AppliediT

QUALITY SYSTEM CERTIFICATION
DNV·GL
ISO 9001

COMPANY PRESENTATION

Capitalizing on data

applieditweb.com

About us

ABOUT US

Who we are

AppliediT was created in 2014 on fundaments of 25 years of experience in Automotive and Aerospace Industry. Our experts come from a proven track in technical continuous improvement projects with the major international companies worldwide.

Our unique background has allowed the evolution of "real world" **data analysis and solutions for difficult industry challenges.** Our engineering team combined with our computer science experts has resulted in a digitalization of problem solving "know-how" to **progress x100 faster than standard industry methods.**

Using our **proprietary ADA Technology** we are able to help our costumers to capitalize on data. By giving just-in-time data analysis, expanding visibility to more than a few "guru analyst". With a simple mouse click the competitive knowledge is enhanced throughout the company. Nowadays, it is very important to take advantage at technological resources in the companies, so we are going to help them to **optimize and improve their global statistics.**

Over the next 5 years, the professionals will develop the ability to utilize all sorts of data in real-time. This will fuel the need for making more intricate problems and computations at scale which will spark the emergence of new data science paradigms due to the needs of future applications.

ABOUT US

Where we are

Munich

Barcelona

Cádiz

Leadership Team

Ignacio Quiñonero
Partner & Managing Director

Patrick Svensson
HR & People Analytics

Christoph Zeihsel
Head of Consulting

José Javier Lage
Facilities Manager

ABOUT US

Value added services

Our services are designed around three main interconnected areas that encompass data analysis and management, custom app development, and manufacturing process optimization.

Data Applications Development

Operational Excellence Projects

Data Engineering Services

ABOUT US / VALUE ADDED SERVICES

Operational Excellence Projects

- Advanced analytics for data packages

- Structured Problem Solving

- Root cause analysis

- OEE Improvements

- Scrap reduction

- Cycle time optimization

- Lean management for direct/indirect processes

ABOUT US / VALUE ADDED SERVICES

Data Engineering
Services

- Data acquisition
- Data transformation
- Cloud management
- PLC connections
- RPA (Robotic process automation)
- Data base development and management

ABOUT US / VALUE ADDED SERVICES

Data Applications
Development

- Dashboards
- Web forms for paperless initiatives
- Advanced analytics
- Traceability, MES
- Quality Digital app
- Logistics monitoring
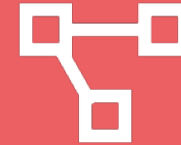- Machine learning modules

ABOUT US

What do we do

We are solutions providers for industry 4.0

Industry 4.0 refers to the intelligent networking of machines and processes for industry with the help of information and communication technology.

Consulting and training services

Inter Connectivity

Advanced Analytics

Ramp up support

Customized solutions

Augmented Intelligence

Capitalizing on data

It's difficult to see what you are not looking for...

It is estimated that we use less than...

10%

of our brain power.

What percentage of your data do you estimate you truly use? Less than...

0.001%

Your company data is the most underused asset which you have.

We transform your data into knowledge to reach excellence

ERP Systems
Transactional data

Machine Data
Variable data

Human based information

Our clients & partners

CLIENTS & PARTNERS

Trusted by industrial leaders

CLIENTS & PARTNERS

Projects around the world

+25 years of experience

+15 countries

+100 completed projects

$6mill benefits generated

CLIENTS & PARTNERS

Proud of our partners

Solutions

SOLUTIONS

We organize your information

Inputs

Management tools
Salesforce, SAP, RP Data, ...

Files
Excel, CSV, TXT, ...

Databases
SQL Server, Oracle, MySQL, ...
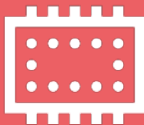
Machine Data
Zeiss, Profinet, OPC Fundation, ...

Data normalization

Output
Indexed data, related and optimized tables, improved access speed, ...

RTM Pro

SOLUTIONS

Before AppliediT

SOLUTIONS

After AppliediT

Operations

Management

Machines

Quality

Planning

Down Time

HR

Logistic

Speed

Process Control

Claims

Cost Control

Productivity

Warehouse

Waste

Rework

ECPC

Connected

CRM

Scrap

Traceability

ERP

SOLUTIONS

What services do we offer?

Include
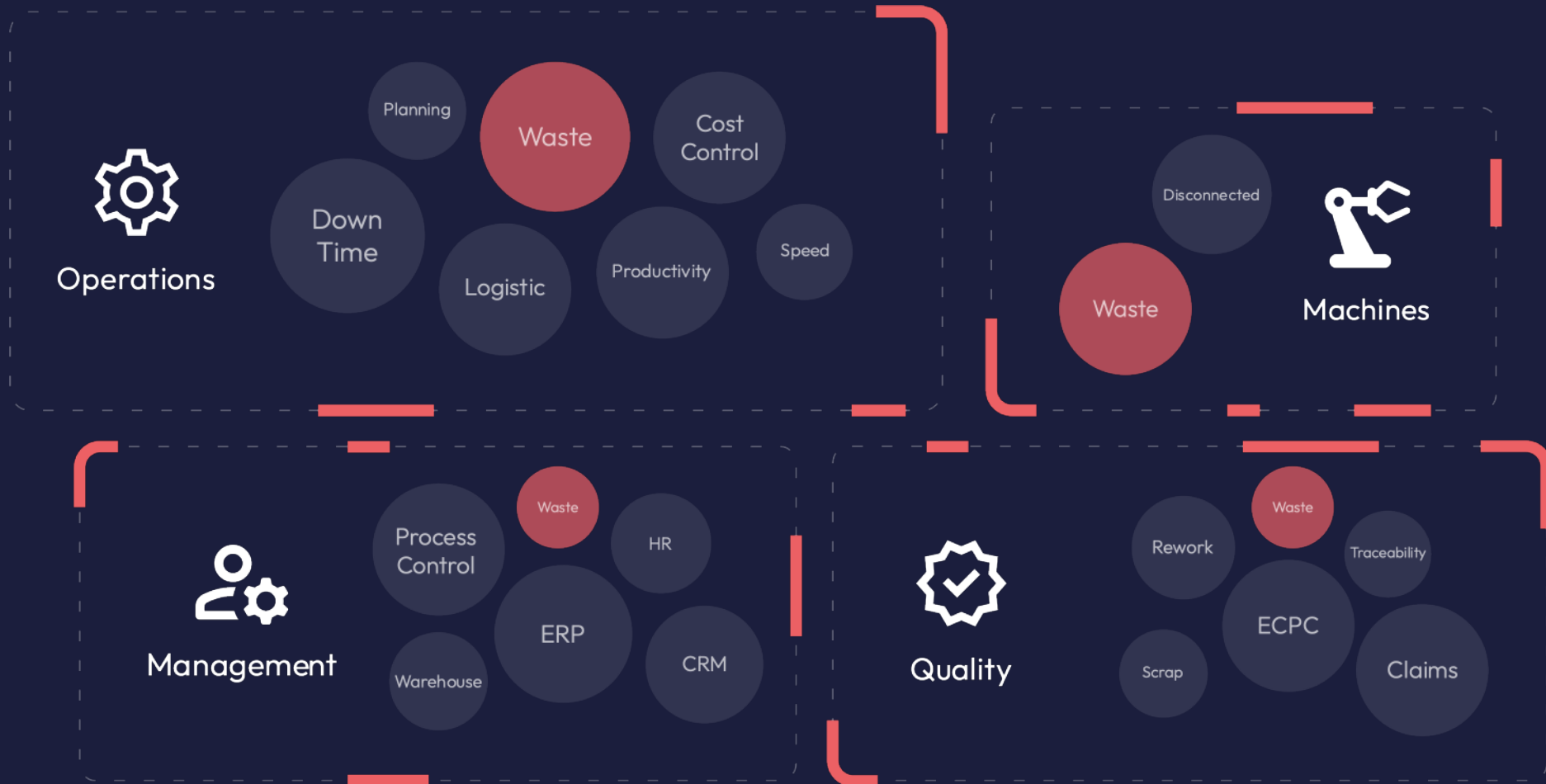
- RTM Pro, Floating licenses.
- Dashboard lite multiusers:
  - Production
  - Logistics
  - Quality
  - Performance
- Transflow multiusers (Indirect departaments)
- Interconected data base development
- Training to ensure a correct function
- Dedicated continuos improvement engineer
- Maintenance

