

Human Work System Framework (HWSF)

A *theory-first lens* that describes the **preconditions, human needs, and stable functions required for any collaborative work to exist and succeed.**

Table of contents

| | |
|--|----|
| 1. INTRODUCTION & QUICK START | 3 |
| 1.1 HWSF Quick Start – From Context to Practice | 3 |
| 1.1.1 What HWSF is | 3 |
| 1.1.2 Read this first | 3 |
| 2. THEORY | 4 |
| 2.1 The Human Work System Matrix | 4 |
| 2.1.1 Foundational Minimum | 4 |
| 2.1.2 Dimensions of the Matrix | 4 |
| 2.1.3 The Human Work System Matrix – Descriptions | 4 |
| 2.1.4 The Human Work System Matrix – Table view | 6 |
| 2.2 The Human Work System Pyramid | 7 |
| 2.2.1 Level 1 – Preconditions for Collaboration (Foundation) | 7 |
| 2.2.2 Level 2 – Core Human Needs for Collaborative Work | 7 |
| 2.2.3 Level 3 – Work System Functions | 7 |
| 2.2.4 Level 4 – Practices & Frameworks | 8 |
| 2.2.5 Level 5 – Meta-Practices & Innovation (Apex) | 8 |
| 2.2.6 Pyramid view – Start & Top | 9 |
| 2.3 The Level Rule | 12 |
| 2.4 Diagnostic Workflow (Observation → Matrix → Level → Function → Practice) | 13 |
| 3. REFERENCE | 14 |
| 3.1 About the Author | 14 |

1. INTRODUCTION & QUICK START

1.1 HWSF Quick Start – From Context to Practice

DRAFT VERSION

This document is a **working draft** of the *Human Work System Framework (HWSF)*. Content, terminology, and structure are **subject to revision**.

1.1.1 What HWSF is

Human Work System Framework (HWSF) is a *theory-first lens* that describes the **preconditions, human needs, and stable functions** required for any collaborative work to exist and succeed.

1.1.2 Read this first

1. Start with the **Matrix** to see the five-by-five landscape of conditions × needs.
2. Use the **Pyramid** to understand levels from *preconditions* → *practices*.
3. Apply **The Level Rule** before prescribing practices.
4. Run the **Diagnostic Workflow** on real observations.

2. THEORY

2.1 The Human Work System Matrix

Work exists because of interdependence – when one person alone can't or doesn't want to do everything, work becomes a shared system of value exchange.

If one person could do everything alone, work would be **pure autonomy**.

But the moment **two or more people are involved**, working together becomes a system – and then, coordination, communication, trust, and shared purpose are not optional, they're essential.

2.1.1 Foundational Minimum

The Human Work System Matrix – a **minimal viable system of work** – the smallest set of interacting forces required for collaborative human work to emerge.

2.1.2 Dimensions of the Matrix

Naming note: The term **Change/Uncertainty tolerance** is used consistently across HWSF to emphasize both the presence of change and the system's capacity to act under it.

- **Horizontal axis – Core Human Needs** for Collaborative Work

Represents what individuals and groups require to function together effectively.

- **Vertical axis – Core Work Conditions**

Represents the external and structural contexts that must exist for collaboration to take place.

Each **cell** in the matrix expresses a **minimal system function** that must be present for collaboration to emerge.

Examples illustrate how these dimensions intersect:

- Common Purpose × Shared Understanding → Alignment on why – shared intent behind joint work.
- Interdependence × Feedback Loops → Outcome reflection – awareness of mutual impact and adaptation.
- Change/Uncertainty × Autonomy & Agency → Adaptability – the capacity to act locally under changing conditions.

The matrix defines the **existential layer** of human work systems – the foundation that makes collaboration possible, preceding any specific framework, tool, or methodology.

Above this layer, operational frameworks such as Agile, DevOps, or OKRs can be positioned as implementations of the underlying functions identified here.

The **Principle–Practice Matrix** later extends this logic to the operational layer, describing how collaboration is maintained and optimized once the foundational functions are active.

