Knowledge Management at Tacoma Water

American Water Works Association, Pacific Northwest Section Conference

May 3, 2024

Purpose

What:
Knowledge Management

Why:
Implement a Program

How:
Tools and Best Practices

Knowledge Management

The strategies and processes designed to identify, capture, structure, value, leverage, and share an organization's collective knowledge and intellectual assets. *

Goals:

• *Effectively capture and utilize the information that we've invested in the workforce.*

• *Grow the Knowledge Management program into a fully mature state*

Critical activities:

• *Capture and documentation of tacit and implicit knowledge*

• *Dissemination of that knowledge within the organization*

*Definition from ARMA: Association of Records Managers and Administrators

EXPLICIT, IMPLICIT AND TACIT KNOWLEDGE

EXPLICIT KNOWLEDGE

- Manuals
- Documents
- Procedures

IMPLICIT KNOWLEDGE

- Know-how
- Learned skills
- Best practices

TACIT KNOWLEDGE

- Expertise
- Ideas
- Intuitive judgment
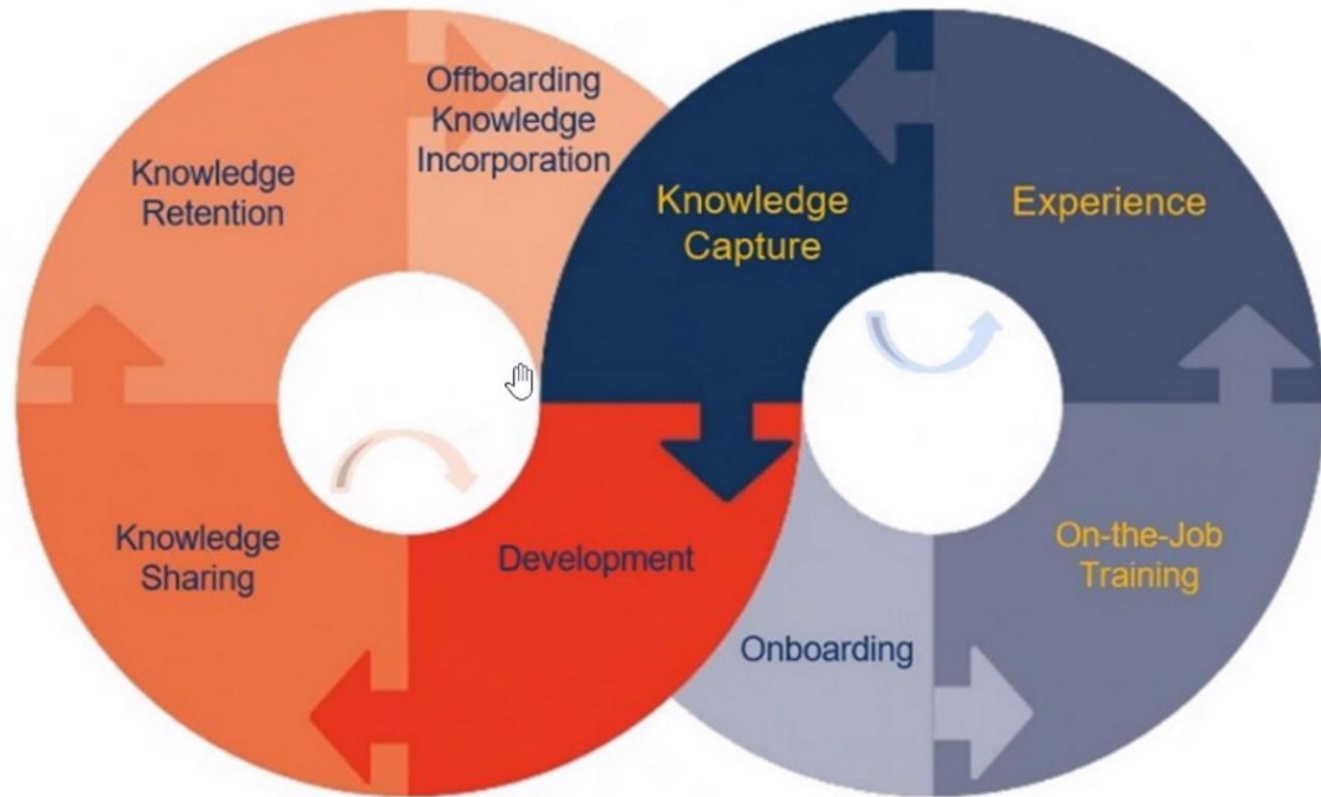
Source: Archbee

Knowledge Management at Tacoma Water

We envision a fully-mature knowledge management program within a modern environment