Not include

- Screens and devices.
- Development by external companies of communication functions with ERP/Management System, unless they can be developed internally by AppliediT, to be agreed during the development of the project.
- Subsistence allowances and travel expenses for the technical team displaced from the Cádiz plant, if it includes consultant man-hours. The client will be able to determine the formula to proceed in this matter, including prior authorization.
- Hiring of servers (optionally, if the customer requires it)

Products

Products

Extract and analyze your data

RTM Pro
Manufacturing Analytics

RTM Lite
KPI Monitoring

TransFlow
Transactional Analytics

DefectMap
Defectology

Function Model
Human Knowledge Structuring

Products

Extract and analyze your data

RTM Pro
Manufacturing Analytics

RTM is "in data base" software analytics platform specifically developed for problem solving in the manufacturing environment.

Whereas other software analysis platforms are either very general or very specific to an industry solution, RTM platform was developed from the "bottom-up" from years of practical problem-solving experience in the engineering manufacturing environments.

RTM Lite
KPI Monitoring

It is a web-based solution to provide additional insights which can give a better breakdown of high level KPIs and go down to the machine level to identify root cause.

All these powerful features are achieved through dynamically linked graphs and simple mouse clicks.

TransFlow
Transactional Analytics

TransFlow is an application that monitoring all the transactional data within every process.

It allows you to detect possible bottlenecks in the transaction and it also uses advanced analytics in order to highlight which are the fastest processes.

DefectMap
Defectology

DefectMap is a tool used mainly for register defects in pieces and keep a record of these defects.

It combines specific engineering knowledge with statistical methods to facilitate the insertion

Features: With this tool you can insert defects in your parts and add custom parameters to these defects.

Function Model
Human Knowledge Structuring

FunctionModel is a system which can manage diverse projects. It is possible to create decision trees, attach media or create metrics with the parents and children.

It combines also a user management to create work teams and analyze together every single project.

PRODUCTS

RTM Pro

RTM is "in data base" software analytics platform specifically developed for Continuous improvement in the manufacturing environment. Whereas other software analysis platforms are either very general or very specific to a particular industry solution, AppliediT RTM platform was developed from a "bottom-up" approach, from years of practical problem-solving experience in the engineering manufacturing environments.

