



A Human Resource
Practitioner's Guide



**MANAGEMENT ATTRITION
& CRITICAL KNOWLEDGE
TRANSFER**

Acknowledgements

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EXECUTIVE SUMMARY

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In our company, we failed to address succession in one key part of the business. It has taken us 2 years to fully recover from that. The cost of that failure far outweighs the cost of the proactive measures we're taking today.
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The Baby Boomer retirement wave and the potential loss of their deep knowledge and experience is a challenge facing many organizations today. This issue hits firms differently. In some cases it means the departure of one or two key leaders who have been seminal in building the business and on whom everyone still relies for advice. In other cases it means the hollowing out of an entire department as a group of long-tenured peers all approach retirement together.

The consequences of losing key personnel without preserving their knowledge can be significant. Relationships with clients, understanding of key processes or history, and on-the-ground expertise gained through years of hands-on experience are often key to a firm's reputation and performance. Losing these with the departure of a key expert or senior leader can impact firm productivity, and ultimately profitability.

Having strategies in place to ensure business-critical expert knowledge is identified, captured, retained and transferred puts organizations in a better position to ensure success through a period of retirement-based attrition. These strategies can be rigorous or relatively simple, but a key success factor is an early recognition that transferring the level of knowledge and expertise within a firm is often a very different challenge than filling a vacant role when they depart.

Firms who have made a concerted effort to transfer knowledge have found these strategies to be complementary to other efforts targeted at improving company performance. Breaking down silos, building trust, and improving workers' skills are all objectives that can be furthered through knowledge transfer. Knowledge transfer can seem daunting at first, but once it has been recognized and its scope understood, designing and implementing a plan to address it is an achievable step for those committed to preserving their firms' knowledge and expertise.

The Asia Pacific Gateway Skills Table undertook a project designed to provide human resources practitioners with practical guidance, strategies and tools they can apply in their organizations to allow them to better plan for and manage retirement-based attrition. Drawing on previous research and supplemented by on-the-ground investigation of eight unique cases from six BC companies, we sought to develop a comprehensive understanding of key challenges organizations face in managing attrition-based knowledge transfer and steps they are taking to address those.

A Framework for Transferring Firm Knowledge

The result of this effort is a *Knowledge Transfer Framework* that lays out a step-by-step approach to critical knowledge transfer, provides key questions and considerations for each step, and identifies potential strategies and tools to facilitate knowledge transfer.

The framework can be applied to a wide range of attrition situations, including:

- Organization-wide initiatives to stimulate broad-based knowledge sharing.
- Specific teams or functional areas where demographic trends put critical expertise at risk.
- Individual manager retirements where unique knowledge and long history needs to be retained.

Key steps in designing and implementing a knowledge transfer strategy include:

- 1. Map out potential retirement timeframes and scenarios.**
This will help to clarify who your attrition risks are and how much time you have to prepare for their departure.
- 2. Validate that a retiring expert has unique, business-critical knowledge that needs to be retained.** Not all knowledge is business-critical and there may be alternatives to knowledge transfer.
- 3. Understand how your organizational systems and processes influence, enable or suppress knowledge transfer** and identify how they may be adapted or leveraged to facilitate specific critical knowledge transfer initiatives.
- 4. Identify knowledge successors.** For critical knowledge to be retained, the organization needs to be intentional around who will be the recipients of the expert's knowledge and expertise.
- 5. Select and implement critical knowledge transfer strategies.**
To be successful, these need to be customized to target the specific knowledge transfer scenario. A detailed list of strategies and tools can be found in Appendix A.
- 6. Measure progress and success.** Knowledge transfer often takes time. Clarifying the goals of the knowledge transfer effort and what success looks like will help to maintain focus over the longer term.

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For the purpose of this report, the term **expert** is used to denote a long-tenured manager who possesses any unique, business-critical knowledge or skills. The term **learner** is used to denote any individual who will be a recipient of knowledge transfer.

Key success factors in transferring critical knowledge include:

- 1. Differentiate between critical knowledge transfer and other organizational development processes and activities.**
Critical knowledge transfer is more likely to be successful when the organization labels it and differentiates it from other (related) talent management initiatives, such as succession planning and employee development.
- 2. Address knowledge succession separately from role succession.**
Organizations tend to equate knowledge succession with role succession, assuming the expert's successor will be the target for knowledge sharing. This limits the range of options for ensuring business-critical knowledge is captured and retained. In many cases, knowledge succession can take place in the absence of any confirmed succession plan. Identifying *knowledge successors* separately from role succession can increase the options an organization has to ensure business-critical expertise is retained.
- 3. Start early, anticipate the complexity of knowledge transfer and create the time and space required for it to occur.**
Knowledge transfer efforts are often put on hold until experts announce their intention to retire. This is usually too late to start thinking about how to retain deep expertise acquired over decades. The more complex and nuanced knowledge is, the more difficult it is to transfer.
- 4. Consider the interpersonal dynamics of knowledge transfer.**
Experts are not always interested in investing their time in teaching and training, particularly if it means working longer and harder as retirement approaches. Not all knowledge successors are good and receptive learners. Individual motivation and the relationship and rapport between the expert and knowledge successor(s) needs to be factored into the equation.
- 5. Customize knowledge transfer to fit the situation and people involved, and execute rigorously.** Knowledge transfer does not require complex strategies to be successful but it is important to match the knowledge transfer tactics to the situation and people involved. Once in place, focus relentlessly on execution.
- 6. Leverage existing programs.** Leveraging or expanding existing talent management, organizational development and knowledge transfer programs can help accelerate traction on knowledge transfer goals.

7. **Establish a plan between the organization, the expert and the knowledge successor.** Regardless of the knowledge transfer strategy selected, it needs to be accompanied by a formal knowledge transfer action plan that details knowledge transfer objectives and has the explicit agreement and support of both expert and learner.
8. **Leverage internal experts as teachers, coaches and mentors.** Organizations tend to over-rely on external training for manager development. While there is benefit to being exposed to outside ideas, practices and people, this does not replace learning from internal experts to build context-specific business-critical expertise.
9. **Maximize opportunities for on-the-job learning.** Learning happens organically when experts and learners have the opportunity to interact in meaningful ways while engaged in real work.
10. **Consider alternatives to knowledge transfer.** Knowledge transfer is not the only strategy worth considering when an expert is retiring. This is the time to consider changing or eliminating a process, redesigning or outsourcing a job, or hiring in expertise directly from the job market.

This research found many of the most powerful knowledge transfer strategies are complementary to existing efforts and are not onerous to implement. What they require is the recognition that knowledge transfer is a distinct and unique activity that needs to be intentionally planned and implemented. The reward is an organization that is able to retain and leverage its unique and critical expertise over time, and the development of a more robust culture of knowledge and information exchange overall.

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How to Build a Knowledge Transfer Culture

Organizations can reduce their exposure to critical knowledge loss by building a culture that intentionally promotes and facilitates the ongoing exchange of information and expertise.

Key features of a knowledge transfer-rich culture include:

- Resounding support from the top. This includes an executive that is highly visible to employees, shares information, takes the lead in succession planning and commits tangible resources (time and money) to staff training and development.
- Structures and processes that require people to interact in regular and meaningful ways in order to make decisions and get work done.
- Opportunities for staff across functions and levels to interact, both formally and informally.
- Promotes cross-training and knowledge overlap.
- Training and development that intentionally puts experts and learners together.
- Documentation that is robust and information that is broadly accessible.

ABOUT THIS RESOURCE AND HOW TO USE IT

**This document is intended
as a guide for employers
to understand how to:**

- Identify critical knowledge within their organization.
- Analyze their existing systems to understand how this type of information is flowing within their company.
- Identify and implement practical steps to ensure critical knowledge is transferred and retained in advance of attrition through worker retirements and departures.

This guide is for you if:

- Your organization is facing the retirement of one or more long-standing employees with a unique knowledge of the company, or expertise gained through years of on-the-job experience.
- Knowledge is critical to your organization's competitiveness, and specific individuals hold a large amount of this critical information.
- Your firm's employee age profile is high and a wave of attrition may occur within the next few years.

The guide will benefit human resource practitioners and executives in organizations fitting this profile.

Section 1 provides a Knowledge Transfer Framework for analyzing and addressing knowledge transfer risks. Section 2 provides a detailed overview of the principles and steps involved for each stage of the framework.

Each firm has different needs and challenges, meaning different strategies will be applicable. Determining which principles most apply to your organization will help you to target strategies that can be most effectively implemented to address your unique needs.

Appendix A contains a detailed list of programs and strategies that can facilitate the knowledge transfer process, including samples of how to evaluate attrition risks (Attrition Map) and implement strategies to preserve the knowledge of a key expert (Knowledge Transfer Action Plan).