2.1.3 The Human Work System Matrix – Descriptions

This document contains definitions and purpose explanations for each element in the matrix that outlines the foundational conditions and needs of collaborative work.

Core Work Conditions (Vertical Axis)

1. **Common Purpose** - Shared meaning or goal that unites people working together. It gives direction and motivation, enabling alignment of actions across individuals or groups.
2. **Interdependence** - A condition where the outcome of one's work depends on others and vice versa. It requires awareness of mutual impact and encourages collaboration.

3. **Communication** - The exchange of information, meaning, and intent between individuals or groups. It enables coordination, understanding, and feedback.
4. **Trust** - A belief in the reliability, competence, and good intent of others. Trust reduces the cost of coordination and enables delegation, openness, and cooperation.
5. **Change/Uncertainty** - The inevitable presence of external or internal shifts that affect work. Handling change requires resilience, learning, and flexibility in both individuals and systems.

Core Human Needs for Collaborative Work (Horizontal Axis)

1. **Shared Understanding** - A mutual grasp of language, goals, constraints, and contexts among collaborators. It ensures that all parties interpret information similarly.
2. **Mutual Commitment** - A shared willingness to contribute to common goals. It implies dedication, accountability, and follow-through from all parties involved.
3. **Feedback Loops** - Mechanisms to observe results, evaluate progress, and make corrections. Enables learning and continuous improvement in a shared system.
4. **Distribution of Roles** - Clear delineation of who does what, ensuring responsibilities are known and efforts are coordinated.
5. **Autonomy & Agency** - The ability and permission to act with intention. Agency empowers individuals to make decisions, contribute meaningfully, and take ownership.

Matrix Cell Descriptions (5x5 = 25)

1. **Common Purpose × Shared Understanding = Alignment on why** - People must align on why they're working together and what success looks like. Without this, efforts may diverge.
2. **Common Purpose × Mutual Commitment = Willingness to act** - A goal alone is not enough; people must genuinely commit to working toward it together.
3. **Common Purpose × Feedback Loops = Learning intent** - Continuous evaluation of whether actions still serve the agreed purpose. Prevents mission drift.
4. **Common Purpose × Distribution of Roles = Contribution clarity** - Each role must support the purpose, ensuring no effort is wasted or misaligned.
5. **Common Purpose × Autonomy & Agency = Room for initiative** - Individuals must be able to pursue the shared purpose with self-direction and initiative.
6. **Interdependence × Shared Understanding = Task relationships** - Team members need clarity about how their tasks relate and depend on one another.
7. **Interdependence × Mutual Commitment = Responsibility** - Each person must commit to their role knowing others rely on them.
8. **Interdependence × Feedback Loops = Outcome reflection** - Real-time signals help adjust coordination and prevent cascading failures.
9. **Interdependence × Distribution of Roles = Coordination** - Role clarity enables smooth handoffs and cooperation.
10. **Interdependence × Autonomy & Agency = Local decision-making** - Teams must balance dependencies with local autonomy to avoid bottlenecks.
11. **Communication × Shared Understanding = Language/Terms** - Shared vocabulary and mental models are essential for messages to land as intended.
12. **Communication × Mutual Commitment = Social contract** - Open, honest communication supports commitment and builds accountability.
13. **Communication × Feedback Loops = Signal/response** - Effective communication delivers feedback in a usable form and closes the loop.
14. **Communication × Distribution of Roles = Clarity in interaction** - Communication supports clarity on who does what and when.
15. **Communication × Autonomy & Agency = Permission to act** - People need communication channels to raise concerns, ask for support, or declare decisions.
16. **Trust × Shared Understanding = Meaning consistency** - Trust grows when people interpret intentions and actions reliably.
17. **Trust × Mutual Commitment = Reliability** - Trust enables people to believe that others will deliver on their promises.
18. **Trust × Feedback Loops = Safety in feedback** - Safe environments allow for honest feedback without fear of blame.
19. **Trust × Distribution of Roles = Delegation** - Clear roles reduce friction and show respect for expertise, reinforcing trust.
20. **Trust × Autonomy & Agency = Empowerment** - Trust enables freedom to act without micromanagement.

