AI Meeting Assistant: AI Agent–Driven End-to-End Automated Meeting Management System

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1. Background

Implementing Organization: MITS (XJTLU)

Through AI Agent implementation, one scenario per task, one sentence per task.

Issues in the original process:

• **Fragmented systems**: Meeting scheduling required switching between multiple systems, including the calendar system, meeting room booking system, and email system, lacking a unified operation interface.

• **Low operational efficiency**: Manual operations involved complex steps, taking an average of 5–10 minutes to complete a single meeting arrangement, significantly impacting work efficiency.

• **Frequent human errors**: Manual operations often resulted in meeting room conflicts, missed emails, and scheduling conflicts.

• **Improper resource allocation**: Administrative staff spent a large amount of time on repetitive tasks and were unable to focus on higher-value strategic work.

> Core pain point: Under the traditional office model, even simple meeting scheduling requires crossing multiple systems and multiple steps, becoming a key bottleneck constraining the improvement of administrative efficiency.

Figure 8-1 Core pain point

2. Solutions

> Core technologies: AI Agent–based natural language interaction and multi-system integration

Figure 8-2 Core technology

Key Functional Design:

• **Natural language instruction recognition**: Users can initiate schedule booking, meeting room booking, Tencent Meeting booking, and meeting invitation emails through simple conversations, eliminating complex system interface operations.

• **Intelligent schedule management**: Automatically creates meeting arrangements in the ehall schedule center, intelligently identifying and avoiding time conflicts.

• **Intelligent meeting room matching**: Automatically matches and books the most suitable meeting room resources based on meeting size, time slots, and equipment requirements.

• **Email automation**: Automatically generates standardized meeting invitation emails and accurately sends them to all relevant participants.

• **End-to-end process integration**: Achieves cross-platform and cross-application workflow automation, seamlessly integrating calendar systems, booking systems, and email systems.

Process Optimization Approach:

> Original process: 5–10 minutes × 3 systems × multiple steps → Optimized process: 30 seconds × one conversation × fully automated execution

Figure 8-3 Process Optimization

The original multi-step manual operations requiring 5–10 minutes across three systems are revolutionarily simplified into a one-time natural language instruction, truly realizing the value leap from

"chatting" to "getting things done," demonstrating the capability upgrade of AI Agent from Answering to Acting.

3. Outcomes and Benefits

Efficiency Improvement:

Meeting scheduling efficiency improved by 90%+ | Average daily time savings of 1–2 hours | Improved meeting room utilization15%

Figure 8-4 Efficiency Improvement

- Significant reduction in operation time: Meeting arrangement time reduced from 5–10 minutes to within 30 seconds, achieving over 90% efficiency improvement.
- Human resource optimization: Each administrative staff member saves approximately 1–2 hours of repetitive work per day.
- Optimized resource utilization: Meeting room utilization increased by approximately 15%, reducing idle resources through intelligent matching.

Accuracy Improvement:

Meeting conflict rate ≈ 0% | Email notification delivery rate 100% | Human error elimination rate 100%

Figure 8-5 Improvement in Accuracy

• Significantly reduced error rate: Complete elimination of human operational errors, with meeting conflict rates reduced to near zero.
• Complete notification coverage: Email omission issues fully resolved, achieving a 100% notification delivery rate to participants.

Management Value Demonstration:

• Enhanced personnel value: Administrative staff are fully freed from low-value repetitive labor and can focus on strategic and creative work.
• Organizational efficiency optimization: Significantly improves organizational collaboration efficiency and standardization of meeting management.
• Validation of technical concept: Successfully demonstrates the core value leap of AI Agent from "Answering" to "Acting."

Technical Demonstration Value:

• Business model innovation: Successfully implements the RaaS

(Result-as-a-Service) business model.

• Application scenario validation: Fully validates the practicality and feasibility of AI Agent in administrative scenarios within educational institutions.

• Core concept proof: Strongly demonstrates the forward-looking concept that “delivery capability > model intelligence.”

4. Replicability and Promotion Value

High Replicability:

• Scenario universality: Meeting management scenarios are widely present across organizations such as enterprises, government agencies, hospitals, and schools.

• Technical generality: The technical solution has strong general applicability and portability, enabling rapid adaptation to different institutions’ OA systems and office environments.

Promotion Potential:

• Horizontal expansion: Can be seamlessly extended to more administrative office scenarios, such as travel applications, reimbursement approvals, asset management, and procurement processes.

• Platform integration: Can be deeply integrated with mainstream collaboration platforms such as DingTalk, WeCom, Feishu, and

Teams.

• Scalability adaptation: The technical architecture supports elastic scaling and is suitable for organizations of different sizes, from small enterprises to large groups.

Industry Demonstration Effect:

• Benchmark case: As a benchmark case of AI Agent application in the education sector, it has significant demonstration and leading value.

• Transformation pathway: Provides other institutions with referenceable and replicable implementation pathways and methodologies for digital transformation.

5. Next Steps

Functional Expansion:

• Enhanced intelligence: Add advanced features such as automatic meeting agenda generation, intelligent meeting minutes organization, and automatic meeting effectiveness analysis.

• Deeper system integration: Integrate with more campus management systems, such as visitor management, equipment borrowing, and venue application systems.

• Optimized interaction experience: Support bilingual Chinese-English

interaction to enhance user experience in an internationalized education environment.

Intelligent Upgrade:

• Personalized services: Learn meeting habits based on users' historical data to provide personalized intelligent recommendations and predictions.

• Data-driven optimization: Add meeting effectiveness analysis and resource optimization recommendations to continuously improve management efficiency.

Scaled Promotion:

• Campus-wide deployment: Achieve systematic promotion and application across the entire XJTLU campus.

• Industry output: Export mature solutions and implementation experience to other universities and educational institutions.

• Commercialization exploration: Explore standardized productization pathways to form a commercially operable AI Agent service platform.

Vision Goal:

To build the MITS personal assistant into a benchmark product for AI Agent in the administrative office domain, driving the industry's strategic shift from a "model arms race" to "practical value

delivery," and truly realizing inclusive application and value creation of AI technologies.