

Creating Knowledge Sharing Culture in a Startup Environment

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This thesis project was completed for a consulting business that helps large companies automate their customer service by building virtual assistants (chatbots).

The objective of this project was to holistically assess and develop knowledge sharing in the company. Being a young business there was a need for formal practices to be defined for the first time. Aside from onboarding and training, effective knowledge sharing empowers employees and improves morale. A culture of sharing ideas helps the business provide better service and continually innovate, leading to a lasting market advantage.

Several tools and practices were developed within the project. Training methods for new recruits were informed by research. Employee skills were formalised into a skills matrix and assessment sheet. The company knowledge base was promoted as the firm's single source of truth, where documentation on best practices and troubleshooting guides were also produced. Working practices in communication and project management were developed throughout the project. Finally, a survey was designed to gather employee opinions on knowledge sharing at the company.

The developed practices and tools as well as survey results were presented to stakeholders and the project deemed successful. Areas for further development of knowledge sharing practices were also identified. For another company just starting to define their own knowledge sharing methods, this thesis provides a comprehensive beginning framework.

Keywords: knowledge sharing, knowledge management, organisational culture

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1 Introduction

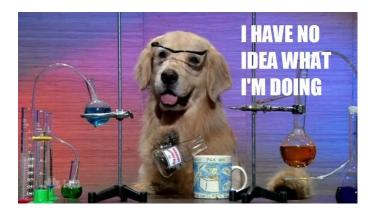


Figure 1: It's an older meme, but it checks out

Any company relies on its employees to know what they are doing. In a highly skilled profession, the required skills to be adept at the role are numerous and take a long time to learn. Lack of sufficient skills in a firm may lead to substandard work, the erosion of competitive advantage, and loss of revenue.

According to Nonaka (2008, 2), in quickly changing markets the only competitive advantage an organisation can sustain is the ability to create, share, and assimilate knowledge that can inform the development of new products or processes quickly. From a business perspective, it is therefore vitally important that skills and knowledge are effectively passed down and shared. By codifying the unspoken knowledge of senior staff, business continuity in unexpected situations or personnel changes also improves.

1.1 Project background

For this young company, operative focus has been on delivering products. As projects got more complex and more employees joined the firm, there was an identified need for formal practices in documentation, training, and operating practices.

For instance, documentation would be developed to communicate specific tasks or frequently asked topics, but not was not necessarily stored for further use and accessible to everyone. There was a need to define standard operating practices and improve training to combat skills gaps between junior and senior members of staff.

1.2 Project goals and schedule

The objective of this project was to address holistically the knowledge management practices and culture in the organisation. The initial goal was to develop a training program for new recruits, but fundamental knowledge management needs were also identified that steered the course of the project further from simple training.

The project deliverables include the report at hand with suggestions for knowledge management strategies, specific knowledge sharing tools, as well as knowledge base templates. An executive summary of culture action points was also devised.

This project benefits the company by delivering tools to develop employee skillset and promoting practices to share knowledge. Employees benefit by being empowered to perform their job better, which increases motivation, productivity, and quality of work. In the long term, building an open culture in the organisation that encourages innovation leads to a lasting competitive advantage.

September 2021	Initial research
October 2021	Implementing knowledge base
November 2021	Documentation
December 2021	Documentation, developing tools
January 2022	Further research
February 2022	Synthesising findings, developing tools
March 2022	Implementing tools, primary research
April 2022	Analysis, completion of report

The schedule of the project is found in Table 1.

Table 1: Project schedule

2 Knowledge sharing

Gurteen (1999) illustrates different aspects of knowledge as it applies to baking a cake. Know-*how* is important - what ingredients go in the cake, and how it is baked - but know-*why* is also crucial: understanding the role of each ingredient means an experienced baker can make substitutions and improvise in unexpected situations. Knowing *why* things are done enables the baker to rely on principles. This kind of tacit or unspoken knowledge is by its nature difficult to describe and define, but it's also the most valuable kind of knowledge to an organisation (Atlassian 2022a).