Knowledge is gained by identifying non-random patterns in your company's data bases. The identification of these patterns allows ranking of key parameters which will be subsequently analyzed through regression techniques and other forms of correlations/trending statistical analysis to predict future behavior.
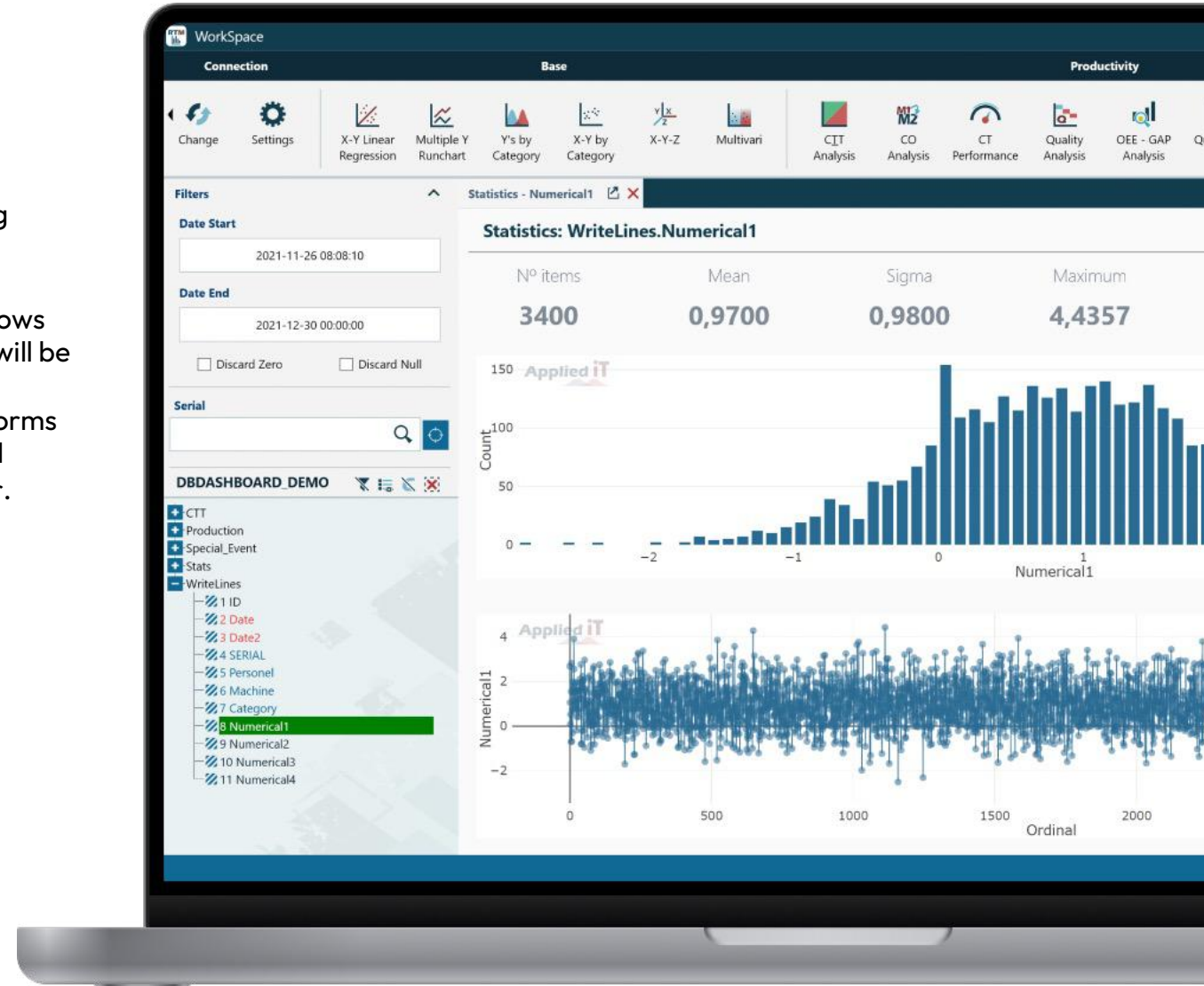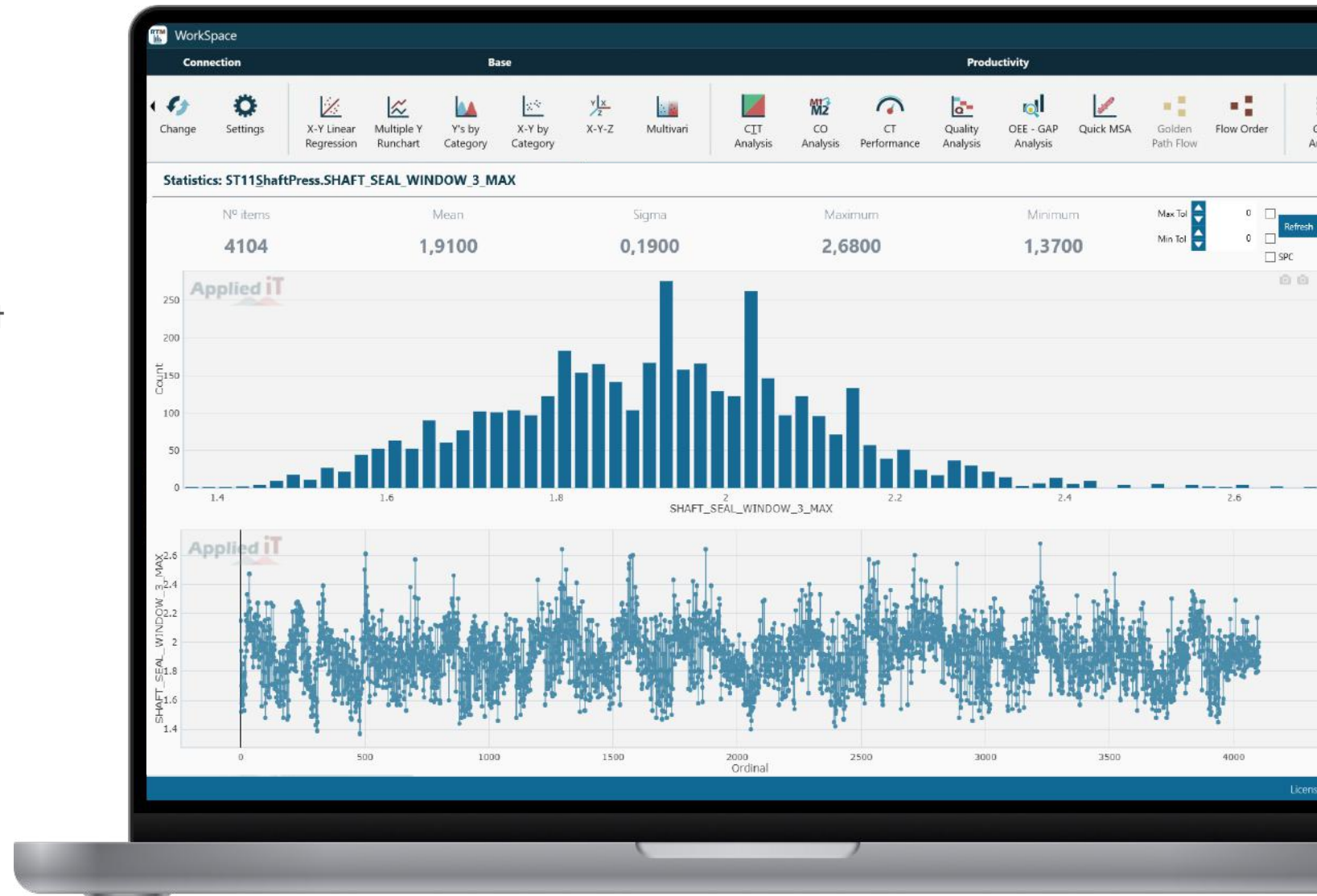
RTM PRO

Descriptive statistics

Run chart and Histogram is the starting point for any further analysis: a simple mouse click on the variable's tables will yield parameter visualization and descriptive statistics.