INTRODUCTION

The Baby Boomer retirement wave and the potential loss of their deep knowledge and experience is a challenge facing many organizations today.

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One of our firm’s key takeaways from this process was a language to talk about knowledge transfer. Now we can speak about it directly and that helps us to address it.
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Having strategies in place to ensure business-critical expert knowledge is identified, captured, retained and transferred puts organizations in a better position to ensure success through a period of retirement-based attrition. In spite of significant efforts being made in succession planning, talent management and leadership development, many human resources leaders don’t feel they have adequately prepared for or addressed critical knowledge loss in their organizations.

In many cases, identifying that knowledge transfer is a process that is distinct from role succession (i.e. filling the position being vacated) and needs to be addressed separately is the critical first step. Because different firm circumstances will lead to very different strategies and solutions, there is no cookie-cutter approach to knowledge transfer. Once the areas of knowledge and expertise that will be affected by future attrition are understood, the steps required to retain those become much clearer.

In addition to addressing a specific future knowledge gap, knowledge transfer efforts are often compatible with and can benefit and support a firm's business objectives. For example, in an organization where customer relationships are key, efforts to successfully transfer these relationships and the skills required to maintain them will help ensure long-term success. In a firm whose reputation is built on subject matter expertise, knowledge transfer can help to broaden the base of expertise and further entrench its reputation in the marketplace. Further, in a labour market where highly-skilled workers are often difficult to source externally, developing a track record of successfully transferring knowledge and skills internally can give a firm a competitive advantage.

Finally, we want to acknowledge that knowledge transfer is a complex issue with a wide range of considerations that come into play: individual career goals and aspirations; interpersonal, team and organizational dynamics; business priorities and staff workload. Merely talking about retirement and succession can be politically sensitive and require careful navigation. In some situations, seeking external support may be required. Nonetheless, a structured and rigorous approach, such as the one outlined in this document, is an asset to both internal and external practitioners in addressing knowledge transfer.

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Helping senior executives recognize that knowledge transfer is unique from role succession and can be used to support bottom-line results will help to gain the support required to make these programs a success.

OBJECTIVES

In surveying member firms, the issue of management attrition and knowledge transfer has been consistently identified as a critical issue, but one many organizations do not feel equipped to address. To help close this gap, the Asia Pacific Gateway Skills Table undertook a project designed to identify critical success factors and provide human resources practitioners with practical guidance, strategies and tools they can apply in their organizations to allow them to better plan for and manage retirement-based attrition.

Key questions the research sought to answer include:

- How can you focus a knowledge transfer effort to ensure business-critical expertise is retained?
- What role does the broader organizational context (i.e., culture, strategy, structure) have on knowledge transfer?
- How do existing processes and systems support and enable knowledge transfer?
- What unique characteristics of knowledge experts and their successors influence knowledge transfer? How do you take these into account when planning and executing a knowledge transfer initiative?
- How do you select and implement specific knowledge transfer strategies to best fit the situation and people involved to ensure one-to-one knowledge transfer actually takes place?

The result of this effort is a Knowledge Transfer Framework that provides practitioners with a step-by-step approach to critical knowledge transfer that can be applied to a wide range of attrition situations, including:

- Organization-wide initiatives to stimulate broad-based knowledge sharing.
- Specific teams or functional areas where demographic trends put critical expertise at risk.
- Individual manager retirements where unique knowledge of and long history with the organization needs to be retained.

Key principles and guidelines for each step along the process were identified to help practitioners customize a knowledge transfer program to their organization and unique knowledge transfer situation.

PROCESS

The firms that participated in the research included 5 headquartered in Metro Vancouver and one based in Northern British Columbia. They include privately held companies, government-funded, and public-private partnerships. They range in size from less than 100 employees to more than 500 employees. Industries represented include design and engineering, construction, shipping and port operations, transportation, tourism and trade. Some of the participating organizations have been in business for many decades; others are relatively new entities. Some have or are going through growth and expansion; others are feeling the effects of economic slowdown.

Common knowledge transfer challenges for most of the firms include:

- A significant 'retirement wave' hitting the organization over the next 3 years.
- Lack of depth in the talent pipeline (gaps in 'ready now' internal succession candidates).
- Lack of time and resources to dedicate to knowledge transfer initiatives.
- No explicit plan for expert—learner knowledge transfer.

Some common approaches to knowledge transfer in participating firms were:

- Interaction between experts and learners on-the-job, including coaching from a manager, shadowing experts and team-based project work.
- Delegation of tasks and decision-making by experts to more junior staff.
- Assignment of potential successors to special projects and/or 'acting' roles during a manager's absence.
- Documentation of key processes, project histories and decision-making guidelines.

One important finding is that while firms may appear similar in terms of size or industry, the strategies and programs for successful knowledge transfer are often very different.

TRANSFERRING CRITICAL KNOWLEDGE: KEY SUCCESS FACTORS

- #1 Make critical knowledge transfer everyone's business.** While it often falls to the Human Resources team to raise the alarm and design and support knowledge transfer initiatives, everyone has a role to play:
- Ultimate responsibility for managing the risk associated with management attrition sits with senior leadership. They also have a critical role to play in shaping a culture that supports knowledge transfer.
 - The manager of a critical knowledge expert has responsibility for replacement planning and overseeing the knowledge transfer effort.
 - Human resources plays a role in developing and supporting programs and policies that facilitate knowledge transfer, and supporting experts and learners through the process.
 - IT has a role in providing infrastructure to capture, store and make key knowledge accessible.
 - The expert is responsible for actually transferring knowledge.
 - The knowledge successor is responsible for acquiring critical knowledge.

- #2 Shift the lens from organization-level succession and development initiatives to individual-level knowledge transfer.** Most organizations have made a significant investment in processes that indirectly support knowledge transfer (i.e., succession planning, performance management, employee development programs, IT systems). Knowledge transfer efforts often break down at the last mile of the marathon, the point at which knowledge needs to shift from one person to another.

To successfully execute knowledge transfer:

- Look at organizational systems and processes through a knowledge transfer lens.
- Consider knowledge succession independently of role succession.
- Differentiate between training and development programs and knowledge transfer strategies.
- Add knowledge transfer action plans to your arsenal of tools and apply them consistently each time a business-critical attrition risk is identified.

- #3 Start early, anticipate the complexity of knowledge transfer and create the time and space required for it to occur.** Knowledge transfer efforts are often deferred until an expert announces their intention to retire. This is usually too late to start thinking about how to retain deep expertise acquired over decades. The more complex and nuanced deep smarts are, the more difficult they are to transfer.
- Provide visibility to the issue of knowledge loss through management attrition to get it on everyone's radar.
 - Incorporate discussions of critical knowledge loss, not just people loss, when engaged in succession planning.
 - Review your people processes and build in a focus on internal knowledge transfer
 - Establish individual, customized knowledge transfer plans well in advance of any potential retirement date.
 - Re-design the jobs of experts to accommodate time for teaching and transfer as the final transition date approaches.
 - Actively consider alternatives to knowledge transfer.
 - Have a back-up plan in the event you lose a critical expert before you are ready.

#4 Consider the interpersonal dynamics of knowledge transfer. Experts are not always interested in investing their time in teaching and training, particularly if it means working longer and harder as retirement approaches. They may also find it difficult to impart tacit knowledge that seems obvious to them. Learners can be reluctant to knock on a closed door, and don't always have the receptivity or attitude of good students. The relationship and rapport between the expert and knowledge successor(s) needs to be factored into the equation. Involve those who will be giving and receiving knowledge in the planning of these initiatives and programs. Understanding their motivations and how to best facilitate their participation will help ensure the strategies developed will be embraced by both experts and learners.

#5 Leverage technology. Technology has a role to play in knowledge transfer and its role will increase as the technology itself improves and as user facility and expectations increase. There are opportunities to be more creative in how it is used now. Capturing real-time exchanges between experts and learners can replace solitary data dumps. For example, video interviews, expert blogs, and question and answer sessions.

#6 Strengthen the culture for knowledge transfer. Organizations with cultures where knowledge exchange is enabled and expected are more robust during periods of management attrition.

Some examples include:

- Create opportunities for formal and informal interaction across levels and departments.
- Build teamwork into how business is done.
- Plan regular social events that allow people from different areas to interact.
- Reward and recognize knowledge sharing.

#7 Be clear, strategic and selective with knowledge transfer tools and focus on quality execution. To maximize the likelihood of success, limit the number of strategies and tools you put in place, and focus on implementing them well.

