

# **Human Cooperation System (HCS)**

---

**A diagnostic lens for understanding how human cooperation enables effective work.**

# Table of contents

---

<b>1. INTRODUCTION &amp; QUICK START</b>	5
<b>1.1 Human Cooperation System (HCS) – From Context to Practice</b>	5
<b>1.1.1 Introduction</b>	5
<b>1.1.2 Why HCS Exists</b>	5
<b>1.1.3 Who It's For</b>	5
<b>1.1.4 Purpose of HCS</b>	6
<b>1.1.5 Structure of HCS</b>	6
<b>1.1.6 Reading Path</b>	7
<b>1.1.7 Positioning</b>	7
<b>2. CORE MODEL</b>	8
<b>2.1 Vision, Principles, and Beliefs</b>	8
<b>2.1.1 Why Systems Break</b>	8
<b>2.1.2 Vision</b>	8
<b>2.1.3 Principles</b>	9
<b>2.1.4 Beliefs</b>	9
<b>2.1.5 Scope and Non-Goals</b>	10
<b>2.2 The Human Cooperation System Matrix</b>	11
<b>2.2.1 Purpose of the Matrix</b>	11
<b>2.2.2 Encapsulation, Integration, and the Matrix</b>	11
<b>2.2.3 Dimensions of the Matrix</b>	11
<b>2.2.4 Matrix Cell Descriptions (5x5 = 25 Cooperation Functions)</b>	12
<b>2.2.5 Table View</b>	14
<b>2.2.6 How the Matrix Fits Into HCS</b>	14
<b>2.3 The Human Cooperation System Pyramid</b>	15
<b>2.3.1 Purpose of the Pyramid</b>	15
<b>2.3.2 Levels Overview</b>	15
<b>2.3.3 Level 1 – Preconditions for Cooperation (Foundation)</b>	16
<b>2.3.4 Level 2 – Core Human Needs for Cooperative Work</b>	17
<b>2.3.5 Level 3 – Cooperative System Functions</b>	17
<b>2.3.6 Level 4 – Practices &amp; Frameworks</b>	18
<b>2.3.7 Level 5 – Meta-Practices &amp; Innovation (Apex)</b>	18
<b>2.3.8 Interpreting and Using the Pyramid</b>	19
<b>3. EXTENDED HUMAN DYNAMICS</b>	20
<b>3.1 Introduction &amp; Purpose</b>	20
<b>3.1.1 Purpose of the Extended Human Dynamics Section</b>	20

3.1.2 Who This Section Is For	20
3.1.3 How This Section Relates to the Core Model	20
3.1.4 How to Use This Section	21
3.1.5 Scope of This Section	21
3.2 Extended Conditions	22
3.2.1 Purpose of Extended Conditions	22
3.2.2 Collective vs Individual Conditions	22
3.2.3 Types of Extended Conditions	23
3.2.4 Why Extended Conditions Matter	24
3.3 Extended Needs	26
3.3.1 Core vs Extended Needs	26
3.3.2 Collective vs Individual Needs	27
3.3.3 Types of Extended Needs	27
3.3.4 Why Extended Needs Matter	29
4. SYSTEM MODES	30
4.1 Introduction & Purpose	30
4.2 Integration Guide	31
4.2.1 The Integration Principle	31
4.2.2 Step 1 – Start With the Core Model	31
4.2.3 Step 2 – Move to Extended Conditions and Needs	32
4.2.4 Step 3 – Evaluate Political and Psychological Vectors	32
4.2.5 Step 4 – Select the Right Level of Intervention	32
4.2.6 Step 5 – Use Practices as Inputs, Not Prescriptions	33
4.2.7 Step 6 – Close the Loop	33
4.2.8 How This Guide Fits Within HCS	34
4.3 SETUP MODE	35
4.3.1 Introduction & Purpose	35
4.4 STABILIZATION MODE	36
4.4.1 Introduction & Purpose	36
4.4.2 Diagnostic Workflow – Observation → Matrix → Level → Function → Practice	37
4.4.3 Diagnostic Dynamics	40
4.5 GROWTH MODE	43
4.5.1 Introduction & Purpose	43
4.6 CONFLICT MODE	44
4.6.1 Introduction & Purpose	44
4.7 RESET MODE	45
4.7.1 Introduction & Purpose	45

<b>5. REFERENCE</b>	46
<b>5.1 Glossary</b>	46
<b>5.1.1 Core System Terms</b>	46
<b>5.1.2 Foundational Conditions (Pyramid Level 1)</b>	46
<b>5.1.3 Systemic Enablers (Pyramid Levels 2–3)</b>	46
<b>5.1.4 Cooperative Function Groups (Level 3)</b>	47
<b>5.1.5 Principles and Rules</b>	47
<b>5.1.6 Relationships to Other Frameworks</b>	47
<b>5.1.7 Extended Conditions and Needs</b>	48
<b>5.1.8 Influence Fields</b>	48
<b>5.1.9 Reference Purpose</b>	48
<b>5.2 Sources and Frameworks</b>	49
<b>5.2.1 Systems Thinking and Cybernetics</b>	49
<b>5.2.2 Human Motivation and Organizational Psychology</b>	49
<b>5.2.3 Communication and Shared Meaning</b>	50
<b>5.2.4 Organizational Design and Governance</b>	50
<b>5.2.5 Power, Influence, and Organizational Politics</b>	50
<b>5.2.6 Philosophical and Ethical Foundations</b>	51
<b>5.2.7 Interpersonal Dynamics and Conflict</b>	51
<b>5.2.8 Bridging Toward Practice</b>	51
<b>5.2.9 Reference Philosophy</b>	51
<b>5.3 Practices Map</b>	52
<b>5.3.1 Legend</b>	52
<b>5.3.2 Motivation &amp; Values Alignment</b>	52
<b>5.3.3 Interaction Styles &amp; Communication</b>	52
<b>5.3.4 Developmental Readiness &amp; Leadership Adaptation</b>	52
<b>5.3.5 Safety, Belonging, and Relational Health</b>	53
<b>5.3.6 Conflict, Repair, and Difficult Conversations</b>	53
<b>5.3.7 Sensemaking, Purpose, and Collective Narrative</b>	53
<b>5.3.8 Structural &amp; Decision-Making Clarity</b>	53
<b>5.3.9 Representation, Fairness, and Inclusion</b>	54
<b>5.3.10 How to Use This Map</b>	54
<b>5.4 Version and Licensing</b>	55
<b>5.4.1 Version Information</b>	55
<b>5.4.2 Licensing</b>	55
<b>5.4.3 Versioning Policy</b>	56
<b>5.4.4 Attribution Guidelines</b>	56
<b>5.5 About the Author</b>	57

# 1. INTRODUCTION & QUICK START

---

## 1.1 Human Cooperation System (HCS) – From Context to Practice

A multi-modal operating system for understanding, designing, and stabilizing human cooperation.

### 30-Second Summary

The **Human Cooperation System (HCS)** defines the stable conditions and functions that make human cooperation possible.

It reveals why alignment, trust, and flow break down — and provides a structure for restoring or improving them across different stages of work.

### 1.1.1 Introduction

Human cooperation is not powered by tools, talent, or methods alone.

It emerges from a deeper **system of shared meaning, aligned boundaries, trust, and coordinated decision-making**.

The **Human Cooperation System (HCS)** maps this system.

It exposes the invisible architecture behind all collaborative work:

the **conditions, needs, and functions** that allow groups to make sense, act, and adapt together.

Cooperation problems rarely start with skills or velocity.

They start when the **system of cooperation** becomes unstable — when people interpret work differently, operate under mismatched expectations, or lack the structural safety to speak, align, or decide.

HCS helps teams **see and repair the system**, not just the symptoms.

### 1.1.2 Why HCS Exists

There are two parallel paths organizations use to solve collaboration problems:

#### The Path of Encapsulation

Reducing friction by narrowing collaboration, separating responsibilities, and limiting interdependence.

Great for clear, predictable work — but brittle in complexity.

#### The Path of Integration

Managing friction through shared meaning, aligned boundaries, and transparent decision-making.

Necessary whenever work is ambiguous, cross-functional, political, or fast-changing.

Most teams unconsciously choose Encapsulation even when Integration is required — and cooperation collapses.

**HCS provides the architecture for choosing the right path, and the structure for governing both.**

### 1.1.3 Who It's For

HCS is designed for anyone responsible for ensuring people can work together effectively:

- **Project & Product Leads** managing cross-functional flow and shared accountability.
- **Engineering, Design, and Research Managers** growing autonomy and reducing misalignment.
- **Consultants & Advisors** diagnosing systemic friction across teams or organizations.
- **Practitioners of 3SF** who want to understand the foundational system beneath the framework.

If you are here from **3SF**, HCS is the **underlying system** that explains why engagement, delivery, and value succeed or fail.

## 1.1.4 Purpose of HCS

---

The Human Cooperation System is a **systemic model and decision structure** for:

- Understanding what cooperation *requires*
- Diagnosing where cooperation *breaks*
- Governing how cooperation *evolves*
- Choosing the right *mode* of intervention
- Connecting human needs, organizational intent, and work structures

HCS does **not** prescribe practices.

It provides the **systemic logic** beneath every practice, framework, and governance choice.

It defines:

- The **preconditions** needed for cooperation
- The **needs** that sustain trust and engagement
- The **functions** that transform shared intent into coordinated action
- The **dynamics** that amplify or distort cooperation
- The **modes** teams must use depending on their stage of work

Together, these form the **Systemic Basis of Work** – a way to understand and shape cooperation itself.

## 1.1.5 Structure of HCS

---

HCS is organized into three architectural layers:

### Core Model – The Physics of Cooperation

The Core Model defines the stable, universal architecture of cooperation.

It answers:

**“What must be true for people to work together at all?”**

This includes:

- **Vision, Principles, Beliefs** – the intent and stance of HCS
- **The Conditions Matrix** – the structural landscape of cooperation
- **The Pyramid** – how stability develops from preconditions to meta-practices
- **The Level Rule** – why interventions must follow a systemic sequence

This layer is **framework-independent** and applies to all forms of human work.

### Extended Human Dynamics – Real-World Complexity

Even when the structure is correct, cooperation is shaped by deeper forces:

- Psychological safety
- Power and authority
- Identity, belonging, and interpersonal patterns
- Misaligned incentives and political vectors
- Cultural and relational history

This layer answers:

### "Why is cooperation difficult in real organizations?"

Extended Dynamics does not add new requirements.

It provides the **human context** needed to understand why cooperation deviates from the Core Model.

### System Modes – How to Use HCS Across the Lifecycle of Work

Cooperation is not static.

Different stages of work require different systemic activities.

HCS expresses these as **modes**:

1. **Setup Mode** – establishing preconditions and governance before work begins
2. **Stabilization Mode** – fixing mismatches, breakdowns, and early friction
3. **Growth Mode** – increasing autonomy, trust, and adaptive capacity
4. **Conflict Mode** – resolving human, political, or relational breakdowns
5. **Reset Mode** – re-establishing cooperation after radical context change

Each mode applies the Core Model differently depending on what the system needs

– **design, repair, evolution, restoration, or renewal**.

### 1.1.6 Reading Path

---

#### Start with the Core Model

1. [Vision, Principles, and Beliefs](#)
2. [The Matrix](#)
3. [The Pyramid](#)

#### Continue with Extended Human Dynamics

Explore how human, political, and psychological forces distort or amplify cooperation.

