisation's purpose, vision for the future, the strategy for how the organisation will get there, AND how their role contributes to strategic delivery. In the same way as knowledge gained must be applied, so people must be able to understand the

organisation's vision and priorities and be able to apply it in their work life.

Without alignment to the organisation's strategy, employees make business decisions based on personal motivations which can result in misaligned decisions, especially when there are incidental pressures such as time, workload, group opinion, or choices to be made, such as targets versus ethics. However, when people have a clear understanding of the company's Vision and strategy, and how their role contributes, they are more likely to make aligned decisions which exemplify company values and deliver high standards. People who are aligned to the company's purpose, vision, and strategy act because it feels right and are more likely to go to greater lengths to achieve what feels right, even if that presents challenges¹⁹. This is important for both learning and innovation, both of which present challenges in amongst delivery of daily tasks.

If innovation is central to the organisation's strategy, people need to be able to align their personal actions to make time for knowledge and skill development, share their learning, and use new knowledge to improve strategic outcomes.



Myth: The vision is just for customers and the strategy for senior leaders.

"Achieving real alignment, where strategy, goals and meaningful purpose reinforce one another, gives an organization a major advantage because it has a clearer sense of what to do at any given time, and it can trust people to move in the right direction."¹⁷

What can we do to create vision alignment?

- 1** Create a clear purpose and strategy that is understandable and relatable.
- 2** Support people to understand the company's purpose and vision.
- 3** Support people to understand the company's strategy.
- 4** Enable people to know how they contribute to the delivery of the vision and strategy.
- 5** Teams use the company's purpose, vision, and strategy as decision-making guides.



Use On-The-Job Reflection

Learning does not come from what we know, but from what we don't know or from information we haven't connected – therefore, being open to new ideas and ways of doing things is essential if people are to learn from one another and experience. However, people can only be open to new ideas and incorporate new knowledge into practice if they have the time to think them through and experiment with ideas. Initial rejection of new ideas is often due to time pressures – by reducing time pressure, people can reflect on new information and consider how it can be used and implemented – this not only facilitates learning but also promotes innovation.

Reflection also enables learning from experience. Organisations that fail to reflect on their actions and performance do not continuously improve – teams that fail to reflect on market/competitor developments and their own practices, risk losing business, and individuals who fail to reflect on their own actions and/or performance risk ending up with a redundant skillset and missed opportunities to improve performance/meet the changing needs of customers and stakeholders. Of course, time is an issue for all organisations, but when people are overworked and stressed, not only do they miss the opportunity to reflect on what they're learning, but their analytical and reasoning abilities also become severely impaired which impacts on their ability to learn, from experience and from others, and effectively problem solve. Reflection in the real world just needs to be quick and pragmatic – it doesn't require huge amounts of time, but it does require people to have the capacity to engage with full access to their cognitive processing abilities.

“Supportive learning environments allow time for a pause in the action and encourage thoughtful review.”¹⁵

Reflection is a powerful way to learn, connect information and discover how it can be corrected. An example of learning from reflection in business can be found in Cynthia Carroll, who was appointed CEO of Anglo-American mines in 2007. She was shocked on appointment to discover that in the five years prior, there had been nearly 200 fatalities at work. The industry culture viewed fatalities as normal – undeterred, she made it her mission to reduce the fatalities, shutting down the most problematic mine for a week to investigate root causes. How would she get to the bottom of the problem? She used reflection sessions! Workers were brought together in groups and asked to reflect on near misses, regular problems, and instances of fatalities to understand where the problems lay. The result? Reflection and discussion enabled people to collectively diagnose long-standing safety issues – highlighting the need for retraining, new safety policies, and stakeholder education. By starting with reflection, Cynthia discovered where the real problems lay and used that learning to improve the mine's safety record, reducing fatalities by 62% over the next four years. Considering this involved 4000 workers and resulted in loss of revenue for a whole week – this was no mean feat¹⁵.

What can we do to encourage reflection?

- 1** Ensure workload allows people time to reflect and learn.
- 2** Develop processes to allow people to consider and experiment with new concepts.
- 3** Carry out reflection at every level and communicate results of reflection.
- 4** Support managers to be comfortable with uncertainty and experimentation following reflection.
- 5** Hold leaders accountable for collective reflection at critical points and sharing learning.



Myth: Reflection takes time that could be better used moving forwards.



