Working Smarter
with personal knowledge mastery

This work is shared under a Creative Commons Attribution — Non-Commercial — Share Alike licence — CC-BY-NC-SA¹

¹ [https://creativecommons.org/licenses/by-nc-sa/4.0/](https://creativecommons.org/licenses/by-nc-sa/4.0/)
The Changing Nature of Human Work

For the past several centuries we have used human labour to do what machines cannot. First the machines caught up with us and surpassed humans with their brute force. Now they are surpassing us with their brute intelligence. There is not much more need for machine-like human work which is routine, standardized, or brute. But certain long-term skills can help us connect with our fellow humans in order to learn and innovate — curiosity, sensemaking, cooperation, and novel thinking.

Automation of routine and standardized work is forcing people to do more non-routine manual and cognitive work. If any piece of work can be mapped and analyzed, it will be automated. As non-routine work becomes the norm, work
environments will have to become more open, transparent, and diverse because trust is absolutely essential to ensure that knowledge flows. Finding the right information is only part of the challenge of non-standardized work. Sharing complex knowledge requires trusted relationships. People have to trust each other before sharing and only then can they work effectively on difficult problems and take informed action.

**sharing complex knowledge requires trust**

Standardized industrial work was focused on reducing errors to ensure quality of similar products and services. This is still important in manufacturing, though production lines are often shorter and re-tooling happens more frequently today. But error reduction is not enough. We also need to increase insights.

In 2010 Jay Cross — futurist and champion of informal learning — published *The Working Smarter Fieldbook* with his colleagues at the Internet Time Alliance.
Working smarter is not working faster or more efficiently. Working smarter is about increasing insights.

“Visualize the workflow of a physical job: produce, produce, produce, produce, produce, produce, produce, produce, produce.

Now visualize the workflow of a creative knowledge worker: nothing, nothing, nothing, nothing, flash of brilliance, nothing, nothing, nothing.”
—Jay Cross (1944-2015)

A focus on reducing errors assumes that a work environment is complicated — production. However, a focus on improving insights understands that most work environments involving people are complex — creativity & innovation. So what should knowledge workers do between flashes of brilliance? They should be engaged in learning socially and informally in order to see what others don’t.
Learning informally and socially means connecting our individual work with our teams, communities, and networks. It requires honing our curiosity and seeking out different perspectives and ideas. It takes more than individual sensemaking to understand complex situations, so we have to find others to challenge our assumptions and learn at the edge of our professional abilities. But most importantly we need to use what we have learned in order to resolve challenges and co-create value. As we do this, we continuously share in order to make our communities and networks more resilient and able to make better informed decisions. This discipline is personal knowledge mastery.
Finding and Sharing Information

One of the challenges we face in our professional and personal lives is making sense of the flow of information that passes by us each day and then aligning that with our current priorities and challenges. The *Seek > Sense > Share* framework of personal knowledge mastery is a simple method to help us stay focused in our sensemaking. The image below shows how information and knowledge can flow when people develop filters to seek information, take time and effort to make sense of it, and then share appropriately, often adding value to what they share.

Establishing a few procedures can simplify the finding and sharing of information, at work, in your communities, or through your knowledge networks.

**Personal Knowledge Mastery (PKM)**

- **seek**
  - Develop & refine subject matter **networks of expertise** to filter signal from noise
  - *Machine* — Algorithmic, Heuristic
  - *Human* — Expert, Network

- **sense**
  - Make sense by doing & creating
  - **Do**: experiment — initiate
  - **Create**: customize — synthesize — question — compare — validate
  - **Add value**

- **share**
  - Discern when, where, & how to share in a spirit of openness & transparency
Machine filters allow information to be pushed to us. They can be email lists, news feeds, blogs, and paid sources of insight. Tools such as RSS feed readers reduce the cognitive load of finding information.

We can connect with people who publish their thoughts and engage with them in person — but often through social media — given space and time restrictions.

Professional social networks and communities of practice are prime venues for seeking human filters to help us make sense, especially in fields where we lack deep knowledge.

When information passes through our machine (e.g. search engine) and human (e.g. experts) filters — which should be regularly reviewed & revised — we can quickly determine if it is important and/or urgent. If it is urgent we may quickly add some value, such as our analysis of the information, and then share it to our networks or teams.

If information is important we can file it away for later retrieval when the time is right. This requires establishing some methods for personal or team filing. A social bookmarking application can help, e.g. Pinboard, Diigo, Flipboard.

There are many ways to add value to information. It comes down to what is appropriate for you as well as the intended audience. Just reading an entire article ensures that you have covered all the points. A summary can then add value for others to determine if they should read the whole article.

Discerning when, where, and how best to share requires an understanding of context and culture. Heuristics are often better than rules in determining how best to share information.

As part of sharing we should solicit considered feedback. Inside an organization this can be part of everyone’s regular work. Outside the organization good feedback is often the result of good work. If something provokes thinking, readers and viewers may be more willing to provide feedback. This back and forth is...
forth can develop trust over time so that more complex information can be shared.

Engaging in regular discussions with fellow professionals can sharpen our thinking. Communities of practice provide a trusted space for these. Published information is one result of these procedures. For example, the chats, questions, and conversations between employees can be collected and refined to inform organizational search engines. Self-published works, like blogs, can contribute to official documents like white papers and brochures. The decision to publish internally or externally depends on the context and culture but the latter can help make the entire network smarter.

finding and sharing information & knowledge

- machine filters
- important? urgent?
- human filters
- file for retrieval

- add value
- file for retrieval

- solicit feedback
- discuss for understanding

- discern how best to share

- publish internal/external
PKM made Simple

Here is a simple, but by no means only, method of putting personal knowledge mastery into practice. It is based on the Seek > Sense > Share model.

