

Appendix: The Great Wall on the Fifth Layer of the Internet

Introduction

While modern society enjoys the convenience of the internet, its fragile foundation leaves it exposed to an estimated 800 billion yen in financial damages annually. To overcome this crisis, we propose a **"fundamental defense"** rather than the existing **"reactive measures."**

Current Situation and Challenges

Most cybercrimes occur on the internet's **Layer 6 (Presentation Layer) and Layer 7 (Application Layer)**. This stems from telecommunication carriers and financial institutions entrusting security to the higher application layers. This ambiguity of responsibility is what leads to the escalation of damages.

Proposal: Building a Dedicated Financial Session

To solve this problem, we propose that telecommunication carriers and financial institutions collaborate to build a fixed and mobile **"Dedicated Financial Session."** This would create a "Great Wall" with ultimate security and stability on the internet's foundation, **Layer 5 (Session Layer)**.

- **Complete Security:** Financial transaction data travels through a closed network that is completely isolated from the general internet.
 - **High Stability:** It uses multiple communication paths simultaneously, physically ensuring uninterrupted communication even during a disaster.
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The Significance of Defending at Layer 5

This approach is not merely a technical argument.

- **Reduced Burden on Citizens:** Citizens no longer have to be conscious of complex security measures.
- **Clearer Responsibility:** Telecommunication carriers will no longer be mere "conduit" providers; they will assume clear responsibility as providers of a **"secure communication channel."**

This proposal is a cost-effective and unique solution to prevent 800 billion yen in annual financial damages through a fundamental defense at a lower layer.