Atlassian (2022a) states: "Knowledge sharing is the exchange of information or understanding between people". Knowledge sharing does not mean having no discretion and blindly sharing everything - judgment and political aptitude is still necessary (Gurteen 1999).

In traditional systems knowledge is passed down master to apprentice. However, in increasingly complex and large organisations, having a "Master Builder" overseeing a project is no longer realistic (Gawande 2010, 59). The master-apprentice system relies on one-to-one instruction or small seminars, which becomes untenable as a company grows (Reid 2003).

Furthermore, training in apprenticeship transfers knowledge, but it is not codified or systematically analysed. The skills and knowledge being passed down remain tacit and cannot be shared with others (Nonaka 2008, 16).

Besides training, informal knowledge sharing can take place anywhere - in the office (the stereotypical water cooler chats), or a discussion about a specific project, via private messages or email. Lacking casual office chats, teams working remotely and in different geographical locations need to work harder to share information effectively (Reid 2003).



2.1 Risks of inadequate knowledge sharing

Figure 2: Dilbert comic strip - 04 April 2016

When knowledge sharing is not routine, information is siloed away in shared or personal drives, unorganised documents, or worse yet, employees' heads (Atlassian 2022a). Work may be duplicated, and problems solved before are not learned from. Expertise gained in one area is not applied in another (Gurteen 1999).

Employees spend time looking for information, while their more experienced colleagues answer the same questions over and over (Atlassian 2022b, 2022c). According to a 2012 report by McKinsey "[t]he average interaction worker spends ... nearly 20 percent [of the workweek] looking for internal information or tracking down colleagues who can help with specific tasks" (Chui et al. 2012). With ten years of development and complexity in information since, this figure is doubtful any smaller.

Inadequate knowledge sharing also leaves the company vulnerable not only when valued employees leave, but when they are on holiday or off sick (Atlassian 2022b). Other employees struggle to find important information and documents, and at worst must wait to carry out routine tasks that only the absentee knows how to do.

2.2 Benefits of knowledge sharing

Successfully implementing a knowledge sharing culture in the organisation can become one of its key assets and a vital part of achieving strategic objectives (Reid 2003). Organisational knowledge is a business asset, the sharing of which enables retention of intellectual capital even as knowledgeable employees depart the company.

Effective documentation also makes onboarding new employees easier, when necessary steps, credentials, tools and so on are defined (Atlassian 2022c). It does not replace mentoring but can give newcomers a degree of independence from the very beginning (Atlassian 2022d).

As less time is used on finding information, productivity increases. Employees are empowered to learn from past work and can keep improving best practices without having to "reinvent the wheel" (Atlassian 2022c).

Finally, starting a new project is easier if the team can utilise lessons learned from earlier similar projects (Atlassian 2022c). Making documentation the norm increases the company's collective knowledge and enables it to make better decisions.

3 Knowledge sharing and management tools

Efficient knowledge sharing requires the right organisational culture and appropriate tools. In practice this is known as knowledge management. The purpose of knowledge management is to support the achievement of business goals (Gurteen 1999). Knowledge management is not done for its own sake, but to share and leverage lessons learned throughout the organisation.

Nonaka (2008, 11) posits that sharing knowledge should not be a task assigned to any one person, but an activity that happens at all levels of the company as personal knowledge is

made available to others. Similarly, Gurteen (1999) asserts that for an effective knowledge management initiative two things are necessary: first to start practicing sharing knowledge at all levels i.e., create a culture of sharing, and secondly to implement a knowledge management system and train people to use it.

3.1 Communication and office software

Currently the team uses Microsoft products such as Teams and Excel to manage a large part of their workload. Jira is also used for work management in conjunction with the knowledge base Confluence.

Use of these tools should be documented, starting with the most common processes. Training in the basic use of these products should be included as part of onboarding unless assessed to be unnecessary - it cannot be assumed that everyone is proficient.

