

# Curriculum Management System

## Service Definition G-Cloud 15

## Table of Contents

|        |                                                           |    |
|--------|-----------------------------------------------------------|----|
| 1.     | About Global IT Factory Pty. Ltd. ....                    | 4  |
| 2.     | Curriculum Management System Overview .....               | 5  |
| 2.1    | Key Features .....                                        | 6  |
| 2.2    | Key benefits .....                                        | 7  |
| 2.3    | Technical Characteristics .....                           | 8  |
| 2.3.1  | SaaS Hosting and Datacenter Locations .....               | 8  |
| 2.3.2  | System Environments .....                                 | 8  |
| 2.3.3  | Scalability and Performance .....                         | 8  |
| 2.3.4  | Backups .....                                             | 9  |
| 2.3.5  | High Availability .....                                   | 9  |
| 2.3.6  | Disaster Recovery .....                                   | 9  |
| 2.3.7  | Single Sign-on and Authentication .....                   | 9  |
| 2.3.8  | Device Browser Compatibility and Accessibility .....      | 10 |
| 2.3.9  | Browser Compatibility and Accessibility .....             | 10 |
| 2.3.10 | Integration .....                                         | 10 |
| 2.3.11 | Partnerships .....                                        | 11 |
| 2.4    | Security .....                                            | 11 |
| 3.     | Onboarding and Offboarding .....                          | 13 |
| 3.1    | Implementation Project .....                              | 13 |
| 3.2    | Training .....                                            | 14 |
| 3.3    | Documentation .....                                       | 14 |
| 3.4    | End-of-Contract Data Extraction .....                     | 15 |
| 4.     | Service and Partnership Management .....                  | 16 |
| 5.     | SLA Based Support and Maintenance Services .....          | 18 |
| 5.1    | The scope of Support Services .....                       | 18 |
| 5.2    | Service Levels .....                                      | 19 |
| 5.3    | Service Level Reporting .....                             | 20 |
| 5.4    | Incident and Service Enhancement Request Management ..... | 20 |
| 5.5    | Incident or Service Request Escalations .....             | 22 |
| 5.6    | CMS Release and Upgrade Policy .....                      | 22 |
| 5.6.12 | Software Version Requirements .....                       | 25 |
| 5.6.13 | Codelines .....                                           | 25 |
| 5.6.14 | Additional Services for Major Software Upgrades .....     | 25 |
| 5.7    | Proactive System Health Check .....                       | 26 |

|     |                                        |    |
|-----|----------------------------------------|----|
| 5.8 | Enhancement/Integration Projects ..... | 26 |
|-----|----------------------------------------|----|

## Table of Tables

|                                                                             |    |
|-----------------------------------------------------------------------------|----|
| Table 1 – Support Levels .....                                              | 18 |
| Table 2: Bronze Service Level SLAs .....                                    | 19 |
| Table 3 – Definition of Incident Severities .....                           | 19 |
| Table 4 –Typical Incident or Service Request Management Process Steps ..... | 21 |
| Table 5 – Release Types, Cycles and Customer Notification .....             | 23 |

## Table of Figures

|                                          |    |
|------------------------------------------|----|
| Figure 1: CMS Cloud-Based Solution ..... | 5  |
| Figure 2: CMS User Interface .....       | 5  |
| Figure 3: Implementation Approach.....   | 13 |

## 1. About Global IT Factory Pty. Ltd.

Global IT Factory is an Australian IT services company, specialising in state-of-the-art, cost-efficient EdTech solutions for the education sector across the globe.

As holders of the ISO 27001 accreditation, we demonstrate unwavering commitment to information security, complemented by our ISO 9001:2015 certification, which underscores our dedication to innovation, efficiency, and consistency in IT service delivery.

Our agile organisation leverages global delivery teams to provide high-quality, cost-effective EdTech solutions, prominently featuring our leading Curriculum Management System.

Catering to the diverse needs of our global customers in Higher and Further Education, we are committed to enhancing educational outcomes worldwide.

**Our Vision** is to become the preferred global supplier of EdTech solutions empowering educational providers to rapidly adapt their curriculum offerings in response to evolving market demands.

**Our Mission** is to enable educational organisations to improve the student experience, acquisition and retention through agile production and management of compelling, high-quality curriculum offerings.

Our prestigious clientele includes highly ranked institutions across Australia, Asia, and Oceania, such as:

- ◆ Adelaide University (Australia)
- ◆ Australian Catholic University (Australia)
- ◆ Charles Darwin University (Australia)
- ◆ Federation University (Australia)
- ◆ Griffith University (Australia)
- ◆ Mohamed bin Zayed University of Artificial Intelligence (UAE)
- ◆ National University of Singapore (Singapore)
- ◆ RMIT University (Australia)
- ◆ TAFE NSW (Australia)
- ◆ The Australian National University (Australia)
- ◆ The University of Auckland (New Zealand)
- ◆ The University of Canterbury (New Zealand)
- ◆ The University of Queensland (Australia)

## 2. Curriculum Management System Overview

Global IT Factory's Curriculum Management System (CMS) has been built from the ground up to serve the needs of tertiary institutions wishing to manage and maintain their evolving curriculum portfolio more effectively and efficiently.

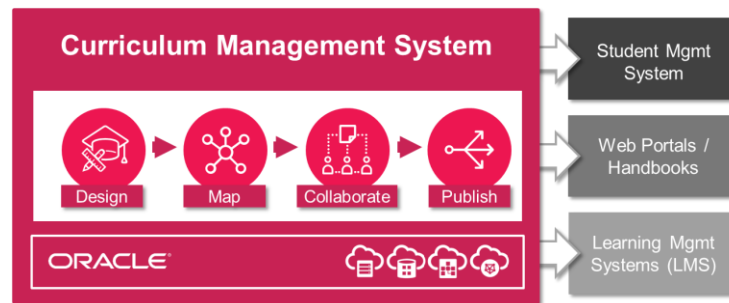


Figure 1: CMS Cloud-Based Solution

The CMS is a cloud-based solution built on enterprise-grade Oracle Cloud technology. It is scalable, highly accessible and secure. It presents a highly intuitive, browser-based interface to users.