#8 Don't overcomplicate it. Knowledge transfer does not require complex strategies to be successful. Through the process of developing this Resource Guide we had the opportunity to review the state of knowledge transfer in participating companies and develop recommendations for enhancing their success. In each case, the majority of recommendations built from what was already in place.

Stay focused on:

- What *business-critical* expertise is at risk.
- How that knowledge is best retained.
- What strategies will maximize the likelihood of success.
- How to support the 1:1 knowledge transfer process.

THE KNOWLEDGE TRANSFER FRAMEWORK

Knowledge transfer is the process of transferring unique business-critical knowledge and experience developed over time from one individual or group to another individual or group.



For some organizations, there may be one or two key management roles that require concrete succession plans. In others, the critical contribution of an entire group or function may be impacted. Regardless of situation, the Knowledge Transfer Framework can be applied to identify attrition risks, develop and successfully implement a knowledge retention strategy. The framework proposes six key steps to designing and implementing a knowledge transfer strategy.

It is important to note there is no cookie-cutter approach for firms, as each will face unique challenges and opportunities. The framework lays out considerations and principles to guide organizations in determining how best to plan and implement their own knowledge transfer strategies.

APPLYING THE KNOWLEDGE TRANSFER FRAMEWORK

Guidelines for working through each of the steps with the goal of developing a knowledge transfer strategy are provided below and supplemented by additional material in Appendix A.

STEP 1

DEFINE THE EXTENT AND URGENCY OF THE MANAGEMENT ATTRITION PROBLEM

The first step in designing a knowledge transfer strategy is to determine how many people are expected to retire, how quickly, and in what roles. Knowledge transfer can take time to accomplish so the sooner the full extent of the problem is understood the more flexibility there is to plan for and address it. Critical to knowledge transfer is reviewing employee demographics (age and tenure) and mapping out potential retirement timeframes and scenarios.¹ This step will help clarify 'hot spots': who is at risk of retirement, when, and what complications may exist.

¹ A sample management attrition map is provided in the toolkit in Appendix A.

By doing this, employers can determine:

- Who is at risk for retirement in the short and medium term.
- If there are entire groups or management levels that are at risk of attrition.
- If there are attrition combinations that could put the business at risk (i.e., the CFO, the Controller and the Accounting Manager could all potentially retire at the same time).

Some organizations include this data as part of their ongoing succession planning process. A best practice would be to report this information semi-annually as part of an enterprise risk assessment to keep it on the radar of senior executives, owners and/or the board of directors.

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It used to be if you didn't have at least 5 years tenure you were a newbie and half the senior team had over 20 years' service. Now, half of our employees have been with us for less than 5 years.

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STEP 2

DETERMINE WHAT CRITICAL KNOWLEDGE NEEDS TO BE RETAINED AND TRANSFERRED

Before engaging in a knowledge transfer effort, validate that the retiring expert has unique, business-critical knowledge that needs to be retained. Not all knowledge is business-critical and there may be alternatives to knowledge transfer.

Not all expertise is critical to the business. Identifying that which is most linked to business success will help focus knowledge management efforts. Before launching into a knowledge transfer effort, it is important to validate the retiring expert has unique, business-critical knowledge that needs to be retained. Interviews with staff and stakeholders are one of the most effective first steps in pointing to critical or unique expertise; other strategies for tapping into knowledge domains are provided in Appendix A. Watch for those employees under the radar who may be the only ones who really know how something important works.

What is Critical Knowledge?

As an organization, you may worry about losing a long-tenured manager for a number of reasons:

- They have deep technical knowledge that is critical for maintaining your products or services.
- They are the architects of key processes and only they know why they were designed that way.
- They hold key relationships with customers and have delivered 25% of company revenue every year for the past decade.
- They have been involved in every contract negotiation and know every nuance of the labour agreement.
- Every senior leader in the organization was mentored by them during their 20-year tenure as President.

Critical to knowledge transfer is mapping out potential retirement timeframes and scenarios. This will help to clarify where your attrition risks are and how much time you have to prepare.

Critical knowledge transfer is most often concerned with what is called tacit knowledge, often referred to as 'deep smarts': "business-critical expertise, built up through years of experience, which helps [managers] make wise, swift decisions about both strategy and tactics." (Rothwell, 2004, page 5).

This is knowledge so ingrained in how we perform our work we take it for granted and struggle to distil it down to a few key steps. Examples of this include complex social skills (i.e., being able to read a room and intuitively know exactly when and how to close a sale), or creative problem solving (i.e., developing a completely new application for an old product). The task of transferring these 'deep smarts' can be difficult, making knowledge transfer efforts challenging to design and execute well.

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We do not do a good job of informing people about who has what knowledge. For example, someone just negotiated a lease I tried to do 10 years ago. They didn't know I had worked on it and had information that would have saved us a lot of money.

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Understanding the critical knowledge domains of a recognized expert will help to ensure the knowledge transfer efforts are focused in the right areas and will help inform what strategies may best be used to transfer them.

² *Tactics for mapping an expert's critical knowledge domains are provided in Appendix A*

Define Critical Knowledge Domains

Critical knowledge can be sorted into four broad domains:

1. Technical Expertise

This includes functional or role-specific technical, operational or process knowledge, regulatory knowledge, models and decision-making frameworks and the ability to generalize technical expertise to trouble shoot and solve unique and complex problems.

2. Stakeholder Engagement and Influence

This includes interpersonal relations, applying insight into stakeholders, instilling confidence and credibility in others, negotiating and influencing skills, navigating complex multi-stakeholder situations and resolving conflict.

3. Management Expertise

This includes business and financial acumen, strategic thinking and planning, project management, decision-making, leadership skills, coaching and developing others and applying judgment.

4. Institutional Knowledge

This includes knowledge based on history with an organization, being involved in the development and evolution of processes, understanding on what basis decisions were made, understanding nuances of effectively navigating the organization and how to be successful.

Knowledge experts don't always recognize what they are uniquely good at, particularly when tacit knowledge extends beyond technical expertise and into 'fuzzier' areas like interpersonal relations or business savvy. An expert may not recognize this as unique knowledge; "it is just how I do things". It can be helpful to get input from those who work with the expert on a regular basis around what they value and rely on from this individual. To illustrate this point, a highly regarded technical expert with an international reputation in his field was found to be most valued by junior staff for his interpersonal savvy. His ability to successfully navigate complex multi-stakeholder relationships was viewed as second-to-none, a critical factor in the firm's success, and something they all hoped to learn from. The expert may not have identified this—stakeholder relations—as a unique knowledge domain he needed to pass on to others.²

Some knowledge can be easily documented (i.e., process knowledge) whereas other knowledge needs to be passed on through person-to-person transfer (i.e., stakeholder relations). *We discuss how type of knowledge informs transfer strategies in more depth in Step 5 (see page 26).*

STEP 3

IDENTIFY, BUILD AND LEVERAGE SYSTEMS AND PROCESSES TO FACILITATE KNOWLEDGE TRANSFER

Knowledge transfer takes place within a broader system and this needs to be considered as part of any strategy. These factors can help to facilitate a critical knowledge transfer initiative, or they may pose limitations or challenges that need to be accounted for or overcome.

Organization-level factors that play a role in the transfer of knowledge include:

- Organizational culture, strategy, and structure influence how and when knowledge flows, to what extent, and for what purpose.
- Human resources policies and programs provide many of the foundational programs and incentives for knowledge transfer-related activities.
- Information systems support the capture, storage and dissemination of knowledge.

Systems: Implication of Culture, Strategy and Structure on Knowledge Transfer

A team or organization's culture, strategy and structure can facilitate or inhibit a knowledge transfer effort.

1. Culture

Culture plays an important role in knowledge transfer. Knowledge transfer can be a succession 'event' or it can be part of the culture. Organizations where people interact, the tone is collegial, politics are low, access to information is easy are environments where knowledge exchange is often informal and robust. Teams or organizations where information is regarded as power (i.e., associated with obtaining personal advantage or given by virtue of position), where politics run high, and where autonomy is valued over teamwork often have cultures where knowledge exchange is less robust and it can be more difficult for knowledge transfer efforts to take hold.

Key cultural considerations include:

- The extent to which people interact, formally and informally.
- How much trust there is.
- Whether information flows easily.

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Taking an inventory of organizational systems and processes will help to identify those that support knowledge transfer and can be further leveraged, those that inhibit knowledge transfer and may need to be mitigated or modified, and what is missing and may need to be established if critical knowledge transfer is going to be successful.

2. Strategy

There may be aspects of the business strategy that facilitate or inhibit knowledge transfer. Reviewing business strategy with a 'knowledge transfer lens' will help identify potential enablers or impediments that need to be considered.