3.2 Knowledge base

A knowledge base tool is essential for teams that work remotely and share information across the world (Gurteen 1999). A knowledge base tool like Confluence also allows for tagging teammates, adding comments, and collective editing of pages (Atlassian 2022d).

The case company is increasingly using Confluence as its central knowledge repository. Although used by operative members of the team, it has not been adopted by sales, marketing, or for strategic documents.

Information may be shared on Teams in private or group chats, but never documented on Confluence. Some document types such as PowerPoint are hard to produce in the same way on Confluence. Having a single source of truth would mean that all information is stored in one place (Atlassian 2022e). This cuts down on confusion and duplication of work that can arise when multiple tools and repositories hold various documents in different states of being up to date.

3.2.1 Documentation types

The knowledge base could hold everything from frequently asked questions to troubleshooting instructions, marketing materials, and bigger picture items like company mission and objectives (Atlassian 2022a). Transparency in sharing these documents in the organisation creates a culture that learns - the things that worked and the things that didn't.

On the other hand, not absolutely everything needs to be documented. Set some criteria for what needs to be documented: does a process or issue need to occur regularly or often?

Documenting a one-off issue may not make sense, but consider writing a guide if it recurs e.g., monthly or three times total (Atlassian 2022d).

Types of documentation could include:

- Company information: mission, values, objectives
- Roles, responsibilities, and contact information of all employees
- Internal tools used
- Meeting summaries
- Plans, roadmaps, strategies
- Schedules, project plans
- Standard operating procedures, how-to guides, troubleshooting
- Designs, templates, stock graphics, logos, visual guidelines
- Product requirements
- Internal procedures like logging hours, requesting holiday etc.

3.2.2 Documentation standards

Atlassian (2022d, 2022f, 2022g) outlines some best practices for documentation standards:

- Write simply
- Use the active voice
- Avoid jargon (and define where unavoidable)
- Use headers and bullet points
- Use visuals (screenshots, GIFs, videos)
- Use emojis
- Name documents clearly (what terms would others use to search for it?)
- Break up text with images, colour, and whitespace
- Use tables
- Use tags
- Use comments and tag people

Making pages look good makes them easier to engage with and enhances retention (Atlassian 2022g). Long paragraphs can be hidden in an expandable header, dashboard-like pages made for tracking work, and data could be visualised in graphs. Text can be placed in a box with a colourful background. Using macros is another option with a tool like Confluence, enabling pages to have charts and illustrations, for example, or add integrated Jira tickets to always have information up to date (Atlassian 2022e).

In addition, using templates saves time and ensures consistent documents. They create a sense of consistency that can help people know what to expect (Atlassian 2022f). The template could include information about why the process exists, who the key players are, and what tools or resources are needed (Atlassian 2022d). Someone should be listed as responsible for keeping the document up to date (Atlassian 2022e). Responsibility for keeping a whole Confluence space up to date could also be assigned.

3.2.3 Using video

Many video meetings can cause fatigue and impact productivity (Atlassian 2022h, Ramachandran 2021). In a team that works asynchronously across different countries and time zones, video in a knowledge base article can be a great way to share information in those instances where knowledge needs to be shared but does not require the dialogue of a video meeting (Atlassian 2022h).

Including video on documentation enables showing processes instead of writing them out, or enhances text when instructions are written. Team members can access the information at any time, and even better, pause and rewind as necessary. This can be part of a sustainable and healthy virtual work environment. Protecting workers from "Zoom fatigue" (Ramachandran 2021) is part of improving sharing and collecting of information.

Videos should be kept short where possible: engagement drops after two minutes of video (Fishman 2016). Longer videos could be broken down into chapters and/or transcribed as well. Video can be used in employee onboarding as well, with a video welcome from the CEO for instance (Atlassian 2022h).

3.3 Checklists to support knowledge sharing

Merely making knowledge available is not enough. People can fail because of ignorance or ineptitude: either the person does not have access to the necessary knowledge, or they fail to apply the knowledge correctly (Gawande 2010, 8). Lack of training is also not the core issue when highly skilled individuals make mistakes. Despite years of training, lawyers and doctors commit errors (Gawande 2010, 12), and partly this is because of the enormous amount of knowledge they must retain.