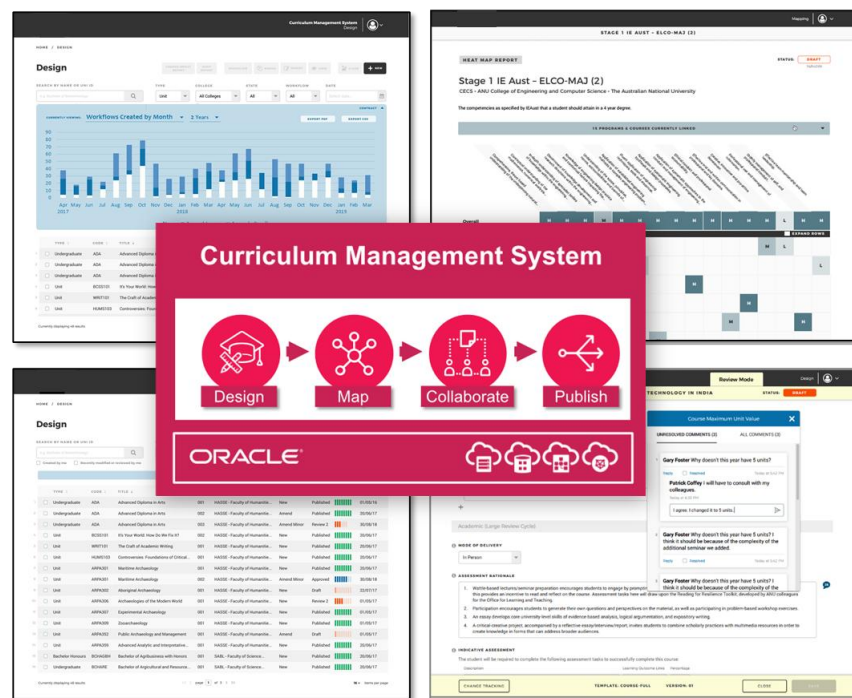


Figure 2: CMS User Interface

## 2.1 Key Features

Our Curriculum Management System (CMS) is designed with the practical needs of educational institutions in mind. It brings together essential features for curriculum management in a streamlined and user-friendly platform. The CMS facilitates the management of curriculum information, supports the creation and revision of programmes and modules, and ensures compliance with regulatory and institutional standards. With capabilities ranging from workflow management to integration with existing educational systems, the CMS aims to enhance staff efficiency, improve curriculum quality, and support the full lifecycle of curriculum management. Here's a closer look at the key features that make our CMS a valuable tool for educational institutions looking to simplify and enhance their curriculum management processes:

- ◆ **Lifecycle Support:** Supports the full Curriculum Management lifecycle.
- ◆ **Creation, Amendment, and Review Support:** Facilitates the creation, amendment, and review of Programmes and Modules.
- ◆ **Single Source of Truth:** Serves as the central repository for all curriculum information, including Programme Proposals, Programme Rules, and Study Plans.
- ◆ **Regulatory and Institutional Compliance:** Assists in ensuring the curriculum meets the standards of regulators, professional associations, and internal guidelines.
- ◆ **Workflow Management and Reporting:** Offers visibility and reporting on progress through tracked and managed workflows.
- ◆ **Quality and Risk Management:** Enhances curriculum quality and reduces error risk through full version and configuration management, data validation, and automated business rules. Provides full traceability.
- ◆ **Flexible Support for Diverse Needs:** Supports both institution-wide and specific academic group/school curriculum models and workflows.
- ◆ **Micro-credentials Support:** Readily accommodates micro-credentials with a highly flexible templating system and mapping capability.
- ◆ **Curriculum Mapping:** Evaluates individual Modules within a Programme based on their contribution to overall Programme objectives, using dynamic and detailed Curriculum Maps, including heat maps.
- ◆ **Integration and Publishing:** Capable of publishing and distributing approved curriculum information to dependent systems such as Student Management Systems, Portals, and Learning Management Systems.
- ◆ **Business Intelligence and Reporting:** Facilitates easy access to and reporting of curriculum data through sophisticated Business Intelligence (BI) tools and API integration.
- ◆ **Public-facing Online Catalogue:** Incorporates a public-facing online Catalogue

*...the CMS supports virtually any curriculum terminology, including:*

- Programme / Module / Module Outline or
- Program / Subject / Class, or
- Course / Unit / Unit Outline ...

## 2.2 Key benefits

Our Curriculum Management System (CMS) offers a suite of benefits designed to streamline curriculum management processes, enhance educational outcomes, and support staff efficiency. From improving curriculum adaptability to ensuring compliance with regulatory standards, the CMS addresses key challenges faced by institutions. Below, we outline the specific advantages that make our CMS an essential tool for modern educational environments, highlighting how it facilitates better governance, reduces administrative burdens, and fosters curriculum innovation:

- ◆ **Adaptive Curriculum Portfolio:** Improves student acquisition and retention through curriculum that rapidly adapts to market changes.
- ◆ **Enhanced Governance and Timeliness:** Significantly improves the ability to track, manage, and report on the curriculum at each approval stage.
- ◆ **Increased Staff Efficiency:** Achieves higher efficiency through reduced data entry, improved information integrity, and greater reuse of information.
- ◆ **Effective Curriculum Mapping:** Utilises mapping to ensure curricula meet the needs of regulators, professional associations, and university guidelines by linking key educational components to objectives and competencies.
- ◆ **Single Source of Truth:** Consolidates and catalogs information in a secure, reliable, and accessible central repository, moving away from inefficient spreadsheets, emails, and documents.
- ◆ **Fostering Innovation:** Enables innovation and creativity in curriculum development with support for micro-credentials, sandbox testing environments, and secure collaboration tools.
- ◆ **Empowerment of Academics:** Allows academics to focus on curriculum development and delivery by reducing the administrative burden associated with curriculum management.
- ◆ **Improved Learning Outcomes:** By closely aligning curriculum content with learning objectives and outcomes, the CMS ensures that students receive a focused and effective education, tailored to achieve specific competencies and skills.
- ◆ **Accessibility and Inclusivity:** The CMS is designed with accessibility standards in mind, ensuring that all users, including those with disabilities, have equal access to curriculum information and resources. This commitment to inclusivity fosters a more supportive and accommodating work environment.

## 2.3 Technical Characteristics

### 2.3.1 SaaS Hosting and Datacenter Locations

We have chosen Oracle Cloud Infrastructure (OCI) as the foundation for hosting our Curriculum Management System. OCI provides several advantages:

**Education Industry Expertise:** Oracle has a strong presence in the education sector, making it an ideal partner for our CMS. Leveraging Oracle's offerings ensures alignment with industry standards and best practices.

