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User Acceptance Test Planning & Execution Guide:

"Empowering Success Through Precision"

RONALD KOHLMAN

What is User Acceptance Testing (UAT)

- **Acceptance Testing (UAT):** The process of validating that a completed system complies with its documented requirements.
- UAT is a critical phase in the software testing process, focusing on validating the system's alignment with business requirements. It involves formal tests conducted by business representatives, ultimately contributing to the decision on whether to accept the system for deployment. Close collaboration between business stakeholders and testing teams is essential for the success of UAT.
- UAT is where business stakeholders actively participate in evaluating the system's readiness for production use. It goes beyond functional correctness and delves into the validation of end-to-end processes, transactions, user access, and the confirmation of all necessary supporting elements. UAT is the final gate before the software is accepted for deployment, ensuring that it aligns with the business objectives and requirements.

Key Characteristics of UAT

Formal Tests:

- Formal tests are conducted to determine whether the system satisfies its acceptance criteria.
- UAT is the formal testing conducted by the business.
- Purpose: It aims to validate whether the system meets the business's acceptance criteria and is ready for deployment.

Validation:

- Focus: UAT validates system transactions and end-to-end business processes.
- The primary goal is to validate that the system aligns with documented requirements and meets the business needs.
- Objective: Ensures that the entire business workflow, that all transactions within the system from start to finish, functions seamlessly within the system such as data entry, processing, and retrieval, are accurate and reliable.

Validation of User Access:

- Inclusion: UAT validates user access.
- Objective: Ensures that users have the appropriate permissions and access levels to perform their roles within the system.

Confirmation of Non-System Requirements:

- Scope: UAT confirms that non-system requirements have been delivered.
- Examples: Non-system requirements may include training materials, documentation, or any elements supporting the solution.

Business Involvement:

- Typically performed by business representatives or end-users who have a deep understanding of business processes.

Acceptance Criteria:

- Tests are designed based on predefined acceptance criteria, which outline the expected behaviour and outcomes.
- Comparison with System Testing: While System Testing is modular and process-specific, Acceptance Testing focuses on the interaction between completed modules.

Decision Making

- UAT enables the business to make informed decisions about whether to accept or reject the system.

Why UAT is Necessary

Validation of Business Requirements:

UAT ensures that the software aligns with the specified business requirements. It allows end-users to verify that the developed system meets their needs and objectives

User Feedback and Satisfaction:

UAT provides an opportunity for end-users to provide feedback on the software's usability, user interface, and overall user experience. This feedback is crucial for enhancing user satisfaction

Identification of Defects and Issues:

UAT helps identify any defects, discrepancies, or issues that may have been overlooked during earlier testing phases. Users play a crucial role in discovering real-world scenarios that might not have been anticipated

Risk Mitigation:

By involving end-users in the testing process, UAT helps mitigate the risk of deploying a system that does not meet user expectations. This reduces the likelihood of post-deployment issues

Increased Confidence in Deployment:

Successful completion of UAT gives stakeholders and project teams confidence that the software is ready for deployment. It validates that the developed solution is both technically sound and aligns with business goals

Key Activities in UAT

Test Planning:

Develop a UAT test plan outlining the testing strategy, scope, resources, and schedule

Test Case Design:

Create detailed test cases based on business requirements and acceptance criteria

Test Execution:

Perform test scenarios in a controlled environment to validate system functionality

Defect Reporting:

Identify and report any defects or deviations from expected behaviour during testing

Collaboration:

Collaborate closely with business stakeholders to ensure that testing aligns with business processes

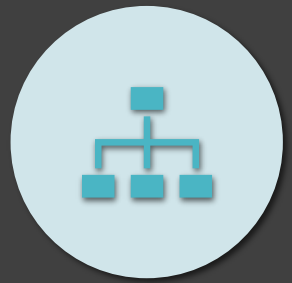
User Involvement:

Involve end-users in testing activities to capture real-world scenarios and user experiences