For example:

- A focus on cost containment can mean a firm invests less in staffing or training. For example, an organization may choose to rely on the expertise of a single employee rather than build skills and knowledge overlap through cross-training.
- A firm that sees expertise as a competitive advantage may invest heavily in developing mastery in its employees. For example, an organization may have robust apprenticeship and mentoring programs where junior staff learn and build expertise over time by working closely with senior practitioners.

3. Structure

Knowledge transfer is enabled and enhanced when people work side-by-side. How the organization or team is structured can provide insight into how easy knowledge transfer efforts will be to execute.

Examples of structures that facilitate formal or informal knowledge exchange include:

- A flat organizational hierarchy with few layers (irrespective of organization size) lends itself to more interaction between experts and others.
- Firms that organize around and assign projects to teams rather than to single individuals build in opportunity for a high level of interaction and knowledge sharing in order to complete work.
- Distributed decision-making where input is valued and sought from diverse personnel or operational groups across the organization require employees to exchange opinions and ideas.
- Matrix organizations where people have formal relationships that cross functional lines require employees to interact on a regular basis, creating opportunities for knowledge exchange.
- When there is role and skills overlap (i.e., multiple people with similar job responsibilities), knowledge is typically distributed across multiple people.

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Because knowledge transfer is so dependent on one-to-one contact, teamwork is one of the best ways to build knowledge transfer into the organization. Learning happens organically when people have the opportunity to interact in meaningful ways, whether it be through formal project teams or working in close proximity with others who fill similar roles.

Business Processes That Facilitate Knowledge Transfer

There is a role for business and management processes to help maintain the focus on critical knowledge. More and more, knowledge is a key asset and competitive advantage for organizations; its development, retention and transfer are central to success.

Examples of processes that incorporate knowledge transfer into business planning and monitoring include:

1. Business Planning

Incorporating attrition trends into the annual business planning processes helps identify and anticipate critical risk areas. Decisions about planning for and prioritizing knowledge and staffing gaps can then be made.

2. Governance

Oversight into attrition and succession at the most senior level of the firm (i.e., the board, the owners) helps to maintain a focus on replacement strategies. For example, it is common practice for the board of directors to review succession plans at least annually; this ensures executives and managers are attending to future talent gaps and identifying and developing replacements.

3. Regulatory Requirements

External audits require firms to maintain documentation and standardization, which helps to ensure a high level of data capture and training. Examples of this include health and safety regulations, financial audit, and professional standards.

People Processes

People processes provide much of the foundation for knowledge transfer. An in-depth review of human resources processes and programs and how they can be used to facilitate knowledge transfer is provided in Appendix A.

Key processes and programs that can enable knowledge transfer include:

- Succession planning,
- Performance management and development planning,
- Learning and development programs,
- Rewards and recognition practices,
- Retirement policies,
- Communications programs.

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It is important to differentiate between systems-level processes that can facilitate knowledge exchange (i.e., succession planning, leadership development) and actual 1:1 knowledge transfer strategies and activities (i.e., job shadowing, expert-led training, process documentation). To be successful, there needs to be a strong link between the two.

Some guiding principles to consider when reviewing, adapting or developing people processes to support knowledge transfer include:

Organizations tend to focus on role succession rather than knowledge succession.

Organizations tend to over-rely on external training to develop managers.

1. Separate Role Succession And Critical Knowledge Succession

Organizations tend to focus on role succession rather than knowledge succession. As a result, knowledge transfer efforts often get put on hold until a leader's succession plans are confirmed. When the focus is on knowledge transfer rather than role succession, the field of candidates who can learn from the expert widens considerably (i.e., direct reports, managers in other groups or departments, peers, even the expert's own manager), and knowledge transfer efforts can begin well in advance of retirement.

2. Incorporate Internal Experts Into Learning And Development Programs

Organizations tend to over-rely on external training to build capability and develop potential successors for retiring managers. While there is benefit to be gained from exposure to outside ideas, practices and people, this is not a replacement for the kinds of internal learning opportunities that build business-critical expertise. In fact, there is research to suggest knowledge transfer within an organization contributes more to performance outcomes than does organizational knowledge transfer between firms (van Wijk, Jansen & Lyles, 2008). Balance external and learner-driven training with targeted internal knowledge transfer to ensure learning is context-specific and grounded in the business.

3. Incorporate Knowledge Transfer Into Performance And Development Goals

Knowledge transfer can be integrated into annual performance reviews and development planning for both experts and learners. Include a special section on critical knowledge to help both managers and employees maintain an ongoing focus on knowledge transfer. For learners it means identifying critical expertise gaps that are best filled by engaging with internal experts (vs. external training and development programs). For experts, it means identifying specific knowledge transfer expectations.

4. Include 'Pre-Retirement' As Part Of The Employee Life Cycle

Including 'pre-retirement' as a unique stage in an employee's career will help to focus programs and policies on this important step. Employees are often reluctant to share their retirement intentions for fear they will work themselves out of a job before they are ready to leave. How a firm approaches the retirement of a critical expert, and the programs it has in place to support employees as they approach this stage, can help to facilitate knowledge transfer. For example, by identifying this as a mastery stage where teaching, coaching and mentoring become focal contributions and areas for personal development. By normalizing this step, it can also reduce the stigma or anxiety associated with retirement planning.

5. Use Flexible Work Policies To Bridge Knowledge Gaps

Predicting exactly when an expert will retire can be difficult, even for the expert. Programs that allow them to transition more slowly out of the business and into full-time retirement may be very appealing while at the same time reducing stress to the business associated with sudden and unplanned departures. Phased retirement programs where experts gradually exit the business, work part-time or become external consultants, advisors or mentors can be effective ways to capitalize on expertise and bridge knowledge gaps while successors are still getting up to speed.

6. Align Rewards And Recognition To Support Knowledge Transfer

Compensation practices can influence the extent to which knowledge transfer occurs. For example, if the system rewards individual productivity or mastery (i.e., billing targets or utilization rates for consultants, quotas for sales managers) or penalizes people for investing in development (i.e., unpaid time) it can be difficult for knowledge transfer initiatives to gain traction.

Documentation and IT Systems

Documentation plays a key role in knowledge capture and storage. It is particularly useful for capturing processes, key job tasks, decision-making criteria, and historical records. The Information Technology team has a role to play in ensuring systems are in place to support knowledge capture, storage and dissemination. A more detailed review of documentation and how it can support knowledge transfer is provided in Appendix A.

Key principles to consider when reviewing or developing technology and systems to support knowledge transfer include:

1. Standardize Expectations Around What Needs To Be Documented

Documentation usually takes a lot of time and expecting a 'data dump' in the last few weeks of an expert's tenure is unlikely to ensure critical information is captured for future reference. Building documentation into job requirements and performance expectations will help distribute this task over time.

2. Standardize How Files Are Labeled And Catalogued

Finding information when you need it can be a challenge in most organizations. To ensure critical information can be located and retrieved, establish consistent and organization-wide guidelines around where information is stored and how it is labeled, and provide training on how to navigate the system and search for information.

3. Leverage Technology

Look for opportunities to use technology to supplement learning and enable knowledge transfer by making it more dynamic for both teachers and learners. Examples include live online knowledge exchange forums (i.e., expert 'question and answer' sessions) or videotaped vignettes with experts recounting critical incidents.

“

We have started to build our organizational knowledge capability. Every online document can be searched with key words. We just signed a 50-year agreement with a company. Who is going to be around in 50 years to remember it? Now the entire history is searchable.

”

STEP 4

IDENTIFY KNOWLEDGE SUCCESSORS

For knowledge to be retained by the organization, it needs to be transferred to someone. The decision around who will succeed those who are retiring and how they will be managed is critical. In some cases this is a single individual who has been identified as a successor or potential successor for the expert's role. In other cases, knowledge can be distributed to a number of different people, none of whom may be role successors. As suggested earlier, it is important to look for opportunities for knowledge transfer that does not depend on role succession.

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Separating knowledge succession from role succession increases the options an organization has to ensure business-critical expertise is retained. In many situations, knowledge transfer can proceed without a concrete succession plan in place.

“

It will be challenging for her because she will have to learn my job, do her own job and teach someone else at the same time. We are very lean and don't have any additional people to pick up the slack.

”

When the focus is specifically on knowledge transfer (versus role succession), there are a number of factors to consider in identifying potential targets as recipients for critical expertise.

1. Awareness On The Part Of Learners Regarding Expertise Gaps

In the absence of formal feedback and a development or knowledge action plan, learners may opt to focus their attention on what they perceive to be most interesting or important. This may not always align with what the organization determines as critical for its success.

