RESEARCH PRESENTATION: BRIDGING AI AND REAL WORK

Ubuntu Philosophy as a Bridge Between AI Capabilities and Organizational Reality

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Supervisor: Jemini Matiya **Meeting Date:** October 2025

Status: Research Design Complete - Requesting Approval to Proceed

THE RESEARCH QUESTION

What Are We Actually Studying?

The Core Question:

"Can Ubuntu philosophy bridge the gap between AI capabilities and realworld organizational work?"

What This Means: - AI systems are technically impressive BUT often fail in real organizations - They don't understand real workflows, hierarchies, or human collaboration - **Our research:** Can Ubuntu philosophy (African collaborative values) make AI systems that actually FIT how people work?

Why This Matters

The Problem We're Investigating:

Organizations worldwide struggle with AI integration: - \times AI tools ignore organizational hierarchies - \times AI doesn't understand team collaboration - \times AI optimizes individuals, not teams - \times AI feels "alien" to organizational culture

Research shows: 35% productivity LOST because AI doesn't align with how people actually work together.

Our Research Question: Can Ubuntu philosophy—which emphasizes "I am because we are"—provide the cultural framework that makes AI systems collaborate naturally with human teams?

OUR RESEARCH APPROACH

How Do You Study This Question?

You can't just theorize. You need to TEST it.

Our Approach: 1. **Design:** Create an AI system explicitly based on Ubuntu principles 2. **Implement:** Deploy it in a real IT department 3. **Validate:** Interview staff to see if it actually bridges the gap 4. **Analyze:** Determine what works, what doesn't, and why

This is ACTION RESEARCH - we're not just studying theory, we're testing whether Ubuntu-driven AI actually improves real collaboration.

The Research Instrument: UGENTIC

UGENTIC = Our Experimental Tool

Think of this like: - **Medical Research:** You design a drug (tool) to test if it cures disease (question) - **Our Research:** We designed UGENTIC (tool) to test if Ubuntu bridges Alworkplace gaps (question)

UGENTIC stands for: Ubuntu-Driven Departmental Collective Intelligence

What It Is: - 6 AI agents representing IT department roles - Designed using Ubuntu philosophy principles - Deliberately built to test our research question

Critical Point: UGENTIC is our **research method**, not our research subject

- The research asks: "Does this approach actually work?"
- ✓ Interviews will tell us the answer

UGENTIC AS RESEARCH INSTRUMENT

Why We Needed to Build It

The Challenge: You can't study "whether Ubuntu bridges AI-workplace gaps" without actually TRYING it.

What We Built: A test case - 6 AI agents for Sun International GrandWest IT department: - IT Manager (strategic) - Service Desk Manager (coordination) - IT Support, App Support, Network Support, Infrastructure (operational)

Ubuntu Integration: - Agents acknowledge each other's expertise - Agents prioritize collective outcomes - Agents use collaborative language - Agents share knowledge openly

Purpose: Create a working example we can STUDY through interviews and observation.

System Status (Tool Readiness)

Current State: ✓ Operational

What This Means: - ✓ The research tool is built and functional - ✓ We CAN conduct the actual research now - 🛣 But research isn't COMPLETE until we validate with interviews

Analogy: - Building UGENTIC = Building the microscope - Running interviews = Actually using the microscope to study cells - We have the microscope ready. We need approval to study the cells.

THE ACTUAL RESEARCH (What We Need Approval For)

What the Research Actually Studies

NOT: - "Look at this cool system we built" - "Does UGENTIC work technically?" - "Aren't AI agents amazing?"

YES: - "Does Ubuntu philosophy help AI integrate with real work?" - "Do IT staff experience UGENTIC differently than traditional AI?" - "Does collaborative AI actually improve departmental collaboration?" - "What factors make Ubuntu-driven AI succeed or fail?"

The Research Subject: Whether Ubuntu bridges AI-workplace gaps

The Research Tool: UGENTIC (the thing we built to test this)

The Research Evidence: Interviews + observations

Research Questions (What Interviews Will Answer)

Primary Research Question: Can Ubuntu philosophy bridge the gap between AI capabilities and real organizational work?

Secondary Questions (Interviews Will Address):

- 1. Do people notice Ubuntu principles in agent behavior?
 - Do staff perceive collaborative AI as different from traditional AI?
 - What specific Ubuntu behaviors do they recognize?
- 2. Does this improve collaboration?
 - Do departments share knowledge more?
 - Do problems get solved faster?
 - Do teams coordinate better?
- 3. What makes it work or not work?

- What organizational factors support Ubuntu-driven AI?
- What barriers exist?
- What would make it succeed in other organizations?

Critical: The system being operational means we CAN study these questions. Interviews provide the ANSWERS.