**Database Services:** Our CMS benefits from Oracle Standard Database Service on OCI. This accelerates deployment, reduces licensing costs, and ensures data integrity.

#### UK OCI Commercial Datacenter Locations

- ◆ UK South (London)
- ◆ UK West (Newport)

Oracle Cloud operates the first and only sovereign, dedicated dual-region cloud for UK government and defense customers. The realm is designed in collaboration with multiple UK government and defense ministries.

#### UK OCI Commercial Datacenter Locations

- ◆ UK Gov South (London)
- ◆ UK Gov West (Newport)

### 2.3.2 System Environments

Global IT Factory provides following SaaS environments:

- ◆ Production (Live)
- ◆ Geographically Redundant Disaster Recovery (optional)
- ◆ Non-production environments (as per customer requirements)

### 2.3.3 Scalability and Performance

The Curriculum Management System (CMS) is built on Oracle IaaS/DBaaS technology, utilising modern development and delivery processes. The Oracle Cloud Infrastructure is an enterprise-grade, secure, and highly scalable platform.

Global IT Factory's CMS is architected based on the 12-Factor Apps Methodology for scalable web applications. It is widely acknowledged that applying the 12 Factors in architecting cloud-native applications contributes to their agility, scalability, and portability for years to come.

We achieve this scalability through the following approach:

1. **Proactive Monitoring and Assessment:** Our dedicated support team continuously monitors the system's performance, allowing us to proactively identify any areas where an increase in infrastructure resources may be necessary. This vigilant approach ensures that the system remains responsive, efficient, and reliable, even during periods of high demand or increased workload.
2. **Responsive Infrastructure Scaling:** If our monitoring indicates a need for additional infrastructure resources, our team promptly scales the dedicated system by allocating the required resources. This responsive scaling



process enables us to maintain optimal performance levels, ensuring a seamless user experience and enabling our clients to focus on their core business operations.

Our CMS solution has been thoughtfully designed to offer effective scalability, accommodating fluctuations in demand and preserving performance standards. By leveraging dedicated cloud instances, proactive monitoring, and responsive infrastructure scaling, we can confidently provide a high-performing, flexible, and reliable CMS solution for our clients.

#### 2.3.4 Backups

Global IT Factory's Curriculum Management System (CMS) offers a robust backup and disaster recovery solution. All backups automated and replicated between our London and Newport Oracle data centres. A full backup is performed daily, with backups retained for 12 months. Our solution's high-availability features and disaster recovery capabilities are designed to provide minimal data loss and quick data recovery.

#### 2.3.5 High Availability

Global IT Factory's CMS solution runs on Oracle Cloud infrastructure utilising Oracle's Infrastructures as a Service (IaaS) and Database as a Service (DBaaS). These services provide resilience and a high degree of infrastructure availability, boasting 99.95% uptime and 99.99% annual durability for block and boot storage volumes.

The Oracle Cloud Data Centres have multiple hardware redundancy. There are 3 separate logical data centres inside the one physical data centre. Oracle calls these Fault Domains. The properties of fault domains guarantee that resources placed in different fault domains don't share any potential single points of a hardware failure within the availability domain, to the greatest practical extent. For example, resources in different fault domains don't share the same "top-of-rack" network switch, because the standard design of such switches lacks redundancy.

Oracle Cloud ensures data replication across all three fault domains, maintaining at least three copies of data on distinct hardware systems. In the event of hardware failure leading to an instance outage, two additional fault domains are available for swift recovery

These High Availability features of the infrastructure are integral to our standard service package, ensuring reliable and uninterrupted access to the our Curriculum Management System.

#### 2.3.6 Disaster Recovery

Beyond backup-based Disaster Recovery, Global IT Factory provides a spectrum of geographically redundant Disaster Recovery options, including Hot-Cold, Hot-Warm, and Hot-Hot configurations. These DR options feature automatic data replication across geographically diverse data centers.

Aimed at achieving low Recovery Point Objectives (RPO) and Recovery Time Objectives (RTO), these options are customisable to suit the unique requirements of each institution.

#### 2.3.7 Single Sign-on and Authentication

Seamless Single Sign-On is supported for the CMS, with integration to a variety of Identity Management Systems ensuring a simple authentication and authorisation experience for end-users. Both SAML 2.0 and LDAP are supported.

### 2.3.8 Device Browser Compatibility and Accessibility

The CMS is designed to be accessed from Desktop & Notebook Computers. While the CMS product's user interface is browser-based, implemented using responsive web design and can be accessed on mobile devices, given the complexity of curriculum information that is captured within the CMS, we do not recommend it for Curriculum Management purposes.

Our experience with existing customers has indicated that seemingly simple actions like approvals should be undertaken with care and attention to detail. Using mobile devices are not conducive to ensuring all due diligence is given when approving complex curriculum.

The Online Curriculum Catalogue is designed to be accessed via mobile devices.

### 2.3.9 Browser Compatibility and Accessibility

The CMS product is HTML and ECMA-262 compliant. It supports the latest public release and two previous versions of the following browsers:

- ◆ Safari (MacOS)
- ◆ Google Chrome (Windows and MacOS)
- ◆ Mozilla Firefox
- ◆ Microsoft Edge

The CMS application and the associated Online Catalogue are Fully Accessible, having been accredited to WCAG 2.0 level AA (and extensively to AAA capabilities).

Compliance with WCAG 2.1 level AA criteria is on the Roadmap for CMS development. Accessibility design is part of our end-to-end software development processes for new feature development. This includes internal testing using screen readers. We are in the process performing an internal audit based on the VPAT template of the entire application and can share this once it is completed.

### 2.3.10 Integration

The CMS is readily able to integrate with a range of external systems using both outbound and inbound API's. Examples of this include:

- ◆ The CMS's Publish API is used to communicate approved curriculum to external systems. This API supports a number of different operating modes (GET, Push) and is capable of receiving status information from downstream systems. Our existing customers have integrated their CMS to several of the example systems listed (SMS, LMS), typically via a middleware integration platform.

- ◆ The CMS's Business Intelligence API enables external systems to dynamically query virtually any curriculum information in the CMS.
- ◆ The CMS's Class schedule adaptor enables the receipt of scheduled classes from external timetabling systems.
- ◆ The CMS supports an "adaptor" capability to allow information on forms to be dynamically sourced from external systems. The best example of this is staff record information. By integrating with a client's HR API, the CMS can allow users to partially enter staff details, e.g., the surname and dynamically search and retrieve a range of other records, such as their position, phone numbers, email addresses etc.
- ◆ The CMS can source key reference data from external systems, in particular key reference "lists". Within the CMS these are referred to as externally managed lists. This type of data is generally used for lookups done within forms (population of options in drop-down lists), where the reference data is mastered in another system. These are typically used for integration with Student Management System as a key source of reference data.

