|  |
| --- |
| **Portfolio: Personal Vision & Google Gemini Research**  Submitted by: Chulumanco Ngongomana  Role: ICT / Web Developer (Incoming Team Member)  Company: Red Face Company  Team Lead: Manace Kapinga  Submission Date: 24 July 2025 |

# Context / Purpose

This portfolio introduces me to the Red Face Company team, outlines my five-year growth vision within the organisation, and presents my research on Google Gemini, an advanced AI Large Language Model that I plan to leverage for productivity, creativity, automation, content creation, and research in support of team and company success.

# Table of Contents

Section 1: Personal Introduction & 5-Year Vision

1.1 Background

1.2 Interests & Passions

1.3 Skills Snapshot

1.4 Why Red Face Company

1.5 Five-Year Vision in the Company

1.6 Professional Goals

1.7 Strategies to Achieve My Goals

1.8 Work Style & Values

1.9 Section Summary

Section 2: AI LLM Research - Google Gemini

2.1 What Is Gemini?

2.2 Model Family & Access

2.3 High-Level How It Works

2.4 Unique Capabilities vs ChatGPT

2.5 Use Cases for My Role

2.6 Starter Prompt Playbook

2.7 30-Day Adoption Pilot Plan

2.8 Risks, Limitations & Responsible Use

2.9 Quick Tips for Better Results

2.10 Value to Red Face Company

Section 3: Commitment, Declaration & Feedback Requests

Appendix A: Research Sources Consulted

# Section 1: Personal Introduction & 5-Year Vision

## 1.1 Background

I was born and raised in Cape Town in the Western Cape. That sense of local community and resilience has shaped how I approach learning and work. My technical background is in web development and broader ICT foundations, and I am comfortable learning new tools and building digital systems.

## 1.2 Interests & Passions

I have a strong personal and professional interest in finance, especially how technology intersects with financial systems, markets, and digital platforms. I regularly research the financial economy, compare products, and explore how data, automation, and software can support smarter financial decision-making. Combining finance and technology is a long-term career theme for me.

## 1.3 Skills Snapshot

* Coding and web development fundamentals
* General ICT troubleshooting and systems orientation
* Curiosity-driven learner; self-teaches through online research
* Able to translate tasks into structured learning steps
* Growing interest in automation, AI tooling, and data-informed decision support

## 1.4 Why Red Face Company

Red Face Company is a place where I can grow from an entry/intermediate contributor into a technical leader who helps shape products, improve internal processes, and support team efficiency. I am excited to build, automate, and innovate in a company that values initiative and growth.

## 1.5 Five-Year Vision in the Company

Within five years, I aim to grow into a Senior Developer or Head of Technology-track role. I want to be someone the team can rely on for technical leadership, innovation that improves product quality, mentoring of others, and evaluating and integrating AI-enabled capabilities into workflows.

## 1.6 Professional Goals

### Short-Term Goals (0-24 months)

* Learn the company tech stack, tools, and development standards
* Deliver assigned tasks accurately and on time
* Build small internal automation scripts that save the team effort
* Strengthen coding fundamentals and version control practices

### Long-Term Goals (2-5 years)

* Lead significant feature builds or system upgrades
* Contribute to or lead automation and AI integration initiatives
* Develop into a senior technical contributor who supports architecture decisions
* Work toward a Head of Tech or equivalent leadership pathway

## 1.7 Strategies to Achieve My Goals

### Learning Plan

Dedicate about 30 minutes daily to structured learning and complete at least one formal online course or certification per year related to our stack or AI tools.

### Hands-On Projects

Start with internal micro-projects such as dashboards, productivity scripts, and auto-documentation tools; scale up to larger cross-team projects as I grow.

### Mentorship & Peer Learning

Pair with a senior developer for guidance and hold bi-weekly check-ins to review progress, blockers, and skill targets.

### Daily / Weekly Habits

Daily: review tasks, log lessons, capture to-dos. Weekly: reflect on learning and select one skill gap to close next week.

### Tracking Metrics / Evidence

* Number of tasks completed and accepted without rework
* Improvement in turnaround times
* Internal automation tools delivered and time saved
* Certifications or courses completed
* Contributions to technical discussions and decisions

## 1.8 Work Style & Values

* Fast learner who adapts quickly with feedback
* Organised and intentional; breaks long-term goals into steps
* Collaborative and communicative teammate
* Integrity and ownership in delivery
* Growth mindset focused on long-term technical leadership

## 1.9 Section Summary

I bring coding skills, curiosity, and a strong drive to learn. Over the next five years I aim to grow into a senior technical leader, ideally toward a Head of Technology role, by mastering the stack, contributing to automation, and leveraging AI to improve team performance.

# Section 2: AI LLM Research - Google Gemini

**2.1 What Is Gemini?**

Gemini is Google's family of advanced AI Large Language Models that understand and generate multiple data types including text, code, images, audio, and video. It was announced in December 2023 by Google DeepMind and has continued to evolve with updates that expand reasoning, context length, and integration across Google's ecosystem.

## 2.2 Model Family & Access

Gemini is offered in multiple tiers: Ultra (most capable), Pro (balanced general model; Gemini 2.5 Pro is a recent update), Flash (faster and cost-efficient), and Nano (optimized for on-device use). Access routes include the Gemini web app, Google AI Studio, Vertex AI on Google Cloud, and integrations across Android and Google Workspace products. Subscription tiers vary by region and usage level; enterprise access is typically usage-based.