Decision-Making Process:

Support the business in making decisions on whether to accept the system for deployment

Benefits of UAT



Ensures that the system meets business requirements and expectations

Provides a final validation before system deployment

Identifies any discrepancies or issues that need to be addressed before release

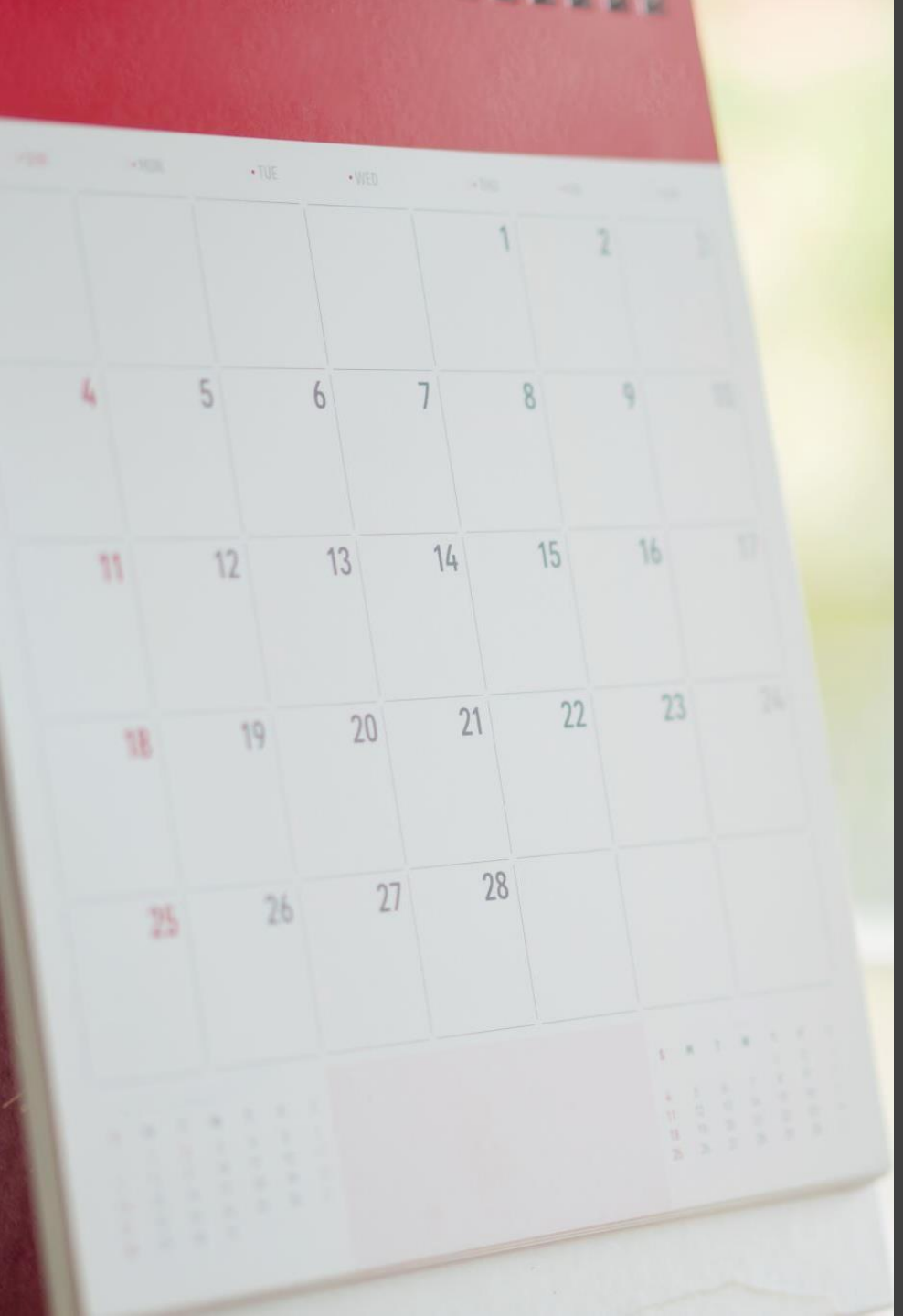
Builds confidence among stakeholders that the system is fit for production use