21. **Change × Shared Understanding = Scenario awareness** - Adapting to change requires everyone to see and interpret the new reality similarly.
22. **Change × Mutual Commitment = Resilience** - Teams that weather change together must renew their commitment in the face of shifting conditions.
23. **Change × Feedback Loops = Learning from change** - Change demands fast, reliable feedback to inform next actions.
24. **Change × Distribution of Roles = Flexibility** - Roles may need to shift dynamically; clarity and adaptability are key.
25. **Change × Autonomy & Agency = Adaptability** - People must be empowered to respond quickly and appropriately to emerging challenges.

2.1.4 The Human Work System Matrix – Table view

| Work Needs / Work Conditions | Shared Understanding | Mutual Commitment | Feedback Loops | Distribution of Roles | Autonomy & Agency |
|--------------------------------------|----------------------|--------------------|----------------------|------------------------|-----------------------|
| Common Purpose | Alignment on why | Willingness to act | Learning intent | Contribution clarity | Room for initiative |
| Interdependence | Task relationships | Responsibility | Outcome reflection | Coordination | Local decision-making |
| Communication | Language / Terms | Social contract | Signal/response | Clarity in interaction | Permission to act |
| Trust | Meaning consistency | Reliability | Safety in feedback | Delegation | Empowerment |
| Change/ Uncertainty tolerance | Scenario awareness | Resilience | Learning from change | Flexibility | Adaptability |

2.2 The Human Work System Pyramid

- **Bottom** = prerequisites for any work between humans to even exist.
- **Middle** = stable functions that turn those prerequisites into coordinated effort.
- **Top** = practices, frameworks, and optimizations that refine or expand what's possible.

2.2.1 Level 1 – Preconditions for Collaboration (Foundation)

Without these, there's no "working together" at all.

They're the *existential conditions* of collaboration.

Examples:

- **Existence of a Common Purpose** (shared "why" to engage at all)
- **Interdependence** (need for something from others, mutual or one-way)
- **Basic Communication ability** (shared medium: language, symbols, signals)
- **Basic Trust** (belief others are not harmful / will reciprocate)
- **Capacity to Act under Change** (some tolerance to uncertainty)

Maslow analogy: Physiological & safety needs – the "oxygen" of collaboration.

2.2.2 Level 2 – Core Human Needs for Collaborative Work

These are the *human-level enablers* that make foundational conditions workable day-to-day.

This is essentially **Horizontal Axis** in the [Matrix](#).

Examples:

- **Shared Understanding** – same mental model of goals, constraints, and context.
- **Mutual Commitment** – agreement to invest effort in the shared purpose.
- **Feedback Loops** – ability to observe, learn, and adjust.
- **Distribution of Roles** – clarity on who does what.
- **Autonomy & Agency** – freedom and authority to act.

Maslow analogy: Belonging and esteem needs – creating security in relationships and a place for contribution.

2.2.3 Level 3 – Work System Functions

Stable **functions** that translate human needs into **coordinated, repeatable work**.

These live in the 25 [matrix](#) cells and define what must happen for collaboration to succeed.

Examples:

- **Problem Discovery** (Clarity of Problem Space × Shared Understanding)
- **Planning & Prioritization** (Interdependence × Distribution of Roles)
- **Monitoring & Feedback** (Communication × Feedback Loops)
- **Enablement & Empowerment** (Trust × Autonomy & Agency)
- **Adaptation & Learning** (Change × Feedback Loops)

These are the "work muscles" – when one is weak, the whole system compensates or breaks.

Maslow analogy: Cognitive needs – organizing and directing effort.

2.2.4 Level 4 – Practices & Frameworks

Concrete ways of performing functions, evolving over time. Different implementations can fulfill the same function.

Examples:

- **Retrospectives** fulfill *Monitoring & Feedback*.
- **RACI matrix** fulfills *Distribution of Roles*.
- **Scrum sprint planning** fulfills *Planning & Prioritization*.
- **JTBD interviews** fulfill *Problem Discovery*.
- **Kanban** fulfills *Flow & Focus + Monitoring & Feedback*.

Here is where change is fastest – new tools, trends, and methods appear, but the underlying function remains the same.