RESEARCH METHODOLOGY

Mixed Methods Design

Why Mixed Methods? Because our question requires both understanding (qualitative) and measurement (quantitative).

Qualitative Component (Primary): - What: Semi-structured interviews with 10-14 GrandWest IT staff - **Why:** Understand HUMAN EXPERIENCE of working with Ubuntudriven AI - **Questions Like:** - "How does UGENTIC compare to other AI tools you've used?" - "Do you notice collaborative behaviors in agent interactions?" - "Has this changed how your team works together?" - **Analysis:** Thematic analysis to identify patterns in staff experiences

Quantitative Component (Supporting): - What: Performance metrics (resolution times, coordination frequency) - **Why:** Measure whether collaboration actually improves - **Metrics:** Before/after comparisons of team coordination patterns

Outcome: Evidence showing whether/how Ubuntu philosophy bridges AI-workplace gaps in real organizational contexts.

The Interview Plan (THE CRITICAL RESEARCH STEP)

Who We'll Interview: - 1 IT Manager (strategic perspective) - 1 Service Desk Manager (tactical perspective)

- 8-12 IT specialists (operational experience with agents)

What We're Studying Through Interviews:

- 1. **Ubuntu Recognition**
 - Do staff notice collaborative behaviors?
 - What Ubuntu principles are visible in practice?
- 2. Collaboration Impact
 - Has departmental knowledge sharing improved?
 - Do teams coordinate differently?
 - What changed in daily work practices?

3. Cultural Alignment

- Does UGENTIC fit GrandWest organizational culture?
- What makes Ubuntu-driven AI work in this context?
- What barriers exist?

4. **Practical Insights**

- What would make this approach succeed elsewhere?
- What factors are context-specific vs. generalizable?

Duration: 45-60 minutes each, recorded and transcribed

Timeline: October-November 2025 (as soon as ethics approved)

Critical Point: The interviews ARE the research. They provide evidence for whether Ubuntu actually bridges the gap we're studying.

RESEARCH PROGRESS

What's Complete: Research Design (87%)

Research Design Phase - COMPLETE:

- ✓ **Literature Review** (7,200 words) Research gap identified: No studies combine Ubuntu + multi-agent AI + real organizations 56 peer-reviewed sources (75% from 2024-2025) Theoretical foundation established
- ✓ **Methodology Designed** (5,400 words) Mixed methods approach justified Interview protocols developed (76 questions) Ethics framework established Analysis approach specified
- **▼ Research Instrument Built** (8,100 words documented) UGENTIC operational and tested Ubuntu principles implemented Ready for research validation
- ✓ **Theoretical Framework** (9,400 words) Discussion chapter drafted (based on design) Research questions framed Expected contributions articulated
- **▼ Research Introduction & Conclusion** (8,320 words) Problem statement clear Research questions defined Expected outcomes described

Total: 38,667 words of research design, theory, and methodology

What's Remaining: The Actual Research (13%)

Research Validation Phase - X PENDING:

- Kethics Approval Documents ready Needs supervisor approval to submit
- **Data Collection** (THE RESEARCH ITSELF) Conduct 10-14 interviews Gather observational data Collect performance metrics
- **Results & Analysis** (5,000-7,000 words) Analyze interview transcripts Identify themes and patterns Answer research questions with evidence **THIS IS THE ACTUAL RESEARCH OUTPUT**

Key Point: 87% = Research DESIGN complete 13% = Actual RESEARCH (collecting and analyzing evidence) We need approval to move from design to execution.

The Critical Distinction

What We've Done: - ✓ Identified the research gap - ✓ Designed the methodology - ✓ Built the research instrument (UGENTIC) - ✓ Prepared all research materials - ✓ Written theoretical framework

What We Haven't Done Yet (THE ACTUAL RESEARCH): -

Collected evidence (interviews) -

Analyzed findings -

Answered research questions empirically

Analogy: - We've built the laboratory ✓ - We've designed the experiment ✓ - We've prepared all equipment ✓ - **We need approval to RUN the experiment** 🛣

RESEARCH SIGNIFICANCE

Why This Research Matters

Academic Contribution:

This would be the FIRST study to: - Combine Ubuntu philosophy + multi-agent AI + real organizations - Empirically test whether cultural values can bridge AI-workplace gaps - Provide evidence-based methodology for culturally-aligned AI

Practical Contribution:

If Ubuntu-driven AI works: - Organizations have a framework for better AI integration - Cultural values can guide technology design - SMEs have evidence-based approach to AI adoption

If Ubuntu-driven AI doesn't work (or works partially): - We learn what fails and why - We identify barriers and limitations - We understand what contexts suit this approach

Either outcome advances knowledge.