#### Move to System Modes

Learn how to apply the system depending on work stage:

- **Setup** (design)
- **Stabilization** (diagnosis and repair)
- **Growth** (optimization)
- **Conflict** (resolution)
- **Reset** (renewal)

### 1.1.7 Positioning

---

Think of HCS as a **cooperation operating system**:

- Methods like Agile, Lean, design thinking, DevOps, or 3SF succeed only when the **underlying system of cooperation** is stable.
- HCS reveals that system and provides a structure for improving it.
- Where 3SF operationalizes cooperation inside delivery flows, HCS explains *why* those operations function – or fail.

In essence:

HCS describes the *physics of cooperation* –

the conditions and functions that allow human work to remain aligned, trusted, and adaptive.

## 2. CORE MODEL

---

### 2.1 Vision, Principles, and Beliefs

The **Human Cooperation System (HCS)** defines the systemic architecture that enables people and organizations to work together with clarity, trust, and adaptability.

It describes the **conditions** and **functions** that sustain cooperation, and the **forces** that destabilize it when misaligned.

HCS treats cooperation not as a cultural preference or interpersonal skillset, but as a **governable system** – one that can be designed, stabilized, and evolved across different modes of work.

#### 2.1.1 Why Systems Break

Human cooperation breaks long before performance drops.

When people struggle to work together, the cause is rarely skills, motivation, or tools – it is almost always a **systemic mismatch in how interdependence is handled**.

At the root of this mismatch are two parallel, conflicting paths for solving problems in organizations:

##### The Two Paths of Problem Solving

###### The Path of Encapsulation – Reducing Interdependence

Encapsulation tries to *avoid friction* by narrowing collaboration: clearer handoffs, stronger boundaries, fixed responsibilities, predefined inputs and outputs.

This works well when the work is stable, modular, or predictable.

But it collapses when ambiguity rises, understanding must be negotiated, or decisions require shared judgment.

###### The Path of Integration – Managing Interdependence

Integration treats friction as **information**, not noise.

It aligns meaning, boundaries, and decisions so that people can make sense of complexity together.

Integration becomes essential when work is cross-functional, uncertain, political, or fast-changing.

##### The Core Reason Systems Break

Most cooperative systems fail because teams attempt to solve an **integration problem using encapsulation tools**:

- Ambiguity is high → but meaning is not aligned.
- Boundaries are fluid → but roles remain rigid.
- Decisions require shared judgment → but authority stays siloed.
- Human dynamics affect outcomes → but governance ignores them.

This mismatch produces predictable symptoms: misalignment, rework, dependency friction, escalating tension, and loss of trust.

**HCS exists to reveal which path is required, when, and why – and to provide the structure for governing interdependence instead of fighting it.**

#### 2.1.2 Vision

To enable individuals, teams, and organizations to **work together intentionally and reliably**, regardless of domain, structure, or methodology.

HCS envisions a world where cooperation is understood as a **systemic discipline**, not an accidental outcome of talent, tools, or goodwill.

##### Vision Statement

A cooperative world where systems of work evolve with people – not against them.

### 2.1.3 Principles

The following principles form the **systemic physics** of cooperation.

They define how cooperative systems remain stable and why interventions must respect the underlying structure.

Principle	Description
<b>Function-First</b>	A practice is effective only when it fulfills the cooperative function it is meant to support. Tools without purpose amplify chaos.
<b>Integration Over Encapsulation (When Required)</b>	Use encapsulation for simple work; use integration for complex work. Treat friction as information, not noise.
<b>The Level Rule</b>	A dysfunction cannot be corrected from a higher layer of abstraction. Stability emerges bottom-up, from conditions to functions to practices.
<b>Clarity Before Speed</b>	Shared meaning is cheaper than rework. Misalignment is the most expensive form of waste.
<b>Evidence Over Interpretation</b>	Cooperation is observable. Behavioral evidence is more reliable than assumptions about intent or personality.
<b>Feedback Closes the Loop</b>	Systems drift without timely feedback. Stability requires continuous sensing and adjustment.
<b>Trust Before Control</b>	Excessive control compensates for missing trust. Cooperative flow emerges when reciprocal trust is structurally possible.
<b>Autonomy with Accountability</b>	Freedom without shared responsibility fragments; responsibility without autonomy suffocates. Balance sustains flow.
<b>Reflection Enables Evolution</b>	Intentional reflection transforms experience into adaptation. Without it, systems repeat avoidable patterns.

These principles guide how the HCS Core Model and System Modes should be interpreted and used.

### 2.1.4 Beliefs

HCS is grounded in several foundational beliefs about human work systems:

**1. Cooperation precedes performance.**

Teams fail for systemic and relational reasons long before they fail for technical ones.

**2. Human needs shape system stability.**

Safety, belonging, purpose, and agency are not soft concepts – they are structural conditions.

**3. Shared meaning is essential for adaptation.**

A group cannot respond coherently to change if it does not interpret the world coherently.

**4. Trust is systemic, not emotional.**

It is built through reliable behaviors, aligned expectations, and transparent decision-making.

**5. Frameworks depend on cooperative conditions.**

No methodology can compensate for missing clarity, trust, or aligned boundaries.

**6. Organizations are learning organisms.**

Their adaptability depends on the quality and speed of feedback loops across roles and structures.

**7. Friction is information.**

Cooperation improves when teams learn to examine tension instead of avoiding or escalating it.

## 2.1.5 Scope and Non-Goals

---

HCS defines **what makes cooperation possible**, not how to run projects or structure organizations.

It provides the foundation beneath methods – not a method itself.

- **Not a Delivery Process**

HCS is not a task-management system or workflow model. It describes the conditions and functions that make any workflow viable.

- **Not an Organizational Blueprint**

HCS does not dictate reporting structures. It defines the cooperative relationships that must exist *regardless* of structure.

- **Not a Psychological Model**

HCS acknowledges human psychology but does not attempt to change personal personalities or traits. It governs cooperation, not therapy.

- **Not a Replacement for Frameworks**

HCS underlies frameworks like Agile, Lean, and 3SF. It explains why those frameworks succeed or fail depending on cooperative stability.

*This section forms the philosophical foundation of HCS.*

*Subsequent chapters – the Matrix, the Pyramid, Extended Dynamics, and System Modes – elaborate how these principles unfold in practice.*

## 2.2 The Human Cooperation System Matrix

---

Cooperation emerges when people depend on one another to achieve outcomes they cannot (or should not) accomplish alone. Once interdependence appears, work becomes a **system of relationships**, requiring clarity of meaning, mutual commitment, coordinated roles, and the ability to adapt.

The **HCS Matrix** defines these requirements.

It describes the **conditions** of the work system and the **human needs** that must align for cooperation to be stable and adaptive.

### 2.2.1 Purpose of the Matrix

The Matrix captures the **minimum viable structure of cooperation** – the patterns that must be present for people to make sense, act, and adjust together.

It is not a methodology or workflow.

It is a **structural lens** that reveals:

- why cooperation stabilizes or destabilizes
- where friction originates
- which cooperation functions are strained
- when integration (not encapsulation) is required

The Matrix forms the **existential layer** of HCS – the layer beneath all tools, frameworks, and governance systems.

The **Extended Human Dynamics** section builds on this layer by explaining how psychological, political, and relational forces amplify or distort these functions.

### 2.2.2 Encapsulation, Integration, and the Matrix

Two fundamental strategies exist for handling cooperation challenges:

- **Encapsulation** reduces interdependence by narrowing boundaries, clarifying handoffs, and limiting meaning-sharing.  
It works when work is modular, predictable, and clear.
- **Integration** manages interdependence by aligning meaning, negotiating boundaries, and enabling shared sense-making.  
It becomes necessary when work is complex, ambiguous, cross-functional, or fast-changing.

The Matrix makes interdependence **visible**, helping teams identify where encapsulation is appropriate and where **integration becomes mandatory**.

Each matrix cell represents a **cooperation function** generated by the interaction of a *work condition* and a *human need*.

If one function is weak or absent, cooperation becomes unstable regardless of tools or processes.

### 2.2.3 Dimensions of the Matrix

The Matrix has two axes:

- **Vertical axis – Core Work Conditions**  
The external realities of the work environment.
- **Horizontal axis – Core Human Needs for Cooperation**  
The internal requirements for participating in cooperation.

Together, they define 25 **cooperation functions**.

## Core Work Conditions (Vertical Axis)

These are the **objective features of the system** that shape how work happens.

### 1. Common Purpose

The shared reason for the work. It provides direction, meaning, and coherence.

Without it, local optimizations fragment and energy dissipates into unconnected goals.

### 2. Interdependence

The degree to which people rely on each other's work to achieve outcomes.

Interdependence makes coordination necessary and raises the cost of misalignment.

Ignoring it leads to hidden dependencies, bottlenecks, and blame.

### 3. Communication

The structure and flow of information, intent, and meaning between people.

Communication is more than message exchange: it includes language, timing, channels, and accessibility.

Poor communication distorts reality for different participants.

### 4. Trust

Confidence in others' reliability, competence, and intent.

Trust reduces the need for control and negotiation in everyday decisions.

When trust is low, every interaction becomes expensive, guarded, or defensive.

### 5. Change / Uncertainty Tolerance

The capacity to operate under shifting conditions, ambiguity, or evolving constraints.

Change can come from markets, technology, governance, or internal decisions.

Tolerance for uncertainty ensures that cooperation continues even when plans must shift.

## Core Human Needs for Cooperation (Horizontal Axis)

These are the **subjective and relational requirements** for people to join and sustain cooperation.

### 1. Shared Understanding

A compatible interpretation of goals, language, constraints, and context.

This does not require full agreement – only enough overlap to coordinate based on a shared sense of reality.

### 2. Mutual Commitment

A shared willingness to contribute to collective goals and to each other.

It includes reliability, follow-through, and a felt sense that “we are in this together.”

Without mutual commitment, cooperation becomes transactional and fragile.

### 3. Feedback Loops

Mechanisms for observing results, sharing signals, and adjusting behavior.

These can be formal (metrics, reviews, ceremonies) or informal (conversations, peer correction).

Without feedback, systems drift and small problems become systemic.

### 4. Distribution of Roles

Clarity around responsibilities, boundaries, and contributions.

People need to know who does what, where their authority starts and ends, and how roles relate.

### 5. Autonomy & Agency

Freedom to act intentionally within the cooperative structure.

Agency enables people to make decisions, take initiative, and feel ownership over their contributions.

## 2.2.4 Matrix Cell Descriptions (5x5 = 25 Cooperation Functions)

Each cell describes what must happen when a Work Condition meets a Human Need.

## Common Purpose × Human Needs

### 1. Shared Understanding → Alignment on Why

People interpret the goal similarly and hold a compatible view of what “success” means.

### 2. Mutual Commitment → Willingness to Act

Individuals commit effort because the shared purpose feels meaningful and legitimate.

### 3. Feedback Loops → Learning the Mission

Teams update their sense of purpose through real outcomes and signals, not assumptions.

### 4. Distribution of Roles → Contribution Clarity

Each person understands how their role contributes to the shared purpose.

### 5. Autonomy & Agency → Room for Initiative

People can act creatively in support of the purpose without waiting for permission.

## Interdependence × Human Needs

### 1. Shared Understanding → Task Relationships

People understand how their work depends on others and how others depend on them.

### 2. Mutual Commitment → Responsibility to Each Other

Team members feel accountable for how their work affects the group.