Key Challenges for UAT

Ensuring comprehensive test coverage of business processes

Managing and coordinating schedules with business representatives

Addressing communication gaps between business users and development teams

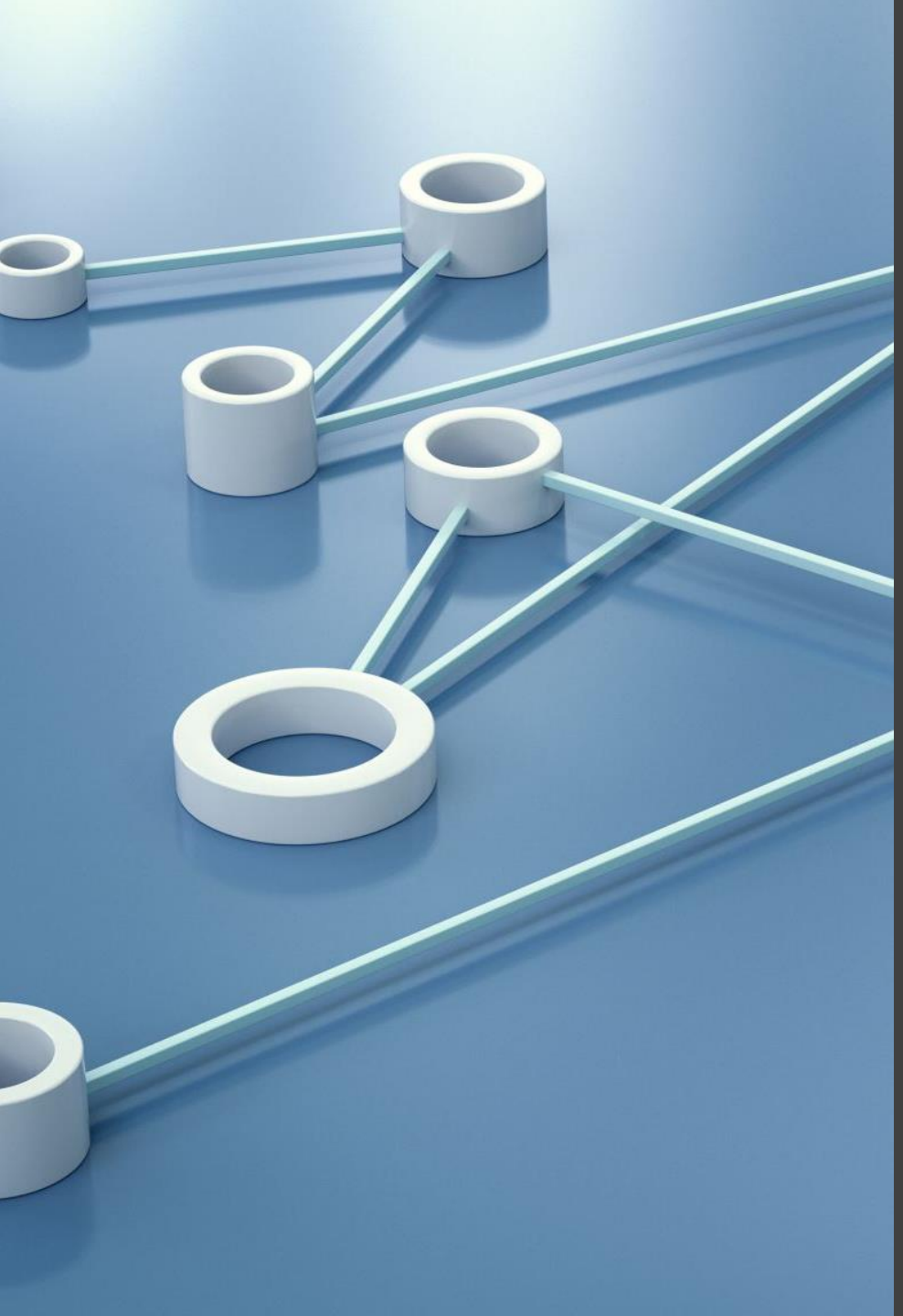


UAT Planning Documents

- **Test Strategy**: Defines the overall approach and methodologies for testing activities, outlining the scope, objectives, and resources.
- **Master Test Plan**: Comprehensive document that details the overall testing strategy, objectives, schedule, resources, and entry/exit criteria.
- **Test Schedule**: Outlines the timeline for various testing activities, including UAT, providing a structured plan for execution.
- **Project Plan**: Provides a broader overview of the entire project, incorporating testing as one of the key components.