Knowledge Management & Employee Lifecycle

Elements of a Learning Organization

Concept development from Tim Billbrough, Southern NH University

Knowledge Retention

Offboarding Knowledge Incorporation

Knowledge Capture

Experience

Knowledge Sharing

Development

Onboarding

On-the-Job Training

The Problems We Faced

% of workforce eligible to retire

Needed a way to transfer institutional knowledge

Lack of succession planning

Solution – Knowledge Management

How we built our program
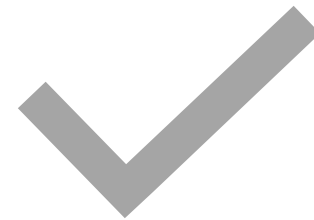
Best Practices

Knowledge Management: Road Map

Current State

Foundation Building

Automation

Documentation & Education

Content Building

Maintenance & Improvement

The Tools

Knowledge Development Questionnaire
Knowledge Capture Kickoff Meeting

TACOMA WATER
TACOMA PUBLIC UTILITIES

As a Tacoma Water employee, you are given access to substantial information regarding Tacoma Water's business operations ... customers. Your knowledge and experience is of enormous value to us as we m... ...s regarding direction, retention and needs of our organization.

Goal:

To capture relevant job tasks & knowledge for you... ...n that can be assimilated into a comprehensive resource guide will focus on the critical tasks that your position does. This guide will be stored in a centralized SharePoint location for all Tacoma Water employees. The project will also capture other tasks that you do at a high level an... potential process improvement projects that could be completed in the future.

Questionnaire:
Name and Current Job Title:
1. How long have you been in your current role?
2. From your perspective, how accurate is your position description form wh... to the work you do?

TACOMA ⩤ WATER
TACOMA PUBLIC UTILITIES

Knowledge Captures

LEAD_RSHIP
Assistant Division Manager
Chief of Party
Construction Inspector

Customer Service Representative
Depu... ...nt
Engineer
Engineering Technician

Financial Assistant
Information Technology Analyst
Information Technology Supervisor

Tango

smartsheet

Tacoma Water ...re

Title: DRAFT Procedure Title

Purpose: *Starting with an action word, describe w... ...does. Spell out all acronyms and shorthand. This field will automatic... ...pose metadata in SharePoint.*
Number: *Tracking Number – Assigned by the Knowledge Management Team*
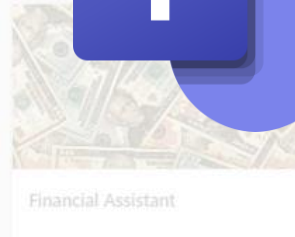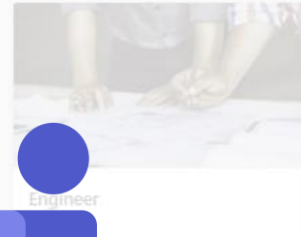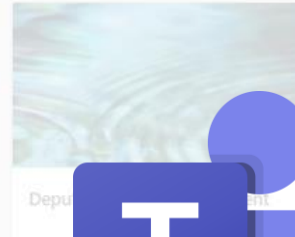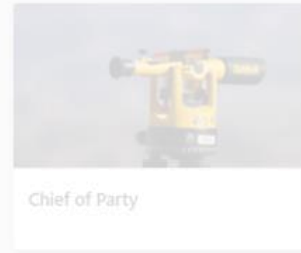Owner: Bateman, Rebecca
Date Last Reviewed: 8/4/2023

TACOMA ⩤ WATER
TACOMA PUBLIC UTILITIES

Home   Business Services   Customer & Employee Experience   Edit   Level 1 - Public   Following   Site acc...

+ New   Up...   ...view   Sync   Add shortcut to OneDrive   All Documents...

Policies, Pro... ...uments

TacomaWaterProcedureTem...
January 10

InstructionsforCreatingaNe...
November 22, 2023

3PLibraryandProcedureStan...
February 6

Knowledge Capture Dashboard

Knowledge Capture Questionnaire

Knowledge Development Questionnaire
Knowledge Capture Kickoff Meeting

As a Tacoma Water employee, you are given access to substantial information regarding Tacoma Water's business operations and customers. Your knowledge and experience is of enormous value to us as we make decisions regarding direction, retention and needs of our organization.

Goal:
To capture relevant job tasks & knowledge for your position that can be assimilated into a comprehensive resource guide will focus on the critical tasks that your position does. This guide will be stored in a centralized SharePoint location for all Tacoma Water employees. The project will also capture other tasks that you do at a high level and any potential process improvement projects that could be completed in the future.