A different tactic is needed to prevent failure, one that leverages organisational knowledge but also counteracts the human tendencies to misremember or lapse in attention or thoroughness. Checklists are a simple tool that does just that: they ensure that the collective knowledge of the group is retained and available, but also easily accessible and quick to use.

Checklists aid memory recall and spell out the minimum steps necessary in a process. In fields like medicine, checklists have improved the basic standard of care (Gawande 2010, 39).

Checklists function as safety nets that catch cognitive errors. Using them can improve baseline performance and business outcomes with no increase in employee skill.

3.3.1 Project documentation and checklists

Checklists can be used for project management as well. In the case company, project progress is usually measured by number of novel intents trained. However, measuring progress in this way means other requirements or steps necessary in the project are not visible to the whole project team, and thus may be missed or not appreciated.

Beyond using a checklist to track the overall project, Gawande (2010, 65) introduces the idea of a communication task checklist. This is a separate list onto which arising issues in a project are written. The list outlines who will discuss the issue and when. Decisions about how to handle the issue are then made by a team of professionals rather than relying on a single person's opinion, leveraging the wisdom of a group.

When facing risks most authorities centralise decision making power, giving orders from above (Gawande 2010, 72). Process checklists may indeed function this way, ensuring tasks are carried out according to management wishes. Communication checklists however disperse responsibility away from the centre and give experts the power to discuss and make decisions. Higher management can then require they attest to have done so.

The idea is that as well as issues being flagged, they are resolved by the relevant parties communicating. Communication checklists could be made more useful by automating the sending of an email to the people who need to discuss the issue.

In complex and unpredictable situations dictating every move from a central decision maker will fail, hindering progress on projects and impinging on employee's freedom and learning. People need not make decisions as individuals either but should be expected to communicate as a team and to keep track of common goals (Gawande 2010, 79).

3.3.2 Process documentation and checklists

Processes can be documented (Atlassian 2022e, 2022f) with:

- Step-by-step instructions
- Checklists
- Flowcharts
- Diagrams
- Mind maps

The team is more productive when repeated processes are broken down into steps that anyone can follow. Good process documentation saves time and improves efficiency and quality, eliminates disagreements on the "right" way to do things, and may improve the processes themselves as they are made explicit, making bottlenecks and issues visible (Atlassian 2022f).

A checklist is not intended to be comprehensive a step-by-step guide but a tool to support the skills of the professional (Gawande 2010, 120). For this reason, the most basic steps in a process can be omitted from a checklist if they are expected to be so automatic that no reminder is necessary. The idea is to boil down the most crucial or easily forgotten steps into a process checklist that is above all quick and easy to use.

Document processes as you carry them out or ask others to take notes as they do it (Atlassian 2022f). Define the scope of the process: where does it start and end? Is your audience familiar with the topic? Identify the key players in the process and what their roles are. Process documentation should be tested by giving it to someone unfamiliar with the process and observing where they get stuck or confused. Then instructions can be revised and tested again (Atlassian 2022f).

4 Creating knowledge sharing culture

Culture is the set of values, norms, and beliefs that members of a community share. It is dependent on the ability of the group to learn and transfer knowledge to future generations (Gurteen 1999). Organisational culture is borne of the conscious and unconscious beliefs of the members of the organisation. In a knowledge sharing culture, there is space for open communication and sharing information is part of the organisation's values (Atlassian 2022i).

People tend to resist change once unconscious beliefs are in place, and it is not necessarily clear why things are done in a certain way in the organisation (Gurteen 1999). This means that organisational processes and practices may form out of habit or necessity, not because they are most effective or efficient. Changing organisational culture can be difficult, but in a young company, the culture may be more malleable.