This window output is interactive meaning clicking on a single point or single key entries will yield more info and further analysis.
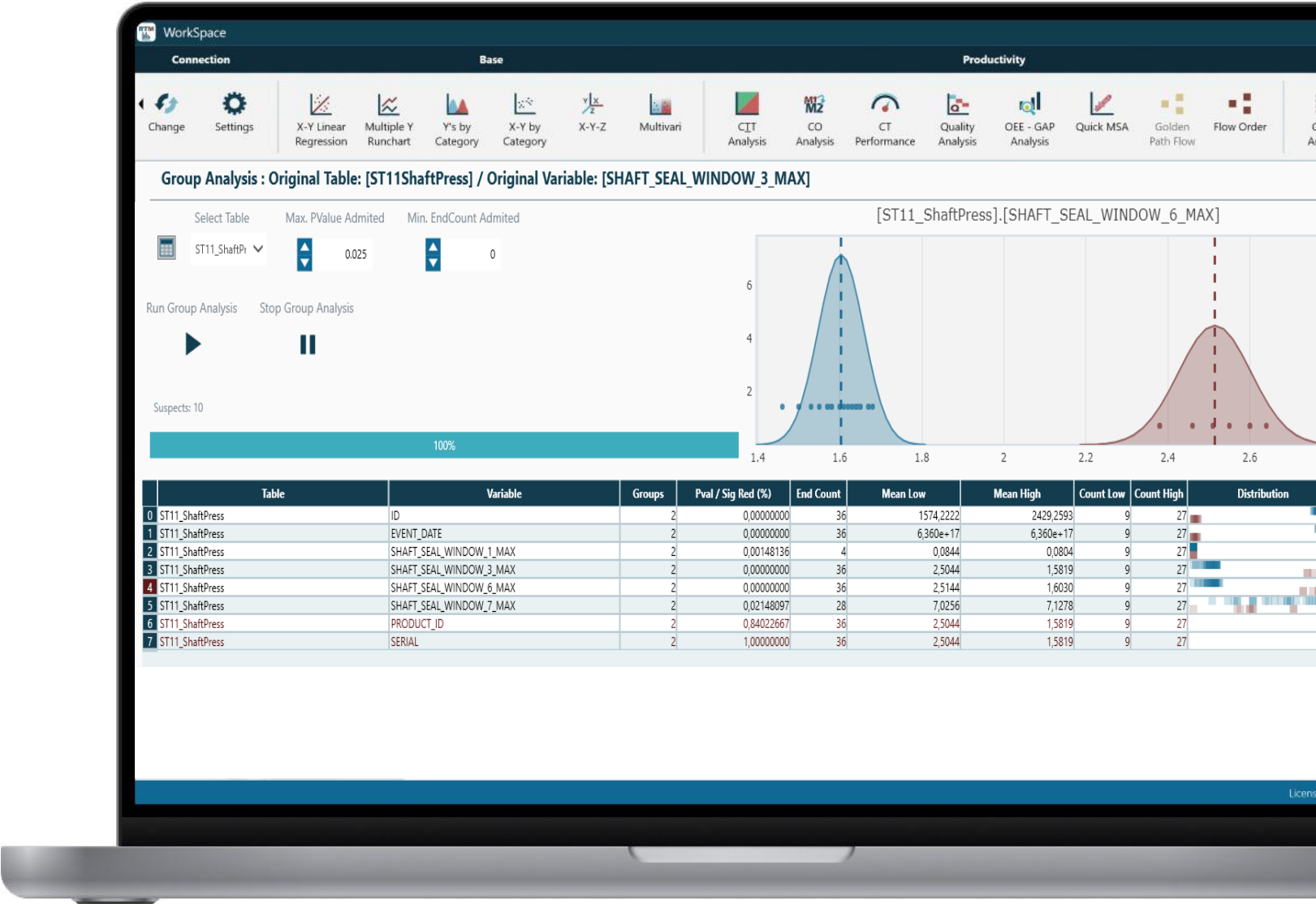
RTM PRO

Comparison Analysis

Selection of logical groups and pairs for automated analysis. It provides a ranking of factors with largest contrast within groups.
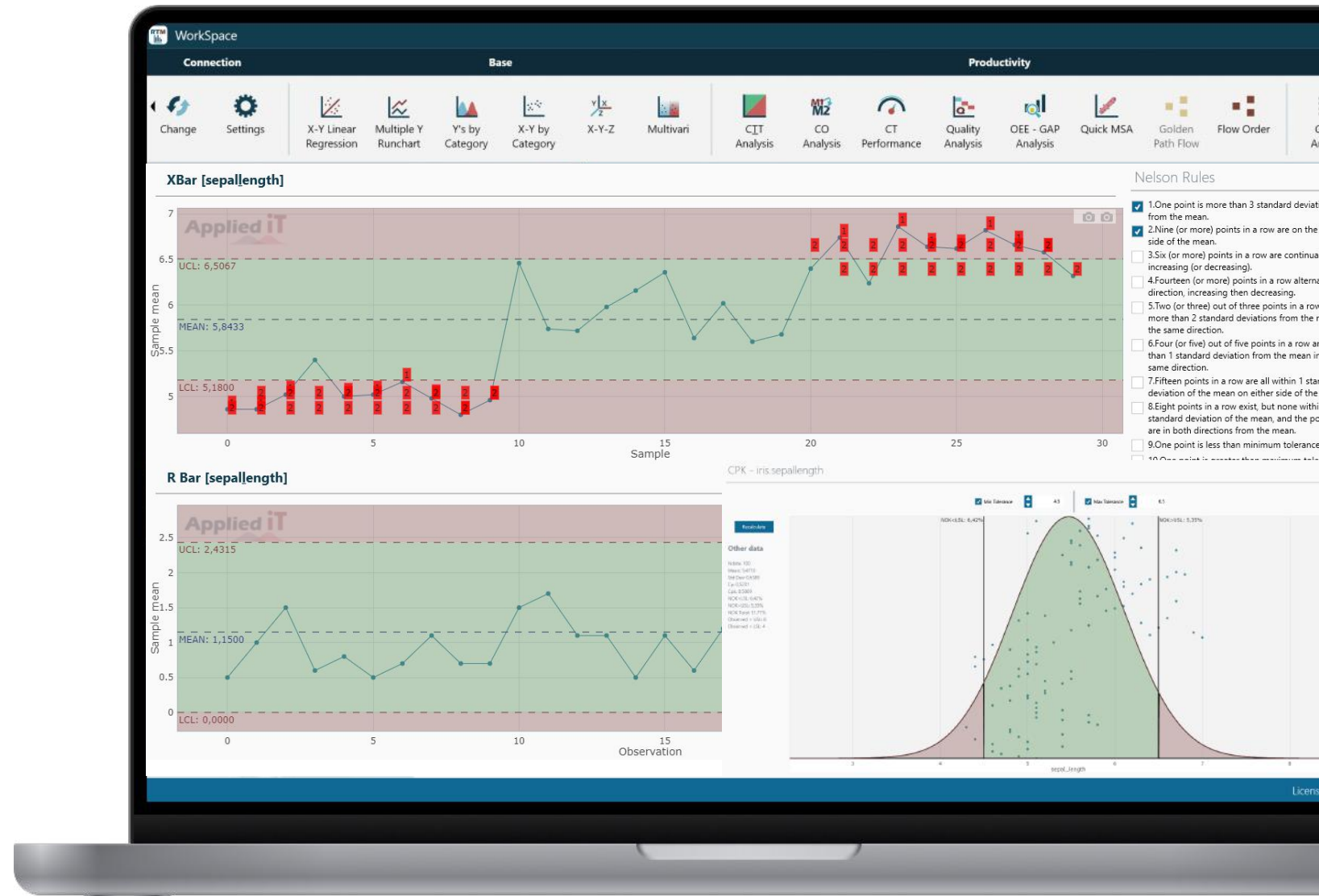
Dynamically selecting logical groups/pairs on the graphs will yield immediate ranking results using parametric and non-parametric test simultaneously.