Questionnaire:
Name and Current Job Title:

1. How long have you been in your current role?
2. From your perspective, how accurate is your position description form when compared to the work you do?
3. What are you known for? What are you the "go to" person for (e.g. customer complaints, Purchasing, business processes, resolving SAP issues, etc.)?
4. What do only you know how to do (unique areas of expertise)?
5. When you are away (i.e. on vacation) what doesn't get done? Why don't these tasks get completed (no one else knows how, not urgent, too time consuming, etc.)
6. In terms of priority, what are the top 5 – 7 things you do in your position (this should include tasks you are known for that may not fall within your current job description)?
7. Who (people / departments) do you interface with frequently in your position (e.g. customers, other agency contacts, etc.)? Please provide as much information as

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Knowledge Development Questionnaire
Knowledge Capture Kickoff Meeting

possible particularly for external contacts (company, contact name, title, phone number, email address, website, what you use them for, etc.). For internal city contacts you may just provide their name and what you use them for.

8. Who is your end customer (internal/external/both)?
9. In order to effectively capture the key aspects of your job, is there anyone we should consider engaging in the knowledge capture process? Perhaps someone else who has in depth knowledge of your job responsibilities?
10. What knowledge or skills are most critical for the effective performance of your job (technical, analytical or managerial)?
11. What are the top 5 recurring issues / challenges you see throughout your area or in carrying out your own duties?
12. Is there currently a central repository for documents that you review, create, or modify (including current policies, processes procedures and location)?
13. What software or equipment do you use to complete your tasks (Outlook, SharePoint, SAP, etc.)?
14. Are there specific governing policies or regulations that are important to your position? What are they? Where do you locate these (reference to WAC or links would be great here)?
15. During your time in this position, have there been any major shifts in the work performed or events that have occurred that we should consider documenting for historical purposes (customer requests, business decisions, policies, etc.)?
16. Are there any logistics or location requirements for completing your tasks? (conference rooms, pipelines, field offices, etc.)
17. What Types of records are you responsible for (hiring, regulatory reports, payroll, project etc.), where are these stored (SharePoint, network, OneDrive, somewhere else)?
18. What type of training is required/desired for this position (in addition to City of Tacoma/Tacoma Water required classes)? Where do you get that training (online-provide site, in person – where)?

Knowledge Development Questionnaire
Knowledge Capture Kickoff Meeting

19. If procedures exist for your role, where are they currently stored? Please provide link with location(s)
20. What SharePoint sites or websites do you use for your role (please provide links)?
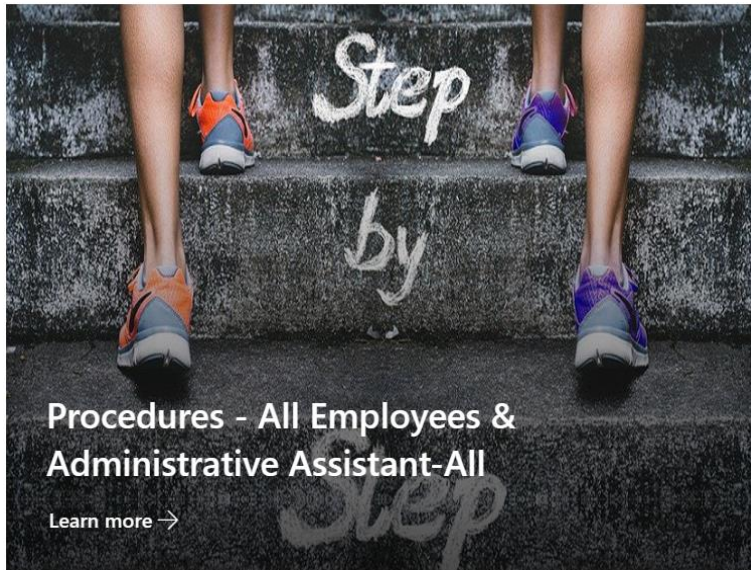
Knowledge Capture: Administrative Assistant

Knowledge Capture: Administrative Assistant

50118070-Business Services

- Important Contacts
- Policy, Process & Procedure - Position & Section Specific, & All Employees
- Recurring Meetings
- Required Knowledge & Technology
- Required Training

Job Priorities

1. Timekeeping
2. Contract and Software Renewals
3. Meeting Support
4. New Hire Interviews and Onboarding
5. Training Rep
6. Travel, reimbursements, PRs, pcards
7. General and misc. Admin support including mail sorting
8. Records Management