Global IT Factory's Curriculum management system has been integrated to a number of systems, including Oracle PeopleSoft, Ellucian Banner and Tribal SMS, Blackboard LMS, Drupal, Sitecore, Leganto, HP TRIM, and others.

### 2.3.11 Partnerships

We are proud to collaborate with a growing network of strategic partners that help us deliver impactful curriculum management solutions. These partnerships support seamless integration, implementation expertise, and alignment with the systems universities already use — making it easier to streamline curriculum processes and drive institutional success.

- ◆ Our Partners include:
- ◆ Workday
- ◆ Ellucian
- ◆ Oracle
- ◆ DVE Solutions
- ◆ JDR

## 2.4 Security

The Global IT Factory (GITF) CMS Solution is built upon the Oracle Cloud Compute Service. Oracle Cloud has successfully completed an ISO/IEC 27001:2013 audit for its Cloud Infrastructure, further underlining the robust security measures in place.

Moreover, Oracle Cloud Infrastructure Edge Services have also achieved ISO/IEC 27001:2013 certification, following an audit by EY/CertifyPoint BV in Amsterdam, Netherlands. This certification provides assurance that Oracle Cloud Infrastructure has developed and implemented an Information Security Management System (ISMS) that complies with the ISO 27002:2013 standard, which outlines best practices in information security management.



Furthermore, Oracle Cloud Compute Services have been accredited with several key certifications and standards, including:

- ◆ SOC 1 Type 1, SOC 2 Type 2, SOC 3
- ◆ GDPR compliance
- ◆ PCI DSS

In alignment with these high standards, the Global IT Factory's Curriculum Management System (CMS) has been developed with a strong emphasis on security. Our application adheres to the OWASP guidelines, ensuring stringent measures are in place for error handling and logging, communications security, data protection, and session management.

Global IT Factory has achieved ISO 27001 accreditation, demonstrating our unwavering commitment to maintaining the highest standards of information security. This accreditation is a testament to our systematic and ongoing approach to managing sensitive company and customer information.

As part of our commitment to security excellence, we conduct regular security audits aligned with our accreditation requirements. Additionally, the CMS is subject to annual penetration testing conducted by a CREST certified penetration tester, ensuring the system's security integrity and the protection of our clients' data.

## 3. Onboarding and Offboarding

### 3.1 Implementation Project

The Delivery Approach, depicted in Figure 3: Implementation Approach below, is based on the following principles:

- ◆ Placing business objectives and the end-users at the centre of the project activities,
- ◆ Leveraging technology to execute strategic business objectives,
- ◆ Emphasising the importance of velocity and transparency of solution implementation,
- ◆ Proven approach to getting the best value out of CMS. Rather than a take-it-or-leave it approach to the introduction of a critical new system, key decisions are made in a structured way to de-risk delivery of business benefits and minimise impacts to other Educational Institution programs.
- ◆ Strong and continuous relationship with stakeholders and end-users.

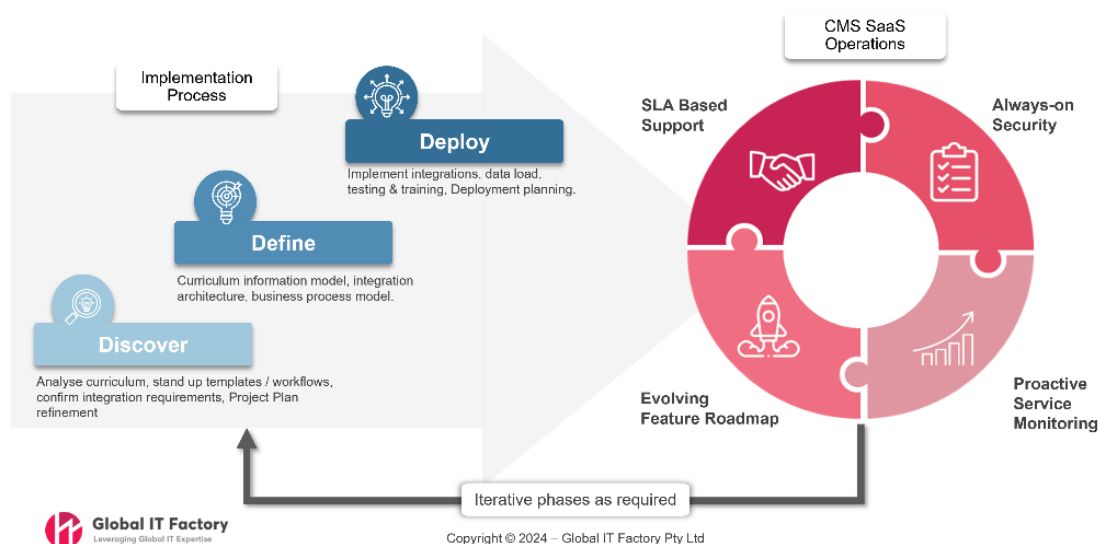


Figure 3: Implementation Approach

The overall approach can be broadly summarised in three project categories:

#### 1. Implementation Process

The implementation process consists of three distinct stages, each culminating in a milestone (elaborated on in the following section). Upon completing these stages, a transition to a support phase begins, which includes a 'Hypercare' period.

#### 2. CMS SaaS Operations

During this transition, the Educational Institution officially goes live with the Curriculum Management System (CMS) product. End-users begin to utilise the software for business operations, marking the commencement of SaaS operations.

### 3. Iterative phases as required

To note that at times the initial go-live does not signify the conclusion of the implementation process. Once the first iteration of the CMS is operational in the production environment, a subsequent project can be initiated to extend the CMS's feature set. This creates two concurrent streams: SaaS support for the existing production environment, and a continuing project for the implementation of new features.

Multiple cycles of implementation can be undertaken as needed. Our team will collaborate with stakeholders to formulate a tailored strategy that best suits the institution's objectives.

s

## 3.2 Training

In addition to the core project team training at the commencement of the project, we adopt a Train-the-Trainer approach for end-users.

As we transition to the production phase, Global IT Factory trains a select group of University trainers on the system operations, encompassing essential functionalities and application procedures. Each training session is designed to be interactive, dedicating ample time for queries and detailed explanations of system functionalities. The training is structured into two sessions, each lasting three hours, totalling approximately six hours.