The Broader Question We're Addressing

Global Challenge: Organizations worldwide struggle to integrate AI with human work.

Our Research Asks: Can indigenous African philosophy provide answers that Western approaches miss?

If Yes: - Ubuntu offers a model for human-centered AI - Cultural wisdom guides technological innovation - South African thought leadership on global stage

If No: - We understand limitations - We identify what's needed instead - We contribute to more nuanced understanding

Both outcomes are valuable research contributions.

WHAT WE NEED FROM YOU

The Approval Request (Clear and Simple)

We Need:

- 1. **Supervisor Approval** Approve proposal on Moodle
 - Submitted October 1
 - Waiting for your formal approval
- 2. **Z** Ethics Support Support ethics submission
 - All documents prepared
 - Ready to submit immediately
- 3. **Permission to Proceed** Conduct research phase
 - Interview GrandWest IT staff
 - Collect the evidence that answers our research questions

What We're NOT Asking For: - X Funding - X Resources - X Extensions - X Special treatment

What We ARE Asking For: ✓ Permission to conduct the research itself (interviews + analysis)

Why This Approval Matters Now

Timeline Reality:

Today (Oct 8): 58 days to December 5 deadline

Scenario A - Approve Today: - Ethics submission this week - Ethics review 2-3 weeks - Interviews November (4 weeks) - Analysis & Chapter 5 November (2 weeks) - ✓ Submit on time

Scenario B - Delay 2 Weeks: - Ethics submission late October - Compressed timeline - **A** Risky but possible

Scenario C - Delay 4+ Weeks: - Cannot complete interviews in time - ○ Research incomplete

Critical Point: Research DESIGN is done (87%). Research EXECUTION needs 4-6 weeks minimum.

ADDRESSING POTENTIAL CONCERNS

"Is the system really necessary for the research?"

Yes.

Why: - You can't study "whether Ubuntu bridges AI-workplace gaps" without implementing it - Theory alone doesn't answer the question - you need real experience - Interviews ask: "Does this ACTUALLY work in practice?"

Without UGENTIC: - We could theorize about Ubuntu-driven AI (not research) - We could survey opinions about hypothetical systems (weak evidence) - We couldn't validate whether the approach ACTUALLY works

With UGENTIC: - ✓ Staff have real experience with Ubuntu-driven AI - ✓ We can study actual behavior vs. hypothetical - ✓ Evidence is grounded in lived experience

The system is the research method, not optional.

"Isn't this too ambitious for Honours?"

No - It's Appropriate.

Research Scope (Manageable): - Single organization case study ✓ - 10-14 interviews (standard qualitative sample) ✓ - Mixed methods (appropriate for Honours) ✓ - 4-month timeframe (tight but achievable) ✓

Technical Complexity (Managed): - System already built (not building during research phase) ✓ - Focus on organizational impact, not technical details ✓ - Non-technical chapters written accessibly ✓

Evidence of Capability: - 38,667 words written to publication quality ✓ - 56 academic sources reviewed ✓ - Rigorous methodology designed ✓ - Professional execution demonstrated ✓

Honours research should demonstrate independent capability. This does.

"What if interviews show it doesn't work?"

That's FINE - It's Still Valid Research.

Research Goal: Answer the question with evidence

NOT: Prove the system is amazing

Three Possible Outcomes (All Valid):

Outcome 1 - Works Well: - Ubuntu-driven AI improves collaboration - Staff prefer it to traditional AI - Evidence supports hypothesis - **Contribution:** Validated approach for others to use

Outcome 2 - Doesn't Work: - Ubuntu-driven AI shows no improvement - Staff find no meaningful difference - Evidence contradicts hypothesis - **Contribution:** Identified what doesn't work and why

Outcome 3 - Mixed Results (Most Likely): - Works in some contexts, not others - Some Ubuntu principles work, others don't - Complex nuanced findings - **Contribution:** Realistic understanding of limits and potential

All three produce complete, valid dissertations.

"Why Ubuntu specifically?"