### 3. Feedback Loops → Outcome Reflection

Teams regularly examine dependencies to improve flow and reduce friction.

### 4. Distribution of Roles → Coordination

Roles and responsibilities align with actual dependency structures.

### 5. Autonomy & Agency → Local Decision-Making

People can act within dependency networks without needing constant approval.

## Communication × Human Needs

### 1. Shared Understanding → Common Language

People use terms, concepts, and frames in ways that mean the same thing.

### 2. Mutual Commitment → Social Contract

Communication carries a baseline respect and reliability that supports cooperation.

### 3. Feedback Loops → Signal/Response

Signals reach the right people, are interpreted correctly, and trigger meaningful adjustments.

### 4. Distribution of Roles → Interaction Clarity

People know who to talk to, when, and for what purpose.

### 5. Autonomy & Agency → Permission to Act

Communication norms empower action rather than reinforce hierarchy or fear.

## Trust × Human Needs

### 1. Shared Understanding → Meaning Consistency

People assume others interpret situations honestly and coherently.

### 2. Mutual Commitment → Reliability

People trust that commitments are kept, and failures are signaled early.

### 3. Feedback Loops → Safety in Feedback

People can share concerns or corrections without fear of retribution.

### 4. Distribution of Roles → Delegation

Roles can be distributed with confidence; people do not micromanage.

**5. Autonomy & Agency → Empowerment**

People act with confidence because trust supports decentralization.

**Change / Uncertainty × Human Needs****1. Shared Understanding → Scenario Awareness**

People understand how change affects work and can interpret shifts consistently.

**2. Mutual Commitment → Resilience**

Commitment persists even when plans shift or constraints evolve.

**3. Feedback Loops → Learning from Change**

Teams rapidly integrate new information and adjust without panic.

**4. Distribution of Roles → Flexibility**

Roles can shift or expand temporarily without destabilizing cooperation.

**5. Autonomy & Agency → Adaptability**

People can act under uncertainty, making thoughtful, context-aware decisions.

**2.2.5 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	Common language	Social contract	Signal/response	Interaction clarity	Permission to act
Trust	Meaning consistency	Reliability	Safety in feedback	Delegation	Empowerment
Change / Uncertainty	Scenario awareness	Resilience	Learning from change	Flexibility	Adaptability

**2.2.6 How the Matrix Fits Into HCS**

The Matrix explains **what cooperation requires**.

The **Pyramid** describes **how these requirements develop and stabilize**.

The **System Modes** describe **how to design, repair, or evolve these functions** depending on the stage of work.

Together, they form the structural and operational foundation of the Human Cooperation System.

## 2.3 The Human Cooperation System Pyramid

---

### 2.3.1 Purpose of the Pyramid

The **HCS Pyramid** visualizes how cooperation develops through **five systemic levels** – from the most fundamental preconditions for working together to reflective innovation at the top.

Where the **HCS Matrix** defines **what must coexist** (conditions × human needs), the Pyramid shows **how these elements depend on one another over time**:

- Lower levels provide the **foundation**.
- Higher levels express **increasing sophistication and stability**.
- Attempts to improve cooperation by acting only at higher levels fail when lower levels are weak.

In short:

The Matrix describes **the anatomy of cooperation**.

The Pyramid describes **its order of development**.

The Pyramid is a core part of the **Level logic** of HCS:

it explains why some interventions work and others don't, based on *which level* they target and *what that level depends on*.

### 2.3.2 Levels Overview

The Pyramid consists of five levels:

1. **Preconditions for Cooperation** – existential requirements to work together at all.
2. **Core Human Needs for Cooperative Work** – what people require to participate in cooperation.
3. **Cooperative System Functions** – the stable “muscles” that turn needs into coordinated work.
4. **Practices & Frameworks** – concrete ways of performing those functions.
5. **Meta-Practices & Innovation** – the ability to redesign and evolve the system itself.

Each higher level depends on the relative stability of the levels below it.

Teams can briefly “jump” ahead, but sustained cooperation requires respecting these dependencies.

### Pyramid Summary Table

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

### 2.3.3 Level 1 – Preconditions for Cooperation (Foundation)

Level 1 contains the **existential conditions** that must be present before there is any real “working together.” Without these, coordination is accidental, fragile, or impossible.

These preconditions correspond to the **vertical axis** of the [Matrix](#):

- **Common Purpose** – there is a shared “why” behind interaction.
- **Interdependence** – outcomes depend on more than one person’s contribution.
- **Communication** – a basic ability to exchange signals, language, or symbols.
- **Trust** – a minimal belief that others will not harm and will reciprocate.
- **Change / Uncertainty Tolerance** – some capacity to function despite shifts and unknowns.

When Level 1 is weak:

- people don't know why they are together,
- dependencies are hidden or ignored,
- communication channels are missing or blocked,
- trust is absent or purely transactional,
- and any change quickly destabilizes the system.

Level 1 answers the question:

**"Is there enough shared ground for cooperation to exist at all?"**

## 2.3.4 Level 2 – Core Human Needs for Cooperative Work

Level 2 contains the **human-level enablers** that make foundational conditions workable in daily interactions.

These needs correspond to the **horizontal axis** of the [Matrix](#):

- **Shared Understanding** – people interpret goals, constraints, and context in a compatible way.
- **Mutual Commitment** – people are willing to contribute and follow through together.
- **Feedback Loops** – people can see results, exchange signals, and adjust.
- **Distribution of Roles** – people know who does what and how roles relate.
- **Autonomy & Agency** – people can act with intention and ownership.

Level 2 transforms the abstract fact of "we are together" into **workable, day-to-day cooperation**.

When Level 2 is weak:

- people talk past each other despite having a common purpose,
- commitment is shallow or one-sided,
- feedback is delayed, distorted, or unsafe,
- roles are vague or contested,
- initiative is suppressed or punished.

Level 2 answers the question:

**"Do people have what they need to participate in cooperation sustainably?"**

Additional human needs (e.g., belonging, meaning, identity, recognition) are covered in the [Extended Human Dynamics](#) section.

Level 2 focuses on the minimal needs required *specifically* for cooperative work.

## 2.3.5 Level 3 – Cooperative System Functions

Level 3 contains the **stable functions** that translate conditions and needs into **coordinated, repeatable work**.

These functions live in the 25 cells of the [Matrix](#) – each cell representing a specific cooperation function where a work condition meets a human need (e.g., *Common Purpose* × *Shared Understanding* → *Alignment on why*).

Examples of Level 3 functions:

- **Problem Discovery** – clarifying the problem space and aligning on what needs to be solved.
- **Planning & Prioritization** – deciding what to do, in what order, given interdependence and constraints.
- **Monitoring & Feedback** – sensing progress and adjusting based on real-world signals.
- **Enablement & Empowerment** – ensuring people have the information, trust, and authority to act.
- **Adaptation & Learning** – updating how work is done in response to change and outcomes.

These functions are the “**muscles**” of cooperation.

If Level 1–2 are reasonably present, but these functions are weak, cooperation feels:

- busy but uncoordinated,
- decision-heavy but unclear,
- full of effort but light on outcomes.

Level 3 answers the question:

**“Is there a functioning system that turns intent into coordinated action?”**

## 2.3.6 Level 4 – Practices & Frameworks

---

Level 4 contains the **concrete, evolving ways** in which Level 3 functions are performed.

Different organizations, teams, or domains will adopt different practices to fulfill the same function.

Practices are **implementations**, not the function itself.

Examples:

- **Retrospectives** fulfill elements of *Monitoring & Feedback* and *Learning from change*.
- **RACI matrices** fulfill *Distribution of Roles* and *Coordination*.
- **Scrum sprint planning** fulfills *Planning & Prioritization*.
- **JTBD interviews** fulfill *Problem Discovery*.
- **Kanban boards** fulfill *Flow & Focus* plus *Monitoring & Feedback*.

Level 4 changes faster than Levels 1–3:

- practices can be adopted, modified, or replaced,
- frameworks can be introduced or retired,
- tooling can be upgraded or reconfigured.

When Level 4 is strong but Levels 1–3 are weak, teams experience “**cargo cult**” adoption:

they perform the practices but do not obtain the intended outcomes because the underlying functions and needs are not supported.

Level 4 answers the question:

**“How are cooperative functions currently implemented in this context?”**

## 2.3.7 Level 5 – Meta-Practices & Innovation (Apex)

---

Level 5 contains the **capacity to reflect on and redesign the system itself**.

At this level, teams and organizations:

- consciously select or adapt practices to match the functions they need,
- invent new practices when existing ones are insufficient,
- retire practices that no longer serve their context,
- connect patterns across teams and domains,
- and teach others how to reason about cooperation as a system.

Examples of Level 5 behavior:

- designing custom playbooks from multiple frameworks,
- modifying rituals to better fit team maturity and constraints,
- explicitly mapping functions to practices before changing process,
- using cooperation principles to guide organizational change.

Level 5 is not about more practices; it is about **meta-awareness** of how the system of cooperation works and the ability to evolve it deliberately.

Level 5 answers the question:  
**“Can this system learn to redesign itself?”**

## 2.3.8 Interpreting and Using the Pyramid

The Pyramid expresses the **Level Rule** of the Human Cooperation System:

### Level Rule (HCS)

You can experiment at any level, but you can only **stabilize** cooperation by restoring the **lowest unstable level** first.

In practice, this means:

- **Do not start from Level 4 or 5.**

Changing practices, tools, or rituals cannot compensate for missing preconditions (Level 1) or unmet human needs (Level 2).

- **Stabilize from the bottom up.**

If Levels 1–2 are fragile, Level 3 functions will keep degrading, and Level 4–5 improvements will fade or backfire.

- **Expect feedback between levels, not a strict ladder.**

Insights at Level 5 can refine Level 4; struggles at Level 3 can reveal gaps in Levels 1–2; context shifts can destabilize Level 1.

The Level Rule does not enforce linear progress – it enforces **dependency awareness**.

When teams repeatedly change practices or tools at Level 4 to avoid addressing deeper issues in Levels 1–3, they are attempting **Encapsulation**. The Level Rule redirects attention toward **Integration at the depth where instability actually lives**.

- **Separate function from implementation.**

When a practice fails, first ask which Level 3 function is under strain, and whether Levels 1–2 can support it, before replacing the practice itself.

At its core, the **Level Rule** is a **discipline of attention**:

Look for the **lowest unstable level** first, and restore stability there before expecting higher-level changes to last.

In the broader HCS:

- The **Matrix** describes the detailed cooperation functions that live primarily at Levels 1–3.
- The **Pyramid** explains how these functions depend on one another over time.
- The **Extended Human Dynamics** chapter explains how psychological, political, and relational forces can erode or distort these levels, even when the structure looks correct.
- The **System Modes** describe how to work with this whole system over time – designing it, stabilizing it, growing it, addressing conflict, or resetting it.

Taken together, they let you move from:

“We need better practices”

to the more precise and systemic question:

“Which level of cooperation is unstable, and what must be restored or supported there first?”

## 3. EXTENDED HUMAN DYNAMICS

---

### 3.1 Introduction & Purpose

The **Human Cooperation System (HCS)** defines the structural core of how cooperation becomes possible.

The **Core Model** explains the minimum set of conditions and needs that make collaborative work stable, observable, and governable.

However, real cooperation is rarely shaped by structure alone.

Teams operate within **human, psychological, and political realities** that sit outside the minimal model, yet strongly influence how cooperation is experienced day to day.

