Test Plan Document

1 single-source-of-truth system with SAP Warehouse Management system and Payroll system

	Test type				
	Unit/unitary	**Performance**	**Volume**	**Regression**	**User acceptance**
Test type requirement	Required	Optional but not recommended	Optional but not recommended	Required	Required
System environment	Development	/	/	Sandbox	Quatlity
Team	Project team	/	/	Project team	Both
Rationale	test functionalities of separate system components during/after development	No big data or traffic expected or specific KPI	No big data or traffic expected	benchmark with existing warehouse management and payroll system	test user acceptance during implementation

- Possible test data sources
    - data from existing payroll and warehouse management system
    - data from new SAP systems (for integration API)
    - SAP Best Practices for SAP S/4HANA
- Tools you will use to perform and manage testing
    - extended Computer Aided Test Tool (eCATT)
    - Ci/CD pipelines
    - SAP Monitoring tools
- Three possible test use cases or scenarios that could be used for a specific testing phase.
    - Unitary: test accuracy of data input from warehouse to the system
    - Regression: compare outcome and time needed to generate the outcome with existing system
    - User acceptance: test how easy a new user can navigate through the system and complete certain task e.g. adjust an employee's salary

2 real time data analytics

	Test type				
	Unit/unitary	**Performance**	**Volume**	**Regression**	**User acceptance**
Test type requirement	Required	Required	Optional but not recommended	Not Required	Not Required
System environment	Development	Quality	/	/	/
Team	Project team	Project team	/	/	/
Rationale	test different analytics functionalities	test data processing efficiency	As a **small** organization the number of	No existing similar functionality	Underlying algorithms, no UI

			transactions/ operational data may not be that huge.		

- Possible test data sources
    - data from existing sales system
    - data from IoT sensors on equipment
    - SAP Best Practices for SAP S/4HANA
- Tools you will use to perform and manage testing
    - extended Computer Aided Test Tool (eCATT)
    - ALM tools to simulate large traffic
    - Ci/CD pipelines
    - SAP Monitoring tools
- Three possible test use cases or scenarios that could be used for a specific testing phase.
    - Performance: manually set an equipment at malfunctioning mode while all others functioning correctly, test failure detection response time
    - Volume: simulate high traffic of orders placing, test importing and sorting time
    - Unitary: test specific order search time among thousands

3 Buying Event Management system

	Test type				
	Unit/unitary	**Performance**	**Volume**	**Regression**	**User acceptance**
Test type requirement	Required	Optional and recommended	Optional but not recommended	Required	Required
System environment	Development	Quality	/	Quality	Quatlity
Team	Project team	Project team	/	Project team	Both
Rationale	test functionalities of separate system components during/after development	test large number of order events processed at the same time	no large amount of data involved	This app **extends** existing functionality. need to **integrate** with existing systems for complete data flow.	test user acceptance during implementation

- Possible test data sources
    - SAP Best Practices for SAP S/4HANA
    - order and supplier data from existing database
- Tools you will use to perform and manage testing
    - extended Computer Aided Test Tool (eCATT)
    - ALM tools to simulate large traffic
    - Ci/CD pipelines
    - SAP Monitoring tools
- Three possible test use cases or scenarios that could be used for a specific testing phase
    - Unitary: test accuracy of order details imported from the online order app
    - Performcare: test time to generate suggested procurement list and corresponding suppliers when thousands of orders are placed

- User acceptance: test time to complete a buying event and get employees' feedback

4 customer information system

	Test type				
	Unit/unitary	**Performance**	**Volume**	**Regression**	**User acceptance**
Test type requirement	Required	Optional and recommended	Optional but not recommended	Required	Required
System environment	Development	Quality	/	Quality	Quatlity
Team	Project team	Project team/Both	/	Project team	Both
Rationale	test functionalities of separate system components during/after development	important to evaluate the **first customer touch point**, involve simulations with multiple users concurrently accessing the system	No big data or traffic expected	This app **extends** existing functionality. need to **integrate** with existing systems for complete data flow.	test user acceptance during implementation

- Possible test data sources
  - customer data from existing database
  - SAP Best Practices for SAP S/4HANA
  - manual mock input
- Tools you will use to perform and manage testing
  - extended Computer Aided Test Tool (eCATT)
  - ALM tools to simulate large traffic
  - Ci/CD pipelines
  - SAP Monitoring tools
- Three possible test use cases or scenarios that could be used for a specific test
  - Unitary: test if customer details are properly stored in the new database
  - Unitary: test if previous orders of a customer are displayed
  - User acceptance: test time for employees to search for a specific customer's certain information

5 waste management system

	Test type				
	Unit/unitary	**Performance**	**Volume**	**Regression**	**User acceptance**
Test type requirement	Required	Optional but not recommended	Optional but not recommended	Required	Required
System environment	Development	/	/	Sandbox	Quatlity

Team	Project team	/	/	Project team	Both
Rationale	test functionalities of separate system components during/after development	No big data or traffic expected or specific KPI	No big data or traffic expected	benchmark with existing asset management system	test user acceptance during implementation

- Possible test data sources
  - water and pulp waste data from existing asset management system
  - SAP Best Practices for SAP S/4HANA
  - new data from wastewater and pulp detection sensor
- Tools you will use to perform and manage testing
  - extended Computer Aided Test Tool (eCATT)
- Three possible test use cases or scenarios that could be used for a specific test
  - Unitary: test if accurate sensor data are imported to the system
  - Regression: compare analytics generated from the system to existing asset management system
  - User acceptance: test if water quality is shown through the production process

6 equipment monitoring system

	Test type				
	Unit/unitary	**Performance**	**Volume**	**Regression**	**User acceptance**
Test type requirement	Required	Optional but not recommended	Optional but not recommended	Not Required	Required
System environment	Development	/	/	/	Quatlity
Team	Project team	/	/	/	Both
Rationale	test functionalities of separate system components during/after development	No big data or traffic expected or specific KPI	No big data or traffic expected	No existing similar functionality	test user acceptance during implementation

- Possible test data sources
  - data from IoT devices on equipment
  - SAP Best Practices for SAP S/4HANA
  - online database of similar data from the same IoT devices
- Tools you will use to perform and manage testing
  - extended Computer Aided Test Tool (eCATT)
  - Ci/CD pipelines
  - SAP Monitoring tools
- Three possible test use cases or scenarios that could be used for a specific test
  - Unitary: test if sensor data is sent accurately to the system
  - Unitary: test if the system detect a worn component of certain equipment
  - User acceptance: test if maintenance team can quickly identify equipment with failure warning and the potential issue before it fails