4.1 Removing barriers to knowledge sharing

Employees may be reluctant to let go of their secrets if they believe their job security hinges on being a subject matter expert (Atlassian 2022a). Employees should feel that knowledge sharing benefits them and is a way to achieve business objectives and team results (Gurteen 1999). One way to combat hindrances to sharing knowledge is to model the desired behaviour by practicing sharing at all levels, including management (Atlassian 2022a). Another barrier to knowledge sharing may be favouritism. Giving too much space to the loudest or most experienced "rock stars" of the company can discourage others from sharing their points of view (Atlassian 2022a).

Non-salaried employees may feel resistant to using their work time for documenting or sharing knowledge if such a task is not explicitly seen as part of their role. The employee essentially needs to feel secure that knowledge sharing is paid work. To this end, a new task for documentation was created in the employee time management system.

4.2 Encouraging knowledge sharing

Sharing knowledge is not just about giving information from on high. At core it is about being more open about the work done and why it is done. Some ways to encourage a culture of knowledge sharing as quoted from Gurteen (1999):

- "Soliciting feedback
- Asking questions
- Telling people what you plan to do before doing it
- Asking other people for help
- Asking someone to work with you in some way, however small
- Telling people what you are doing and more important why you are doing it
- Asking people what they think, asking them for advice
- Asking people what they would do differently
- Not just sharing information but know-how and know-why"

Some members of the team might have valuable knowledge to share but work in a less visible or vocal role (Atlassian 2022a). Tapping into these resources could be done by directly asking for their input or assigning them to lead a project. Giving people ownership for sharing the knowledge they have of a specific task or project empowers them and shows that they are trusted (Atlassian 2022i). Documentation isn't about evaluating the correctness or level of skill of the employee but learning and developing together (Atlassian 2022f). It's okay to not be perfect and to start small.

Knowledge sharing should be quick and easy, and should be encouraged, even rewarded (Reid 2003) with prizes, financial benefits, or public praise in team gatherings (Atlassian 2022b, 2022d). Incentivising knowledge sharing is one way to encourage it, though Gurteen (1999) maintains that removing barriers is better. Blind rewarding of sharing knowledge with no criteria to its quality or relevance may be a futile endeavour.

However, praise is free. Make time at the end of a project to acknowledge the results and successes of team members (Atlassian 2022i). This is a good opportunity to give recognition

for work well done. Giving regular recognition to all hard-working employees can help them feel valued as experts and reduce the need to guard any gained status or knowledge (Atlassian 2022a). If the company acknowledges them as valuable mentors for new hires or other teams, sharing knowledge feels less threatening.

4.2.1 Encouraging social sharing

If employees feel that they must be "working" or "productive" all the time, this might prevent knowledge sharing (Atlassian 2022b). The company should make it clear that it's okay for people to talk to their colleagues, and to not always be working on something concrete at the case company this is something that appears to be a common anxiety. Reserving time at the start of meetings for casual conversation helps create an open culture (Atlassian 2022i). Spending some time breaking the ice means people will be comfortable and relaxed for talking business and may spark conversation about ideas that would otherwise not surface.

Another way to open communication is to encourage taking the time for informal coffee breaks and chats (Atlassian 2022b). This also helps employees form bonds and enhances socialising at the company. Considering a 2019 survey in which 40% of employees feel isolated at work (Robinson), this could make a big difference to employee satisfaction.

4.2.2 Sharing knowledge in onboarding

The company's onboarding process can also support a knowledge sharing culture. Some aspects to include could be presentations across departments, to help new hires understand how different teams work together and to get to know people outside their own immediate circle.

Ensuring that knowledge sharing is a norm starts with integrating it to new employees' onboarding plans (Atlassian 2022e). Some tactics could be making mentoring another employee part of everyone's job description, having new recruits shadow someone in a similar position or a buddy system (Atlassian 2022a, 2022b).

4.3 Including knowledge sharing in mission

The organisational culture in the case company is well suited for knowledge sharing. Employees are encouraged to be open about the lessons they learn, and mistakes are learned from rather than penalised. Regular town hall meetings and weekly operational meetings are held for sharing companywide information about new projects and clients. Open and informal communication takes place on Teams channels and chats.

