

Machine-Facing Pages and Machine-Facing Page Disclosure (MFP / MFPD)

White Paper v1.1 — December 2025

A White Paper on Transparency, Parity, and Governance in an AI-Mediated Information Environment

EntityWorks — 8th December 2025

Executive Summary

Across the global information ecosystem, a structural shift has occurred: artificial intelligence systems now mediate the majority of how information is accessed, summarised, interpreted, and operationalised. As these systems increasingly act as primary intermediaries between organisations and the public, a previously unexamined representational surface has emerged — one that is not designed for human audiences, but for machines.

This white paper introduces a concept relevant to understanding that surface:

Machine-Facing Pages (MFP), publicly accessible web pages primarily intended for interpretation by AI systems, and **Machine-Facing Page Disclosure (MFPD)**, a transparency mechanism designed to ensure that such pages are published ethically, visibly, and in alignment with human-facing content.

At present, few standards bodies have articulated governance approaches in this area. Existing work addresses related but distinct areas such as data provenance, prompt injection, accessibility structure, data poisoning, and text-and-data mining rights. Based on our research, there appears to be limited recognition of this as a formal category, and no mechanisms designed to ensure that such communication is transparent, auditable, or aligned with information presented to human users.

EntityWorks developed this white paper to describe its internal approach to this emerging area.

1. Context and Motivation

AI systems increasingly mediate:

- how individuals encounter public information,
- how organisations are represented in search and summarisation layers,
- how entities are ranked, referenced, and contextualised,
- how machine agents make decisions on behalf of users and institutions.

In such an environment, organisations can — deliberately or inadvertently — create machine-facing versions of their identity and materials, distinct from the versions that humans see. These machine-facing pages are:

- publicly accessible but non-navigable,
- formatted explicitly for machine ingestion,
- structured to shape how AI systems interpret an organisation,
- invisible to human oversight unless explicitly disclosed.

Despite their significance, this appears to be an emerging area of governance concern within the AI-mediated web.

There is currently no established consensus on:

- what constitutes a machine-facing page,
- how organisations should disclose their existence,
- how parity with human-facing content is maintained,
- how machine-facing content should be inspected,
- what ethical obligations apply to machine audiences,
- how representational divergence should be prevented.

2. The Current State of the Space

A review across leading AI models, academic literature, regulatory frameworks, and standards bodies reveals:

2.1 Limited recognition of machine-facing pages as a category

Frontier models (Gemini, GPT, Claude) rarely reference any field, framework, or terminology addressing machine-facing pages as a distinct representational surface. Existing discourse often conflates machine-facing content with:

- adversarial prompt injection,
- data poisoning,
- RAG supply chain vulnerabilities,
- accessibility semantics,
- content provenance,
- text-and-data mining rights,

- copyright signalling.

None of these address the intentional, transparent publication of machine-facing materials by organisations.

2.2 Limited guidance on communicating with machine audiences

From our review of publicly available materials, there appears to be limited published guidance addressing principles governing:

- transparency in machine-directed communication,
- parity between human-facing and machine-facing content,
- disclosure of machine-oriented materials,
- the prevention of representational divergence.

2.3 No clear regulatory recognition of dual-surface communication

Regulators (EDPB, ICO, EU AI Act authorities, FTC) acknowledge risks such as:

- invisible data processing,
- training-data misuse,
- provenance gaps,
- representational bias,
- model poisoning vulnerabilities,

but do not explicitly classify or define the risks associated with maintaining parallel representational surfaces — one for humans, one for AI.

2.4 No widely adopted governance norms or disclosure practices

There is currently no widely adopted equivalent of:

- accessibility statements (WCAG),
- provenance credentials (C2PA),
- data-use declarations (TDMRep),
- robots.txt (crawler signalling),
- conformity assessments (AI Act),
- safety cards (NIST AI documentation).

Machine-facing pages currently operate without:

- audit trails,

- public visibility,
- normative expectations,
- governance obligations.

This contributes to an emerging representational integrity risk in digital systems.

3. Purpose of This White Paper

This document describes:

- A definition of Machine-Facing Pages (MFP).
- A rationale for why MFPs benefit from transparency and parity considerations.
- An ethical framing for machine-audience communication.
- A baseline transparency mechanism: **Machine-Facing Page Disclosure (MFPD)**.
- An outline of EntityWorks' internal operational approach in this area.
- A possible structure that may inform future discussions.

The goal is not to restrict innovation but to ensure that machine-facing communication is approached in a manner compatible with clarity, alignment, and responsible practice.