2. Readiness And Aptitude

The narrower the development gap between expert and learner, the easier it is to successfully transfer deep knowledge. While some knowledge (i.e., history or process) may be passed on with less context, true expertise needs to be built on a solid foundation. Where the targeted knowledge successor is more than one technical or management level below the incumbent, an accelerated development strategy needs to be deployed to narrow the knowledge and experience gap before critical knowledge will likely take hold.

“

The values of the younger generation are different. We have to recognize that they want more change and diversity in their career.

”

3. Learner Motivation and Initiative

Most learners have an innate desire to acquire expertise as part of their professional development and consider learning part of their day-to-day work, particularly when it is connected to advancement. When knowledge transfer does not align with a promotion or when the goal is to distribute it to a larger group, how to motivate these individuals may need to be considered. Initiative and resourcefulness may be required of learners to identify opportunities in their day-to-day work to tap into a knowledge expert.

4. Expert-learner 'Fit'

One-to-one knowledge transfer puts heavy demands on experts and learners alike. While critical expertise is attached to specific people, you may have some flexibility in selecting the learners. Employees are more likely to engage in knowledge transfer when they respect each other (Krishnaveni & Sujatha, 2012). The extent to which an expert-learner pairing will be effective needs to be considered. There may be an opportunity to take advantage of pre-existing relationships to accelerate knowledge transfer.

5. Longevity and Retention

Relying on a single learner or successor for knowledge transfer has its risks and needs to be factored into the decision-making. When possible, distributing expertise across multiple knowledge successors increases the likelihood of long-term knowledge retention.

CRITICAL KNOWLEDGE CASE EXAMPLE

Janice has worked at Alpha Company for the past 32 years. She was the fifth employee in a transportation firm that now has 340 employees across British Columbia. For the past 17 years she has been the company's financial controller. As the company grew, she was responsible for developing the accounting processes and procedures, including a customized billing process that gives customers a lot of invoicing flexibility. She has a small team, but no one knows the ins-and-outs of the processes and the quirks of the customers like she does. This became obvious two years ago when she had an extended illness and others filled in. For months, the billing process was a mess, customers were annoyed, and invoices were not getting paid. It took her a good two months upon her return to sort things out. After openly considering retirement for a number of years, Janice has decided it is finally time. Now that she's ready, she would like it to happen quickly. She doesn't want to leave her boss and colleagues in the lurch, so she's agreed to stay for three months so they can hire or train someone to replace her. Alpha Company needs to prepare for Janice's departure, and quickly.

Applying the Knowledge Transfer Framework

- As a first step, the HR Manager talked to Janice, her boss, her team members, and several key sales people to clarify where Janice had unique knowledge and expertise critical to the business. The invoicing process, in particular, was a key area of concern.
- Given the urgency around knowledge transfer, the next step was to identify to whom, and how, knowledge would be transferred. Unfortunately, the company was not big enough to have anyone senior enough to step into Janice's job, so the HR Manager started a recruitment process.
- To ensure the customer invoicing process continued smoothly, the decision was made to train one of Janice's direct reports, Don, to take over billing. Don is relatively new to the company but has proven to be a quick study who also has good customer service skills. He was keen but concerned how he was going to find the time. A contract employee was hired to take on some of Don's work so he could focus on learning. To free up Janice's time to devote to teaching, she delegated to her team.
- Janice and Don decided the best way for him to learn would be to spend one month shadowing her, one month working on the invoicing with her, and one month doing the invoicing independently. For the first month, they scheduled time when she worked on invoicing and Don observed, asked questions, and took notes. For the second month, they did the invoicing together and she provided coaching. For the third month, Don did the invoicing and Janice reviewed it. At the end of three months Don was not an expert, but he had a good grasp of the billing process and its nuances.
- During the transition period, Janice also introduced Don to all her key customer contacts. She shared information to help him understand their expectations and how to work with each. Gradually, she referred the customers to Don directly.
- During the last month of her tenure, Janice also spent time doing a 'brain dump', updating her notes and filling in documentation for others to refer to.
- The company was successful in hiring her replacement, and were able to plan a 2-week role overlap, during which time Janice explained as much as she could. Janice also agreed to be available after her retirement to support the new Controller as well as Don. Don and they arranged monthly calls. Janice also came back to help close out the books at the end of the year.

As a result of these knowledge transfer efforts, a new Controller was in place and oriented before Janice left the company and customer invoicing continued with relatively few problems.

STEP 5



SELECT AND IMPLEMENT KNOWLEDGE TRANSFER STRATEGIES

Converting knowledge into behaviour and transforming it into expertise is hard work on the part of retiring managers, their successors, and the organization at large. While culture, systems and processes provide a foundation to facilitate knowledge exchange, transfer only happens when someone (the expert) shares his or her deep expertise in a way that it can be acquired by someone else (the learner and/or successor). In most cases, despite the advent of technology, this still happens one-on-one or in small groups.

Factors Influencing the Selection of Knowledge Transfer Strategies

The methods an organization chooses to transfer and retain critical knowledge will be influenced by a number of factors.

Key considerations include:

1. Knowledge Domain

Some knowledge transfer strategies are more effective than others depending on the type of critical knowledge being targeted, for example:

- Technical expertise is often best learned through a formal or informal apprenticeship model that allows individuals to develop competence through successive levels of expertise.
- Documentation is helpful in providing instructional guidelines (i.e., for completing certain work processes), to record unique events, or to document how and why decisions were made.
- Developing stakeholder relations or managerial expertise is best learned through a combination of formal training and on-the-job exposure (i.e., special projects, role assignments, shadowing).

2. Urgency

The amount of time available in advance of a manager's retirement will determine what strategies can realistically be implemented. For example, when time is a luxury, an apprenticeship-type program may be developed whereas when time is short, job shadowing may have to suffice.

3. Characteristics of the Expert

Experts need to be motivated to share their knowledge and also need to have the skill set required to implement any specific knowledge transfer strategy. For example, using a formal mentoring program when an expert has never been an effective or motivated coach is unlikely to be successful.

It is important to consider:

- How motivated an expert is to participate in a knowledge transfer strategy. Motivation can be difficult to engage late in someone's career. Unless your expert has an innate sense of altruism or desire to leave a legacy, strategies such as job redesign (shift responsibilities toward teaching and mentoring) or formal reward mechanisms may need to be established to support the transfer program.
- How motivated the expert is to pass along their hard-earned knowledge to this particular learner. If there is no natural rapport or respect, less direct strategies may need to be deployed (i.e., knowledge exchange forums, documentation).
- The skill set of the expert. For example, someone who has never enjoyed coaching is unlikely to suddenly become a keen and effective mentor. How to align transfer strategies with the strengths and preferences of the expert is an important consideration. Involving them in the design of their knowledge transfer strategy is critical.
- How the expert will be supported through the knowledge transition process. The development needs of experts in order to support knowledge transfer (i.e. coaching and mentoring skills) are often overlooked.

4. Characteristics of Learners

As mentioned in Step 4, the needs, expectations and style of knowledge receivers needs to be considered if transfer is going to be successful. People learn differently. For example, there have been noted differences between the learning style of Millennials versus Baby Boomers (Piktialis & Greenes, 2008).

Whereas Baby Boomers are accustomed to formal and structured learning methods, Millennials prefer learning that:

- Incorporates a social aspect.
- Provides practical near-term opportunities to utilize and recognize new knowledge.
- Allows for reciprocity by incorporating opportunities for the learner to teach something to the expert.

If you are targeting Millennials as knowledge successors, strategies that focus on learning through interpersonal interaction (i.e., mentoring, knowledge exchange forums, project teams) and just-in-time learning (i.e. projects or special assignments) will likely be more successful.

“

The best way to teach is to give people meaningful pieces of work to do and be there to provide guidance.

”

5. Organizational Culture

The extent to which some strategies will be effective depends on an organization's norms and values. For example, a culture that is open and trusting may be a good environment for a group mentoring program. One that is fast-paced and action oriented may be a tough context in which to focus on documentation.

6. Resources

Some knowledge transfer strategies are more expensive and/or time-intensive to implement than others. Whereas some programs can be costly (i.e., action learning programs, apprenticeship models), many can be built into day-to-day work routines (i.e., shadowing, mentoring, after-action reviews). Some knowledge transfer situations will be so critical to business sustainability any investment will be worth it (ie, CEO succession) whereas others require a more careful cost-benefit analysis.

7. Existing Programs

Leveraging existing programs that already have support and are working is the best way to get traction on knowledge transfer goals. Many knowledge transfer strategies can be incorporated into existing programs by shifting the focus.