RTM PRO

Normal Statistics

Normality tests and other tools such as Process capability (Cpk) analysis can be performed on a single keyboard entry.
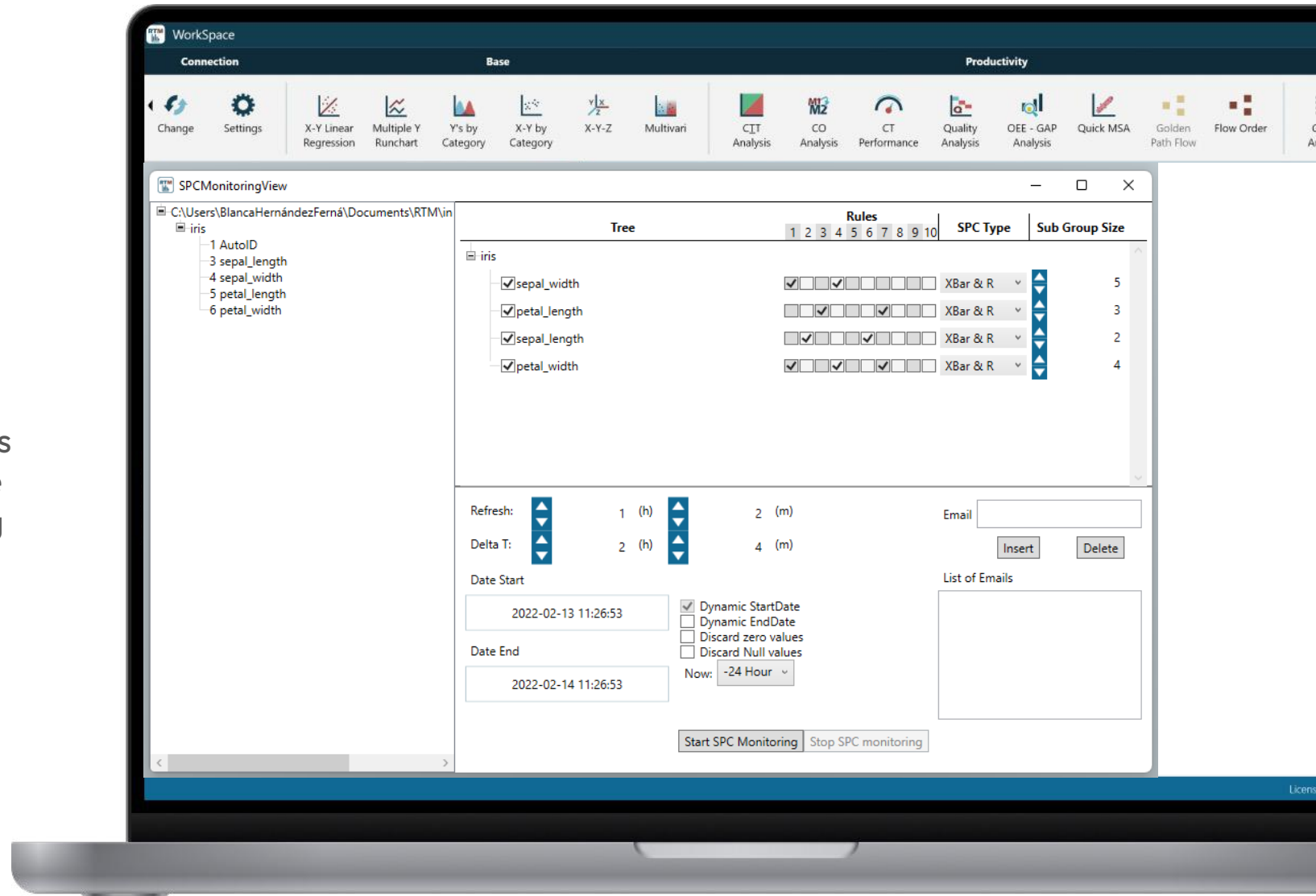
RTM PRO

SPC Monitoring

Using SPC Monitoring, you can monitor any process parameters of interest.