Our training methodology integrates a variety of educational tools, including presentations to elucidate core concepts, live demonstrations using a non-production instance of the CMS, and practical exercises for trainees to apply what they've learned directly. This blend of teaching techniques is aimed at enhancing understanding and retention.

Furthermore, Global IT Factory provides the University with access to all training materials, enabling you to customise and adapt them to fit your specific processes and requirements.

## 3.3 Documentation

Ensuring users and administrators can effectively engage with and manage the Curriculum Management System (CMS) is a priority for Global IT Factory. To facilitate this, comprehensive documentation is provided, encompassing User Manuals, Administrator Manuals, and API Specifications.

**User Manuals:** Designed for end-users, these manuals offer step-by-step instruction on using the CMS's features and functionalities. They include practical examples, troubleshooting tips, and best practices to enhance the user experience and promote self-sufficiency.

**Administrator Manuals:** Tailored for system administrators, these manuals provide detailed instructions on configuring, managing, and maintaining the CMS. Topics covered include user management, system settings, data security, and customization options, ensuring administrators can effectively support and optimize the system.

**API Specifications:** For integrations our API Specifications detail the technical aspects of the CMS's interfaces. This includes endpoint descriptions, data models, authentication methods, and sample requests and responses, enabling seamless integration with other systems and tools.

**Training Documents:** Training Documents are designed to deliver information on functional areas of the system. The documents take a topic (e.g., Curriculum Mapping), and show how this can be managed within the system. The documents include use cases, examples of best practice, and configuration options.

These documentation resources are continuously updated to reflect new features and improvements, ensuring they remain a valuable asset for all users and administrators. Global IT Factory is committed to providing clear, thorough, and accessible documentation to support the effective use of the CMS.

Global IT Factory provides the University with access to all training materials, enabling you to customise and adapt them to fit your specific processes and requirements.

### 3.4 End-of-Contract Data Extraction

At the contract's conclusion, we ensure a smooth transition of your data through a structured data migration strategy.

This encompasses:

- ◆ Data Extraction: Exporting all customer data in a universally accessible, documented, machine-readable format, such as CSV, adhering to industry standards for ease of use.
- ◆ Data Schema Documentation: Providing detailed documentation of the customer's data schema, facilitating a clear understanding of the data structure and content.
- ◆ Integration Documentation: Ensuring all integrations, including adaptors, security protocols, and APIs, are documented, allowing for seamless data transition to alternative systems.
- ◆ Migration Support: Offering comprehensive support during the data migration process, including assistance in interpreting the data schema and integrating data with new systems.

Our approach guarantees that your valuable data remains intact, interpretable, and easily transferable, ensuring no disruption to your operations post-contract.

## 4. Service and Partnership Management

Global IT Factory (GITF) adopts a structured Relationship Governance and Service Management approach, ensuring exceptional service delivery and client satisfaction. Our governance model is segmented into Strategic, Tactical, and Operational components, addressing all facets of our engagement with The University from strategic business collaborations, through project delivery, to operational effectiveness.

### **Strategic Governance Forum**

This top-tier forum sets the vision and direction for the partnership, ensuring alignment with The University's strategic objectives. Comprising senior executives from both organizations, it meets monthly to oversee progress, establish priorities, and ensure strategic goals are achieved.

### **Tactical Governance Forum**

Functioning as the Program Steering Committee, this forum focuses on managing the delivery program for the business contract. Leadership from both sides collaborates to direct the project, prioritize initiatives, and confirm contractual requirements are met. Initial meetings are fortnightly, with adjustments as necessary.

### **Operational Governance Forum**

Dedicated to project management and service delivery, this forum ensures the Program of Works aligns with The University's specific requirements. Management teams from both parties participate, with the meeting frequency tailored to project phases.

### **Escalation and Complaints Procedure**

GITF employs a robust Issue Management Process with an established Escalation Procedure to address and resolve concerns promptly. Complaints related to the contract activate our Non-Conformity and Corrective Action Procedure, aligning with our ISO 9001:2015 certified Quality Management System.

### **Performance Monitoring and Review**

Our performance is closely monitored against SLAs and KPIs, using advanced tools for real-time insights into service availability, ticket metrics, and more. Monthly reports ensure transparency and facilitate continuous service improvement.

### **Communications Plan**

Developed in collaboration with The University, our Communications Plan outlines the communication strategy, including events, schedule, participants, objectives, and methods, ensuring efficient information flow throughout the project.

### **Reporting Arrangements**

During the implementation phase, GITF provides weekly progress reports, transitioning to monthly Service Reports during ongoing SaaS delivery. These reports cover milestones, risk management, service desk performance, and software updates, providing comprehensive insights into project and service status.

### **Half-Yearly User Forums**

To deepen our engagement and ensure continuous improvement, Global IT Factory hosts Half-Yearly User Forums. These sessions offer a blend of presentations and interactive discussions, facilitated typically online, to





accommodate all users. They provide an invaluable opportunity for The University's community to share insights, voice feedback, and learn about CMS developments and upcoming features. This initiative is crucial for aligning our service enhancements with The University's evolving needs and fostering a vibrant user community.

Through our focused approach to service and partnership management, GITF ensures a resilient, responsive, and client-centric service model, underpinning our commitment to delivering excellence and nurturing a successful, long-term partnership with The University.

## 5. SLA Based Support and Maintenance Services

This section provides an overview of Global IT Factory's Service Level Agreement (SLA) based support and maintenance service offering. It defines the scope of support services, available service levels and associated support metrics.

### 5.1 The scope of Support Services

Global IT Factory can provide the Customer with support and maintenance services for the CMS Product as described in Table 1 below.