For example:

- A mentoring program can be expanded to include specific knowledge transfer objectives.
- An executive development program can incorporate an in-house action learning project.
- Corporate meetings can include small round-table deep-dive discussions.
- Development planning can be expanded to include knowledge transfer goals.

8. Learning Support

Facilitators or process owners are often part of the knowledge transfer initiative and play an important role in planning, managing, monitoring and measuring the success of a program. Who will play this role in the organization (i.e., HR, manager) will need to be determined and may influence what strategies can be deployed. For example, action learning projects require a lot of up-front planning, coordination and support; after-action reviews can be done by managers directly with their teams and require little additional support.

“

It is hard to give a presentation that teaches someone 'how to'. I've gotten the best development by working with senior people. You run into a problem and go and get help on it. That is the best way to learn.

”

3 See Appendix A for detailed descriptions of knowledge transfer strategies.

Key knowledge transfer strategies include³:

1. **On-the-job Learning** where knowledge transfer is embedded in the day-to-day work of learners. Examples include:
 - Apprenticeship programs (i.e., technical or skilled trades, accounting).
 - Delegation of tasks or responsibility.
 - Special and temporary job assignments, such as ‘Acting’ roles to replace a superior during an absence.
2. **Coaching, Mentoring and Training by Experts**, examples of which include:
 - Shadowing to observe an expert as they go about their day-to-day business or perform a specific task.
 - Mentoring programs oriented around a specific knowledge transfer agenda (one-to-one or group-based).
 - Action learning development programs organized around solving real business problems and supported by a subject matter expert.
 - Post-retirement support and ‘coach-on-call’.
3. **Knowledge Exchange Forums**. Group-based knowledge exchange between experts and learners, for example:
 - After-action reviews following critical projects or incidents to identify lessons learned.
 - Communities of practice where those with shared interests meet to exchange knowledge.
 - Formal or informal presentations by experts.
4. **Documentation**. Some expert knowledge, such as processes and procedures, can be effectively shared via documentation and instruction and/or serve as backups and reminders after training has concluded.
5. **Job Aids and Instruction Manuals** provide guidance on how to deal with specific issues and job responsibilities.

While many organizations have formal mentoring programs that expose early- and mid-career employees to experts, they are rarely knowledge transfer programs per se. Rather than targeting specific critical knowledge transfer, they are more often used as career development and guidance forums.

Regardless of the knowledge transfer strategy selected, it needs to be accompanied by a formal knowledge transfer action plan articulating what knowledge needs to be transferred that has the explicit agreement and support of both the expert and the learner.

Alternatives to Knowledge Transfer

Knowledge transfer is not the only strategy worth considering when an expert is retiring.

Alternatives to knowledge and job transfer include:

1. **Change Processes**

A deep expert may have developed a unique way of solving a problem that can be replaced by a new process. Something that is done manually may be automated.

2. **Eliminate a Task**

Sometimes things are done out of habit rather than necessity. Assess whether all that is currently done is still critical to the success of the business. Reduce the reliance on expert judgment by investing in more sophisticated tools and technology. There may also be tasks that could be better outsourced to external expertise.

3. **Redesign Jobs**

Senior-level roles, in particular, often evolve to fit the skill set and interests of an incumbent. Rather than replace a retiring manager, you may elect to redistribute responsibilities to several people who have similar expertise.

4. **Hire the Expertise You Need**

When expertise available in the market is of greater importance than institutional knowledge, you may elect to recruit externally or use consultants or other external personnel rather than engage in internal knowledge transfer.

“

Frankly, I would have retired a few years ago if I had not wanted to ensure those I've brought up through the business would be secure in their positions.

”

STEP 6

MEASURE SUCCESS

Measuring the success of knowledge transfer strategies will help to determine what is working and how well. It is important to establish what success looks like and how it might be measured. There are ways to measure both progress and results.

Measuring Progress

While efforts are underway, measuring progress can help maintain focus on longer-term objectives.

Examples of process indicators include:

- Number of retirement roles that have been assessed for critical knowledge transfer.
- Number of knowledge successors identified.
- Number of knowledge transfer action plans in place.
- Status of a specific knowledge transfer strategy (i.e., 1 year into a 2-year program).

Measuring Success

Measures of knowledge transfer success are evidenced by steady or improving performance (individual and organizational) in spite of attrition. Measuring real outcomes, and not just activities, is by far the more difficult. Linking critical knowledge to tangible business outcomes can help establish what to track.

Potential measures of outcomes include:

- Change in individual competency assessments (i.e., pre and post-learning).
- Increased readiness of succession candidates.
- Results that are meaningful to your business (i.e., reduced execution errors, increased decision quality, number of successful contracts awarded, increased revenue, improved safety performance, customer retention, etc).

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The transfer of deep expertise often takes time. Defining what success means with respect to knowledge transfer (why are we doing this?) and how it will be measured (how will we know it is working?) will help maintain focus over the long term.

CRITICAL KNOWLEDGE CASE EXAMPLE

Beta Company, an engineering firm, was established in 1967 with three founding partners. The firm has grown considerably over the years and now has over 200 employees with 15 Senior Partners. Most of the Partners joined the firm over 30 years ago and will start to retire over the next 3–5 years. They are responsible for bringing in and managing the bulk of the business, so it is important for the firm's ongoing success to ensure these transitions are well-managed. Seven years ago the company lost three of its original founders, including its President. It was not prepared for the sudden loss of leadership, deep technical expertise and institutional memory. It knows it needs to do a much better job with knowledge transfer this time around.

Applying the Knowledge Transfer Framework

- To better understand the retirement intentions of the Senior Partners, at the HR Manager's suggestion, the President has started to have formal discussions with each Senior Partner to a) understand intentions and timing, and b) discuss how they can phase out of the business in a way that meets their own needs as well as the organization's. The President discovered that many of these key leaders would be interested in extending their employment in some way, but don't want to continue leading major projects. They committed to continuing the conversation as retirement approaches.
- The firm has already been doing things to help it retain and transfer knowledge. They started formal succession planning 2 years ago and have a good view on the up-and-coming Partners and Associates who have the potential to take on expanded responsibilities. They also launched a voluntary mentoring program where junior engineers are paired with Senior Partners. They upgraded their IT systems and put in a sophisticated document management system to ensure information is retained and easily accessible. The firm also started holding semi-annual day-long offsite meetings with senior staff to increase information flow and use those as training and development opportunities.
- Everyone who will be retiring has played an important role in the business, but some have unique skills or expertise they would like to develop in others. Three leaders, in particular, have been identified for more targeted knowledge transfer. One of these is a deep technical expert. One is particularly adept at building and managing client relationships and navigating complex multi-stakeholder situations. One holds a key leadership role, Chief Operating Officer, and will need to be replaced.
- For the technical expert, the decision was made to identify three Associates and one Partner who will work as an intact project team for the next 3 years. On-the-job learning will include observation and delegation of responsibility. Since the expert is better at 'showing' than 'telling' how to do something, this strategy should work well.
- To transfer Bruce's interpersonal and client management expertise, the strategy will be a combination of on-the-job learning by strategically assigning more junior staff to his projects and have Bruce focus on this aspect of skill building, and also giving Bruce a 'relationship mentor' role in the organization. He will be the go-to person for staff who want advice on coaching with difficult client situations, and he will also hold regular small-group round tables to share key principles of relationship management. Fortunately Bruce is a good coach and enjoys interacting with younger staff, so he is excited about taking this on in the last 2 years of his tenure.

- In the case of the COO role, two potential candidates have been identified through the succession planning process, and there are concrete development plans for each of these individuals both to get additional management training as well as work on projects with the COO to get direct exposure to key issues and mentoring.
- To help increase the level of knowledge transfer that will take place in the firm over the next 5 years, it also made a few changes to some of its programs. Instead of sending future leaders out for executive development, they have contracted with a university to bring the learning in-house and have a group of 20 people who will be going through the program together, with experts also serving as guest faculty. Beta also decided to expand their mentoring program to create more targeted knowledge transfer opportunities. They identified key experts and knowledge successors and with the support of both experts and learners, have created mentorship pairings with specific knowledge transfer objectives in place. Finally, they also launched an online 'ask the expert' blog where people can post questions for an expert.

Beta has time to prepare for its significant knowledge loss, and it believes that with some of the new programs it is putting in place, it will be well-positioned to ensure the business continues successfully through the transition.

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APPENDIX A

KNOWLEDGE TRANSFER DESIGN AND IMPLEMENTATION: PROGRAMS AND STRATEGIES

Included in this Appendix are strategies and tools to support steps in the Knowledge Transfer Framework.