Seek

- Use a feed aggregator to collect all your online news and information resources in one place, e.g. Feedly or Inoreader.
- Carry a notebook to collect insights as you go through your day. A notes application for your mobile device would work as well.
- Determine what areas you want to learn more about. Find others from whom you can learn. Identify people who share their knowledge on social media. Follow them and take notes, as above.

Sense

- Filter your online resources by marking the best in a social bookmark system, e.g. Diigo or Pinboard. Make sure you highlight the important part and add tags (metadata) to help with later retrieval. For long reads, save them for later on a platform, e.g. Pocket. Set up a routine to review these weekly or monthly.
- Get your notes into a retrievable form, e.g. Evernote has a system that works with Moleskine notebooks.
- Take some of what you have filtered and do something with it on a regular basis: e.g. write a review, synthesize multiple perspectives, explain how some new knowledge pertains to you or your profession.
- Put into action your new ideas by trying them out with friends or colleagues. Find a safe space (community of practice) to do this.

Share

- Put some of your ideas and sense-making in a forum where others can find it. There is no need to advertise this. Let others find you through time.
- Once you have a body of knowledge it will be easier to find other people interested in your work. Note that whatever you use to seek and sense, ensure it is in a format that makes it easier to share later.
Getting started with a sensemaking practice can be daunting. While the *Seek > Sense > Share* framework is simple to understand, putting it into an everyday context can be difficult. Let’s get some advice from people who have been using the personal knowledge mastery conceptual model. For example, Nadia von Holzen\(^2\) likens seeking to fishing, sensemaking to cooking, and sharing to inviting people to dinner. It’s a great metaphor.

To begin, ask yourself what value you can add for your co-workers, clients, peers, and even yourself at some later date. But don’t get stuck in analysis paralysis. An essential element of PKM is to do ‘something’. As Tim Kastelle\(^3\) says, “the biggest gap is between those doing nothing and those doing something”.

While it’s good to have a trusted knowledge network, Jane Hart\(^4\) recommends — “Although I trust my network to feed me valid resources, it is always important to check any resources personally to ensure they meet my own high ‘quality control’ standards.”

Fact-checking is one way of adding value.

After coming across new information, Tom Spiglanin\(^5\) asks the following questions:

- *Does it make sense?*
- *How does it fit with what I currently believe?*
- *Are there hidden biases?*
- *Is it rooted in experience or research?*
- *What’s missing?*

---

\(^2\) [https://learning-moments.net/2015/05/29/my-personal-learning-habits/](https://learning-moments.net/2015/05/29/my-personal-learning-habits/)

\(^3\) [http://timkastelle.org/blog/2014/03/creating-your-own-space-for-creativity/](http://timkastelle.org/blog/2014/03/creating-your-own-space-for-creativity/)


Ben McMann⁶ integrated his learning with his ongoing work, sharing with co-workers. 

“I also deliver presentations during our company knowledge sharing lunches – some recent topics have been running design sprints for projects and facilitating workshops utilizing innovation game techniques to speed requirements gathering. I then utilize my internal blog to expand on these topics in greater detail.”

Sacha Chua⁷ uses drawing — to explore her thoughts — as a form of sensemaking.

Here is how Nick Leffler⁸ made sense of a conference he attended — “I started with a first hand experience at the conference. I then documented and immediately synthesized via Twitter. Finally, I am reflecting to write this post.”

A good example of a weekly routine, including tasks and time allocated, comes from Kate Ensor⁹ — 30 minutes per day on seeking, 2-3 hours per week on sensemaking, and 30-60 minutes per week for sharing.

---

⁶ https://benmcmann.wordpress.com/2015/12/17/my-pkm-routine/
⁷ https://sketches.sachachua.com/
⁸ https://www.technkl.com/reflecting-on-the-national-extension-conference-nexconf/
⁹ https://rusticlearning.wordpress.com/2015/02/02/my-pkm-routine/
Harold Jarche

Harold Jarche is a workplace learning consultant focused on sensemaking in networks, communities, and teams. He has been described as “a keen subversive of the last century’s management and education models”. Clients appreciate Harold for his extensive experience and network. His internationally renowned blog is “a beacon of light in the dark landscape of organizational learning”. According to one long-time reader, “Harold is one of the best thinkers out there on things relating to learning and work”. For his clients, Harold helps to identify next practices around collaboration, knowledge-sharing, and innovation, in an increasingly complex networked world.

A graduate of the Royal Military College, Harold served over 20 years in the Canadian Armed Forces in leadership and training roles. Harold began his career as an officer with Princess Patricia’s Canadian Light Infantry. He completed his service as a Training Development Officer with the Royal Canadian Air Force where he conducted the analysis and design of training for aircrew and technicians on the newly purchased CH146 helicopter.

In 2003 Harold launched his independent consulting practice in Sackville, NB, Canada. He has served a wide variety of clients and has been a speaker at many venues worldwide. Harold is currently a partner with the Internet Time Alliance.

“Harold has the rare talent of being both a thought leader and a pragmatic communicator. He is a pioneer in personal knowledge mastery — a skill just beginning to be recognized as critical in our digital age. He spoke to a group I manage in Paris composed of digital practitioners from global organizations headquartered in Paris. Harold had a strong impact on the way they now see their own professional development.”
—Jane McConnell, Advisor and Researcher, Digital Workplace Strategies

HGJ — 2020-05-02