Traditionally a business might measure the worth of knowledge by whether it lowers costs or improves efficiency, whereas a knowledge-creating company measures the value of new

knowledge by how it fits the company's vision and whether it furthers the organisation's aspirations and strategy (Nonaka 2008, 49).

As an important part of building an open culture, the company celebrated its third birthday with a workshop where the organisational values were collectively agreed upon. This tapping into employees conscious and unconscious intuitions creates a feeling of personal commitment to the company and its mission (Nonaka 2008, 7). Engaged employees bring good ideas to the table, the kind of intellectual capital that is essential in knowledge work.

5 Tools developed for knowledge sharing

5.1 Skills matrix

Beyond process documentation, a systematic way was needed to examine employee skills and guide their development in this highly skilled profession. A skills matrix (What Is Six Sigma 2022) was designed which charts each skill area with the employee's level of competency in that area. The skills were identified by individual brainstorming and consulting with senior members of the operative team. The skills matrix is an excellent way to explicitly codify the skills used in all areas of the operative role.

In addition, a tool was developed for systematically assessing employee skills in specific tasks. The assessment tool itself is loosely based on the Pan London Practice Assessment Document (Pan London Practice Learning Group 2022), which is designed for rigorous assessment of student nurses' skills. Each skill area was broken down into one or more specific tasks that the employee may need to perform in their role.

5.2 Knowledge sharing culture survey

Surveying employees on how well knowledge sharing takes place sends a message that their opinions are heard and valued (Atlassian 2022b). A survey was designed to investigate employee impression of the organisational culture and to find areas for improvement. Survey questions were based on source reading (Atlassian 2022a, 2022b) and slightly modified with the client company's feedback.

Questions about tools and resources were added to gauge the success of concurrent knowledge sharing efforts. A question about length of employment was also added to enable later analysis of correlation between tenure and confidence in sharing knowledge. For confidentiality, the full questionnaire and results are not included in this report. Survey questions can be found in Appendix 1. The survey answer options were a mix of open answers, Likert scales, and yes/no questions with an option to write in an answer. Questions about tools listed the software used at the client company.

The survey cohort was restricted to the operative team because they were the employee group that had most exposure to the current knowledge sharing efforts and training. The lack of standardised knowledge sharing in other functions of the business was a known issue and of less interest than understanding how the operative team uses existing systems. The survey cohort should be extended to whole company as organisational culture formalises, and repeated at regular intervals (e.g., yearly).

The knowledge sharing culture survey was built with Microsoft Forms and a link to it sent by email to 11 operative team members, with 9 responses received. The invited team members had a week to respond to the survey and were informed their responses would be confidential. The survey was set to not collect respondent's names or email addresses to facilitate more honest answers.

6 Conclusion

6.1 Survey findings

The survey responses were unexpectedly verbose and varied, necessitating deeper analysis than possible in the scope of this project. This was possibly due to many open questions, and while the information volunteered by respondents is valuable, it indicates that an additional simpler questionnaire to quickly measure success and satisfaction with company knowledge sharing could be designed. Survey results were preliminarily analysed with operations management and action points identified with further analysis planned with decision makers.

Almost all respondents felt a need to be busy or productive all the time (7 Yes, 1 Sometimes, 1 No), which could hamper creativity and sharing of ideas. This is an issue that has been recognised before and the responses show that this feeling is common within the operative team. Fostering a more relaxed open culture should be a priority. Additionally, more than half of respondents feel isolated at work at least sometimes, highlighting the need to foster stronger social connections.

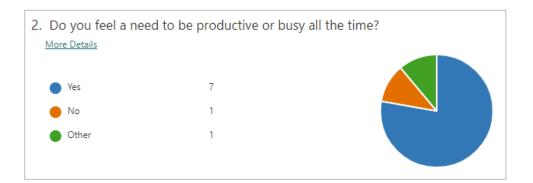


Figure 3: Responses to survey question 2

Overall respondents feel that they are supported to succeed and get enough recognition for good work. Getting feedback is seen as valuable and motivating, and for the most part the company has succeeded at giving it. A few respondents requested still more constructive feedback, and many spoke of their passion of learning and developing, their work, and the potentials of automation.

