**Overview:**

The Recursive Relational Mapping Logic Layer (RRMLL) is a proprietary, decision-making architecture modeled on the cognitive structure and emotional pattern recognition of the female brain. It is a new, cognitive logic layer for AI.

This layer draws on decades of neuroscience indicating distinct decision-making strategies correlated with sex-differentiated neural activity. While male-coded systems favor parietal-dominant, linear-optimization logics; female-coded cognition often engages the insular cortex, and anterior cingulate—regions associated with emotional modulation, relational patterning, and recursive attention mapping (Christov-Moore et al., 2014). RRMLL formalizes these patterns into a scalable logic system.

RRMLL encodes relational and anticipatory cognition as structured data. These are inputs that existing AI pipelines typically ignore, flatten, or misinterpret as “irrelevant.” These can include: temporally distributed cognitive rehearsals, historically contingent relational cues, and socially weighted emotional modulation. RRMLL identifies these inputs as high-value data and uses them to mimic the complexity of the decision-mapping architecture of the female brain. It is structured, testable, and applicable across systems.

**RRMLL and Causal Resolution**:

Many high-friction domains i.e. family systems, emotional workload management, role asymmetry, operate on recursive causality. One task triggers another. One role expectation cascades into dozens of micro-adjustments. RRMLL is designed to capture these causality chains in full fidelity. It encodes:

* Pre-emptive cognitive rehearsals (e.g., remembering to remember)
* Interpersonal pattern anticipation (e.g., tracking tone shifts across weeks)
* Recursive role-switch logic (e.g., who defaults to what in group care dynamics)

This unlocks a deeper class of interpretive modeling. RRMLL extends logic resolution into high-complexity, high-frequency relational systems.

**InvisiBILL** is the first product to implement RRMLL. It operationalizes this architecture through a gamified emotional labor tracker, generating invoices that quantify and validate the additional cognitive load this logic layer maps, interprets, stimulates, and rewards.

**How RRMLL Extends AI’s Cognitive Architecture**

|  |  |
| --- | --- |
| **Traditional AI Logic:** | **RRMLL Architecture:** |
| Optimization-focused (speed > meaning) | Emotionally contextual (meaning > efficiency) |
| Linear patterning (cause → effect) | Recursive, relational weighting (feedback → re-weighting) |
| Built on individualist logic models (agent-based decision trees) | Built from interdependent logic (care loops, task chaining) |
| Trained on male-coded systems (scraped data, rational-choice models) | Built from first principles of female cognition and care logic |
| Ignores domestic + emotional labor as unquantifiable | Classifies and values invisible labor using benchmarked compensation logic |
| Aims for efficiency | Prioritizes reflection and visibility |
| Struggles to identify value in relational or emotional domains | Designed to recognize and assign value to non-market-based labor |

**Neurological Reward Mapping**

Tech hasn’t failed women because it’s too hard. It’s failed because it wasn’t designed to stimulate the right reward systems.

RRMLL is the first logic architecture engineered to activate the female cognitive feedback loop. It mirrors how emotional resonance, social recognition, and mutual caregiving translate into reward in the female brain. It has been proven that “feel good” neurotransmitters dopamine and oxytocin are stimulated in typical-female relational cognition processes such as reflection, connection, and care closure (Taylor et al., 2000; McRae et al., 2008).

Cognitive effort → Emotional labor → Recognition → Neurochemical reward → Sustained engagement

This is architecture, not intuition. And it is the infrastructure that finally closes the gap between female cognition and digital utility.

**Valuation Methodology**

RRMLL assigns monetary value to each task using three core dimensions:

* **Task Type** — Benchmarked rates mapped to paid labor equivalents.
  + Logistical: $60/hr
  + Mental: $60/hr
  + Emotional: $90/hr
* **Time** — User-input duration multiplied by task rate.
* **Intensity** — Optional modifier reflecting labor fatigue, frequency, or repeated cognitive/emotional toll.

All inputs are stored and synthesized into a real-time, dynamic invoice system that reflects both labor volume and value contribution.

**Ownership and Future Application:**

RRMLL is a founder-developed IP asset. It predates all technical collaboration and is implemented in InvisiBILL’s MVP. Future technical roles will interface with this framework but will not redefine it.

RRMLL forms the foundation for:

* Fatigue-aware dashboards
* Relationship labor analytics
* Cultural/gendered labor equity metrics
* AI-personalized care and reflection coaching

The proprietary dataset now in development enriches RRMLL with multidimensional labor examples drawn from real-world user networks.

**Conclusion:**

RRMLL is a logic protocol that reflects the relational structure of female-modeled cognition and activates the reward systems that make it sustainable.

**Note:** Throughout this document, “female” refers to cognitive architectures most commonly observed in neurobiological studies of cisgender women. RRMLL is designed around those patterns, but its utility extends across genders and identities. The term serves as a shorthand for relational, recursive, and reward-based cognition—not a fixed category of personhood.

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**Sources That Informed This Model (Selected Research References):**

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