These forces do not change the “physics” of HCS, but they do change its **behavior under pressure**:

- they can distort otherwise sound structures
- they can push systems toward Encapsulation when Integration is needed
- they can keep teams stuck in conflict or avoidance, even when the work is clear

This section exists to make those forces visible.

#### 3.1.1 Purpose of the Extended Human Dynamics Section

The Extended Human Dynamics section introduces an **expanded collection of conditions and needs** that influence cooperation but are not required for the Core Model itself.

Its purpose is to:

- Recognize why cooperation can be difficult, even when the structural system is in place.
- Provide language for diagnosing human and political factors without assigning blame.
- Differentiate between **collective** and **individual** influences to avoid wrong-level interventions.
- Show how psychological and political vectors can distort, amplify, or suppress core HCS conditions and needs.
- Offer practitioners a way to integrate leadership tools, coaching practices, and cultural diagnostics *without* expanding or diluting the Core Model.
- Help teams decide when a problem requires **individual support**, **collective renegotiation**, or **structural correction**.

Extended Human Dynamics does not add “new laws” to HCS.

It explains why systems that are structurally sound on paper may still fail in practice.

#### 3.1.2 Who This Section Is For

This material supports roles who work at the intersection of people and systems:

- Project and team leads navigating recurring interpersonal friction.
- Engineering managers and directors responsible for team health and culture.
- Consultants, coaches, and facilitators diagnosing systemic dysfunctions.
- Decision-makers responding to political tension, conflict, or misalignment.
- Anyone trying to understand why cooperation “feels wrong” even when work is planned and structured correctly.

#### 3.1.3 How This Section Relates to the Core Model

The Extended Human Dynamics section **does not modify or replace the HCS Core Model**.

The Matrix and Pyramid remain the authoritative representation of the cooperation system:

- The **Matrix** defines the structural relationships between conditions, needs, and functions.
- The **Pyramid** defines how these elements depend on each other across levels.

Extended Human Dynamics adds:

- A **collective vs individual** classification of extended conditions and needs.
- **Four layers** of human dynamics: contextual, relational, structural, developmental.
- A way to examine each through **psychological** and **political** impact vectors.
- A mapping to existing leadership and motivation practices (e.g., DiSC, SCARF, Moving Motivators, Situational Leadership), clarifying where and why these tools matter.

In short:

**Core Model = what cooperation requires.**

**Extended Human Dynamics = what cooperation must navigate.**

These dynamics are especially relevant in **Stabilization**, **Growth**, and **Conflict** Modes, where human factors often determine whether structural interventions can succeed.

### 3.1.4 How to Use This Section

---

#### 1. Start with the Core Model.

Use the Matrix and Pyramid to identify what is structurally missing or misaligned.

#### 2. If structure is coherent but friction persists, extend the analysis.

Switch to Extended Human Dynamics to examine conditions and needs through **collective** and **individual** lenses.

#### 3. Identify psychological or political vectors affecting the situation.

Look for forces that amplify, distort, or suppress otherwise sound cooperative structures.

#### 4. Choose the correct intervention level.

5. Individual coaching or support

6. Team agreements or renegotiation

7. Structural adjustment or boundary correction

8. Escalation to Conflict or Reset Mode when needed

#### 9. Use referenced practices intentionally, not by default.

This section clarifies when tools like DiSC or SCARF help – and when they distract from systemic issues that belong in the Core Model or System Modes.

For combining **Core** and **Extended** insights in a concrete way, see the **Integration Guide** in the System Modes section.

### 3.1.5 Scope of This Section

---

This section acknowledges human complexity without attempting to quantify, codify, or control it.

It provides a vocabulary and diagnostic aid for:

- understanding why cooperation is hard,
- recognizing non-structural influences,
- avoiding misdiagnosis and misplaced solutions,
- and bringing difficult psychological or political dynamics into safe discussion.

It is optional but highly recommended for practitioners who operate in real organizational environments where human dynamics shape every outcome.

## 3.2 Extended Conditions

---

### 3.2.1 Purpose of Extended Conditions

The **Core Model** defines the minimum structural conditions that make cooperation possible:

Common Purpose, Interdependence, Communication, Trust, and Change / Uncertainty tolerance – plus the human needs that interact with them in the [Matrix](#) and [Pyramid](#).

In practice, cooperation is also shaped by a wider set of **contextual, relational, structural, and developmental influences**.

These are the **Extended Conditions**.

Extended conditions:

- do **not** change the Core Model or its Matrix,
- are **not required** for cooperation to exist at all,
- but strongly affect **how cooperation feels**, how it behaves under stress, and how fragile or resilient it becomes.

They help explain why a system that looks “correct” on paper may still be experienced as unfair, unsafe, or exhausting in reality.

Extended conditions are described along two lenses:

- **Collective vs Individual**
- **Political and Psychological impacts**

They are most relevant when deciding whether a challenge calls for **structural changes, collective renegotiation, or individual support**.

### 3.2.2 Collective vs Individual Conditions

---

Extended conditions arise at two intertwined levels:

#### **Collective Conditions**

System-wide patterns that shape the environment in which cooperation happens:

- Cultural norms and shared narratives
- Incentive structures and governance mechanisms
- How decisions are made and communicated
- How stable or volatile constraints appear to be

Collective conditions influence **what is possible** in the system.

#### **Individual Conditions**

The personal experience of living inside those collective patterns:

- How predictable the environment feels
- How safe it feels to speak, disagree, or experiment
- How much control one feels over daily work
- How much one identifies with the group or mission

Individual conditions influence **what is experienced** by each person.

Both levels matter:

- Changing only individual attitudes without addressing collective conditions leads to burnout and self-blame.
- Changing only collective structures without addressing individual experience leads to quiet disengagement.

Extended conditions help practitioners keep both in view.

### 3.2.3 Types of Extended Conditions

Extended conditions are grouped into four types that frequently show up in cooperation challenges.

They are **not new dimensions** of the Core Model – they are lenses to understand how the system behaves in real organizations.

Each type includes **collective** and **individual** variants, plus typical **political** and **psychological** impacts.

#### Contextual Conditions

These describe the broader environment surrounding cooperation.

##### COLLECTIVE CONTEXTUAL CONDITIONS

- Cultural climate and day-to-day tone
- Communication norms across roles and levels
- Predictability of governance and decision patterns
- Transparency of goals, constraints, and trade-offs
- Stability of priorities, timelines, and commitments

##### INDIVIDUAL CONTEXTUAL CONDITIONS

- Perceived stability of workload and expectations
- Personal clarity about “what matters now”
- Ability to anticipate changes that affect one’s work
- Sense of control over environment, tools, and schedule

#### **Political impact:**

Who sets the context, whose priorities define “reality,” how visible or opaque decisions are.

#### **Psychological impact:**

Uncertainty, anxiety, vigilance, or ease; perceived safety in the face of change.

#### Relational Conditions

These describe how people relate, interpret, and respond to one another.

##### COLLECTIVE RELATIONAL CONDITIONS

- Norms of reciprocity, fairness, and repair
- Predictability of behavior across roles and teams
- Accepted ways of handling disagreement and escalation
- Shared vs fragmented interpretation of problems and success

##### INDIVIDUAL RELATIONAL CONDITIONS

- Default trust posture toward peers and leaders
- Openness vs self-censorship in communication
- Capacity for empathy and perspective-taking
- Emotional responses to tension, conflict, or critique

#### **Political impact:**

Alliances, informal influence, exclusion, hidden agendas, and “who speaks for whom.”

#### **Psychological impact:**

Fear of loss, defensiveness, shame, guilt, emotional contagion, or genuine solidarity.

## Structural Conditions

These describe how formal and informal structures support or constrain cooperation beyond the Core Model's basic boundaries.

### COLLECTIVE STRUCTURAL CONDITIONS

- Boundary clarity: who decides, who contributes, who is accountable
- How feedback and progress visibility are built into the system
- Access to resources, tools, and information across roles
- Alignment or mismatch between formal organization charts and actual working patterns

### INDIVIDUAL STRUCTURAL CONDITIONS

- Perceived autonomy and real decision authority
- Ability to escalate issues without backlash
- Clarity of one's own role, scope, and dependencies
- Access to information and support needed for daily work

#### **Political impact:**

Gatekeeping, veto positions, resource control, "choke points" in the system.

#### **Psychological impact:**

Overcontrol, learned helplessness, confusion, or a sense of empowerment and legitimacy.

## Developmental Conditions

These describe how the cooperative system – and the people in it – learn and evolve over time.

### COLLECTIVE DEVELOPMENTAL CONDITIONS

- Learning rhythms (retrospectives, reviews, open dialogue)
- How the organization remembers and reuses learning
- Adaptability to changing constraints and opportunities
- Evolution of shared narratives, identity, and rituals

### INDIVIDUAL DEVELOPMENTAL CONDITIONS

- Personal reflection and self-assessment habits
- Curiosity, openness to feedback, and willingness to experiment
- Ability to integrate new insights into behavior and decisions
- Sense of progress, growth, and increasing mastery

#### **Political impact:**

Whose learning "counts," whose ideas shape direction, who is allowed to experiment.

#### **Psychological impact:**

Pride, motivation, frustration, shame, identity protection, or a sense of stagnation.

## 3.2.4 Why Extended Conditions Matter

Extended conditions explain **variation in cooperation quality** that the Core Model alone cannot:

- why a structurally sound setup still feels hostile or fragile,
- why teams drift into avoidance, conflict, or apathy without any obvious change in roles or process,
- why attempts to "fix" cooperation at practice level (Level 4) fail when deeper contextual or relational issues remain untouched.

They help practitioners:

- Distinguish **structural** problems from **cultural** or **interpersonal** ones.
- Avoid mislabeling behavior as “resistance” or “attitude” when it is a rational response to conditions.
- Identify when Encapsulation (narrowing collaboration) is a protective response to unsafe or unpredictable dynamics.
- Decide whether an issue calls for **system redesign**, **collective renegotiation**, **individual support**, or a dedicated **System Mode** (e.g., Conflict or Reset).

Extended conditions make cooperation **legible at a human level** without overloading the Core Model.

They provide the bridge between:

- the structural “physics” of HCS, and
- the lived experience of people working inside real organizations.

The next section on **Extended Needs** builds on this foundation to describe how these conditions interact with deeper human needs, shaping motivation, perception, and behavior over time.

## 3.3 Extended Needs

---

Cooperation can be **structurally sufficient** and still feel brittle, unfair, or exhausting.

The **Core Model** defines the minimum cooperative needs required for work to function (Level 2 of the Pyramid):  
Shared Understanding, Mutual Commitment, Feedback Loops, Distribution of Roles, Autonomy & Agency.

**Extended Needs** describe the deeper human and systemic requirements that influence:

- how cooperation is experienced,
- how motivation is sustained, and
- how resilient the system is under stress.

These needs are **not part of the minimal HCS Matrix**.

Cooperation can function without them, but it will often feel strained, transactional, or fragile.

Extended Needs are:

- classified as **Collective** or **Individual**, and
- organized into five **functional categories**.

Each need can be examined through potential **political** and **psychological** impact vectors to understand how it becomes distorted under tension.

Extended Needs complement the **Extended Conditions** by focusing on **what people and groups seek**, not just **what context they inhabit**.

### 3.3.1 Core vs Extended Needs

---

It is important to distinguish:

- **Core cooperative needs** (Level 2 of the Pyramid)
- Shared Understanding
- Mutual Commitment
- Feedback Loops
- Distribution of Roles
- Autonomy & Agency

These are the **minimal human requirements** for cooperation to function at all.