- **Project Schedule**: Specifies the overall schedule for the project, including milestones and deadlines for different phases, including testing.

Purpose of the UAT Plan

- The reasoning behind the creation of a UAT Plan is to ensure that the allocation of resources, whether financial or operational, is in harmony with specific business requirements or initiatives
- A robust UAT Plan comprehensively captures both quantifiable and unquantifiable aspects of UAT for a proposed Project/Program
- It has an emphasis on UAT, regardless of delivery methodology used



Principles

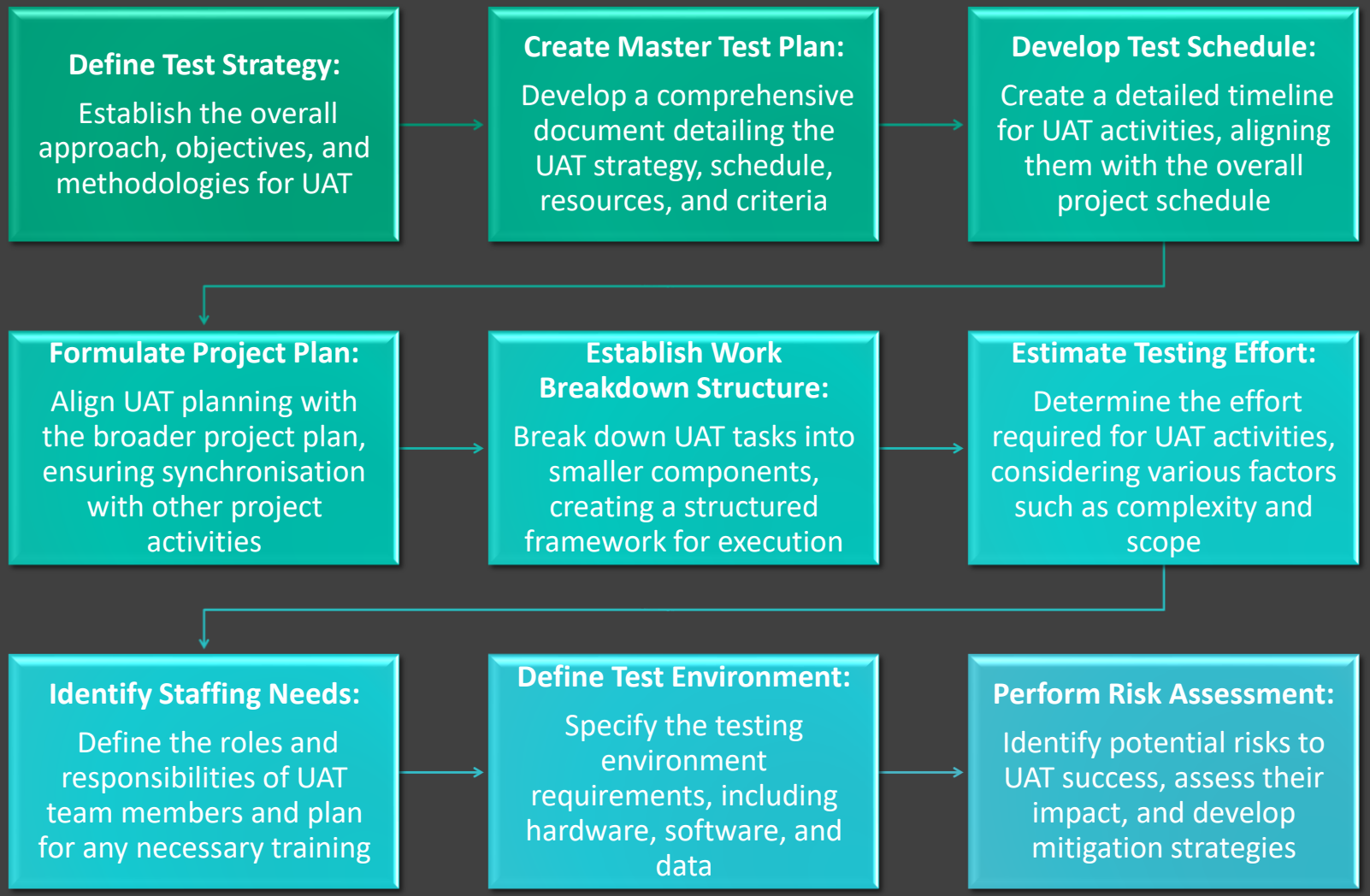
- The UAT Plan principles are to cover the activity required:
  - To ensure that the integration of business processes across the systems function properly
  - The user organisation validates and tests the completed application against the business requirements
  - Focuses on the interaction between the completed system and business processes