## 2.3 High-Level How It Works

* Trained on massive datasets of text, code, and multimodal content
* Built for native multimodality: text + images + audio + video
* Newer versions apply internal reasoning steps to improve accuracy
* Large context window supports very long inputs (documents, code bases)
* Can be integrated with tools and APIs to extend capabilities

## 2.4 Unique Capabilities vs ChatGPT

Both Gemini and ChatGPT are powerful, but Gemini stands out in native multimodality, large context windows, deep integration with Google's ecosystem, emerging deep research capabilities, agent-like actions, and lightweight on-device variants.

## 2.5 Use Cases for My Role

### Productivity

* Generate daily task breakdowns from tickets
* Turn meeting notes into action lists
* Convert brainstorm text into project requirements

### Creativity

* Brainstorm UI/UX concepts
* Suggest naming conventions and messaging - Blend finance + tech data into story ideas

### Content Creation

* Draft SOPs and onboarding guides
* Generate slides or training outlines
* Turn code docs into stakeholder summaries

### Automation

* Parse form inputs or emails into structured data
* Generate starter scripts for repetitive tasks
* Automate progress summaries from commit logs

### Research

* Summarise market reports and finance-tech news
* Compare competitor features and pricing
* Extract themes from survey or feedback data

## 2.6 Starter Prompt Playbook

Below are practical prompts I can run in Gemini or adapt to daily work.

### Prompt: Development Checklist

You are a senior web developer. Generate a step-by-step development checklist for implementing secure user authentication in our web app. Include data models, validation, test steps, and deployment tasks.

### Prompt: Meeting Summary to Actions

Summarise the following meeting transcript into: (1) decisions, (2) blockers, (3) next actions with owners and due dates. Format in a table.

### Prompt: Data -> Insight -> Code

Here is CSV data showing ticket response times. Analyse trends, highlight outliers, and generate Python code to plot weekly averages.

### Prompt: Creative Campaign Ideas

We are launching a new internal automation tool. Suggest 10 announcement ideas: short copy + internal banner concept + metric to track adoption.

### Prompt: Competitive Snapshot

Compare Red Face Company to Competitor A and Competitor B on pricing, core features, customer segment, and differentiators. Present a comparison table and 5 bullet strategic takeaways.

## 2.7 30-Day Adoption Pilot Plan

Objective: Demonstrate practical value by applying Gemini to real internal work and measuring outcomes.

### Week 1 - Setup & Familiarisation

* Secure Gemini access (web + API)
* Test basic prompts and document outputs

### Week 2 - Productivity Automation

- Feed sample meeting notes to generate summaries - Convert tickets into status report drafts

### Week 3 - Content & Documentation

* Generate SOP drafts from bullet outlines
* Convert code comments into user guides

### Week 4 - Evaluation & Next Steps

* Measure time saved vs manual process
* Collect feedback from teammates
* Recommend scale-up opportunities

### Success Metrics

* % reduction in time to produce summaries or reports
* # internal documents drafted with AI assistance
* Qualitative quality feedback from reviewers

## 2.8 Risks, Limitations & Responsible Use

* Data privacy: do not paste confidential client data without approval
* Accuracy: always review outputs; AI can fabricate details
* Version drift: document prompts; model behavior can change -

Access limits: plan fallback tools for quota/service issues

## 2.9 Quick Tips for Better Results

* Provide role, context, and output format in prompts
* Give an example of desired structure
* Use stepwise prompting: outline -> draft -> refine
* Ask for reasoning steps when accuracy matters
* Save and reuse prompt templates

## 2.10 Value to Red Face Company

* Reduce manual prep time for documents and reports
* Accelerate feature planning and documentation
* Improve knowledge sharing with AI-assisted content
* Open automation pathways that scale with growth
* Support data-informed decision making

# Section 3: Commitment, Declaration & Feedback Requests

## 3.1 Commitment to Growth

I am committed to developing my technical capability, contributing to the success of Red Face Company, and growing into a senior leadership role over time. I will take ownership of my learning, seek feedback, and actively look for ways to deliver value through technology and AI-assisted productivity.

## 3.2 Declaration of Originality & AI Assistance

This submission reflects my own thinking, goals, and professional intentions. I used AI tools (including ChatGPT and Gemini) to help structure, edit, and summarise information, but the content, direction, and vision are mine.

## 3.3 Feedback Requests

* Does my five-year growth path align with team and company opportunities?
* Which short-term technical areas should I focus on first?
* Would a 30-day Gemini pilot aligned to team priorities be useful?
* Are there preferred internal tools or code standards I should learn immediately?

# Appendix A: Research Sources Consulted

Listed in plain form; full referencing available on request.

* Google DeepMind: Gemini model family announcements and overview
* Google AI Blog: Introducing Gemini across text, code, and media
* Google AI Studio / Developer Docs: Gemini models and API usage
* AndroidCentral coverage of Gemini subscription tiers and rollout
* TechRadar updates to Google AI Mode powered by Gemini
* Tom's Guide example of automated phone interaction (Duplex-style)
* The Verge analysis of Google's ecosystem context advantage
* Neontri and eWeek comparisons: Gemini vs ChatGPT capabilities and context length

## Signature (Optional)

Name: \_\_\_\_\_CI NGONGOMANA\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_23/07/2025\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_