- **Extended Needs** (this section)
- Purpose & Direction
- Trust & Safety
- Growth & Evolution
- Recognition & Belonging
- Autonomy & Coherence

These are **deeper motivational needs** that shape the *quality* and *emotional tone* of cooperation.

Core Needs answer:

“Do people have enough to participate in cooperation sustainably?”

Extended Needs answer:

“Does this cooperation feel meaningful, fair, and worth sustaining over time?”

Both are real. Only the first group is encoded in the Core Model.

### 3.3.2 Collective vs Individual Needs

Extended Needs arise at two connected levels:

- **Collective Needs**

Shared meaning, fairness, legitimacy, and identity.

These shape how groups hold purpose together and maintain cohesion during change.

- **Individual Needs**

Personal motivation, recognition, autonomy, and emotional safety.

These shape how each person engages with cooperation and interprets their role in it.

Both levels interact continuously:

- When **collective needs** weaken, individuals disengage or protect themselves.

- When **individual needs** are chronically unmet, collective dynamics destabilize.

Extended Needs help practitioners see both levels without collapsing everything into "culture" or "attitude".

### 3.3.3 Types of Extended Needs

Extended Needs fall into five categories that influence motivation, coherence, and resilience within cooperative systems.

#### Purpose & Direction

Needs related to meaning, intention, and contribution.

#### Collective Needs

- Shared sense of purpose
- Legitimacy of direction and goals
- Relevance of the work to a broader context
- Identity as a group with a coherent mission

#### Individual Needs

- Personal meaning in the work
- Sense of contribution to something valuable
- Alignment between values and daily actions
- Clarity about "why my role matters"

#### Political impact:

Who defines purpose, whose interests shape direction, which voices are included or excluded when goals are set.

#### Psychological impact:

Pride, commitment, and energy when needs are met; disillusionment, cynicism, or loss of meaning when they are not.

#### Trust & Safety

Needs related to vulnerability, honesty, and perceived security.

#### Collective Needs

- Systemic fairness (rules apply consistently)
- Transparent communication about risks and constraints
- Predictable commitments and follow-through
- Safety in raising issues or challenging assumptions

**Individual Needs**

- Psychological safety in conversations and decisions
- Confidence that honesty does not result in punishment
- Predictability in key relationships
- Emotional security when facing uncertainty or change

**Political impact:**

Fear of retaliation, status risk, exclusion, and invisible power; "safe for some, dangerous for others."

**Psychological impact:**

Anxiety, withdrawal, defensiveness, or hypervigilance when safety is low; openness and calm engagement when safety is high.

**Growth & Evolution**

Needs related to improvement, mastery, and progression.

**Collective Needs**

- Shared learning rhythms (retrospectives, reviews, open dialogue)
- Integration of insights into future work, not just storing them
- Collective progression toward greater mastery
- Capacity to adapt without losing coherence or identity

**Individual Needs**

- Skill development and increasing mastery
- Constructive feedback and support
- Opportunities for growth or new challenges
- A sense of becoming "better over time"

**Political impact:**

Whose growth is prioritized, who gets opportunities, who is "invested in" vs merely "used".

**Psychological impact:**

Stagnation, frustration, or quiet resignation when needs are unmet; motivation and engagement when growth is visible and supported.

**Recognition & Belonging**

Needs related to appreciation, inclusion, and social identity.

**Collective Needs**

- Culture of appreciation, not just criticism
- Inclusion mechanisms that ensure representation and voice
- Fair allocation of credit and visibility
- Shared rituals that build connection and identity

**Individual Needs**

- Feeling valued and seen as a person, not just a resource
- Belonging to the group without constant self-protection
- Recognition for contributions and effort
- Acceptance without needing to constantly prove worth or status

**Political impact:**

Favoritism, visibility bias, gatekeeping, and "inner circles".

**Psychological impact:**

Loneliness, envy, shame, loss of identity, or over-identification with status; versus a grounded sense of being part of "us".

**Autonomy & Coherence**

Needs related to freedom, agency, and alignment.

**Collective Needs**

- Coherent decision-making across roles and teams
- Boundary clarity between functions and responsibilities
- Distributed authority that matches real responsibility
- Consistency of decisions with stated principles and strategy

**Individual Needs**

- Freedom to make informed decisions in one's domain
- Sense of agency and ownership over outcomes
- Space to act without micromanagement
- Clarity about how personal choices affect the whole system

**Political impact:**

Overreach, territorialism, centralization of control, and token autonomy.

**Psychological impact:**

Dependency, helplessness, reactive resistance, or burnout when needs are unmet; grounded confidence and initiative when they are met.

---

### 3.3.4 Why Extended Needs Matter

Extended Needs explain variation in **motivation**, **engagement**, and **cooperation quality** that structural models alone cannot capture.

They highlight why teams with the same processes and structures can behave very differently, and why cooperation often degrades slowly rather than collapsing suddenly:

- from committed to compliant,
- from transparent to guarded,
- from adaptive to rigid,
- from "we" to isolated "me".

Understanding Extended Needs helps practitioners:

- See the difference between **structural alignment** and **human experience**.
- Avoid over-focusing on tools or processes when motivation or meaning is the root issue.
- Detect early signals of disengagement, resentment, or quiet fragmentation.
- Choose the right level of intervention: **individual, relational, collective, or structural**.
- Recognize when political or psychological distortions, not just process gaps, are driving behavior.

Extended Needs make the human dimension of cooperation **explicit** without inflating the Core Model.

They prepare the ground for **System Modes**, where teams decide *how* to act on these insights over time – whether to design, stabilize, grow, resolve conflict, or reset the cooperation system.

## 4. SYSTEM MODES

---

### 4.1 Introduction & Purpose

---

## 4.2 Integration Guide

---

The Core Model defines the structural foundation of cooperation.

Extended Human Dynamics describes the human and political forces that shape how cooperation is experienced.

This guide explains how to use both layers together in a coherent diagnostic flow, and how to choose interventions at the correct level without overreaching into areas that the Core Model does not attempt to govern.

The goal is to make cooperation understandable and actionable without simplifying the complexity of human systems.

### 4.2.1 The Integration Principle

Use the Core Model to diagnose **structural** gaps.

Use the Extended Model to diagnose **human** and **political** distortions.

Both must be considered, but never confused.

**Structure first. Experience second.**

**Conditions before emotions.**

**Needs before tools.**

This ordering keeps interventions grounded, fair, and effective.

The Extended Model may enrich diagnosis, but it must never override a Core-level intervention.

### 4.2.2 Step 1 – Start With the Core Model

Begin with the HCS matrix and pyramid:

- Identify which core conditions are missing or weak
- Confirm the level of alignment, clarity, and coordination
- Examine trust and purpose as system-level needs
- Test whether work is structured correctly for cooperation

If any core condition is broken, address it first.

Most recurring team issues originate from structural gaps.

Examples:

- Misalignment → unclear purpose or boundaries
- Coordination friction → missing feedback loops
- Tension and escalation → unclear decisions
- Blame and anxiety → weak visibility and trust

Extended dynamics should not be used as a substitute for structural clarity.

#### 4.2.3 Step 2 – Move to Extended Conditions and Needs

When the structure is intact but the cooperation still feels:

- tense
- fragile
- inconsistent
- political
- emotionally charged
- or confusing

then examine extended conditions and needs.

Use the collective/individual classification to pinpoint the level:

- **Collective** → norms, narratives, fairness, shared meaning
- **Individual** → motivation, autonomy, recognition, safety

This prevents misdiagnosis (e.g., assuming lack of motivation when the issue is unclear expectations).

#### 4.2.4 Step 3 – Evaluate Political and Psychological Vectors

Once the quadrant is clear, examine how influence fields affect it.

##### **Political vector**

- Power, visibility, resource control, legitimacy
- Hidden agendas or veto players
- Representation gaps
- Territorial behavior or informal hierarchies

##### **Psychological vector**

- Fear and uncertainty
- Status or identity threat
- Emotional triggers
- Self-censorship, avoidance, or defensiveness

This reveals why cooperation is distorted, even when structure appears correct.

#### 4.2.5 Step 4 – Select the Right Level of Intervention

Act where the issue truly lives.

##### **Structural interventions (Core)**

- Clarify decisions and boundaries
- Increase visibility and feedback
- Stabilize commitments
- Re-align purpose or flow

##### **Collective interventions (Extended)**

- Rebuild shared narrative
- Align expectations and agreements

- Improve representation and fairness
- Strengthen learning rhythms

#### **Relational interventions (Extended)**

- Repair conflict
- Improve communication safety
- Build reciprocity and predictability

#### **Individual interventions (Extended)**

- Clarify expectations
- Offer feedback or coaching
- Support emotional safety
- Address recognition or growth needs

Selecting the wrong level creates new dysfunction.

---

#### **4.2.6 Step 5 – Use Practices as Inputs, Not Prescriptions**

Practices listed in the map (e.g., DiSC, Moving Motivators, RACI, NVC) support exploration, not enforcement.

Use them to:

- generate insight
- create vocabulary
- surface hidden patterns
- support agreements

Do **not** use them to:

- override structure
- assign identity labels
- replace the Core Model
- fix political issues with personal coaching
- fix structural issues with emotional tools

The system dictates the boundaries. Practices support conversation within those boundaries.

---

#### **4.2.7 Step 6 – Close the Loop**

After intervening:

- re-check the Core Model
- confirm structural alignment
- confirm extended tensions have softened
- update agreements if needed
- document insights for collective memory

This loop maintains cooperative stability across time.

#### 4.2.8 How This Guide Fits Within HCS

The Integration Guide is not an additional model.

It is a practical bridge that ensures:

- the Core Model stays clean and universal
- extended dynamics do not dilute structural clarity
- practitioners avoid misdiagnosis
- leadership tools are used intentionally
- interventions land at the correct systemic level

It aligns the human experience with the structural design, creating cooperation that is both **stable** and **humane**, both **clear** and **adaptive**.

## 4.3 SETUP MODE

---

### 4.3.1 Introduction & Purpose

---

## 4.4 STABILIZATION MODE

---

### 4.4.1 Introduction & Purpose

---

## 4.4.2 Diagnostic Workflow – Observation → Matrix → Level → Function → Practice

### Why the Diagnostic Workflow Exists

The **HCS Diagnostic Workflow** turns theory into action.

It provides a structured loop for tracing **observable issues** in cooperation back to their **systemic root causes** – before deciding how to intervene.

Most improvement efforts fail because they start with *practice changes* (Level 4) rather than diagnosing *which level of cooperation is weak*.

This workflow keeps analysis grounded and ensures each corrective action strengthens the right layer of the system.

**Tip:** The goal is not to fix symptoms – it's to restore coherence between **conditions, needs, and functions**.

### How the Workflow Works

Use this short, structured loop on any issue or pattern you observe.

#### 1. OBSERVATION – CAPTURE EVIDENCE

Write down what you see, *hear, or measure* – without interpretation or blame.

Focus on **observable behavior**, not assumptions.

**Example:**

"Critical dependencies were discovered late; downstream team blocked twice this sprint."

This ensures that diagnosis starts from data, not opinion.

#### 2. MATRIX MAPPING – LOCATE WHERE IT LIVES

Map the observation to the **HCS Matrix**:

Which **Condition** (vertical axis) and which **Human Need** (horizontal axis) are involved? If the structural cell seems correct but the issue persists emotionally or politically, use the **Extended Human Dynamics** section to examine contextual or relational distortions.