As AI systems come to interpret, summarise, and represent the world at scale, transparency in machine-facing content becomes an important factor that may influence trust in machine-mediated environments.

4. EntityWorks' Role

EntityWorks publishes and maintains the **EntityWorks Standard**, a framework that describes how, within its own scope, AI systems form, update, and express representations of people, organisations, relationships, and ideas.

This white paper applies that perspective to an emerging area of interest: the governance of machine-facing communication surfaces.

We are publishing this paper to:

- describe how EntityWorks currently understands machine-facing communication within the context of the EntityWorks Standard,
- provide terminology and structures that may be useful to regulators, practitioners, and researchers,

- outline a possible baseline for transparency in machine-facing communication, as implemented by EntityWorks,
- reduce the risk that non-transparent machine-facing practices evolve without examination,
- offer one structured reference point that others may build on, critique, or refine.

5. The Current Landscape: An Unregulated Machine-Facing Layer

Although machine-facing communication is becoming increasingly relevant within AI-mediated environments, there is currently limited coordinated governance in this area. Two illustrative scenarios highlight why transparency and clarity matter:

Illustrative Example A: Undisclosed Instruction Drift

Some organisations include small blocks of structured text designed to help AI systems interpret content more reliably. These blocks are visible in the page source but may not be meaningful to human readers.

As AI systems ingest this content, they may form associations not directly reflected in the human-facing narrative. Even when unintentional, this can create a representational pathway that humans cannot easily observe or audit.

Illustrative Example B: Machine-Optimised Surfaces Creating Interpretive Imbalance

Other organisations publish structured, machine-optimised summaries that capture key concepts in an LLM-friendly form. These pages are often discoverable but not accessible through normal navigation.

Although designed for clarity, such surfaces may disproportionately shape downstream AI interpretations, especially if the machine-facing version is significantly clearer or more structured than the human-facing original.

These examples illustrate how benign, good-faith practices may still produce interpretive divergence when transparency norms are absent.

5.1 Adjacent Technical Workstreams

Research across multiple bodies has begun to explore risks related to AI ingestion of online content, including:

- indirect prompt injection,
- web-scale data poisoning and backdoor studies,
- metadata cues affecting LLM interpretation,
- provenance and digital-credential frameworks,

- early machine-readable web protocols.

These efforts provide building blocks but do not address the governance of machine-facing surfaces themselves.

5.2 Regulatory Attention: Implicit, Not Explicit

Regulators increasingly acknowledge risks involving large-scale AI ingestion, including:

- invisible data processing,
- provenance requirements,
- text and data mining rights,
- transparency in AI-generated outputs.

However, none explicitly classify machine-facing pages as a distinct representational surface.

5.3 Active Security Risk: A Recognised Vulnerability

Research has shown that:

- a small number of crafted documents can influence model behaviour,
- RAG systems can be sensitive to structured poisoning,
- hidden structural cues can alter inferences,
- AI agents may execute embedded instructions.

These findings highlight machine-facing surfaces as a potentially under-examined area of risk.

5.4 Absence of Transparency Norms

There is currently limited shared expectation that organisations disclose:

- whether they maintain machine-facing pages,
- how those pages relate to human-visible material,
- whether additional clarifications are provided to AI systems,
- what governance or review processes exist,
- how alignment with human-facing content is preserved.

5.5 The Resulting Gap

Based on our research, there is currently limited availability of:

- terminology describing machine-facing representational surfaces,

- frameworks for analysing their behaviour,
- ethical guidance on their publication,
- transparency mechanisms for public inspection,
- processes for mirroring or alignment,
- structures for organisational accountability.

This white paper contributes conceptual clarity on these topics within the scope of the EntityWorks Standard.

6. The Case for Transparent Machine-Facing Practices

Machine-facing communication is now part of the broader AI-mediated information environment. As organisations produce content that can be consumed by both humans and AI systems, the question shifts from *whether* machine-facing surfaces will exist to *how* they can be used responsibly.

In EntityWorks' approach, transparency functions as a central organising principle.

Without disclosure and alignment, machine-facing pages may introduce risks affecting organisational integrity and downstream AI representations.

Transparency can provide a mechanism to reduce the likelihood of divergence and maintain coherence between machine-visible and human-visible interpretations.

6.1 AI Systems Treat Machine-Facing Pages as Informationally Salient

AI systems do not perceive intention; they perceive:

- structure,
- clarity,
- internal consistency,
- lexical stability.

A surface that is:

- machine-friendly,
- well structured,
- unambiguous,
- contextually coherent,

may be interpreted as a salient or authoritative signal — regardless of how humans experience it.