Maslow analogy: Self-actualization tools – many possible routes to fulfill the same higher need.

2.2.5 Level 5 – Meta-Practices & Innovation (Apex)

Ability to **reflect on the system itself** and redesign it intentionally.

This is when teams stop just applying practices and start adapting or inventing them to better fit their needs.

Includes:

- Combining practices into custom playbooks.
- Inventing new practices when existing ones don't fit.
- Continually matching practices to functions consciously (avoiding "cargo cult" use).
- Sharing and teaching system-level thinking to others.

Maslow analogy: Self-transcendence – going beyond individual optimization to improve the system for others.

2.2.6 Pyramid view – Start & Top

Always climb levels in order

Don't patch Level 4 **practices** when Level 1–2 **preconditions or human needs** are weak. Fix lower levels first—then revisit practices.

- **It starts** at Level 1 the moment two or more people have a reason to interact for mutual value.
- **It tops** at Level 5 when teams become self-evolving systems, capable of diagnosing, designing, and improving their own way of working without external imposition.

| Level | Name | Examples | Description |
|----------------|---|--|---|
| 5 (Apex) | Meta-Practices & Innovation | <ul style="list-style-type: none"> • Designing custom playbooks • Inventing new practices • Matching practices to functions deliberately • Coaching others in system thinking | Teams consciously reflect on, adapt, and redesign their way of working. Practices are tailored, combined, or invented to better serve needs. Knowledge is shared to elevate the whole system. |
| 4 | Practices & Frameworks | <ul style="list-style-type: none"> • Retrospectives (<i>Monitoring & Feedback</i>) • RACI matrix (<i>Distribution of Roles</i>) • Scrum sprint planning (<i>Planning & Prioritization</i>) • JTBD interviews (<i>Problem Discovery</i>) • Kanban (<i>Flow & Focus + Monitoring & Feedback</i>) | Specific, evolving methods that fulfill stable functions. Practices change over time, but the function they serve remains stable. |
| 3 | Work System Functions | <ul style="list-style-type: none"> • Problem Discovery (<i>Clarity of Problem Space × Shared Understanding</i>) • Planning & Prioritization (<i>Interdependence × Distribution of Roles</i>) • Monitoring & Feedback (<i>Communication × Feedback Loops</i>) • Enablement & Empowerment (<i>Trust × Autonomy & Agency</i>) • Adaptation & Learning (<i>Change × Feedback Loops</i>) | The stable “muscles” of collaboration – what must happen for work to succeed. Represented by the 25 cells in the Human Work System Matrix . |
| 2 | Core Human Needs for Collaborative Work | <ul style="list-style-type: none"> • Shared Understanding • Mutual Commitment • Feedback Loops • Distribution of Roles • Autonomy & Agency | The human-level enablers that make foundational conditions operational. Corresponds to the Matrix's horizontal axis . |
| 1 (Foundation) | Preconditions for Collaboration | <ul style="list-style-type: none"> • Common Purpose • Interdependence • Communication • Trust • Change/Uncertainty tolerance | The existential conditions for collaboration to exist at all. Corresponds to the Matrix's vertical axis . Without these, there is no “working together.” |

This structure makes it easy to trace a problem from the bottom up:

- Weakness in **Level 1 or 2** means the system lacks collaborative stability.
- Weakness in **Level 3** means a core function is missing or broken.
- Weakness in **Level 4** often means wrong or outdated practices are being applied.
- Weakness in **Level 5** means the system can't evolve on its own.

2.3 The Level Rule

Before changing *practices* (Level 4), verify and stabilize lower levels:

1. **Level 1 – Preconditions** (Common Purpose, Interdependence, Communication, Trust, Change/Uncertainty tolerance) must be present enough for collaboration to exist at all.
2. **Level 2 – Human Needs** (Shared Understanding, Mutual Commitment, Feedback Loops, Distribution of Roles, Autonomy & Agency) must be sufficiently met for day-to-day work to function.
3. **Level 3 – Work Functions** (the 25 cells) must be minimally expressed so the system can coordinate and learn.
4. **Level 4 – Practices** can then be tuned or replaced without fighting gravity.
5. **Level 5 – Meta-Practices** emerge once the system can safely adapt itself.

