

Unlocking Your Agents Potential

with

Model Context Protocol

Standardizing AI Tool Integration for Business Agility

Agenda

- **Understanding AI Agents**
- **The Evolution to MCP**
- **Model Context Protocol**
- **Real-world Implementation**
- **Technical Architecture**
- **Business Benefits**
- **Case Study: Zava Retail**
- **Future Perspectives**


About the Content


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Presentation Focus

- ▶ Model Context Protocol
- ▶ Azure AI Agent Service
- ▶ PostgreSQL Integration
- ▶ Business Applications

Use Case: Zava DIY Retail Company

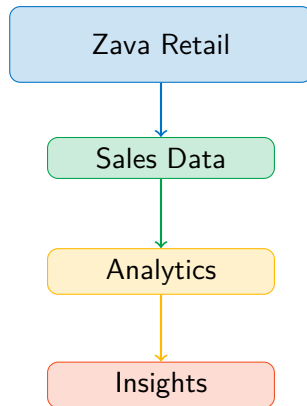
Company: Zava DIY Retail

Role: Sales Manager

Challenge: Data-driven decision making

Requirements

- ▶ Analyze sales trends
- ▶ Understand customer preferences
- ▶ Make informed decisions
- ▶ Need intelligent analytics



What is an AI Agent?

Semi-autonomous software that can be given a goal and will work to achieve that goal without you knowing in advance exactly how it's going to do that or what steps it's going to take.

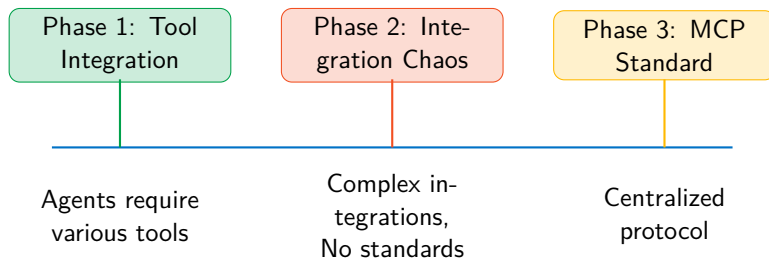
Key Characteristics

- ▶ **Goal-oriented:** Accepts high-level objectives
- ▶ **Autonomous:** Determines execution path

Capabilities

- ▶ **Adaptive:** Figures out steps independently
- ▶ **Intelligent:** Makes autonomous decisions

The Evolution: From Chaos to Standardization



Model Context Protocol (MCP)

MCP is an open protocol that standardizes how applications provide context to LLMs

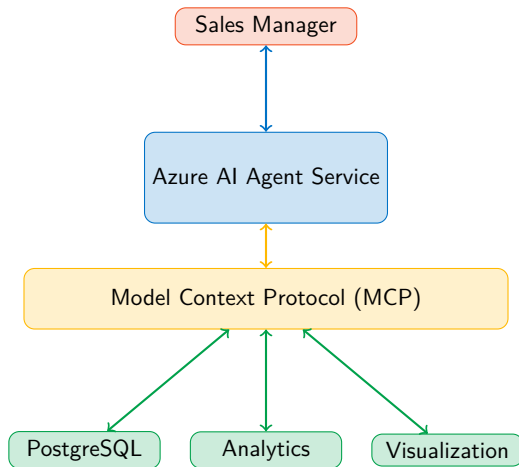
Key Benefits

- ▶ **Standardization:** Like USB-C for AI
- ▶ **Business Agility:** Rapid deployment
- ▶ **Interoperability:** Seamless integration
- ▶ **Scalability:** Easy capability addition

Protocol Advantages

- ▶ **Open Standard:** Community-driven
- ▶ **Context Management:** Efficient LLM info
- ▶ **Tool Integration:** Simplified connections
- ▶ **Developer Experience:** Reduced complexity

Implementation Architecture



Zava Sales Agent: Capabilities

▶ **Revenue Analysis**

- ▶ Retail Revenue: \$44,419.80
- ▶ Retail Discount: \$27,530.00

▶ **Interactive Queries**

▶ **Data Visualization**

▶ **Trend Analysis**

User Experience

- ▶ Conversational Interface
- ▶ Real-time Analysis
- ▶ Visual Data Representation
- ▶ Contextual Responses

Sample Interactions

- ▶ Sales distribution by store
- ▶ Revenue trend identification
- ▶ Customer insights

Technical Implementation

1. **Standardized Access:** Consistent DB interface
2. **Context Preservation:** Maintains state
3. **Extensibility:** Easy tool addition
4. **Performance:** Optimized retrieval

Azure AI Features

- ▶ **Built-in MCP:** Native integration
- ▶ **Scalable:** Cloud-native
- ▶ **Security:** Enterprise-grade
- ▶ **Monitoring:** Performance tracking




Natural Language **MCP** Protocol Database Query Visual Output

Key Takeaways



- ✓ **Agent Evolution:** From simple tools to intelligent, goal-oriented systems
- ✓ **Standardization Importance:** MCP solves integration complexity
- ✓ **Business Value:** Faster development, better UX, improved agility
- ✓ **Real-world Application:** Practical implementation in retail analytics
- ✓ **Future-ready Architecture:** Scalable and maintainable AI systems

MCP: The USB-C of AI Integration



Resources and Further Reading

-  Azure AI Foundry Docs
-  MCP Protocol Specs
-  Implementation Guides



Repositories

-  Workshop Repository
-  Dave Glover's GitHub

Articles

-  Azure AI MCP Support
-  Microsoft DevBlogs

Connect

-  LinkedIn: Dave Glover
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