Leadership That Drives Continuous Learning

Leaders' behaviours strongly influence organisational learning. Leaders set expectations, determine priorities, direct attention and provide/remove permission by their words and actions. Some people leaders complain that they are held responsible for how their team behave – harsh as it may sound, people leaders are responsible for team culture; they set the tone, either by overt actions or their silence, co-creating and perpetuating culture with their team.

When leaders have a continuous learning mindset, they facilitate knowledge sharing, reflection, curious questioning, sharing of new and alternative ideas, collaboration, and experimentation. When this happens, people understand that learning is important and feel comfortable actively gaining knowledge from personal experience, others, transforming knowledge, sharing knowledge, and taking deliberate actions to retain learning in the organisation. Conversely, when people leaders fail to demonstrate continuous learning, it can have huge business ramifications. As mentioned previously, what happened at Nokia

is a notable example of what can happen when organisations fail to learn, with research revealing that leadership was a significant contributing factor in the company's downfall. Over time, engineers persistently tried to report concerns about Nokia's Symbian operating system, but leaders didn't hear it. Senior leaders discouraged managers from reviewing industry developments, reflecting on system shortcomings, and learning from them, rather they didn't want to know what issues lay ahead. Their primary focus was on pace and delivery-against-all-odds. Leaders blocked feedback and learning, and people experienced negative career consequences if they tried to report problems. Leaders should have been facilitating continuous learning – had they done that, Nokia would have had several years to design an alternative system. This lack of continuous learning meant that by the time they could no longer ignore the fact that their operating system could not compete, it was too late¹.

*Leadership learning behaviours

1. React positively to failure – focus on learning and how new knowledge will be used. Share intelligent and unavoidable failures and manage avoidable failures.
2. Be human – share your own learning, failure, and experimentation stories to make it safe for others to do so.
3. Listen – facilitate the conversation, give own opinion last, ensure that everyone can share their thoughts.
4. Provide quality feedback and provide opportunity for people to discuss feedback.
5. Ask open, enquiring questions to encourage others to voice their thoughts.
6. Always be curious- go into every situation expecting to learn something.
7. Reward knowledge sharing and development.

“Leaders who work to create hospitable conditions for learning can build organisations that are better able to achieve and sustain success.”¹⁵

What can people leaders do to drive continuous learning?

- 1 Role model learning behaviours*. This sets the expectation and gives others permission to follow.
- 2 Plan for staff development – be aware of peoples' skills and interests and provide stretch opportunities.
- 3 Provide resources and opportunities for gaining, transforming, sharing, retaining, and using knowledge.
- 4 Supportively hold teams accountable for developing their learning and skills.
- 5 Provide role clarity and support teams to understand the criticality of knowledge and skills development to strategic delivery.

What can organisations do to drive continuous learning?

- 1 Appoint people managers with curiosity and value of learning.
- 2 Develop managers, providing training, shadowing, coaching & mentoring opportunities.
- 3 Hold people leaders accountable for developing a learning environment.
- 4 Provide a process that enables people to have the time to develop and use knowledge.

In Summary

To thrive in the knowledge economy, organisations must optimise intangible business assets, the learning, knowledge, and experience of their employees. This fuels innovation and rapid technological advancement.²⁰

To become a learning organisation, it is essential that organisations intentionally create effective habits and systems which facilitate each stage of organisational learning. Gaining knowledge is not enough – organisations must actively USE knowledge and develop a continuous learning mindset, proactively improving processes, practices, and behaviours. Processes must be designed to enable and streamline task delivery and innovation whilst reducing barriers. Practices must be developed to generate more effective knowledge sharing mechanisms. Behaviours at every level of the organisation must support team learning so that the organisation continually learns and evolves in the constantly moving marketplace.

In virtually every sector, effective organisational performance is dependent on the effective sharing and combining of the knowledge, learning and skills of individuals across multiple projects and teams. However, a job is no longer for life and therefore, organisations risk losing significant economic advantage when skilled employees resign and take their learning, knowledge, skills, and experience with them. This requires organisations to provide a working environment that is conducive to maximising, retaining, and using learning at the individual, team, and organisational level. To ignore this imperative is to risk constantly losing value like a leaking tap.



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These insights were generated via a Knowledge Transfer Partnership (KTP) between NTU and Fujitsu.



For information about conducting a KTP with NTU, please contact **ktp@ntu.ac.uk**

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