Heuristic

- If a problem repeats across different practices, it's likely **not** a Level 4 issue.
- If alignment collapses under stress, check **Level 1–2**.
- If coordination stalls but relationships seem sound, inspect **Level 3** (*which function is missing?*).

Anti-pattern: cargo-culting practices at Level 4 to compensate for missing Level 1–2 foundations.

2.4 Diagnostic Workflow (Observation → Matrix → Level → Function → Practice)

Use this quick loop on any observed issue:

1. **Observation (evidence)**
 2. Write what you *saw/heard/measured* without judgment.
 3. Example: "Critical dependencies discovered late; downstream team blocked twice this sprint."
 4. **Matrix Mapping (where it lives)**
 5. Map the observation to the **Matrix axes**: which **Condition** (vertical) and which **Human Need** (horizontal)?
 6. Example: **Interdependence × Feedback Loops** → *Outcome reflection*.
 7. **Level Check (how deep the root is)**
 8. Is this a missing **precondition** (Level 1), **human need** (Level 2), or **function** (Level 3)?
 9. Example: Repeated late discovery hints at weak **Level 3 Monitoring & Feedback** and possibly thin **Level 2 Feedback Loops**.
 10. **Function to Practice (what to change safely)**
 11. Identify the **function** to strengthen (from the 25 cells), then choose or design a **practice** that fulfills it.
 12. Example: Strengthen *signal & response cadence* (Comm × Feedback). Practices: explicit dependency scan per PRD item; daily risk surfacing; lightweight Andon.
 13. **Trial & Learn (tight loop)**
 14. Introduce the practice for 1–2 cycles, measure the specific signal, and **iterate**.
 15. If it fails, re-check **lower levels** before swapping practices.
- Output Template (copy/paste)**
- Observation:
 - Matrix cell:
 - Level(s) involved:
 - Function to strengthen:
 - Practice(s) selected:
 - Signal/metric to watch:
 - Review date:

3. REFERENCE

3.1 About the Author

Viktor Jevdokimov, Vilnius, Lithuania – Creator of 3in3.dev and the 3SF Framework

Viktor Jevdokimov is a software engineering leader, systems thinker, and framework designer with over 30 years of experience in software product delivery, modernization, and team alignment.

He is the creator of the **3-in-3 SDLC Framework (3SF)** and founder of the **3in3.dev** initiative – an independent platform dedicated to advancing collaboration and alignment between **Client**, **Vendor**, and **Product** organizations.

Professional Background

- Began career supporting distributed banking software on DOS and Windows, developing a deep appreciation for troubleshooting and system design.
- Progressed through roles of **developer**, **architect**, **delivery lead**, and **practice lead**, working with international clients on modernization and cloud migration initiatives.
- Specializes in **Client–Vendor relationship design**, **project leadership**, and **delivery system diagnostics**.
- Advocates for “*Context before Method*” and “*Trust before Control*” as guiding principles of effective collaboration.

Creative and Personal Work

Beyond software, Viktor is an **active musician and live sound engineer**, performing and mixing with the *Great Things* cover band.

He approaches both sound and systems with the same mindset: striving for **clarity, balance, and authenticity**.

About 3in3.dev

3in3.dev is an independent research and publishing initiative founded by Viktor Jevdokimov.

It consolidates his experience and experimentation into open frameworks that help organizations improve how they **engage, deliver, and measure value** across client–vendor ecosystems.

3in3.dev publishes:

- The **3-in-3 SDLC Framework (3SF)**
- The **3-in-3 Maturity Model**
- Supporting tools, templates, and learning materials under an open license.

“3SF is not another method – it’s the operating system that connects them all.”
— Viktor J., Creator of 3in3.dev

© 2025 **Viktor Jevdokimov, Vilnius, Lithuania / 3in3.dev**

Licensed under **CC BY 4.0 International**.

Connect and follow on **LinkedIn** for updates and professional discussions.

For contact, collaboration, or speaking requests, visit **<https://3in3.dev>**.