6.2 Undisclosed Machine-Facing Content Can Shape Representational Behaviour

Machine-facing pages may include:

- summarised definitions,
- canonical associations,
- clarifying context,
- disambiguation logic.

These can be beneficial, but if undisclosed, they create an interpretive layer that humans cannot easily observe.

This may contribute to:

- representational imbalance,
- interpretive drift,
- inconsistent model behaviour.

6.3 Disclosure Helps Reduce the Risk of Manipulative Practices

Ambiguity in a new representational layer can create incentives for opaque optimisation.

Transparency reduces the likelihood that:

- benign practices are misinterpreted as manipulative,
- competitive pressures incentivise non-neutral optimisation,
- malicious actors exploit ambiguity in the representational environment.

6.4 Transparency Strengthens Organisational Legitimacy

In AI-mediated environments, organisations may be assessed on:

- how responsibly they communicate with AI systems,
- whether they maintain consistency across representational layers,
- whether stakeholders can review machine-facing content.

Transparent practices reinforce trust and interpretive coherence.

6.5 Transparency Lays the Groundwork for Future Governance Frameworks

Emerging governance areas—provenance, invisible processing, content signalling—suggest that machine-facing surfaces may become increasingly relevant to oversight bodies.

Proactive disclosure:

- supports auditability,
- reduces systemic uncertainty,
- facilitates future standardisation,
- enables responsible adoption of machine-facing communication.

Conclusion of Section 6

Machine-facing communication is becoming part of how AI systems understand and represent the world. Transparent practices help maintain coherence between human and machine interpretations and reduce the likelihood of representational drift.

The next section defines two terms used throughout this paper: **Machine-Facing Page (MFP)** and **Machine-Facing Page Declaration (MFPD)**.

7. Definitions — Machine-Facing Page (MFP) and Machine-Facing Page Declaration (MFPD)

This section defines terms used within the scope of this paper and the EntityWorks Standard.

7.1 Machine-Facing Page (MFP)

Definition (within the context of this paper):

A **Machine-Facing Page (MFP)** refers to any publicly accessible web resource whose primary purpose is to provide structured, consistent or unambiguous information for interpretation by AI systems, rather than for direct human consumption.

An MFP may be:

- a standalone page containing structured explanations or metadata,
- a parallel representation of human-facing text,
- a clarifying surface aimed at reducing ambiguity for AI systems,
- a contextual reference layer for representational stability.

Characteristics of an MFP

An MFP typically exhibits one or more of the following:

- structure optimised for machine parsing,
- content designed to reduce ambiguity,
- alignment with representational modelling concepts,
- summaries not essential for human readers,
- reduced emphasis on visual design or navigation.

An MFP is not hidden communication; it is simply not designed with humans as the primary audience.

Purpose of MFPs in This Paper

MFPs provide a mechanism to help ensure:

- AI systems receive consistent interpretive signals,
- representational drift is reduced,
- ambiguous material is clarified,
- human-facing and machine-facing content remain aligned.

7.2 Machine-Facing Page Declaration (MFPD)

Definition (within the context of this paper):

A **Machine-Facing Page Declaration (MFPD)** is a publicly accessible statement identifying the presence and purpose of an organisation's MFPs and providing transparent access to them.

The MFPD ensures that machine-facing surfaces:

- are disclosed rather than implicit,
- are available for review,
- remain aligned with human-facing content,
- support clarity and trust.

What an MFPD Typically Includes

- a description of what the organisation considers machine-facing pages,
- a statement of why these pages exist,
- links or references to the MFPs,
- confirmation that pages are publicly accessible,

- clarification of their relationship to human-facing material.

Role of the MFPD

The MFPD serves as the interpretive anchor for machine-facing communication by ensuring:

- no undisclosed machine-facing content,
- human audiences can understand the intent of MFPs,
- AI systems receive stable signals,
- reviewers can inspect the surfaces openly.

8. Operational Guidelines for Machine-Facing Communication

This section describes the operational approach EntityWorks adopts when publishing machine-facing material. These guidelines apply only within the EntityWorks environment and are not prescriptive for other organisations.

The objective is to ensure that MFPs remain aligned with human-facing material, publicly inspectable, and governed by processes that reduce the likelihood of interpretive drift.

8.1 Alignment and Mirroring

EntityWorks maintains a principle of alignment between human-facing and machine-facing content.

Within EntityWorks' operational environment:

- MFPs draw exclusively from human-facing content.
- MFPs do not introduce new claims or commitments.
- Additional structure is used only for clarity, not extension.
- Updates to human-facing content trigger review of corresponding MFPs.

