# Systems Thinking and System Engineering
## Service Definition Document

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4 pages including cover

## Systems Thinking and System Engineering

### Service Description

Daintta utilises proven Systems Thinking techniques to explore complex problems, understand root causes and develop feasible solutions. Throughout delivery, Daintta implement and lead complex programmes using experienced system engineers to ensure risks are managed, technology is fit for purpose and the end results achieve the operational needs.

### Service Features

- Comprehensive expertise in analysis of complex situations and problems
- Application of Systems Thinking approaches to understand root causes
- Range of techniques include Soft Systems Methodology, System Dynamics etc
- Experienced System Engineers ensure delivery of complex programmes
- Full lifecycle expertise from requirements to disposal
- Tailored engineering delivery to align with complexity and risk tolerance
- Review and audit of existing complex engineering programmes
- Development of robust Integration, Verification & Validation approaches
- Complex system modelling and analysis (e.g. Failure-Mode-and-Effects-Analysis)
- System engineering leadership, support, mentoring, training and coaching

### Service Benefits

- Manage real-world evolving issues, produce more economic and robust solutions
- Reduction of omissions, invalid assumptions, and delivery-failure risk
- Improve chances of achieving business-goals and early identification of critical-risks
- Proactively manage engineering complexity and risk, including emergent issues
- Independent assessment of complex programme delivery effectiveness, including risk identification
- Gain insight into complex issues involving people, processes & technology
- Bring disparate viewpoints together to achieve a common outcome
- Understand and remediate root cause issues using appropriate engineering standards
- Proven support and guidance to your teams from experienced professionals
- Develop a culture of how to effectively deliver complex programmes

# Annex 1 – standard Daintta services

Below is a list of standard Daintta services that apply to all GCLOUD services Daintta provides.

### Planning

Daintta works with Clients to ensure projects and programmes have the appropriate planning in place to drive successful implementation. These services are flexible to fit into our client's existing delivery lifecycle and include:

- Define vision and mission of project with leadership and stakeholders
- Strategy (e.g. business, technical, architecture and data) and business case creation
- Agile led cloud planning and delivery
- High level and low-level planning control
- Risk, issue and dependency management
- Business analysis (data and user centric design)
- Operating model development
- Manage benefits across the full project lifecycle
- Backlog management and refinement services

### Set-up and Migration

Daintta offers a range of services to help organisations setup a cloud capability, cloud migration and/or retirement. These services cover the full services lifecycle, they include:

- Strategy (e.g. business, technical, architecture and data) and business case creation
- Analysis and assessment of as-is and desired to-be state
- Selection of best suited delivery methods, people, technology, processes and data
- Full deliverables of required artefacts, depending on need (e.g. planning, risks and mitigation, architecture, testing, training, service management)
- Execute service setup and/or migration
- Monitoring and continuous improvements

Daintta brings extensive and proven experience in delivering complex technological projects to agreed time, cost and quality whilst managing risks. This covers planning, delivering, migrating and implementing cloud-based capabilities via appropriate people, processes, technologies and delivery methods (e.g. Waterfall, Agile, Iterative).

### Quality Assurance and Performance Testing

Daintta works with Clients to ensure appropriate quality assurance is established and performance testing is achieved. Daintta helps Clients develop strategies and deliver tests for quality assurance and performance testing. Daintta's testing approach covers all variations of testing including system integration testing, operational acceptance testing and user acceptance testing.

Daintta utilises a risk-based approach to quality assurance and testing, mitigating risk early through appropriate, proportional use of the testing resource. Early detection and mitigation of defects in the lifecycle, saves time, improves quality, reduces risk and maximises return on investment.

## Training

Daintta offers a range of flexible training services appropriate to our offerings. Daintta offers the option for bespoke training tailored to our Client's specific training needs. Additionally, Daintta offers shadowing and mentoring to Client staff.

Daintta follows a structured approach to learning and training development that include:

- Engage directly with end users follow a user centric approach to training
- Perform Training Needs Analysis (TNA) and assessment
- Develop training roadmap and curriculum relevant to training needs
- Define individual and generic training plans
- Flexible to accommodate group and individual training and learning
- Train the trainer options to scale training within our Client's organisation
- Gamification training techniques

## Support Services

Support services are flexible options available to Daintta's Clients. Daintta have two key areas of contact: Email and Phone. This is a standard support service which is shared across multiple clients. Every organisation will have a technical account manager assigned. If clients require dedicated support or support from specific locations this can be provided.

## Security Services

Daintta provides a range of security services including, but not limited to:

- Security strategy
- Security risk management
- Security design
- Cyber security consultancy
- Security audit services