UAT planning is a crucial phase that involves creating essential documents, defining activities, and addressing key aspects such as staffing, training, environment, and risk management.

A well-planned UAT process contributes to organised and effective testing, enhancing the overall success of a project.

Planning for UAT

Alignment with Business Objectives:	Planning ensures that UAT activities are aligned with the organization's business objectives and user requirements. It helps identify the goals and expectations of the UAT process.
Resource Allocation:	Planning helps in allocating the necessary resources such as time, budget, and personnel for conducting UAT effectively. It ensures that the right people with the required skills are available when needed.
Scope Definition:	Planning helps define the scope of UAT by identifying the features, functionalities, and scenarios that need to be tested. It prevents scope creep and ensures that testing efforts remain focused on critical areas.
Risk Management:	Planning enables the identification and assessment of potential risks and challenges that may impact the UAT process. It allows for the development of mitigation strategies to address these risks proactively.
Timeline and Scheduling:	Planning establishes a timeline and schedule for UAT activities, including test preparation, execution, and reporting. It ensures that testing activities are completed within the allocated timeframe and deadlines are met.
Quality Assurance:	Proper planning ensures that UAT is conducted in a structured and systematic manner, leading to thorough testing and validation of the system's functionality, usability, and performance.
Stakeholder Engagement:	Planning involves identifying and engaging stakeholders who are critical to the success of UAT. It facilitates communication and collaboration among stakeholders, fostering a shared understanding of expectations and outcomes.