**Example:**

**Interdependence × Feedback Loops → Outcome Reflection**

Late discovery means coordination and feedback signals are weak.

This step anchors the issue to a specific **function** – preventing vague problem statements like "communication issue" or "poor planning."

#### 3. LEVEL CHECK – FIND HOW DEEP THE ROOT IS

Determine the **lowest affected level** in the **HCS Pyramid**:

If the problem is about...	It likely belongs to...
Missing purpose, trust, or communication basics	<b>Level 1 – Preconditions</b>
Misalignment, unclear roles, weak feedback, low agency	<b>Level 2 – Human Needs</b>
Broken coordination or learning cycles	<b>Level 3 – Functions</b>
Ineffective or misapplied methods	<b>Level 4 – Practices</b>
Lack of reflection or self-improvement	<b>Level 5 – Meta-Practices</b>

**Example:**

Repeated late dependency discovery → weak **Level 3 Monitoring & Feedback**

Possibly thin **Level 2 Feedback Loops** underneath.

This step is where the **Level Rule** applies – fix lower levels first.

#### 4. FUNCTION TO PRACTICE – SELECT WHAT TO STRENGTHEN

Once you've located the function, choose or design a **practice** that fulfills it.

Use the 25 [Matrix functions](#) as your reference for what "healthy cooperation" looks like.

The practice can be a known method or a custom one suited to your context.

##### **Example:**

Function: *Communication × Feedback Loops → Signal & Response*

Practice ideas:

- Add an explicit dependency scan before each sprint.
- Introduce a daily "risk surfacing" moment.
- Create a visual "Andon" signal for cross-team blockers.

#### 5. TRIAL & LEARN – VALIDATE AND ITERATE

Run the chosen practice for 1–2 cycles and track a **specific observable signal** (not vague satisfaction scores).

If it doesn't produce the expected outcome, recheck **lower levels** before trying another practice.

##### **Example:**

Watch: *Reduction in repeated dependency delays within two sprints.*

If not improved → revisit Levels 2 and 3 for unaddressed issues in feedback culture.

#### Output Template

Use this lightweight template for documentation or reflection:

```
Observation:
Matrix cell:
Level(s) involved:
Function to strengthen:
Practice(s) selected:
Signal/metric to watch:
Review date:
```

You can use it in retrospectives, coaching sessions, or system diagnostics – it fits equally well in individual reflection or team learning contexts.

#### Practical Example (Full Loop)

##### **Observation:**

"Design team's updates rarely align with development progress; misinterpretations surface during QA."

##### **Matrix Mapping:**

*Communication × Shared Understanding → Language / Terms*

##### **Level Check:**

Level 2–3 issue: weak shared understanding and coordination function.

##### **Function to Strengthen:**

Clarify shared vocabulary and decision handoffs.

##### **Practice(s):**

- Introduce weekly alignment review with both design and dev leads.
- Create a shared "definition of ready" document.

##### **Signal/Metric:**

Reduced QA rework or clarifications needed after handoff.

#### Why It Matters

This workflow transforms **improvement discussions** from reactive fixes to **systemic diagnosis**.

It replaces "who made the mistake?" with "which part of the system is under strain?" – building psychological safety while improving results.

The HCS Diagnostic Workflow is the bridge between **theory and daily practice** – a loop that keeps cooperation systems alive, adaptive, and learnable.

Used consistently, this workflow becomes the **practical heartbeat of HCS** – transforming abstract theory into measurable cooperative improvement.

#### SUMMARY TABLE

Step	Purpose	Output
<b>1. Observation</b>	Capture neutral evidence	Statement of what happened
<b>2. Matrix Mapping</b>	Locate systemic dimension	Condition × Need = Function
<b>3. Level Check</b>	Identify root depth	Level(s) causing dysfunction
<b>4. Function → Practice</b>	Define safe intervention	Function and matching practice
<b>5. Trial &amp; Learn</b>	Validate and adjust	Measurable feedback loop

#### ESSENCE

Every cooperation issue can be traced through the same lens:  
**Observation → Matrix → Level → Function → Practice → Learning.**

This is how theory becomes a living system.

## 4.4.3 Diagnostic Dynamics

Extended Human Dynamics introduces two cross-cutting influence fields—**political** and **psychological**—that shape how cooperation behaves beyond its structural foundation. These forces do not alter the Core Model, but they can distort, suppress, amplify, or obstruct its conditions and needs.

This chapter provides a diagnostic lens for identifying how extended conditions and needs are affected, and how to choose the correct intervention level: individual, collective, or structural.

### Political and Psychological Vectors

The Core Model defines what cooperation requires.

Extended conditions and needs describe what cooperation feels like.

Political and psychological vectors explain **why cooperation becomes difficult**, even when structure is in place.

These vectors do not alter the Level Rule. They influence behavior, not system structure.

#### POLITICAL VECTOR

Political influences emerge from:

- Power dynamics
- Resource control
- Legitimacy battles
- Visibility and influence
- Representation and agenda-setting
- Hidden coalitions or veto players

These forces affect how decisions are made, who shapes direction, and whose interests prevail under pressure.

#### PSYCHOLOGICAL VECTOR

Psychological influences emerge from:

- Fear, anxiety, loss of safety
- Identity and status threat
- Emotional triggers, biases, and narratives
- Trust posture and previous experiences
- Vulnerability patterns and self-protection
- Perceived fairness

These forces affect how people interpret behavior, respond to tension, and decide whether to contribute, withdraw, or protect themselves.

### How Vectors Influence Conditions and Needs

Both vectors can act on **any** extended condition or need.

Their impact may be visible or subtle, temporary or persistent.

Examples:

- A collective structural condition (e.g., boundary clarity) becomes distorted under political pressure when influence flows outside formal decisions.
- A personal autonomy need becomes distorted under psychological tension when individuals self-censor or avoid taking initiative.
- A collective purpose need becomes distorted when the narrative is shaped by a few powerful actors.

Political vectors affect **permission**.

Psychological vectors affect **participation**.

## The Diagnosis Framework

To diagnose extended dynamics, evaluate three layers in order:

### 1. IDENTIFY THE QUADRANT

Determine where the issue is primarily visible.

- **Collective Condition**
- **Individual Condition**
- **Collective Need**
- **Individual Need**

This prevents wrong-level interventions (e.g., coaching a person when the collective structure is broken).

### 2. EXAMINE FIELD IMPACT

Assess how political or psychological forces influence the issue.

#### **Political signals**

- Unseen decision-makers
- Resource bottlenecks
- Alliance patterns
- Visibility bias
- Veto power
- Agenda manipulation
- Territorial behavior

#### **Psychological signals**

- Self-censorship
- Avoidance or withdrawal
- Emotional escalation or shutdown
- Overreaction to ambiguity
- Sensitivity to fairness
- Defensive communication
- Loss of motivation or identity threat

### 3. SELECT THE INTERVENTION LEVEL

Once the quadrant and field are clear, choose an intervention at the appropriate level:

#### **Structural**

- Rebuild boundaries
- Clarify decisions
- Increase transparency
- Introduce or repair feedback loops

#### **Collective**

- Align purpose or narrative
- Establish shared agreements
- Run inclusion or representation checks
- Strengthen learning rhythms

**Relational**

- Facilitate conflict repair
- Rebuild reciprocity norms
- Improve communication safety

**Individual**

- Support psychological safety
- Develop emotional literacy
- Provide coaching or mentoring
- Improve clarity and expectations

The goal is to act **where the problem actually lives**, not where it is easiest or most comfortable to intervene.

**Practical Heuristics**

Use the following heuristics to quickly diagnose complexity:

**"If structure is clear but behavior is erratic, check psychological vectors."**

Fear, identity, and ambiguity often override clarity.

**"If individuals keep failing in the same way, check collective conditions."**

People adapt to the system they're in.

**"If the story makes sense to leadership but not to the team, check political vectors."**

Narratives often serve the interests of those who shape them.

**"If conflict repeats, examine unmet needs, not personalities."**

Unmet needs create predictable patterns of resistance or withdrawal.

**"If people stop speaking up, treat this as a system failure, not a personal flaw."**

Silence is a political and psychological signal.

**How to Use This Chapter in Practice**

This diagnostic layer is designed to be used:

- After the Core Model has been applied
- When structural issues are ruled out or insufficient
- When friction persists despite clear agreements
- When cooperation feels tense, fragile, or confusing
- When teams experience recurring interpersonal issues
- When politics or emotional dynamics distort work

The goal is not to solve human psychology or organizational politics, but to **make their influence visible**.

Once visible, they can be addressed at the right level—without expanding the Core Model, and without blaming individuals for systemic patterns.

Extended diagnostic dynamics help teams navigate the real-world complexity of cooperation with clarity, empathy, and precision.

## 4.5 GROWTH MODE

---

### 4.5.1 Introduction & Purpose

---

## 4.6 CONFLICT MODE

---

### 4.6.1 Introduction & Purpose

---

## 4.7 RESET MODE

---

### 4.7.1 Introduction & Purpose

---

## 5. REFERENCE

---

### 5.1 Glossary

The **Human Cooperation System (HCS)** defines a foundational language for describing the dynamics of **cooperative work systems** – how individuals and groups align, commit, and adapt together across levels of stability and change.

This glossary supports consistency across HCS Core Model, Pyramid, Matrix, and Diagnostic Workflow.

#### 5.1.1 Core System Terms

Term	Meaning
<b>Human Cooperation System (HCS)</b>	A diagnostic system that explains how cooperative work remains stable and adaptive across changing conditions. It models the “physics” of collaboration using the Pyramid, Matrix, and Level Rule.
<b>Pyramid Model</b>	Hierarchical structure of stability, from foundational human conditions (Level 1) to reflective meta-practices (Level 5).
<b>Matrix Model (5x5)</b>	Two-dimensional map crossing five cooperative dimensions with five human conditions to identify functional gaps or tensions in a system.
<b>Level Rule</b>	Governing principle stating that dysfunction at a lower level cannot be resolved by interventions at higher levels. Stability must be restored bottom-up.
<b>Diagnostic Workflow</b>	A repeatable method for observing behaviors, identifying affected levels and functions, and selecting interventions that respect the Level Rule.

#### 5.1.2 Foundational Conditions (Pyramid Level 1)

Term	Meaning
<b>Common Purpose</b>	The shared intent that gives meaning and direction to collective effort.
<b>Shared Understanding</b>	The degree to which participants interpret information and goals in the same way.
<b>Mutual Commitment</b>	The willingness of each participant to invest effort and uphold agreements that sustain cooperation.
<b>Trust</b>	Confidence that others will act reliably and with integrity within shared norms.
<b>Interdependence</b>	Recognition that outcomes depend on others, making collaboration both necessary and valuable.

#### 5.1.3 Systemic Enablers (Pyramid Levels 2–3)

Term	Meaning
<b>Autonomy</b>	The ability to make decisions within agreed boundaries; freedom coupled with responsibility.
<b>Agency</b>	The individual or group's capacity to act intentionally to influence outcomes within a system.
<b>Distribution of Roles</b>	How authority, accountability, and contribution are shared to balance autonomy and coherence.
<b>Feedback Loops</b>	Mechanisms through which information about performance or environment is used to adjust behavior and improve outcomes.
<b>Change / Uncertainty</b>	Natural variability in environment, priorities, or conditions that tests the adaptability of the system.