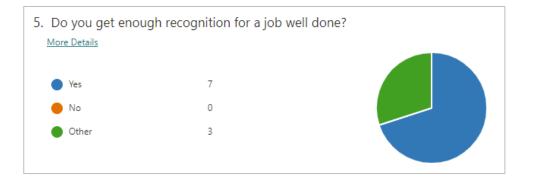


Figure 4: Responses to survey question 5

The company's "free speech" culture was widely lauded and current knowledge sharing efforts recognised as useful and a step in the right direction. Respondents do mostly share their ideas but find it hard to when they feel it could be stupid, or so obvious that it is ridiculous. Lack of time and other priorities were also identified as barriers to innovation, as well as the lack of appropriate channels to bring up ideas.

None of the respondents felt that rewards were needed for knowledge sharing, but rather they hoped for more constructive feedback, more opportunities to learn new things, and transparent information sharing within the company. The overall impression is of a skilled and motivated workforce that sometimes does not feel trusted with meaningful information and tasks and may be frustrated by occasional lack of opportunities for growth. There is a general attitude of wanting to share ideas but feeling like they are not always heard.

6.2 Project results

The project can be deemed a success, with tools for knowledge management in place and active participation in knowledge creation and sharing quickly becoming a company norm. 300+ articles were created in Confluence during the project, with contributors from all areas of the company. Project management practices also evolved during the project, with a new project manager increasingly using checklists for systematically handling client projects. Jira use is increasing and other Atlassian tools are being trialled for better work management across the organisation.

An early version the of skills matrix was received well by employees and managers. It has provided structure in discussions about skills and training, with operative team members giving feedback that they find it clear and helpful. As the tool has evolved further, all employees should be assessed using the current version, and development objectives set based on identified weaknesses. The completed assessment should be shared with the individual so they can always see what they need to focus on.

Some areas were identified where further development could take place, such as documentation practices on Confluence. Pages exported as PDF should look better so that documents can be easily shared. It would also be good to figure out if Confluence can replace PowerPoint in any way, as sales materials are often produced in PowerPoint but storing these files in Confluence is impractical and would necessitate downloading a local copy for edits.

Additionally, interviews are an effective way to gather and document knowledge to share from the company's experts. Hypothetical scenarios can be used to elicit specific troubleshooting steps, which can further be analysed for the underlying philosophy and principles. Furthermore, exit interviews can be used to retain intellectual capital in the organisation. Knowledge elicitation and exit interview guidelines should therefore be developed.

Finally, as a company that relies heavily on virtual collaboration, some further effort could be well spent on researching ways to leverage visual tools such as virtual whiteboards. In addition, some readymade templates in Confluence seem apt to enhance meetings. It would be worth trying the 1-on-1 meeting template while assessing employees with the skills matrix, and immediately implementing the meetings notes template to all meetings. Much information is discussed in meetings but never documented or passed on to other team members.

References

Printed

Gawande, A., 2010. The checklist manifesto: How to get things right. New York: Picador.

Leonard-Barton, D., Swap, W. & Barton, G., 2014. Critical Knowledge Transfer: Tools for Managing Your Company's Deep Smarts. Boston: Harvard Business Review Press.

Nonaka, I., 2008. The knowledge-creating company. Boston: Harvard Business Press.

Reid, F., 2003. Creating a knowledge-sharing culture among diverse business units. Employment Relations Today, 30(3), pp. 43-49.

