

# Platform functional description

#### Contents

1.	Platform functional description	3
2.	Infrastructure	3
3.	Application design, testing and development tools	3
4.	Databases	3
5.	Monitoring and management tools	3
6.	Security Design Principles	4
7.	Intended use	4
8.	Legal disclaimer	4



# 1. Platform functional description

The platform is constructed as best-of-breed and consists of various standard components, which combined will provide necessary functionality and operational excellence. The fundamental design principles are including capabilities within AI, Big-Data, real-time readiness, IoT-management and is built with a modular portal and self-service options. The platform is scalable and built as a green software with security by design.

# 2. Infrastructure

The infrastructure is based on Microsoft Azure components that has been selected and setup in the most scalable and modular way possible. It consists of 5 layers. The first layer is the landing zone in which all data sources can be handled either via an API-integration or via an IoT-hub. The next layer is the Data Warehouse in which the platform leverages an Azure-deployed Snowflake Database. From the Data Warehouse the data can be either used in the AI or BI platform for analysis and modelling to be presented lastly in the User Portal. The infrastructure leverages components such as API Management, Data Factory, Storage Accounts etc. for data handling and storage.

# 3. Application design, testing and development tools

PaaS provides customers with everything they need to build and manage applications. These tools can be accessed over the internet through a browser, regardless of physical location. The specific software development tools often include but are not limited to a debugger, source code editor and a compiler.

### 4. Databases

The platform is fully equipped with database management for both compliance and security. All data is presented with a layer of role-based security in such a way that the role of the user decides what data can be visualized, used and accessed. The databases used on the platform is deployed on Snowflake.

# 5. Monitoring and management tools

The platform includes a business intelligence platform, for monitoring and analytics of the data loaded into the platform. This can also be used to monitor costs, utilization etc.



# 6. Security Design Principles

Platform security design is based on NTT DATA security practice & optional external audit and ISO 27017 Certification.

The security by design is consisting of:

- Data encrypted at rest and in transit customer data is isolated
- All access is logged and monitored (Splunk)
- Multifactor authentication is required for administrative access
- AD groups are used to manage resource access
- Data is stored in Azure Netherlands
- Principles of 4 eyes and segregation of duties of any administrative or developer access
- Architecture is actively updated by Azure and vulnerabilities are scanned
- Developers are required to fulfil security training developers follow OWASP
- Only services are used no physical servers

# 7. Intended use

The platform is intended to support complex eco-system of data from users, suppliers, companies and organizations with sharing and analyzing data, optimize processes and discover new business opportunities, by joining data from all the collaborating sources in one common platform.

### 8. Legal disclaimer

The information in this document is proprietary to NTT DATA Business Solutions. No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of NTT DATA Business Solutions. The information contained herein may be changed without prior notice

NTT DATA Business Solutions assumes no responsibility for errors or omissions in this document. NTT DATA Business Solutions does not warrant the accuracy or completeness of the information, text, graphics, links, or other items contained within this material. This document is provided without a warranty of any kind, either express or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose, or non-infringement.

NTT DATA Business Solutions shall have no liability for damages of any kind including without limitation direct, special, indirect, or consequential damages that may result from the use of these materials. This

limitation shall not apply in cases of intent or gross negligence The statutory liability for personal injury and defective products is not affected.

NTT DATA Business Solutions has no control over the information that you may access through the use of hot links contained in these materials and does not endorse your use of third-party web pages nor provide any warranty whatsoever relating to third-party web pages