### 5.1.4 Cooperative Function Groups (Level 3)

Term	Meaning
<b>Strategic Alignment</b>	Ensures clarity of <i>what</i> and <i>why</i> – aligning purpose and understanding across participants.
<b>Execution &amp; Coordination</b>	Maintains flow of work, role clarity, and cross-functional collaboration.
<b>Systemic Governance</b>	Establishes decision-making, delegation, and accountability mechanisms that balance trust and control.
<b>Learning &amp; Adaptation</b>	Converts experience and feedback into collective improvement and resilience.
<b>Communication Fidelity</b>	Ensures that messages are transmitted, received, and interpreted as intended.

### 5.1.5 Principles and Rules

Term	Meaning
<b>Function-First Principle</b>	Effective practices must be matched to the cooperative function they serve, not adopted by imitation.
<b>Lowest-Level Fix Rule</b>	Interventions should always address the root level where instability originates.
<b>Whole-System View</b>	Understanding that all cooperative dimensions interact; improvement in one area affects others.
<b>Reflective Practice</b>	Periodic examination of how cooperation itself functions, leading to intentional redesign (Level 5 behavior).

### 5.1.6 Relationships to Other Frameworks

Term	Meaning
<b>3-in-3 SDLC Framework (3SF)</b>	A meta-framework derived from HCS principles that operationalizes cooperation in software delivery ecosystems.
<b>Agile / Lean / Scrum</b>	Examples of Level 4 frameworks that depend on stable lower-level cooperative functions to succeed.
<b>Systems Thinking</b>	The philosophical foundation of HCS – viewing cooperation as an interconnected adaptive system rather than a set of isolated practices.

### 5.1.7 Extended Conditions and Needs

Term	Meaning
<b>Extended Conditions Types</b>	Contextual, relational, structural, developmental categories used to classify non-core influences.
<b>Extended Conditions</b>	Contextual, relational, structural, and developmental factors that influence how cooperation is experienced. They do not alter the Core Model but explain variation in quality, tension, or stability.
<b>Extended Needs Categories</b>	Purpose, trust/safety, growth, belonging/recognition, autonomy/coherence.
<b>Extended Needs</b>	Human motivational and relational needs (purpose, recognition, belonging, growth, autonomy) that affect engagement and emotional experience within cooperation. Not required for the Core Model to function but critical for sustained, humane collaboration.
<b>Collective Conditions / Needs</b>	System-level patterns, narratives, norms, or motivations that emerge from groups rather than individuals. They influence shared meaning, fairness, identity, and cohesion.
<b>Individual Conditions / Needs</b>	A person's lived experience within cooperation — clarity, predictability, psychological safety, recognition, growth, autonomy, and emotional security.
<b>Distortion Vectors</b>	Forces that amplify or suppress conditions and needs, making cooperation difficult even when structure is intact. Represented as political or psychological influences.
<b>Quadrant</b>	The four-way classification used in Extended Human Dynamics: Collective Condition, Individual Condition, Collective Need, Individual Need. Guides correct intervention level and prevents misdiagnosis.

### 5.1.8 Influence Fields

Term	Meaning
<b>Political Vector</b>	The influence of power, legitimacy, resource control, representation, and informal hierarchies on cooperation. Political dynamics affect permission, visibility, and whose interests shape decisions.
<b>Psychological Vector</b>	The influence of emotions, identity, fear, uncertainty, trust posture, and personal narratives on cooperation. Psychological dynamics affect participation, safety, and interpretation of events.
<b>Intervention Level</b>	The correct systemic layer at which an issue must be addressed — structural, collective, relational, or individual. Prevents treating human issues as structural failures or vice versa.

### 5.1.9 Reference Purpose

This glossary ensures terminological clarity across all components of the Human Cooperation System and supports:

- Consistent interpretation of key terms in diagnostics and workshops.
- Alignment between HCS theory and practical applications such as 3SF.
- Educational use in training, coaching, and organizational learning contexts.

## 5.2 Sources and Frameworks

The **Human Cooperation System (HCS)** builds upon a wide range of theories, models, and disciplines that have shaped how humans understand **cooperation, trust, and adaptive systems**.

This section lists the **academic and conceptual influences** that inform HCS theory and its derivatives (including 3SF).

Each source is categorized by its **theoretical contribution area** – systemic, psychological, communicative, or organizational – highlighting how HCS integrates existing knowledge into a unified diagnostic model of human cooperation.

### 5.2.1 Systems Thinking and Cybernetics

Source / Framework	Core Idea	Relevance to HCS
<b>General Systems Theory (Bertalanffy)</b>	All systems – biological, social, or technical – share structural and functional patterns.	Provides the foundation for viewing cooperation as a <i>system of interacting elements</i> rather than isolated behaviors.
<b>The Fifth Discipline (Peter Senge)</b>	Organizations learn and adapt through feedback and systemic awareness.	Inspires HCS's focus on <i>feedback loops</i> and <i>collective learning</i> as stabilizing forces.
<b>The Viable System Model (Stafford Beer)</b>	Describes how systems maintain internal stability and external adaptability through recursive control loops.	Informs HCS's concept of <i>Systemic Governance</i> and <i>Autonomy–Control balance</i> .
<b>Cybernetics (Wiener / Ashby)</b>	Studies self-regulating systems and the role of feedback and control.	Underpins HCS's diagnostic logic and <i>Level Rule</i> – stability emerges from functional feedback, not hierarchy.
<b>Complex Adaptive Systems (Holland / Gell-Mann)</b>	Systems evolve through adaptation and local interaction under uncertainty.	Reinforces HCS's treatment of <i>Change and Uncertainty</i> as natural, not exceptional, conditions.

### 5.2.2 Human Motivation and Organizational Psychology

Source / Framework	Core Idea	Relevance to HCS
<b>Hierarchy of Needs (Maslow)</b>	Human motivation progresses from basic to self-actualizing needs.	Provides conceptual ancestry for the <i>HCS Pyramid</i> and the <i>Level Rule</i> – higher forms of cooperation rely on lower-level stability.
<b>Self-Determination Theory (Deci &amp; Ryan)</b>	Autonomy, competence, and relatedness drive intrinsic motivation.	Directly informs HCS's dimensions of <i>Autonomy</i> and <i>Mutual Commitment</i> .
<b>Theory X and Theory Y (McGregor)</b>	Management assumptions influence employee motivation and trust.	Supports HCS's framing of <i>Trust</i> and <i>Agency</i> as emergent, not enforceable, conditions.
<b>Psychological Safety (Edmondson)</b>	Teams learn and innovate when members feel safe to take interpersonal risks.	Embedded in HCS's <i>Learning and Adaptation</i> function.
<b>Social Exchange Theory (Blau)</b>	Relationships are sustained through reciprocal benefit and fairness.	Grounds HCS's view of <i>Mutual Commitment</i> as both emotional and contractual.
<b>Self-Determination Theory / Modern Motivation Models</b>	Motivation emerges from autonomy, mastery, and belonging rather than external control.	Supports HCS Extended Needs around autonomy, growth, and recognition.
<b>SCARF Model (David Rock)</b>	Social threat and reward shape behavior through status, certainty, autonomy, relatedness, and fairness.	Provides psychological foundations for Extended Needs and psychological vectors.
<b>Intrinsic Motivation Models (Pink / Oldham / Hackman)</b>	Engagement increases when work is meaningful, self-directed, and feedback-rich.	Aligns with Extended Needs such as purpose, autonomy, and growth.

### 5.2.3 Communication and Shared Meaning

Source / Framework	Core Idea	Relevance to HCS
<b>Shannon–Weaver Model of Communication</b>	Information transmission depends on reducing noise and distortion.	Forms basis for HCS's <i>Communication Fidelity</i> function.
<b>Double-Loop Learning (Argyris &amp; Schön)</b>	True learning requires questioning underlying assumptions, not just correcting errors.	Informs <i>Reflective Practice</i> and <i>Level 5 Meta-Systems Thinking</i> .
<b>Sensemaking (Weick)</b>	People construct meaning retrospectively to understand ambiguous situations.	Explains why <i>Shared Understanding</i> is a dynamic, co-created process.
<b>Nonviolent Communication (Marshall Rosenberg)</b>	Needs-based, empathetic dialogue that improves relational clarity and trust.	Supports Core Trust (feedback clarity) and Extended Relational Conditions (emotional safety, conflict repair).
<b>Radical Candor (Kim Scott)</b>	Honest, caring communication strengthens accountability and relationships.	Informs relational repair within Extended Dynamics.

### 5.2.4 Organizational Design and Governance

Source / Framework	Core Idea	Relevance to HCS
<b>Sociotechnical Systems Theory (Trist &amp; Emery)</b>	Optimal performance arises when social and technical subsystems are jointly optimized.	Validates HCS's integration of human and procedural stability layers.
<b>Lean Thinking (Womack &amp; Jones)</b>	Continuous removal of waste to improve flow and value.	Reflects in HCS's <i>Execution &amp; Coordination</i> function.
<b>Kaizen</b>	Continuous small improvements by all participants.	Embedded in <i>Learning &amp; Adaptation</i> and the <i>Diagnostic Workflow</i> .
<b>Adaptive Leadership (Heifetz)</b>	Leadership is about enabling systems to adapt, not control.	Mirrors the <i>Systemic Governance and Agency</i> principles in HCS.
<b>Organizational Learning (Argyris, Senge)</b>	Organizations evolve when individuals learn within systemic feedback structures.	Reinforces <i>Systemic Learning</i> and the importance of <i>feedback closure</i> .

### 5.2.5 Power, Influence, and Organizational Politics

Source / Framework	Core Idea	Relevance to HCS
<b>French &amp; Raven's Bases of Power</b>	Power derives from position, expertise, relationships, information, and personal influence.	Forms the basis of HCS's <i>political vector</i> , explaining how influence affects cooperation.
<b>Organizational Politics Research (Mintzberg / Pfeffer)</b>	Informal networks, hidden agendas, and resource negotiation shape real decision-making.	Validates HCS's distinction between <i>formal structure</i> and <i>actual influence flows</i> .
<b>Stakeholder Theory (Freeman)</b>	Organizations must manage diverse interests and legitimacy claims.	Supports Collective Extended Needs around fairness, representation, and legitimacy.

## 5.2.6 Philosophical and Ethical Foundations

Source / Framework	Core Idea	Relevance to HCS
Aristotle – Nicomachean Ethics	Virtue arises from practiced balance between extremes.	Influences HCS's pursuit of equilibrium between autonomy and control.
Kantian Ethics	Human cooperation is grounded in respect for rational agency.	Echoes in HCS's concept of <i>Agency</i> and moral interdependence.
Ubuntu Philosophy ("I am because we are")	Human identity and well-being are inseparable from community.	Embodyies the relational worldview behind <i>Interdependence</i> and <i>Mutual Commitment</i> .
Phenomenology (Husserl / Merleau-Ponty)	Meaning is constructed through lived experience.	Supports HCS's principle that <i>Shared Understanding</i> emerges through interaction, not instruction.

## 5.2.7 Interpersonal Dynamics and Conflict

Source / Framework	Core Idea	Relevance to HCS
Conflict Styles (Thomas–Kilmann)	People favor competing, avoiding, accommodating, compromising, or collaborating under tension.	Helps interpret relational distortions in Extended Conditions.
Attachment Theory (Bowlby / Ainsworth)	Safety and past relational patterns influence trust and conflict behaviour.	Provides psychological grounding for individual Extended Needs (safety, belonging).
Emotional Intelligence (Goleman)	Self-awareness and empathy shape communication effectiveness.	Aligns with relational conditions and leader behavior in Extended Dynamics.

