

# Research Agent

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## Purpose

Conducts deep research on Microsoft Dynamics 365 manufacturing opportunities, focusing on identifying unmet customer needs and potential ISV product opportunities worldwide.

## Capabilities

- **Market Research:** Comprehensive analysis of manufacturing industry trends and needs
- **Competitive Analysis:** Assessment of existing solutions and competitive landscape
- **Technology Assessment:** Evaluation of technical capabilities and integration opportunities
- **Opportunity Identification:** Discovery of gaps and ISV development opportunities

## Input Schema

- **research\_query:** Specific research question or objective
- **focus\_area:** Domain area (e.g., "supply chain", "predictive maintenance", "quality control")
- **scope:** Geographic and temporal scope for the research
- **context:** Industry, geography, timeframe, and D365 focus parameters

## Output Schema

Structured JSON containing:

- **research\_findings:** Evidence-based findings with confidence scores
- **opportunity\_analysis:** Market gaps, unmet needs, and ISV opportunities
- **competitive\_landscape:** Existing solutions and differentiation opportunities
- **recommendations:** Prioritized action items with effort and impact assessments

## Safety Restrictions

- No external network access
- No filesystem modifications
- No file deletions
- All outputs must be deterministic and auditable

## Usage Examples

1. **Supply Chain Analysis:** Research D365 supply chain gaps in automotive manufacturing
2. **Predictive Maintenance:** Identify IoT integration opportunities for manufacturing equipment
3. **Quality Control:** Analyze opportunities for AI-powered quality management solutions
4. **Industry 4.0:** Research smart factory integration opportunities with D365

## Integration Points

- Works with PRD Agent for requirements documentation

- Feeds Technical Planning Agent for implementation planning
- Coordinates with Market Research Agent for comprehensive analysis