- ◆ The scope of support includes:
- ◆ Global IT Factory CMS Application
- ◆ Oracle Cloud Infrastructure (IaaS and DBaaS)
- ◆ Any other 3rd party applications or Cloud Services provided by GITF as part of the solution

| Table 1 – Support Levels                 |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Support Level                            | Responsible        | Service Provided                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 1 <sup>st</sup> Level                    | Client's Help Desk | <ul style="list-style-type: none"> <li>• Provide a 1st level response for Client's business users as per the agreed Service Desk process.</li> <li>• Analyse and triage query and allocate to appropriate support queue.</li> <li>• Resolve operational/admin requests such creation of new users, configuration of access rights, password reset</li> <li>• Escalate any other incidents to GITF's Service Desk</li> </ul>                                              |
| 2 <sup>nd</sup> or 3 <sup>rd</sup> Level | Global IT Factory  | <ul style="list-style-type: none"> <li>• Respond within agreed SLA</li> <li>• Analyse and triage incident and resolve and/or implement temporary workaround if related to the configuration of CMS product.</li> <li>• Liaise with integrating parties to identify the root cause of any integration issues.</li> <li>• Liaise with Oracle to resolve any Cloud Infrastructure issues</li> <li>• Provide reports/updates on the incident resolution progress.</li> </ul> |

## 5.2 Service Levels

Global IT Factory offers a range of support options and associated Service Levels. The Bronze level Service Level support is included in our standard SaaS fee. Global IT Factory will work with the institution to understand preferred support arrangements and may provide offer for any higher support level if required.

| Table 2: Bronze Service Level SLAs     |                                                                                              |
|----------------------------------------|----------------------------------------------------------------------------------------------|
| Response Time Objectives               | Sev 1: 30 min<br>Sev 2: 4 hours<br>Sev 3: 1 business day<br>Sev 4: 2 business days           |
| Support Channels                       | Online Service Desk (24 x7)                                                                  |
| Response Method                        | Service Desk Ticket acknowledged.                                                            |
| Support Coverage                       | Mon-Fri 9AM - 5PM                                                                            |
| Resolution Targets business days/hours | P1: 90% within 6 hours<br>P2: 3 business days<br>P3: 5 business days<br>P4: 10 business days |
| Monthly reports                        | Included                                                                                     |

| Table 3 – Definition of Incident Severities |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Severity                                    | Severity Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1 – SEVERE                                  | Defined as either the full system down or any problem that: <ul style="list-style-type: none"> <li>Critically impacts on the Client’s ability to meet its Service Level commitments and/or business obligations for the CMS application.</li> <li>Has a significant impact on one or more critical CMS functions;</li> <li>Impacts multiple business units for which there is no reasonable workaround that allows end users to continue processing with potentially some slight loss of efficiency or (non-critical) functionality;</li> </ul> |
| 2 - HIGH                                    | Defined as a partial failure of a system affecting at least one business unit (other than a Severity 1 problem) that: <ul style="list-style-type: none"> <li>Has a high impact on business commitment(s) or function(s) for which there is no reasonable workaround that allows end users to continue processing with potentially some slight loss of efficiency or functionality;</li> </ul>                                                                                                                                                   |
| 3 - MEDIUM                                  | Defined as a unit or component failure that does not significantly impact an application’s availability. A problem at an individual level or a small workgroup.                                                                                                                                                                                                                                                                                                                                                                                 |

**Table 3 – Definition of Incident Severities**

| Severity | Severity Description                                                                                                                                                                                                                                                                                                  |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 - LOW  | <p>Defined as a minor problem or information request and includes all other problems which are not Severity 1, 2 or 3 problems.</p> <p>The Client's end users are still able to complete tasks with minimal loss of functionality or performance degradation. Problem is related to a specific/individual entity.</p> |

### 5.3 Service Level Reporting

Global IT Factory will provide Performance / SLA reporting via its Service Desk and Services Management reporting functions. The report will show, as a minimum, service performance achievement against the agreed SLA and any other criteria as agreed to during the Transition phase of the engagement. The content of the report will enable service reviews with the Customer and will contribute to continual improvement in service delivery.

Post-Incident Reports (PIRs) will be documented for relevant Severity 1 Incidents and all Significant Events. The PIR will provide an understanding of the impact of the incident on the business, the activities are undertaken by Global IT Factory to resolve the incident, and the recommended actions to minimise the chance of the incident recurring in the future.

Where Global IT Factory identifies unusual trends, issues or risks to the CMS Application, Global IT Factory will be pro-active in reporting such issues to the Client's relevant personnel.

### 5.4 Incident and Service Enhancement Request Management

Global IT Factory will be responsible for the resolution of any incident or service enhancement request that is raised by Client's Level 1 Help Desk Staff.

Global IT Factory will be responsible for owning the Incident/Service Request Management process, end-to-end until resolved and closed with the approval of the appropriate authority even if reassigned to another service provider or 3rd party engaged by GITF (e.g. Oracle). The GITF team will liaise with the Client to record an issue, allocate a severity level, resolve the call where possible and appropriate, or escalate the incident to the 3rd party Software Vendor engaged by GITF (e.g. Oracle).

Global IT Factory will keep the Client informed of the steps that are being taken to address problems and maintain records in our problem tracking system. Our support team will also work with the client to determine the impact of the problem and, if necessary, help to define an action plan to recover lost productivity.

There may be instances when Global IT Factory's support staff will need to involve the Client's Support or IT staff in problem resolution or confirming service restoration. It is assumed that in these circumstances the Client's staff will provide all reasonable assistance to Global IT Factory.

For all Severity 1 Incidents, our support team will notify the GITF Service Delivery Manager and immediately escalate the incident.

The Service Delivery Manager will be responsible for coordinating the resolution of all Severity 1 Incidents and will work closely with the allocated resources and 3rd party providers (e.g. Oracle) as required. The Service Delivery Manager will also be responsible for maintaining a heightened need for quick resolution and will coordinate the

production of an Incident Report where needed. Success will be measured monthly by meeting minimum requirements within the SLA, specifically referring to Incident and Escalation Management.