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STEP 1

DEFINE THE EXTENT AND URGENCY OF THE ATTRITION PROBLEM

Sample Management Attrition Map

Name	Position	Department	Age	Tenure	Projected Retirement Date
N. Jones	VP Finance	Finance	53	12	2018
S. Till	Accounting Manager	Finance	54	30	2017
J. Smith	Inventory Manager	Supply Chain	56	25	2020
L. Vikram	Operations Manager	Operations	62	49	2016
R. Drup	VP Operations	Operations	64	20	2017
P. Radmath	Sales Director	Sales	54	13	2022

STEP 2

DETERMINE WHAT CRITICAL KNOWLEDGE NEEDS TO BE RETAINED AND TRANSFERRED

Strategies for Identifying Critical Knowledge Domains

Strategies for gaining insight into an expert's critical knowledge include:

- Interviews, including with colleagues (direct and indirect reports, manager, peers), and in some cases potentially external stakeholders and customers.
- Job descriptions often highlight special skills required for a role.
- Observation of an expert on-the-job can reveal unique knowledge and expertise.

Sample Critical Knowledge Interview Questions

Examples of interview questions that can solicit information about critical areas of expertise include:

1. What are the critical knowledge and skills this organization needs to possess in order to be successful in the long term?
2. Do any of these reside principally with one person or group of people?
3. Is there historical information and experience you/these people possess that, if lost, could put the organization at risk at some point in the future?
4. Are there currently other people inside who could step in and fill this gap if required?
5. If required, could you bring in this expertise from the outside quickly and efficiently?
6. Whose retirement you are most concerned about? Why that person?
7. What makes her/him so valuable?
8. Which of these things are 'mission critical' in your mind—that is, the organization is at risk of failing to deliver on its commitments to stakeholders?
9. What is the consequence to you or the organization if she/he retired tomorrow?
10. What would the organization struggle to do if they were not around?
11. What would you hope she/he teaches you before departing?

STEP 3 IDENTIFY, BUILD AND LEVERAGE SYSTEMS AND PROCESSES TO FACILITATE KNOWLEDGE TRANSFER

Human Resources Processes and Programs that Support Knowledge Transfer

1. Workforce Planning

Engaging in regular workforce planning allows an organization to look out into the future around the kinds of work that will need to be done, the skills required to complete that work, and the extent to which the organization has or can develop these skills. Having a longer-term view plays an important role when critical knowledge takes time to develop (i.e., high-level technical expertise or senior leadership experience).

2. Succession Planning

Succession planning is a critical process for identifying positions at risk of attrition, and finding potential successors. It is often the first step in launching a knowledge transfer strategy.

3. Career Pathing and Competency Mapping

By profiling critical job roles, detailing technical and behavioural competencies necessary for success and linking these to training and development opportunities, the organization proactively and intentionally builds a knowledge, skills and experience path to more senior levels of responsibility. Competency mapping can also help to articulate critical knowledge and capabilities so they can be proactively developed and reduce the organization's reliance on one or two key contributors over time.

4. Learning and Development Programs

Training and development initiatives help to build employee capability and knowledge transfer. As noted in the guide, these programs often rely heavily on external experts and could better facilitate knowledge transfer by looking to internal experts within the firm.

Learning and development strategies for promoting critical knowledge transfer between experts and future successors include:

- Assessment and 360-feedback reviews help provide insight into business-critical gaps for learners.
- In-house training and development programs (including high potential development programs) where experts have teaching and mentoring roles.
- Knowledge exchange forums such as company meetings, 'lunch and learns' and other presentation formats. These provide an opportunity for experts to share their experiences and knowledge with a broad audience. These can be transformed into more powerful knowledge transfer opportunities by shifting the format to small-group round tables with less focus on formal presentations (which experts often do not like to prepare or deliver) and more focus on sharing critical incidents and answering questions.

5. Development Planning

Knowledge transfer can be integrated into annual development planning for both experts and learners. Including a special section on critical knowledge can help both managers and employees maintain an ongoing focus on knowledge transfer. At the individual employee level, for learners it means identifying critical expertise gaps that are best filled by engaging with internal experts (vs. external training and development programs). For experts, it can mean putting an emphasis on building critical competencies that support their ability to engage in effective knowledge transfer (i.e., coaching skills).

4 A sample Knowledge Transfer Plan is provided on page 43.

6. Knowledge Transfer Planning

As a replacement for more traditional development planning, which many experts feel is irrelevant to them later in their careers, knowledge transfer plans⁴ can be implemented for key experts. These plans should identify critical knowledge to be transferred, to whom, and how.

7. Performance Management

There are several ways to support knowledge transfer through the performance management process:

- Establish knowledge transfer as a performance criterion (i.e., as part of the competency model for all employees/managers).
- Use individual goal-setting to set specific knowledge transfer expectations. For learners, goals around acquiring specific expertise. For experts, commitments around spending time teaching, coaching or documenting knowledge. It is not uncommon to find a focus on process and role documentation in the performance deliverables of experts as they approach retirement.

8. Rewards and Recognition

Incorporating knowledge transfer into the intrinsic and/or extrinsic recognition and rewards system can reinforce the sharing and acquiring of knowledge in a meaningful way.

9. Hiring and Advancement

Critical knowledge can take a long time to develop and is most easily accomplished when there is an internal knowledge successor. Many organizations make it standard practice to engage in a formal search process when a key managerial role becomes vacant. However, this policy also tends to suppress knowledge transfer. Incumbent managers may be less likely to engage in proactive knowledge transfer when a successor has not been named (seeing it as effort without a clear payoff). Firms do not need to declare or finalize their succession choice in order to implement knowledge transfer strategies. Separating role succession from knowledge succession, where possible, facilitates knowledge transfer while retaining hiring optionality.

10. Retirement Policies

Employees can be reluctant to share their retirement intentions for fear they will work themselves out of a job before they are ready to leave. How a firm approaches the retirement of a critical expert, and/or the types of policies they establish, can help to facilitate knowledge transfer.

Policies that promote knowledge transfer include:

- Phased retirement programs where experts gradually exit the business or shift from delivery toward advising and mentoring are effective ways to capitalize on expertise.
- Arranging for a defined period of role overlap between incoming and outgoing incumbents where the focus is on accelerated knowledge transfer. Getting the timing and expectations right needs to be carefully considered.
- Retaining experts as mentors and/or consultants post-retirement either for a set period of time or on an on-call basis.

11. Employee on-boarding

These programs aim to “jump-start” the learning process for newly hired or promoted employees. Examples of on-boarding activities that support knowledge transfer include role overlap between retiring and incoming manager, facilitated introductions to key people, training on key organizational or role-specific systems and processes. These programs can best facilitate knowledge transfer when they are customized to meet the individual learning gaps of incoming managers and look for opportunities to close these by leveraging internal experts.

Documentation and Information Technology that Support Knowledge Transfer

1. Documentation

Standardizing expectations around what needs to be documented helps support knowledge transfer. As documentation usually takes a lot of time, how this will be accommodated needs to be carefully considered. Adding it to the job of already-busy managers and/or expecting a ‘data dump’ in the last few weeks of an expert’s tenure is unlikely to ensure critical information is logged and available for future reference.

2. Storage and Retrieval

Most organizations have IT systems that serve as repositories for information and are set up for knowledge capture and storage. Extracting information often proves to be more of a challenge, with information difficult to locate if you don’t know where it is stored, or if it even exists. To maximize the utility of IT systems as knowledge transfer strategies, standards around how files are labeled and catalogued, how to manage version control, and who has access all need to be established.

3. Technology-enabled Knowledge Transfer

Communication is facilitated through technology, allowing a direct and easy flow of information between experts and learners (i.e., email, message boards, instant messaging).

Other ways to leverage technology include:

- Project histories.
- “Ask the Expert” forums where an expert might receive and answer questions online, which can be stored for future reference.
- Video-taped vignettes with experts where they are asked to recount critical incidents, key learnings, and provide advice. Allowing people to share expert knowledge through storytelling is often more effective at extracting critical expertise (prompted through good questioning on the part of the interviewer) and is also a powerful learning medium.

4. Documentation

Some expert knowledge, such as processes and procedures, can be effectively shared via documentation and instruction and/or serve as backups and reminders after training has concluded.

- Job aids. Instructions to provide guidance on how to deal with specific issues and job responsibilities. Examples include process flow charts, instruction manuals, and decision trees.
- Project histories.

STEP 5

SELECT AND IMPLEMENT KNOWLEDGE TRANSFER STRATEGIES

Knowledge Transfer Tools and Strategies

1. On-the-job Learning

Learning on the job is the most cost-effective and appreciated way of gaining knowledge. Experts typically cite this as how they gained their own expertise, and learners prefer this as a way to learn.