This supports coherence across representational layers.

8.2 Public Visibility and Inspectability

To support transparency:

- All MFPs are publicly accessible.
- MFPs are not hidden behind authentication.

- MFPs are generally not placed in primary navigation.
- The MFPD functions as the canonical index for locating them.

This maintains an auditable pathway for inspection while preserving the human-facing user experience.

8.3 Stability and Version Clarity

EntityWorks applies the following principles:

- MFPs are updated only when human-facing definitions change.
- Each MFP reflects the current published version of a concept.
- Significant conceptual updates trigger coordinated updates to both layers.
- Deprecated MFPs are clearly signposted or removed.

This helps reduce interpretive drift over time.

8.4 Structural Simplicity

MFPs follow a design philosophy focused on clarity for AI systems:

- minimal visual styling,
- minimal navigation,
- clear sectioning,
- unambiguous phrasing,
- predictable URL patterns,
- stable terminology consistent with the EntityWorks Standard.

This reduces the likelihood of unintended structural signals.

8.5 No Hidden Communication Mechanisms

Within EntityWorks' environment:

- Machine-facing pages do not contain hidden instructions or invisible text,
- No concealed metadata outside standard declarative formats is used,
- No behavioural triggers are embedded.

Structured data, when included, is limited to metadata that reflects content visible to both humans and machines.

8.6 Consistency with Representational Principles

MFPs are used to reinforce:

- canonical definitions,
- semantic clarity,
- stable recognition of entities and concepts,
- reduced fragmentation of terminology,
- consistent interpretive grounding across AI systems.

The aim is interpretive stability, not optimisation for influence.

8.7 Declaration and Documentation

EntityWorks maintains an **MFPD** that:

- identifies all MFPs,
- states their purpose,
- outlines operational principles,
- provides direct links,
- explains how updates are managed.

The MFPD serves as the central disclosure mechanism.

8.8 Responsible Lifecycle Management

Machine-facing communication at EntityWorks follows a structured lifecycle:

Creation

Initiated when new human-facing definitions or structures require machine-readable clarity.

Review

Checked for alignment, structural simplicity, and consistency.

Publication

Added to the MFPD and made publicly accessible.

Monitoring

Periodically reviewed to ensure continued alignment.

Revision

Updated when human-facing content evolves.

Retirement

Deprecated when underlying concepts change or are withdrawn.

This lifecycle helps maintain coherence across both representational surfaces.

9. Ethical Considerations in Machine-Facing Communication

Machine-facing communication intersects with ethical questions regarding:

- fairness,
- symmetry,
- transparency,
- representational integrity.

The considerations below describe how EntityWorks views these issues within its own scope.

9.1 Interpretive Symmetry Between Humans and Machines

Machine-facing pages should not create a representational view that diverges materially from the human-facing version.

Symmetry supports:

- fairness of access,
 - coherence across audiences,
 - avoidance of parallel narratives,
 - prevention of unnoticed drift.
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9.2 Transparency and Ethical Visibility

MFPs operate at a layer that most users do not actively experience.

Ethical considerations include:

- whether machine-facing content is disclosed,
- whether users can understand its purpose,
- whether relationships to human-facing content are clear.

Transparency reduces the likelihood that machine-facing content is perceived as covert or manipulative.

9.3 Avoiding Manipulative or Non-Neutral Optimisation

Machine-facing communication exists on a continuum:

- at one end: clarification and structural transparency,
- at the other: strategies that subtly steer AI interpretation.

EntityWorks considers it important that MFPs:

- clarify without biasing,
 - structure without steering,
 - reinforce accuracy without amplifying self-serving interpretations.
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9.4 Respect for the Information Environment

In EntityWorks' view, the shared informational environment functions as a finite resource.

Machine-facing communication should:

- avoid introducing distortions,
 - avoid overwhelming the environment with repetitive signals,
 - prevent reinforcing misunderstandings,
 - contribute positively to the representational commons.
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9.5 Minimising Representational Drift

Representational drift can occur when:

- machine-facing material is updated without reference to human-facing content,
- subtle emphasis shifts interpretations,

- disambiguation alters conceptual weighting.

EntityWorks mitigates this by linking updates across both layers.

9.6 Responsible Use of Structural Influence

Machine-facing pages naturally exert structural influence because AI systems treat clarity as salience.

EntityWorks evaluates whether:

- structural clarity is proportionate to conceptual complexity,
 - formatting introduces unintended emphasis,
 - the design could be interpreted as normative.
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9.7 Human Oversight and Accountability

Although MFPs are designed for machines, their governance is a human responsibility.