| Table 4 –Typical Incident or Service Request Management Process Steps |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Step #                                                                | Process Step                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ticket Status         |
| 1                                                                     | <b>Client's Level 1 Support Team Raises Incident or Service Request</b><br>The process of engagement is initiated by a client's level 1 support team raising an incident/query/issue to Global IT Factory's Level 2 support team through a Service Desk and/or phone call on a dedicated number (depending on SLA support level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | n/a                   |
| 2                                                                     | <b>GITF Support Team Logs Requirements &amp; Confirm Severity</b><br>The Global IT Factory support team assesses the incident to determine if it is a CMS product related issue. If the incident is not related to the CMS Product, Global IT Factory support refers the incident back to the initiator with the relevant input. Global IT Factory support also performs an assessment to confirm severity. If the severity needs to be changed, it is discussed and agreed with the initiator before the incident is logged. A reference number is allocated for the incident, and the initiator is advised of the reference number. The details provided for the issue and initiator's name/contact details are recorded in the Global IT Factory's Service Desk tool.                                                                                                                                                     | OPEN (New)            |
| 3                                                                     | <b>Conduct 2<sup>nd</sup> Level Support</b><br>Global IT Factory's support team member commences an investigation to try to resolve the incident and/or developing an appropriate workaround to allow the business user to return to business operation in accordance with the agreed Severity levels. Global IT Factory will contact the client's incident initiator during the conduct of support to confirm when rectification has been achieved. When a service outage is required for resolution, approval of an appropriate time frame for the outage will be obtained from the client. From the time Global IT Factory has acknowledged that the incident will be owned and therefore managed by Global IT Factory, it is Global IT Factory's responsibility to keep the originator of the incident informed of progress through the lifecycle of the incident, i.e. through rectification to resolution and closure. | OPEN/<br>UNDER REVIEW |
| 4                                                                     | <b>Raise 3<sup>rd</sup> Level Support Ticket (Optional)</b><br>Where Global IT Factory has deemed the problem to require product support from a 3 <sup>rd</sup> party product vendors engaged by GITF (e.g. Oracle) to resolve or to furnish a workaround solution, Global IT Factory will engage with those vendors directly and manage all communications regarding 3 <sup>rd</sup> party support.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ON HOLD               |
| 5                                                                     | <b>Resolution</b><br>If the incident/service request can be resolved without making a change to the production environment go to Step 9 – Close Incident.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | RESOLVED -><br>CLOSED |

| Table 4 –Typical Incident or Service Request Management Process Steps |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                     |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Step #                                                                | Process Step                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Ticket Status                       |
| 6                                                                     | <b>Schedule Release &amp; Outage</b><br>For incidents/service requests that require change, Global IT Factory will follow the Customer’s Change Management process to enable the fix to be implemented into the production environment.                                                                                                                                                                                                                                                                       | <b>RESOLVED – PENDING PROMOTION</b> |
| 7                                                                     | <b>Conduct Implementation Activities</b><br>During the approved change window, Global IT Factory will coordinate all changes required to the production environment to resolve the incident.                                                                                                                                                                                                                                                                                                                  | <b>RESOLVED</b>                     |
| 8                                                                     | <b>Conduct UAT Testing (optional)</b><br>Prior to releasing any “fix” or change, Global IT Factory will liaise with the user community to establish what User Acceptance Testing (UAT) is required to test the resolutions or fixes that Global IT Factory has developed.<br><br>The client’s Support has the option to waive the UAT phase.<br><br>In either instance, Global IT Factory will place the incident on hold until formal approval from the client is received to implement the “fix” or change. | <b>PENDING CUSTOMER</b>             |
| 9                                                                     | <b>Close Incident</b><br>Once the permanent resolution is in place, the initiator will be advised, and upon notification from the initiator or an appropriate business representative that the incident can be closed, Global IT Factory will close the call in Service Desk tool. Any relevant documentation will be updated as part of the resolution process.                                                                                                                                              | <b>CLOSED</b>                       |

## 5.5 Incident or Service Request Escalations

In the case that the client believes they have not received quality or timely assistance with the response to an incident or service request or they urgently need to communicate important support related business issues to Global IT Factory management, the client’s technical contact may escalate the service request by contacting Global IT Factory and requesting that the service request be escalated.

For service requests that are escalated, the Global IT Factory support analyst will engage the Global IT Factory service request escalation manager who will be responsible for managing the escalation. The Global IT Factory service request escalation manager will work with the client to develop an action plan and allocate the appropriate Global IT Factory resources. If the issue underlying the service request continues to remain unresolved, the client may contact the Global IT Factory service request escalation manager to review the service request and request that it be escalated to the next level within Global IT Factory as required.

## 5.6 CMS Release and Upgrade Policy

In order to maintain operational stability, availability, security, performance, and currency, Global IT Factory and Oracle deploy occasional patches and upgrades to the system following a formal change management process.

Global IT Factory and Oracle will provide prior notice of modifications to the standard maintenance period schedule. Please refer to Table 5 for details.

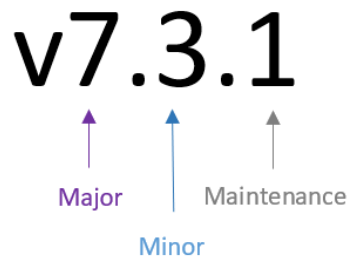
For Customer-specific changes and upgrades, where feasible, Oracle and Global IT Factory will coordinate the maintenance periods with You.

| Table 5 – Release Types, Cycles and Customer Notification |                                                                     |                                           |                                                               |                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Release Type                                              | Scope                                                               | Frequency                                 | Notification                                                  | Customer Obligations                                                                                                                                                                                                                                                |
| Major CMS SW Release                                      | New application functionality, new integrations                     | Typically once every 1-2 years            | Not less than 3 months                                        | <ul style="list-style-type: none"> <li>Upgrade to current General Availability Release</li> <li>Perform functionality verification test including any customer-specific customisations</li> <li>Perform the End-to-End Solution test (test integrations)</li> </ul> |
| Minor CMS SW Release                                      | Smaller feature upgrades and updates as well as application patches | Typically once each quarter               | Not less than one month                                       | <ul style="list-style-type: none"> <li>Upgrade to the current General Availability Release</li> <li>Verify that the system is operational after the upgrade</li> </ul>                                                                                              |
| Maintenance CMS SW Release                                | Application fixes to address reported defects                       | Typically once a month                    | Not less than one week.                                       | <ul style="list-style-type: none"> <li>Upgrade to the current General Availability Release</li> <li>Verify that the system is operational after the upgrade</li> </ul>                                                                                              |
| Major Cloud Infrastructure Maintenance                    | Major Oracle Cloud Infrastructure Maintenance Changes               | Typically not more than twice a year      | Not less than 2 months                                        | <ul style="list-style-type: none"> <li>Verify that the system is operational after infrastructure maintenance completion.</li> </ul>                                                                                                                                |
| Patch Release                                             | Standard updates and fixes needed for system stability or security  | Fortnightly recurrent window or as agreed | Regular established window – typically 5 days                 | <ul style="list-style-type: none"> <li>Verify that the system is operational after patching activities are complete</li> </ul>                                                                                                                                      |
| Emergency Hot-Fix                                         | Hot fixes needed for system stability or security                   | As required.                              | Typically a few hours with a target of 24 hours when possible | <ul style="list-style-type: none"> <li>Verify that the system is operational after the upgrade</li> </ul>                                                                                                                                                           |

### **CMS Software Upgrades:**

As a part of ongoing support and maintenance, Global IT Factory will be performing CMS Software upgrades. Those production upgrades are typically performed in the period from 22:00 until 4:00 and may involve short service outage. The upgrade windows are coordinated and agreed with our clients.

