EMMA Finance

Phase 1 Summary: Findings and Functional Prototype

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Executive Context

Global Financial Services (GFS) plays a critical role in ensuring accurate, consistent, and well-controlled financial operations. As operational volumes increase and expectations around efficiency continue to rise, Finance teams are under growing pressure to maintain high standards while operating with limited capacity.

Over time, GFS has made significant investments in documentation and enablement. More than **1,100 Standard Operating Procedures (SOPs)** are maintained in SharePoint, complemented by over **500 instructional videos** in Guidde. This content is structured, governed, and reflects deep domain expertise.

Phase 1 of the EMMA initiative was launched to explore whether advanced, **agent-based AI approaches** could offer practical alternatives to persistent execution-time challenges—without compromising control, accuracy, or governance.

This document summarizes the findings, opportunity framing, and **functional prototype** developed for EMMA Finance during Phase 1.

Scope of the Engagement

The scope of this work was intentionally limited to a first **exploratory phase**.

Phase 1 included:

- Investigation and problem framing through stakeholder engagement
- Design of an AI agent-based approach aligned with Finance constraints
- Development of a functional prototype to demonstrate feasibility

Phase 1 did not include:

- Production deployment
- Integration with Finance systems
- Rollout or change-management planning
- Commercial, cost, or effort estimates

These topics are considered out of scope for Phase 1 and would require separate evaluation and approval.

Investigation Approach

During the investigation phase, conversations were held with **GFS stakeholders and leaders** to understand:

- How Finance procedures are executed in practice
- How SOPs and guidance are accessed today
- Where time and effort are most frequently consumed
- What constraints exist around automation, governance, and approval

In parallel, existing **documentation practices** were reviewed, including the structure and use of SOPs in **SharePoint** and instructional videos in Guidde.

The findings summarized below are grounded directly in these discussions and observations.

Key Findings

Information Exists at Scale

GFS has invested heavily in **documented knowledge:**

- More than 1,100 SOPs maintained in SharePoint
- Over 500 instructional videos supporting process execution
- Content that is structured, categorized, and well governed

The **availability or quality of information** is not the primary issue.

Access Is Misaligned With Execution

Finance work is often executed under **time pressure**. Questions arise during a process, not before it begins.

In these moments, stopping execution to search, read, and interpret documentation is not always practical. As a result, teams frequently rely on colleagues to clarify steps, confirm procedures, or unblock progress.

This pattern reflects how **complex work is performed in practice**, not a lack of discipline or effort.

Pressure on Expertise

Because **guidance is repeatedly needed** during execution:

- Senior and experienced team members are interrupted frequently
- The same procedural questions surface multiple times
- Time is spent guiding rather than executing or improving processes

Over time, this creates a **persistent operational burden**.

Structural Constraints

Several **constraints limit traditional responses:**

- Limited time for training and formal enablement
- Ongoing pressure to operate with leaner teams
- Sensitivity of Finance processes, which constrains automation and requires strong governance

Accuracy, control, and consistency remain non-negotiable.

The Core Paradox

The investigation revealed a **structural paradox**.

- More documentation increases maintenance effort
- More training requires time that teams do not have
- Full automation is often not feasible in sensitive Finance contexts

As a result, the more guidance teams need during execution, the harder it becomes to provide that guidance **consistently at scale**.

Framing the Opportunity

Rather than adding more documentation or training, Phase 1 explored whether an agent-based AI approach could offer an alternative.

Unlike static documents or basic question-and-answer tools, **agent-based systems** can combine:

- Natural language interaction
- Access to enterprise knowledge
- **Context awareness during execution**
- Controlled, auditable actions

This framing guided the design of EMMA Finance.

EMMA Finance: The Proposed Solution

EMMA Finance was designed as an **AI voice agent** to support GFS teams during execution, using the knowledge and systems that already exist.

It is important to clarify what EMMA Finance is and is not.

> EMMA Finance does not replace Finance expertise.
>
> It does not change SOPs or policies.
>
> It does not bypass controls or permissions.
>
> Instead, it provides a **new access layer** that helps teams apply existing knowledge at the moment it is needed.

Functional Prototype Overview

EMMA Finance was developed as a functional prototype.

The purpose of the prototype is to demonstrate feasibility and explore how **real-time execution support** could work in a Finance context. It is not a production system and does not connect to production Finance environments.

The prototype was intentionally designed to allow **safe evaluation without operational risk**.

Key Capabilities Demonstrated

The EMMA Finance prototype demonstrates several complementary capabilities.

Basic Mode — Knowledge Access

In **Basic Mode**, users can ask questions in **natural language**.

EMMA Finance:

- Retrieves relevant answers from Finance SOPs and reference content
- Provides clear responses
- Includes direct links to the exact SharePoint or web source

This removes the need for manual searching and interpretation.

Procedure Mode — Guided Execution

In **Procedure Mode**, EMMA Finance supports execution while work is in progress.

The agent can:

- View what the user sees on screen
- Read SOPs and documents alongside the user
- Understand where the user is within a process
- Provide **step-by-step guidance** aligned to that context

This experience is similar to working with an expert colleague during execution.

Document Vision

The prototype can work with large, **visual SOPs and PDFs**, not just text excerpts.

This capability is important for Finance procedures that rely on diagrams, structured layouts, or **complex process flows**.

Web and SharePoint Browsing

EMMA Finance can **navigate SharePoint pages** and relevant web content to surface information efficiently, **reducing navigation effort**.

Browsing Automation

When appropriate, the agent can perform **browser-based actions**—such as navigating pages or filling templates—always within the user's **existing permissions and access rights**.

Automated Knowledge Synchronization

The prototype includes **automatic synchronization** with SharePoint, ensuring that SOPs and reference content remain current **without manual maintenance**.

Intended Users

EMMA Finance is designed for **Global Financial Services team members**, particularly those **executing procedures** and handling complex or repetitive processes.

Security and Governance Considerations

From the outset, EMMA Finance was designed with **enterprise governance** in mind.

Key considerations include:

- Python-based, **auditable codebase**
- Self-hostable tools
- Secure deployment options (local or cloud)
- No bypassing of access controls or permissions

These principles ensure that support is provided without compromising control.

Validation Activities

As part of Phase 1, the EMMA Finance functional prototype was reviewed in **working sessions with leadership**.

These sessions focused on demonstrating capabilities, discussing potential value, and gathering feedback. They provided visibility and input at both **local and executive levels**, without constituting formal approval.

Current Status

EMMA Finance is currently a **Phase 1 functional prototype**.

It demonstrates technical feasibility and a potential new approach to supporting Finance execution. It is intentionally designed for **controlled evaluation** before any consideration of broader scaling.

Closing Note

The work completed in Phase 1 provides a **concrete foundation** grounded in real operational input and a working prototype.

Any future steps—such as deeper validation, integration assessment, roadmap definition, or rollout planning—would build on this foundation and require **separate alignment and approval**.