UAT Planning Process

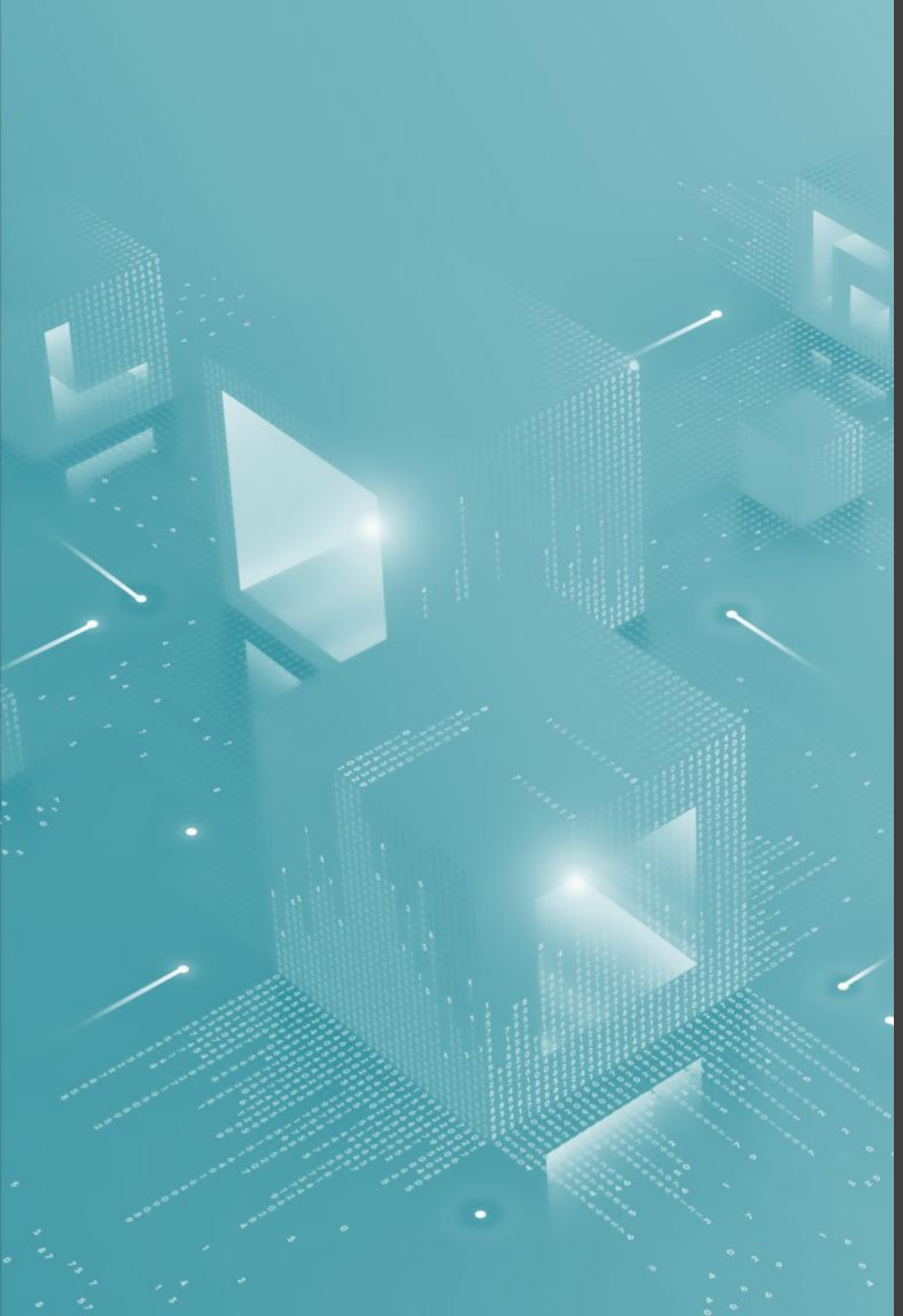
Effective planning is paramount in ensuring the success of UAT. It lays the foundation for assessing and assuring the quality of systems being delivered to the business.

Key Questions to Address

How much testing is enough?	Define the extent of testing required to ensure comprehensive coverage
How many tests do we need?	Quantify the number of tests necessary for a thorough evaluation
Which tests should we choose to execute?	Prioritise and select tests based on their relevance and impact
What approach is suitable?	Determine the testing approach aligned with project requirements
What risks are there in our approach?	Identify potential risks associated with the chosen testing approach
When is it appropriate to start testing?	Establish the optimal timing for commencing the UAT process

Benefits of UAT Planning

Structured Approach:	Resource Optimisation:	Risk Mitigation:	Timeline Adherence:	Quality Assurance:
Provides a structured framework for conducting UAT, ensuring organised and systematic testing	Efficiently allocates resources and defines roles, preventing resource bottlenecks	Identifies and addresses potential risks, minimising their impact on the UAT process	Ensures that UAT activities align with the project schedule, facilitating timely completion	Enhances the quality of UAT by defining clear objectives, criteria, and methodologies