When connected to a real time data base, it is possible to configure the system to let people know when defined rules are broken, sending alerts by email.
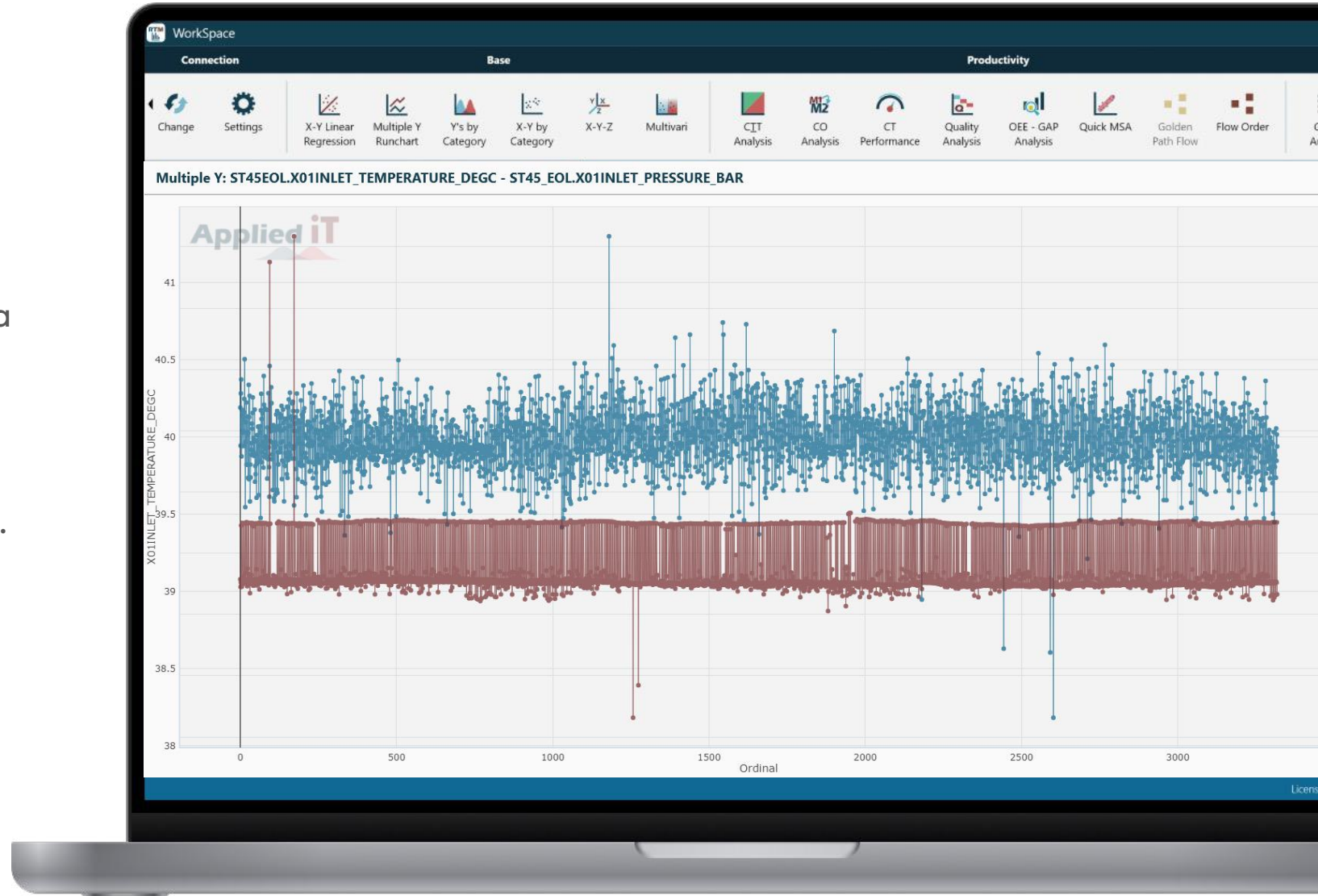
RTM PRO

Multiple Y Analysis

Multiple Y Run Chart can plot time series data on the same graph allowing intuition as to their interaction over time.

To view these parameters as an X–Y plot, simple click <R> in the graph to change views.
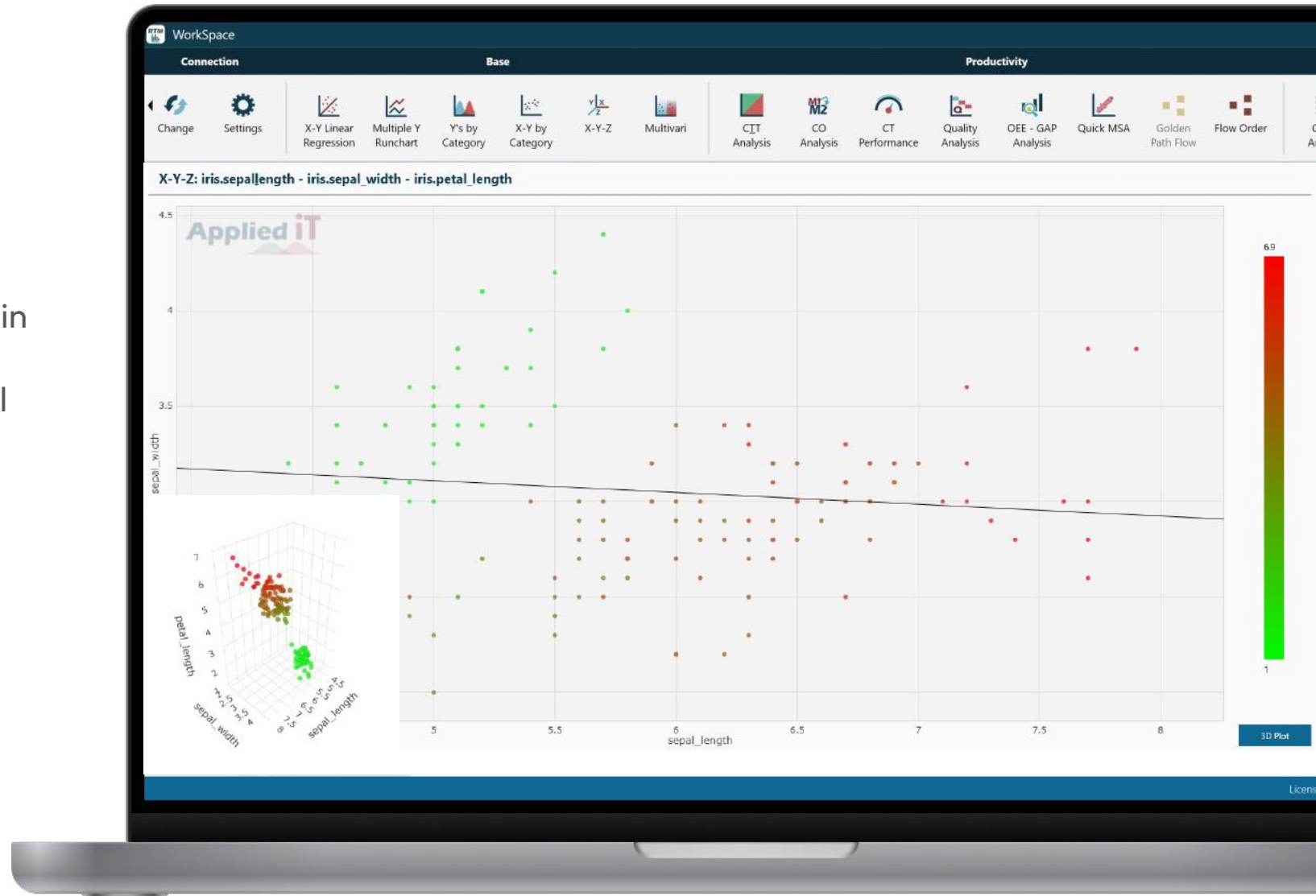
RTM PRO