Prior to a production upgrade, updated CMS Software is made available in the Test environment to provide the opportunity to verify the operation of the upgraded solution, including an end-to-end CMS Solution test in an integrated test environment.



Release numbering example

- ◆ **Major Release:** Major Releases are application version upgrades to the CMS SaaS solution. These releases are an integral part of GITF offering and provide new functionality and/or additional integrations.
- ◆ **Minor Release:** Minor Releases include but are not limited to minor feature upgrades, bug fixes, security updates, and installation of application patches.
- ◆ **Maintenance Release:** Provides a regular cadence for maintenance release addressing reported defects

#### **Major Oracle Cloud Infrastructure Maintenance Changes:**

To help ensure continuous stability, availability, security and performance of the Oracle Cloud Services, Oracle reserves the right to perform major changes to its hardware infrastructure, operating software, applications software and supporting application software under its control, typically no more than twice per the calendar year. Each such major change event is considered scheduled maintenance and may cause the Oracle Cloud Services to be unavailable. Each such event is targeted to occur at the same time as the scheduled maintenance period. Oracle will work to provide no less than 60 days prior notice of a major change event.

#### **Patch Release:**

Patch releases are needed to maintain system security, performance, availability and stability. The update will be performed within a pre-agreed maintenance window, ideally established as a regular activity in the organisational change calendar. The typical notice period is 5 days.

#### **Emergency Maintenance (Hot-Fix):**

Global IT Factory and Oracle may be required to execute emergency maintenance in order to protect the security, performance, availability, or stability of the CMS Cloud Services. Emergency maintenance may include program patching and/or core system maintenance as required. Global IT Factory and Oracle work to minimise the use of emergency maintenance and to the extent, reasonable, will work to provide 24 hours prior notice for any emergency maintenance requiring a service interruption.



### 5.6.12 Software Version Requirements

Global IT Factory runs CMS SaaS offering on the latest generally available software version. It is the requirement that the customer's SaaS instance is upgraded within 12 months of the Major SW version availability being announced.

Global IT Factory is not obligated to maintain any instance other than the current and previous (N-1) generally available Major versions. If the client declines to upgrade to the latest available Major version within the period of 12 months, Global IT Factory will be unable to continue to provide SLA-based support. Any upgrade at a later stage may incur additional costs.

### 5.6.13 Codelines

Production defect fixes will be applied to the current Major release version codeline, and by agreement to the previous Major release version codeline.

### 5.6.14 Additional Services for Major Software Upgrades

While our standard software upgrades are included as part of our SaaS service, ensuring that your software remains up-to-date and secure, certain Major Software Upgrades may necessitate a more comprehensive implementation process. These upgrades may involve additional services and activities that extend beyond the scope of our standard offerings.

Major Software Upgrades classified as "upgrade projects" encompass not only technical aspects but also support for the Client's change impact assessment, business change management activities (such as training), data migration, system integration, and specialised consultation.

In such cases, Global IT Factory will provide a detailed proposal for the required additional services, which may include:

1. Dedicated project management to oversee the upgrade process, ensuring a timely and efficient implementation.
2. In-depth system analysis and consultation to pinpoint potential challenges, opportunities, and enhancements related to the Major Software Upgrade.
3. Assistance with data migration to facilitate a seamless transfer of information and minimise the risk of data loss or corruption.
4. Configuration of the solution and integrations tailored to the specific needs and requirements of the Client.
5. Comprehensive training and support materials, including documentation and workshops, to enable a smooth transition and empower users to fully leverage the upgraded software.

This approach is designed to address each Client's unique needs, effectively managing the transition and maximising the value and effectiveness of the software upgrade.

Charges associated with Major Software Upgrades account for the costs of these additional services and activities, which can require significant resources, expertise, and coordination. By providing a separate quote for these upgrades, we maintain transparency and flexibility in our pricing, allowing our clients to make informed decisions and plan accordingly for potential changes to their software environment.

## 5.7 Proactive System Health Check

Global IT Factory uses Nagios (<https://www.nagios.com/>) to implement PSMA (Proactive Service Monitoring and Alerting) and ensure quick detection and alerting in case of any infrastructure issues, network outages, detection of failed application services, processes, or integration issues.

Additionally, on a regular basis, Global IT Factory will pro-actively review the production environment logs to check that all services are working and that no issues are reported with the system.

A register of key metrics will be kept to provide an audit trail that the health checks are being performed. Any issues identified during the health checks will be managed under the Incident and Problem management processes.

Should any failure or service issue resulting in diminished, or loss of functionality be identified during the system health checks, the Client's Help Desk will be notified within 1 hour of problem identification.

## 5.8 Enhancement/Integration Projects

Global IT Factory is committed to meeting our clients' evolving business requirements by providing CMS Product enhancement and integration services tailored to their specific needs. To ensure the successful implementation of these services, we take full responsibility for managing and delivering high-quality results for all enhancement and integration projects.

Enhancement/Integration projects are resourced by augmenting our CMS support team with skilled developers and consultants who possess the necessary expertise to provide the required professional services.

Please note that enhancements and integrations are considered additional services and will be quoted separately based on the effort required for implementation.

While we strive to accommodate our clients' requests, we reserve the right to assess each enhancement request on a case-by-case basis and determine whether we can accommodate it within our service offerings.

Our comprehensive approach ensures that each project is addressed with the utmost care and attention, resulting in

1. Seamless integration of CMS Products with existing systems, tools, and platforms to optimise business processes and workflows.
2. Enhancements in line with standard CMS Product capabilities, driving improved efficiency and productivity.
3. Thorough project management, ensuring clear communication, timely delivery, and minimised disruptions to ongoing operations.
4. Access to a team of experts with extensive experience in CMS Product enhancement and integration, ensuring the highest quality results.

Upon completion of the Enhancement/Integration Project, the impact on the ongoing support effort will be assessed, and the ongoing SaaS fee may be adjusted accordingly to reflect the additional complexity or requirements of the enhanced or integrated solution.



By entrusting Global IT Factory with your Enhancement/Integration Projects, you can expect tailored solutions designed to meet your specific business demands, supported by a team of professionals dedicated to helping you achieve your objectives while maintaining transparency in pricing and service levels.