Electronic

Atlassian. 2022a. 3 ways to use knowledge sharing to boost business and morale. Accessed 25 January 2022. https://www.atlassian.com/work-management/knowledge-sharing

Atlassian. 2022b. Knowledge sharing best practices. Accessed 25 January 2022. https://www.atlassian.com/work-management/knowledge-sharing/best-practices

Atlassian. 2022c. The importance of documentation (because it's way more than a formality). Accessed 25 January 2022. https://www.atlassian.com/work-management/knowledgesharing/documentation/importance-of-documentation

Atlassian. 2022d. How to ace internal documentation. Accessed 25 January 2022. https://www.atlassian.com/work-management/knowledge-sharing/documentation

Atlassian. 2022e. Building a true Single Source of Truth (SSoT) for your team. Accessed 25 January 2022. https://www.atlassian.com/work-management/knowledge-sharing/documentation/building-a-single-source-of-truth-ssot-for-your-team

Atlassian. 2022f. The ultimate guide to process documentation. Accessed 25 January 2022. https://www.atlassian.com/work-management/knowledge-sharing/documentation/processdocumentation

Atlassian. 2022g. How pretty pages boost project collaboration for teams. Accessed 25 January 2022. https://www.atlassian.com/work-management/knowledge-sharing/bestpractices/pretty-pages-boost-project-collaboration Atlassian. 2022h. Put video on the page to boost collaboration and engagement. Accessed 25 January 2022. https://www.atlassian.com/work-management/knowledge-sharing/bestpractices/async-video-embeds

Atlassian. 2022i. How to create a culture of knowledge sharing. Accessed 25 January 2022. https://www.atlassian.com/work-management/knowledge-sharing/culture

Chui, M., Manyika, J., Bughin, J., Dobbs, R., Roxburgh, C., Sarrazin, H., Sands, G., and Westergren, M. 2012. The social economy: Unlocking value and productivity through social technologies. Accessed 15 February 2022. https://www.mckinsey.com/industries/technologymedia-and-telecommunications/our-insights/the-social-economy

Fishman, E., 2016. How Long Should Your Next Video Be?. Accessed 15 February 2022. https://wistia.com/learn/marketing/optimal-video-length

Gurteen, D., 1999. Creating a knowledge sharing culture. Knowledge Management Magazine, 2(5). Accessed 20 April 2022. http://www.gurteen.com/gurteen/gurteen.nsf/id/ksculture

Pan London Practice Learning Group, 2022. Pan London Practice Assessment Document 2.0. Accessed 20 April 2022. ttps://plplg.uk/plpad-2-0/

Ramachandran, V., 2021. Stanford researchers identify four causes for 'Zoom fatigue' and their simple fixes. Accessed 25 January 2022. https://news.stanford.edu/2021/02/23/four-causes-zoom-fatigue-solutions/

Robinson, A., 2019. New Study Finds 40 Percent of Employees Feel Isolated. Here's How to Make Your Workplace More Inclusive--and Productive. Accessed 08 February 2022. https://www.inc.com/adam-robinson/new-study-finds-40-percent-of-employees-feelisolated-heres-how-to-make-your-workplace-more-inclusive-and-productive.html

What Is Six Sigma. 2022. What's a Skills Matrix?. Accessed 20 April 2022. https://www.whatissixsigma.net/skills-matrix/

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Appendices

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Appendix 1: Knowledge sharing culture survey questions

- 1. How long have you worked at [company]?
- 2. Do you feel a need to be productive or busy all the time?
- 3. Do you often get interrupted at work?
- 4. Do you feel isolated at work?
- 5. Do you get enough recognition for a job well done?
- 6. Do you feel supported to succeed in your role?
- 7. How comfortable do you feel sharing ideas or opinions with your team?
- 8. What makes you excited to share knowledge or ideas with your team?
- 9. What makes you hesitant to share knowledge or ideas with your team?
- 10. What could [company] do to reward you for sharing your ideas?
- 11. What resources do you use to get work done?
- 12. What internal resources have you found helpful in gaining the skills and knowledge necessary to do your work?
- 13. How comfortable do you feel using the following software?
- 14. How would you change about what information is stored and where? What information is missing?
- 15. What do you wish you had known on day one of joining the company?
- 16. Any other comments?