X-Y-Z
Regression

Represents three numeric variables selected in one single chart and visualize the correlation between them in 2D+Color or 3D dimensional space.
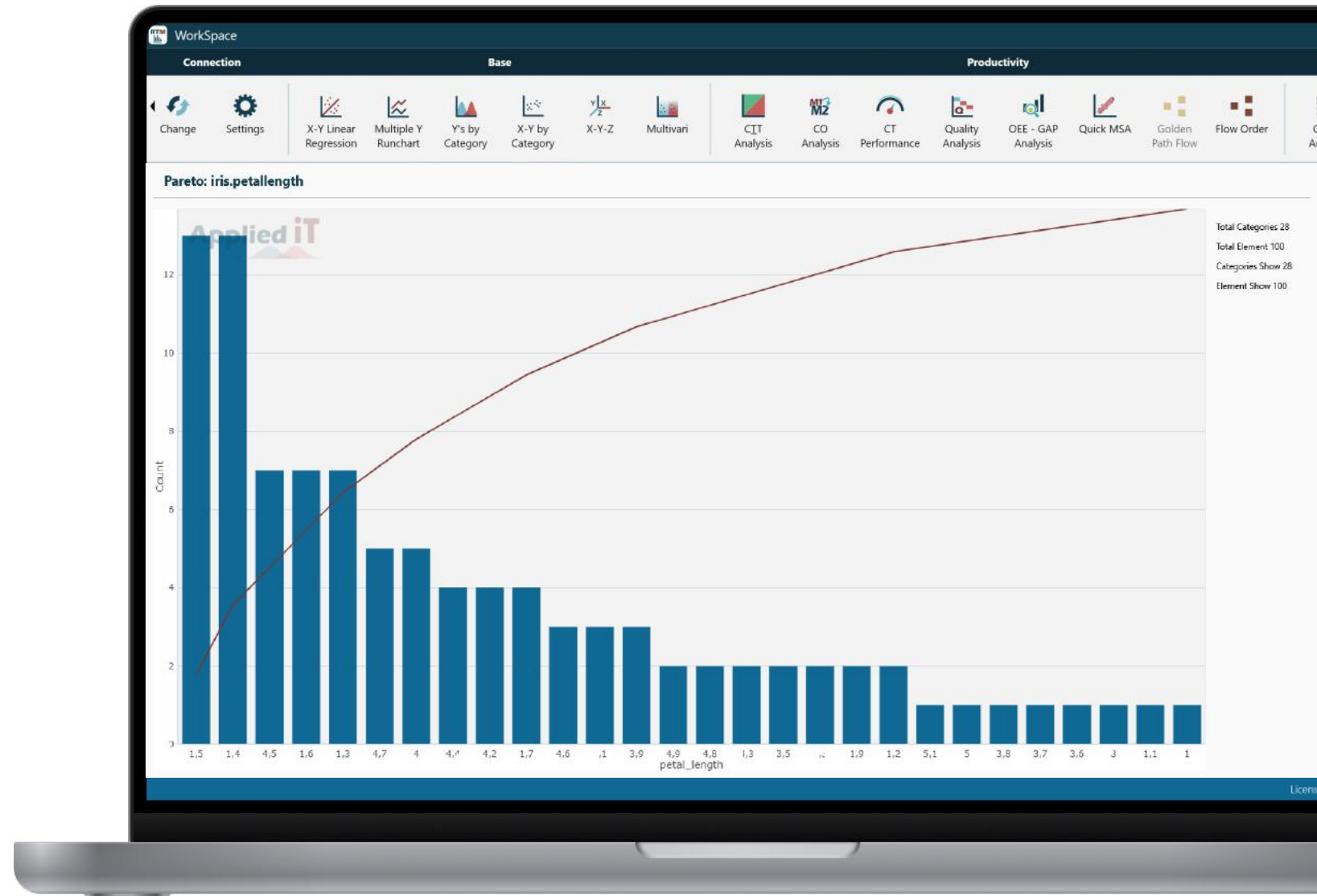
RTM PRO