Challenges in UAT Planning

Changing Requirements:

- Adapting to changes in requirements during the UAT planning process

Resource Constraints:

- Managing resource constraints and ensuring adequate staffing for UAT

Environment Availability:

- Ensuring the availability of the required testing environment and infrastructure

Key Takeaways

Clear Objectives:

Define clear objectives and goals for UAT to ensure alignment with business requirements and user expectations.

Involvement of Stakeholders:

Involve stakeholders from the beginning to ensure their requirements are understood and incorporated into the testing process.

Comprehensive Test Plan:

Develop a detailed test plan outlining test objectives, scope, approach, resources, and timelines. This plan serves as a roadmap for UAT activities.

Effective Communication:

Maintain open and transparent communication channels among team members, stakeholders, and users throughout the UAT process to address issues promptly.

User Involvement:

Engage end-users actively in UAT to validate the system's functionality, usability, and adherence to business needs.

Risk Management:

Identify potential risks and challenges early in the process and develop mitigation strategies to minimise their impact on UAT outcomes.

Thorough Testing:

Conduct thorough testing covering all critical functionalities, scenarios, and edge cases to ensure comprehensive validation of the system.

Documentation and Reporting:

Document test cases, results, and any issues encountered during UAT. Generate comprehensive reports to track progress, identify trends, and facilitate decision-making.

Feedback Collection:

Encourage users to provide feedback and insights based on their UAT experience. Use this feedback to make necessary improvements and refinements to the system.

Continuous Improvement:

Continuously evaluate and improve UAT processes based on lessons learned from previous cycles to enhance efficiency and effectiveness.

Summary

- User Acceptance Testing is a critical phase in the software testing process, focusing on validating the system's alignment with business requirements. It involves formal tests conducted by business representatives, ultimately contributing to the decision on whether to accept the system for deployment. Close collaboration between business stakeholders and testing teams is essential for the success of UAT.
- UAT is where business stakeholders actively participate in evaluating the system's readiness for production use. It goes beyond functional correctness and delves into the validation of end-to-end processes, transactions, user access, and the confirmation of all necessary supporting elements. UAT is the final gate before the software is accepted for deployment, ensuring that it aligns with the business objectives and requirements.
- Effective planning lays the foundation for a successful UAT process by providing direction, clarity, and structure to testing activities, ultimately contributing to the delivery of a high-quality product that meets user needs and expectations.

About Ronald

Ronald is a highly experienced and knowledgeable IT professional in the field of program and test management.

He has had many roles working across transformational initiatives and complex enterprise technology solutions.

- Leadership in Transformational Programs
- Global Experience and Cross-Continental Team Leadership
- Governance Frameworks and Tools
- Delivery of Complex Technology Solutions
- Executive-Level Engagement and Consulting

He has been writing and publishing technology industry specific documents for several years. Imparting his practical working experience within these documents.

You can purchase his technology & project books on Amazon:

Vulnerability Management – Empowering Security Through Strategic Vigilance
You've had a Cyber Attack - Now what?
Securing Tomorrow, Today: Navigating Cyber Security Risks with Strategic Precision
How to Create a Cyber Security Roadmap: A necessity for your organisation
Program Management Plan: A usable Template for you
Business Case Template: An approach to documenting your next IT business case
Successfully Delivering User Acceptance Testing for your project
IT Deployment Management Framework
Steering Committee Terms of Reference and Charter
UAT Planning & Execution Guide
Defect Management Plan
And others…

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COGNICIONS.COM

COGNICIONS PTY LTD

ABN 83 611 219 642

MELBOURNE

PO BOX 125, OLINDA,
VICTORIA 3788

+61 (0) 402 448 050

INFO@COGNICIONS.COM