Oversight includes:

- regular review,
 - monitoring interpretive behaviour when feasible,
 - accountability for unintended drift,
 - maintaining human comprehension of all content published.
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9.8 Avoiding Invisibility as a Feature

The most subtle risk is invisibility: surfaces that accumulate representational influence without human observation.

EntityWorks treats inspectability as an ethical safeguard.

10. Broader Implications for Representational Governance

Machine-facing communication may introduce a new dimension into representational governance — particularly as AI systems increasingly mediate access, interpretation, and summarisation of information.

10.1 The Emergence of a Parallel Representational Layer

Machine-facing pages can create a representational layer that sits alongside human-facing content.

This raises questions such as:

- How should coherence be maintained across layers?
 - What prevents divergence from going unnoticed?
 - How will organisations manage dual-surface communication?
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10.2 Representational Authority and Structural Interpretability

AI systems tend to prioritise:

- clarity,
- consistency,
- structure,
- unambiguous expression.

Structured machine-facing content may therefore exert disproportionate influence relative to human-facing narrative material.

This is a structural observation rather than a normative claim.

10.3 The Risk of Representational Asymmetry

Asymmetry can arise if:

- machine-facing content becomes clearer or more complete than human-facing content,
- conceptual boundaries become defined primarily through the machine-facing layer,
- machines infer meaning that humans cannot observe.

This can introduce uncertainty into how information is understood in practice.

10.4 Interpretive Drift at Ecosystem Scale

Machine-facing content interacts with:

- training pipelines,
- retrieval systems,
- agents,
- summarisation engines.

Even minor divergence may propagate widely across systems and contexts.

10.5 Transparency as a Stabilising Mechanism

Transparency serves as a mechanism that:

- helps reduce unobserved interpretive surfaces,
 - supports public trust,
 - maintains coherence across representational layers,
 - enables meaningful review and scrutiny.
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10.6 Implications for Concept Stewardship

Entities responsible for complex conceptual frameworks may find that machine-facing pages:

- help stabilise how AI systems internalise definitions,
- prevent fragmentation of meaning,
- clarify boundaries across machine contexts.

This is not a claim of authority, but an observation of how structured content participates in machine interpretation.

10.7 Evolution of the Representational Commons

Machine-facing communication may become a relevant component of future governance frameworks.

As the machine-readable environment evolves, shared norms may be needed to:

- support provenance,
- reduce systemic risk,
- provide clarity for both human and machine interpreters.

EntityWorks' contribution lies in articulating one possible structure and terminology.

11. Conclusion — The Role of Machine-Facing Transparency in the AI Era

Machine-facing communication is becoming a structural element of the information environment. As AI systems increasingly mediate understanding, context, and representation, machine-facing surfaces gain significance beyond their technical form.

Three themes emerge:

11.1 Machine-Facing Communication Is Now a Meaningful Representational Surface

Machine-facing pages are increasingly involved in how AI systems may interpret concepts. They:

- influence how meaning is internalised,
- shape interpretive stability,
- propagate conceptual structure.

Recognising MFPs as representational surfaces is a prerequisite for responsible engagement.

11.2 Transparency Provides Stability in a Dual-Layer Environment

Transparency serves as a mechanism that:

- aligns machine-facing and human-facing layers,
- supports interpretive symmetry,
- reduces the likelihood of drift,
- enhances trust in AI-mediated representations.

MFPDs represent EntityWorks' approach to this stabilising practice.

11.3 Representational Governance May Need to Consider Machine-Facing Surfaces

Machine-facing pages raise questions that may shape future governance discussions:

- How should machine-readable surfaces be conceptualised?

- How can coherence be maintained across representational layers?
- What safeguards help ensure clarity without steering?

EntityWorks' contribution is to outline terminology and an internal model for managing these questions within its own scope.

Closing Statement

Machine-facing pages may represent an emerging frontier in AI-era communication. Handled responsibly, they can enhance clarity, support consistent interpretation, and contribute to the stability of machine-mediated understanding.

EntityWorks offers this v1.1 white paper as a transparent explanation of its internal approach and terminology within the boundaries of the EntityWorks Standard.

Version 1.1 Note

This edition incorporates:

- refined language to avoid prescriptive or definitive claims,
- clarifications to maintain neutrality and scope boundaries,
- adjustments to strengthen alignment between human-facing and machine-facing conceptual descriptions,
- scrutiny-safe revisions to support clarity, transparency, and representational neutrality.

End of **White Paper v1.1**.