Procedure Writing: The Method

CONSULT, REVIEW, INVENTORY

OBSERVE AND WRITE

VALIDATE

REVIEW

APPROVE

PUBLISH

Procedure Writing: The Project Plan

	At Risk	Priority	Task Name	Type of Request	SAP Position Number(s)	Proce... No.	Status	% Co...	N... of Pr...	Next Step	Assigned To
149	🚩		⊞ WFM & Payroll Administrator (Charelle)	Knowledge Cap	50008214			0%	10	Priority from Jennifer to do Charelle's procedures. Dependent on Charelle completing Tangos during January focus-time, plan to support and complete procedures in Feburary 2024	
161	🚩		⊞ Water Capital and Developer Planning Support Procedures				Not Starte	0%	6	Kickoff meeting 3/4	
169	🚩		⊞ Safety Office		All		In Progres	46%	13		
183	🚩		⊞ Utility Service Specialist (Chris Hicks)	Knowledge Cap	50076182		Not Starte	0%	6	Q3/Q4 - 1 hr/week	
190			⊞ CIC0	TW Goal	N/A		On Hold	89%	96	May reprise as "SAP Now!" project, since it has all the same names	
287			⊞ Operations Manager (Scott)	Knowledge Cap	50092738		On Hold	0%	10		
298			⊞ 3P Library		Employees -.		On Hold	20%	5	Ongoing	
304			⊞ UFOs				On Hold	50%	1		
306	🚩	OP	⊞ Business Writer	Operational	50138503			0%	9		
316		BL	⊞ Natural Resource Specialist (NRS)	Knowledge Cap	50075281		On Hold	37%	13	OK to hold	
330		BL	⊞ Water Service Mechanic (WSM)	Knowledge Cap	50004522		On Hold	66%	13	Finish	
344		BL	⊞ Water Service Worker (WSW)	Knowledge Cap	WSW - All		On Hold	2%	32	OK to hold - likely to be reprioritized as high priority in Q1 2024	
377		BL	⊞ C&D Utility Services Representative	Knowledge Cap	50079287		On Hold	19%	15	Pulled documentation from CIC0 Project (that didn't use CIC0)	
393		BL	⊞ E&IC Call-Out Response	EX Intake			On Hold	0%	1	On hold until SME describes future work	
395		BL	⊞ Financial Assistant - M&C	Knowledge Cap	50079293		On Hold	67%	9	Reach out to Joline Gibson "for your awareness, we had this body of work going, understand with the turnover we have other priorities right now, let us know when you have someone on board that can pick th' back up."	
484		BL	⊞ Water Treatment Plant Operator		50069829		On Hold	25%	4	parts may get updated through the OIT program (a Aaron reviews it); additional resources may need t moved over	
489		BL	⊞ Senior IT Analyst	Knowledge Cap	50071270	see OneN	On Hold	0%	28	GIS team is understaffed, Joe Albert does not have capacity to do this work at this time. Documenting of the role may become part of the Utility Network	

Procedure Writing: Procedure Template

TACOMA WATER
TACOMA PUBLIC UTILITIES

Tacoma Water Procedure

Title: DRAFT Procedure Title

Purpose: *Starting with an action word, describe what this procedure does. Spell out all acronyms and shorthand. This field will automatically update the Purpose metadata in SharePoint.*
Number: *Tracking Number – Assigned by the Knowledge Management Team*
Owner: Bateman, Rebecca
Date Last Reviewed: *8/4/2023*

Preparation Instructions

Instructions for anything needed to be completed before beginning the procedure, including assembling PPE, gathering materials, and required access to computer systems.

Step-by-Step Instructions

Instructions for how to complete the procedure. Font should be Arial size 12. List format should be 1. a. i.

Post Instructions

Instructions for next steps after completing this procedure.

Additional Resources

Related Policies, Processes, and/or Procedures:

Linked to Internal Sites, Pages, or Libraries:

External references, forms, or webpages:

SME Contacts, SAP Position Number is preferable to name:

Revision Log

Revision Date:
Revision Description:

Procedure Writing: SharePoint Library

In Closing

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Rebecca Bateman RBateman@cityoftacoma.org

Appendix

Resources and References:

- ARMA

- [Enterprise Knowledge (enterprise-knowledge.com)](Enterprise Knowledge)

- [Knowledge Transfer Plan (weisman.consulting)](Knowledge Transfer Plan)

- **Tacit knowledge:** understood without being expressed directly; knowledge that you do not get from being taught, or from books, but get from personal experience.

- **Implicit knowledge:** suggested but not communicated directly; easy to articulate, but not formally captured, gained through understanding and experience. Usually gained through experience and understanding of a specific topic. Can be shared by being around the thing you are learning

- **Explicit knowledge:** knowledge that can be expressed in words, numbers, and symbols stored in books, computers, etc. It can be articulated and easily communicated between individuals and across organizations.

- **Knowledge** "*Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents, repositories, but also in organizational routines, processes, practices, and norms.*" Davenport, Tom and Prusak, Laurence. *Working Knowledge.* Harvard Business Review Press, 2000.

- **Knowledge Management** (as defined by ARMA): The strategies and processes designed to identify, capture, structure, value, leverage, and share an organization's intellectual asset to enhance its performance and competitiveness.