Three Strategic Reasons:

- **1. Research Gap:** Multi-agent AI: Well-studied ✓ Ubuntu philosophy: Growing interest ✓ Ubuntu + Multi-agent + Real organizations: **Never studied** X This fills an identified gap
- **2. Cultural Authenticity:** Research in South Africa Should engage South African philosophy Not just imposing Western frameworks Authentic cultural integration
- **3. Practical Alignment:** IT departments need collaboration ✓ Ubuntu emphasizes collective wellbeing ✓ Natural philosophical fit for the problem ✓

RESEARCH ETHICS

Ethical Considerations (All Addressed)

Participant Protection: - ✓ Voluntary participation - ✓ Informed consent - ✓ Anonymization guaranteed - ✓ Right to withdraw - ✓ Minimal risk (talking about work experience)

Data Protection: - ✓ POPIA compliance - ✓ Secure storage - ✓ Confidential transcription - ✓ Anonymized reporting

Organizational Ethics: - ✓ GrandWest aware and supportive - ✓ No disruption to operations - ✓ Interviews outside work hours (if needed) - ✓ Results shared with organization

Academic Integrity: - ✓ Rigorous methodology - ✓ Honest reporting (whatever results show) - ✓ Proper attribution - ✓ Transparent limitations

All ethics documents prepared and ready for submission.

THE BOTTOM LINE

What We're Really Asking

The Simple Question:

"Can we conduct our research?"

Translation: - Research question: Defined ✓ - Methodology: Designed ✓ - Research instrument: Built ✓ - Ethics documents: Prepared ✓ - Timeline: Achievable ✓ - Student capability: Proven ✓

Missing piece: Your approval to proceed with the research itself (interviews)

What This Represents

This is NOT: - **X** "We built a cool system, approve it" - **X** "Technical demo of AI agents" - **X** Engineering project

This IS: - ✓ "Can Ubuntu bridge AI-workplace gaps?" - ✓ Empirical research with real evidence - ✓ Mixed methods investigation - ✓ Original academic contribution

The system (UGENTIC) is HOW we study the question.
The interviews are WHERE we get the answers.
The research is ABOUT whether Ubuntu philosophy works for this.

WHAT HAPPENS NEXT

Immediate Next Steps (If Approved)

This Week: 1. You approve proposal on Moodle 2. I submit complete ethics application 3. We schedule November check-in

- **2-3 Weeks:** Ethics committee reviews I finalize interview logistics Prepare data collection materials
- **4-6 Weeks (November):** Conduct 10-14 interviews Gather observational data Begin analysis
- **7-8 Weeks (Late November):** Complete analysis Write Chapter 5 (Results THE ACTUAL RESEARCH OUTPUT) Finalize dissertation

December 5: - Submit complete dissertation - Research question answered with evidence

The Research Completion Path

87% Complete = Research DESIGNED

What's Done: - Problem identified - Literature reviewed - Method developed - Tool built - Theory articulated

13% Remaining = Research EXECUTED

What's Needed: - Collect evidence (interviews) - Analyze findings - Answer research questions

We need your approval to move from design to execution.

CLOSING STATEMENT

This Is About the Research Question

Five Months Ago: I asked a question: "Can Ubuntu philosophy bridge the gap between AI capabilities and real organizational work?"

Today: I've designed rigorous research to answer it. I've built the tool to test it. I've prepared everything needed to collect evidence.

What I Need: Permission to conduct the research itself - to interview staff and analyze whether Ubuntu-driven AI actually works in practice.

The Question Remains Unanswered: - Not because of lack of preparation ✓ - Not because of lack of capability ✓ - Not because of insufficient timeline ✓

But because I need supervisor approval to proceed with the research phase.

The Core Truth

Research Question: Can Ubuntu bridge AI-workplace gaps?

Research Method: Build Ubuntu-driven AI and study whether it works

Research Evidence: Interviews + observations show whether/how it works

Research Status: - Method prepared ✓ - Evidence collection blocked 🛣 - Waiting for approval to proceed

This is action research about cultural philosophy in AI, not a tech demo.

THANK YOU

Thank you for considering this research.

What I'm asking: - Approve the research to proceed - Support ethics submission - Allow evidence collection (interviews)

What I'm offering: - Rigorous empirical research - Original academic contribution - Evidence-based answers to important questions

Let's discover together whether Ubuntu philosophy can bridge the gap between AI capabilities and real organizational work.

Presentation Prepared: October 8, 2025

Purpose: Request approval to conduct research (interviews)

File: Planning/JEMINI_PRESENTATION_RESEARCH_FOCUSED_Oct8.md **Key Point:** UGENTIC is the research tool, not the research subject

APPENDIX: Quick Reference

Research Question: Can Ubuntu philosophy bridge the gap between AI capabilities and real organizational work?

Research Method: Action research - build Ubuntu-driven AI system, deploy in real organization, validate through interviews

Research Tool: UGENTIC (the experimental AI system)

Research Evidence: 10-14 interviews + observational data + performance metrics

Research Output: Chapter 5 (Results) - empirical evidence showing whether/how Ubuntu

bridges the gap

What We Need: Approval to conduct interviews (the actual research)

Timeline: 58 days to deadline - need approval soon to complete research phase

Contact Information: Student: Craig Vraagom (40241517)

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All supporting documents available upon request.