Examples of on-the-job knowledge transfer strategies include:

- **Apprenticeships.** These are formal, structured programs focused on building critical knowledge. They are commonly applied in technical and professional occupations (i.e., engineering, skilled trades, accounting) to help practitioners develop mastery over time. These typically require intensive and sustained investment on the part of the organization, the mentors and learners. They are highly effective at transferring and building expertise.
- **Delegation.** Assigning tasks and responsibility to more junior members of staff is a way to develop both experience and confidence while providing a safety net (the expert). These can be used to develop a wide range of expertise from technical decision-making to stakeholder relations to business judgment. They are most effective when the expert manager delegates effectively and is a good coach.
- **Special and Temporary Job Assignments.** ‘Acting’ assignments and other temporary job placements including special projects, cross-department postings, and cross-office or international placements put the learner in situ and let them ‘try on’ a different role. These are most effective when active coaching and support is provided by a senior person.
- **Project Teams.** Designing work around teams that consist of members at different levels of expertise allows more junior staff to learn directly from knowledge experts (and vice-versa).

2. Coaching, Mentoring and Training

Expert-supported knowledge transfer strategies include:

- **Observational Learning.** There are a number of critical knowledge domains best learned through observation of an expert followed by debriefing and discussion. Examples of this include stakeholder relations, executive decision-making, and strategic planning. Having the opportunity to shadow an expert as they go about their day-to-day business or sit in on meetings and observe the expert in action is a powerful development experience and highly valued by learners.
- **Informal Mentoring** (i.e., getting advice on a problem).
- **Coach on Call.** In some cases a retiring manager is retained to provide information, advice and coaching to the successor on an as-needed basis. This can be particularly useful to support infrequent or rare events or when historical context is important to understanding how to best move forward with an issue.

- **Mentoring Programs.** Formal expert-learner pairings that are oriented around a specific knowledge transfer agenda.
- **Group Mentoring** where a mentor meets with a group of learners to share knowledge and provide advice and guidance.
- **Peer-mentoring Programs** that combine cohort-based development with support from one or more experts who rotate through to share expertise related to the competency being developed (i.e., negotiation skills, managing performance, business development skills).
- **Action Learning.** Development programs organized around solving real business problems. Teams typically have an executive sponsor who serves as a mentor and helps to guide the group through a process of learning, action and reflection.
- **Simulations.** Critical events can be anticipated and created to allow for learning to occur in a safe environment. These are often used to build up knowledge and skills to react and respond to crises (i.e., safety and security events).
- **Cross-Training.** Learning aspects of another person's (the expert's) role in order to serve as a back-up helps to broaden an individual's knowledge base while also building skills overlap in the organization or team.

3. Knowledge Exchange Forums

Group-based knowledge exchange between experts and learners.

- **After-Action Reviews.** Formal post-hoc review sessions with a team following critical incidents or project completions to identify lessons learned and ways to improve performance for the future.
- **Communities of Practice.** Formal or informal knowledge exchange forums for those with shared interests. These groups have the added benefit of building and maintaining networks of people with shared expert knowledge, making the organization less vulnerable to reliance on one or two key experts.
- **Presentations.** Sessions where an expert presents followed by a question and answer period. These are more powerful learning forums when they are smaller group round-table discussions rather than formal, large-group, powerpoint-driven events.
- **Interview the Expert or Fireside Chats.** Using structured processes or 'Q & A' forums, learners tap into expert knowledge through questions and conversation. These can be video taped as vignettes and posted or distributed.

Sample Knowledge Transfer Action Plan

Knowledge Domain	→ Customer retention
Expertise Transfer Objectives	<ul style="list-style-type: none"> → Gaining insight into client needs → Building trust → Asking for and responding to critical feedback
Transfer Strategies and Actions	<p>Shadowing John to work alongside Susan in three of her key client projects. Attend client project meetings and review communications. Meet in advance of client meetings to discuss objectives of the meeting and approach. Debrief client meetings immediately afterward to discuss strategies used, results. Specifically, to discuss how insights into the client were gained, listening strategies. Observe Susan ask client for feedback and how she responds.</p> <hr/> <p>Coaching → Susan to review her history with the three key long-term clients (how they were acquired, projects completed, how new projects were sold, key success factors in building and maintaining the relationship, key points of stress and how they were overcome). → John to review his clients and discuss insights, strategies for building trust to establish the relationship.</p> <hr/> <p>Training → John to attend Building Client Trust and Selling for the Long Term workshops. → Review workshop learning with Susan. → Practice workshop simulation training with Susan to reinforce key principles. Susan to provide real-time feedback in simulated coaching meeting.</p> <hr/> <p>Observation & Feedback Susan to shadow John in project meetings with one of his key clients. Meet before client meeting to discuss objectives and approach. Debrief meeting immediately following; provide feedback. Specifically, how John uses questions to gather insights, how he establishes trust, how he asks for and responds to feedback</p>
Measurement	<ul style="list-style-type: none"> → John demonstrates a deeper understanding of customer needs and the ability to frame his project review meetings by addressing those needs. → John is able to articulate and identify strategies he is using to build trust. → Clients are open in giving John feedback on our services. → John demonstrates repeat business with clients.

APPENDIX B

RESEARCH GOALS AND METHODOLOGY

Goals

As the Baby Boom generation retires firms are at risk of losing their critical knowledge, but many do not feel equipped to address this issue. To help close the Knowledge Transfer gap the Asia Pacific Gateway Skills Table undertook a project designed to identify critical success factors and provide human resources practitioners with practical guidance, strategies and tools they can apply in their organizations to allow them to better plan for and manage retirement-based attrition.

Key questions the research sought to answer include:

- How can you focus a knowledge transfer effort to ensure business-critical expertise is retained?
- What role does the broader organizational context (i.e., culture, strategy, structure) have on knowledge transfer?
- How do existing processes and systems support and enable knowledge transfer?
- What unique characteristics of knowledge experts and their successors influence knowledge transfer? How do you take these into account when planning and executing a knowledge transfer initiative?
- How do you select and implement specific knowledge transfer strategies to best fit the situation and people involved to ensure one-to-one knowledge transfer actually takes place?

Background Research, Literature Review, and Case Study Framework Development

This project began with a thorough review of research and practice on critical knowledge transfer from the fields of management, human resources, adult learning, knowledge management and knowledge transfer⁵. Knowledge Transfer is a relatively new subject, with a relatively thin but growing body of literature.

⁵ A bibliography is provided in Appendix C.

This research helped inform the development of a Knowledge Transfer Framework that provides practitioners with a step-by-step approach to critical knowledge transfer that can be applied to a wide range of attrition situations, including:

- Organization-wide initiatives to stimulate broad-based knowledge sharing.
- Specific teams or functional areas where demographic trends put critical expertise at risk.
- Individual manager retirements where unique knowledge of and long history with the organization needs to be retained.

Key principles and guidelines for each step along the process were identified to help practitioners customize a knowledge transfer program to their organization and unique knowledge transfer situation.

To supplement the literature and best practices review, and test the framework that was created, on-the-ground work was done to better understand key challenges organizations face in managing attrition-based knowledge transfer and how they are solving for this problem.

Participating Firms

The firms that participated in the research included five based in Metro Vancouver and one based in Northern British Columbia. They represent a range of ownership structures including privately held, government-funded, and public-private partnerships. Industries represented include design and engineering, construction, shipping, port operations, transportation, tourism and trade. Professional services, skilled and unskilled trades and managerial professions were all represented. Participants interviewed ranged from front-line supervisors to CEOs to department heads to members of a board of directors.

Knowledge Transfer Case Studies

Each of the case studies was unique. Some were targeted at a single critical knowledge expert with a fixed retirement date; others were focused on a group of knowledge experts projected to retire over the next 2–3 years; in some cases, we looked at the issue of knowledge transfer across an entire organization over a longer time horizon.

Methodology

For each case study, in-depth interviews were conducted with a sample of experts (future retirees), learners (potential knowledge and/or role successors), senior management, human resources and information technologists. Archival data (i.e., attrition data, organization charts, key processes, systems and tools) was reviewed when available.

Key areas of investigation for each case included:

- What is the extent and implication of retirement-related management attrition?
- What is critical knowledge and who has it?
- What organizational culture, systems and processes support and address critical knowledge transfer?
- Who are the successors of critical knowledge?
- What knowledge transfer strategies will be most effective?
- How will success be measured?

Interviews and archival data was reviewed, key themes identified and a knowledge transfer plan was developed for each participating firm. In each case, the Knowledge Transfer Framework proved to be an effective tool for diagnosing knowledge transfer needs and identifying strategies to close expertise gaps.

APPENDIX C

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