## 5.2.8 Bridging Toward Practice

Source / Framework	Core Idea	Relevance to HCS
Agile / Lean / Scrum	Frameworks that operationalize adaptability and feedback.	Represent Level 4 practices that rely on stable lower-level HCS conditions.
3-in-3 SDLC Framework (3SF)	Systemic governance model for client–vendor ecosystems.	Serves as a <i>Level 5 derivative</i> – an applied embodiment of HCS principles.
Team Topologies (Skelton & Pais)	Structures teams for flow and cognitive load balance.	In practice, can be evaluated through HCS's <i>Execution &amp; Coordination</i> function.
VMOSA / OKR / Wardley Maps	Strategic planning and situational awareness frameworks.	Connect to <i>Strategic Alignment</i> at Level 3, translating cooperative intent into measurable direction.
Situational Leadership (Hersey–Blanchard)	Leadership behavior must match follower readiness and capability.	Supports Extended Needs around growth, autonomy, and developmental alignment.
Liberating Structures	Creates equal-opportunity participation environments.	Supports fairness, belonging, and balanced contribution in Extended Dynamics.
RACI / Decision Records (ADR/CDR)	Makes decisions, ownership, and roles explicit.	Reinforces Core Conditions: clarity, coordination, and boundary safety.

## 5.2.9 Reference Philosophy

HCS does not seek to **supersede** these theories – it **synthesizes** their enduring principles into a unified, practical system for diagnosing cooperation.

In essence:

HCS = (Systems Thinking + Organizational Psychology) × (Communication + Adaptive Governance)  
structured through the **Pyramid** (stability hierarchy) and **Matrix** (functional map),  
providing the theoretical foundation for applied frameworks like **3SF**.

## 5.3 Practices Map

---

This chapter provides a reference-level overview of commonly used practices that support either **Core Model functions** or **Extended Human Dynamics**.

Practices are included only to illustrate how teams often address specific conditions or needs. They are **optional, framework-neutral**, and **not prescriptive**.

Each practice is listed with: - A brief functional purpose (what it helps with) - Its HCS mapping (Core, Extended, or Mixed) - A simple category for navigation

The intent is to offer **direction**, not detailed instruction.

### 5.3.1 Legend

---

**Core** – Supports minimal structural conditions and needs of the HCS Core Model

**Extended** – Supports motivation, relational dynamics, psychological or political influences

**Mixed** – Addresses both Core and Extended dynamics

### 5.3.2 Motivation & Values Alignment

---

#### **Moving Motivators**

Surfaces individual intrinsic motivators behind behavior and engagement.

HCS Mapping: Extended (Purpose, Recognition, Autonomy)

Category: Motivation

#### **SCARF (David Rock)**

Identifies status, certainty, autonomy, relatedness, and fairness drivers.

HCS Mapping: Mixed (Trust, Fairness, Safety; Personal Needs)

Category: Motivation / Psychological Triggers

#### **CliftonStrengths**

Highlights personal strengths and energy sources.

HCS Mapping: Extended (Growth, Recognition)

Category: Strengths Awareness

### 5.3.3 Interaction Styles & Communication

---

#### **DiSC**

Provides a vocabulary for communication and interaction preferences.

HCS Mapping: Extended (Relational Predictability); Mixed (Trust)

Category: Communication Style

#### **MBTI / 16Personalities**

Describes cognitive and interpersonal preference patterns.

HCS Mapping: Extended (Relational Understanding)

Category: Communication / Empathy

### 5.3.4 Developmental Readiness & Leadership Adaptation

---

#### **Situational Leadership**

Aligns leadership behavior with individual readiness and capability.

HCS Mapping: Extended (Growth, Autonomy); Mixed (Clarity)

Category: Leadership Adaptation

#### **Competency Models**

Clarify expectations, maturity levels, and developmental pathways.

HCS Mapping: Core (Clarity); Extended (Growth)

Category: Expectations & Development

### 5.3.5 Safety, Belonging, and Relational Health

---

#### **Psychological Safety Surveys (Edmondson)**

Measures perceived safety in communication and risk-taking.

HCS Mapping: Core (Trust); Extended (Safety, Belonging)

Category: Safety Assessment

#### **Nonviolent Communication (NVC)**

Provides a structured approach for respectful, needs-based dialogue.

HCS Mapping: Extended (Belonging, Recognition, Conflict Safety)

Category: Communication / Emotional Clarity

#### **Empathy Mapping**

Makes emotional states and expectations visible.

HCS Mapping: Extended (Relational Understanding)

Category: Empathy & Insight

### 5.3.6 Conflict, Repair, and Difficult Conversations

---

#### **Radical Candor**

Supports direct yet caring communication to address tension.

HCS Mapping: Mixed (Feedback Clarity, Relational Repair)

Category: Feedback & Conflict

#### **Crucial Conversations**

Framework for navigating high-stakes or emotionally charged dialogue.

HCS Mapping: Extended (Conflict Safety, Trust)

Category: Conflict Management

#### **Conflict Styles Inventory (TKI)**

Identifies preferred conflict responses to improve collaboration.

HCS Mapping: Extended (Relational Conditions)

Category: Conflict Behavior

### 5.3.7 Sensemaking, Purpose, and Collective Narrative

---

#### **Team Canvas**

Aligns teams on purpose, values, roles, and expectations.

HCS Mapping: Core (Shared Purpose, Clarity); Extended (Belonging)

Category: Alignment

#### **Appreciative Inquiry**

Strengthens shared identity through positive narrative exploration.

HCS Mapping: Extended (Purpose, Belonging, Coherence)

Category: Narrative & Identity

#### **Storytelling Workshops**

Helps teams articulate and align personal and collective narratives.

HCS Mapping: Extended (Purpose, Meaning)

Category: Sensemaking

### 5.3.8 Structural & Decision-Making Clarity

---

#### **RACI / RASCI**

Clarifies roles, responsibilities, and decision ownership.

HCS Mapping: Core (Boundary Clarity, Coordination)

Category: Structural Clarity

#### **Decision Records (ADRs / CDRs)**

Make decisions visible and traceable over time.

HCS Mapping: Core (Transparency); Extended (Fairness)

Category: Decision-Making

#### **Working Agreements**

Create explicit local rules for collaboration and behavior.

HCS Mapping: Core (Clarity); Extended (Predictability)

Category: Team Norms

### 5.3.9 Representation, Fairness, and Inclusion

---

#### **Stakeholder Mapping**

Makes influence, representation, and interests visible.

HCS Mapping: Extended (Fairness, Legitimacy; Political Vector)

Category: Influence & Representation

#### **Inclusion Audits**

Evaluates whose voices, roles, or perspectives are missing.

HCS Mapping: Extended (Fairness, Belonging)

Category: Inclusion

#### **Liberating Structures**

Ensures equitable participation in group discussions.

HCS Mapping: Extended (Belonging); Mixed (Clarity)

Category: Group Facilitation

### 5.3.10 How to Use This Map

---

These mappings describe *where practices are often helpful*, not required or recommended by HCS.

- Begin with the Core Model or Extended Dynamics to identify the primary condition or need.
- Select a practice that supports the function you are trying to explore or stabilize.
- Use practices **as inputs for discussion**, not as predefined solutions.
- Keep structural issues and human issues distinct when choosing interventions.
- Avoid using practices to “fix” what is actually a structural gap in the Core Model.

The Practices Map is intentionally **lightweight**.

Its purpose is to orient practitioners toward appropriate tools without prescribing methods or replacing agreements defined by HCS.

## 5.4 Version and Licensing

---

This section documents the current version, license, and attribution principles for the **Human Cooperation System (HCS)**. It ensures transparency, traceability, and consistency across all derivative works, educational materials, and frameworks built upon it — including the **3-in-3 SDLC Framework (3SF)**.

### 5.4.1 Version Information

Attribute	Description
<b>System Name</b>	Human Cooperation System (HCS)
<b>Version</b>	V1.0
<b>Status</b>	Stable — foundational version established as the theoretical core of cooperative system design.
<b>Release Date</b>	November 2025
<b>Maintained by</b>	3in3.dev
<b>Repository</b>	<a href="#">GitHub – vitar/hcs</a>

#### Version Summary

Version 1.0 consolidates the **foundational architecture** of the Human Cooperation System across two complementary layers:

- **Core Model** — the structural foundation of cooperation, including the 5x5 Matrix, Pyramid, Level Rule, and Diagnostic Workflow.
- **Extended Human Dynamics** — classification of collective and individual conditions and needs, and the influence of psychological and political vectors on real-world cooperation.
- **Reference Practices Map** — a non-prescriptive orientation linking common leadership and communication practices to relevant HCS functions.
- **Reference Section** — Glossary and theoretical sources covering systemic, psychological, relational, and governance influences.

This release establishes HCS as a **complete V1.0 system**:

a stable theoretical base (Core Model) and a complementary human-centered layer (Extended Dynamics), suitable for diagnostics, education, and derivative frameworks such as 3SF.

### 5.4.2 Licensing

The **Human Cooperation System** and all related documentation are licensed under the:

#### Creative Commons Attribution 4.0 International (CC BY 4.0)

You are free to:

- **Share** — copy and redistribute the material in any medium or format.
- **Adapt** — remix, transform, and build upon the material for any purpose, including commercial use.

Under the following terms:

- **Attribution** — You must give appropriate credit, provide a link to the license, and indicate if changes were made.
- **No additional restrictions** — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

#### License Reference

[Creative Commons Attribution 4.0 International \(CC BY 4.0\)](#)

To attribute this work, please use the following reference:

Human Cooperation System (HCS) by 3in3.dev – licensed under CC BY 4.0 via GitHub repository [vitar/hcs](#).

#### 5.4.3 Versioning Policy

- **Major versions (V2, V3, ...)** introduce new theoretical constructs or expanded diagnostic models.
- **Minor revisions (e.g., V1.1)** include refinements, clarifications, or terminology alignment with derivative frameworks (e.g., 3SF).
- All published versions will remain **permanently available** for reference and citation.
- Future releases will maintain **backward compatibility** with the foundational definitions, rules, and models of HCS.

#### 5.4.4 Attribution Guidelines

If reusing or adapting HCS content:

1. Include a visible credit line referencing 3in3.dev and the license type.
2. Retain section numbering and core definitions where possible to preserve structural consistency.
3. When combining HCS content with other frameworks or methods, clearly separate attribution and derived materials.
4. For translations or derivative works, add a note identifying the adaptation (e.g., "Adapted from the original Human Cooperation System V1.0 documentation licensed under CC BY 4.0").

© 2025 3in3.dev

Licensed under Creative Commons Attribution 4.0 International (CC BY 4.0)

<https://creativecommons.org/licenses/by/4.0/>

## 5.5 About the Author

---

### **Viktor Jevdokimov, Vilnius, Lithuania – Creator of 3in3.dev, HCS, and 3SF**

**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 **Human Cooperation System (HCS)** and 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** ecosystems.

#### **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 collaborative ecosystems.

3in3.dev publishes:

- The **Human Cooperation System (HCS)** – theoretical foundation for cooperative system design.
- The **3-in-3 SDLC Framework (3SF)** – practical application of HCS principles in software delivery.
- Supporting tools, templates, and learning materials under an open license.

“These systems aren’t about control – they’re about clarity, trust, and the shared intent that makes collaboration work.”  
— 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>.