Pareto
Analysis

Shows pareto diagram of selected categorical values. This is a simple tool but very often used.
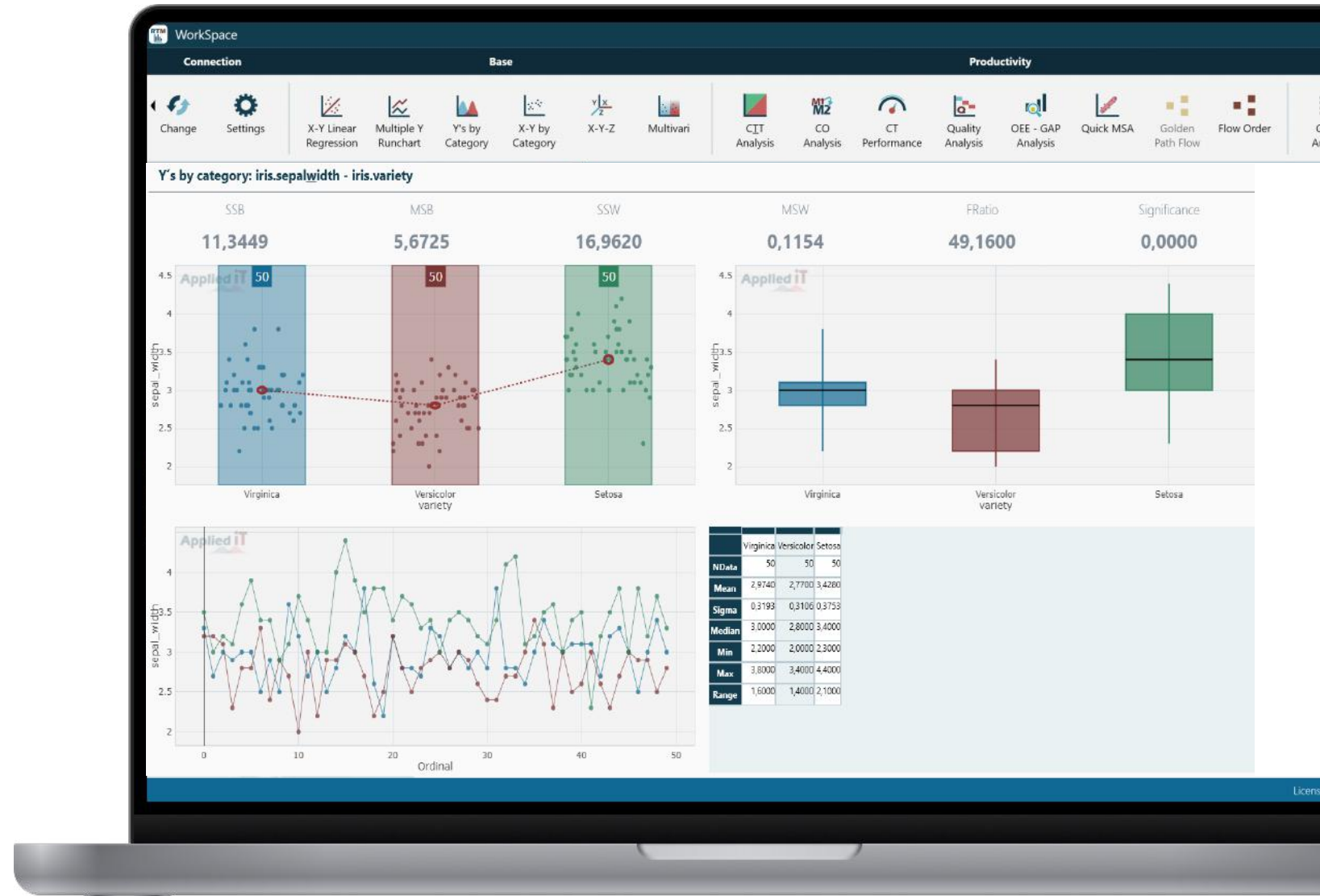
Thus, an instant view can be executed by directly clicking on any categorical value.

RTM PRO

Y by Category

Allows the user to see a variable ordered by category in various visualization graphs. Dot plot, box plot, run chart, or ANOVA.

RTM PRO

Multiple Linear Regression (MLR)

MLR can be used to construct a predictive model of an output variable from multiple inputs variables.

This function allows for more complicated models to be analyzed in an intuitive manner.
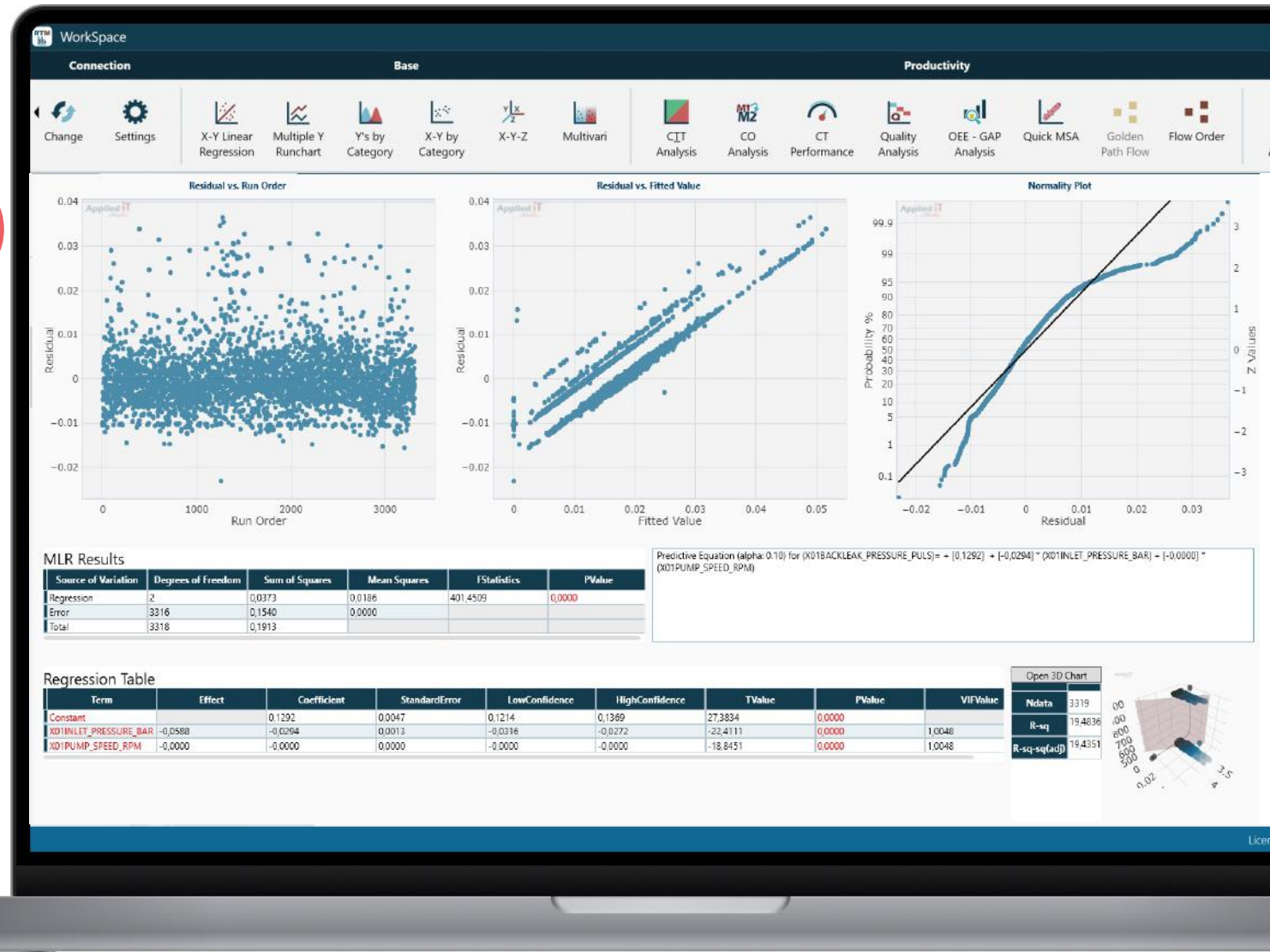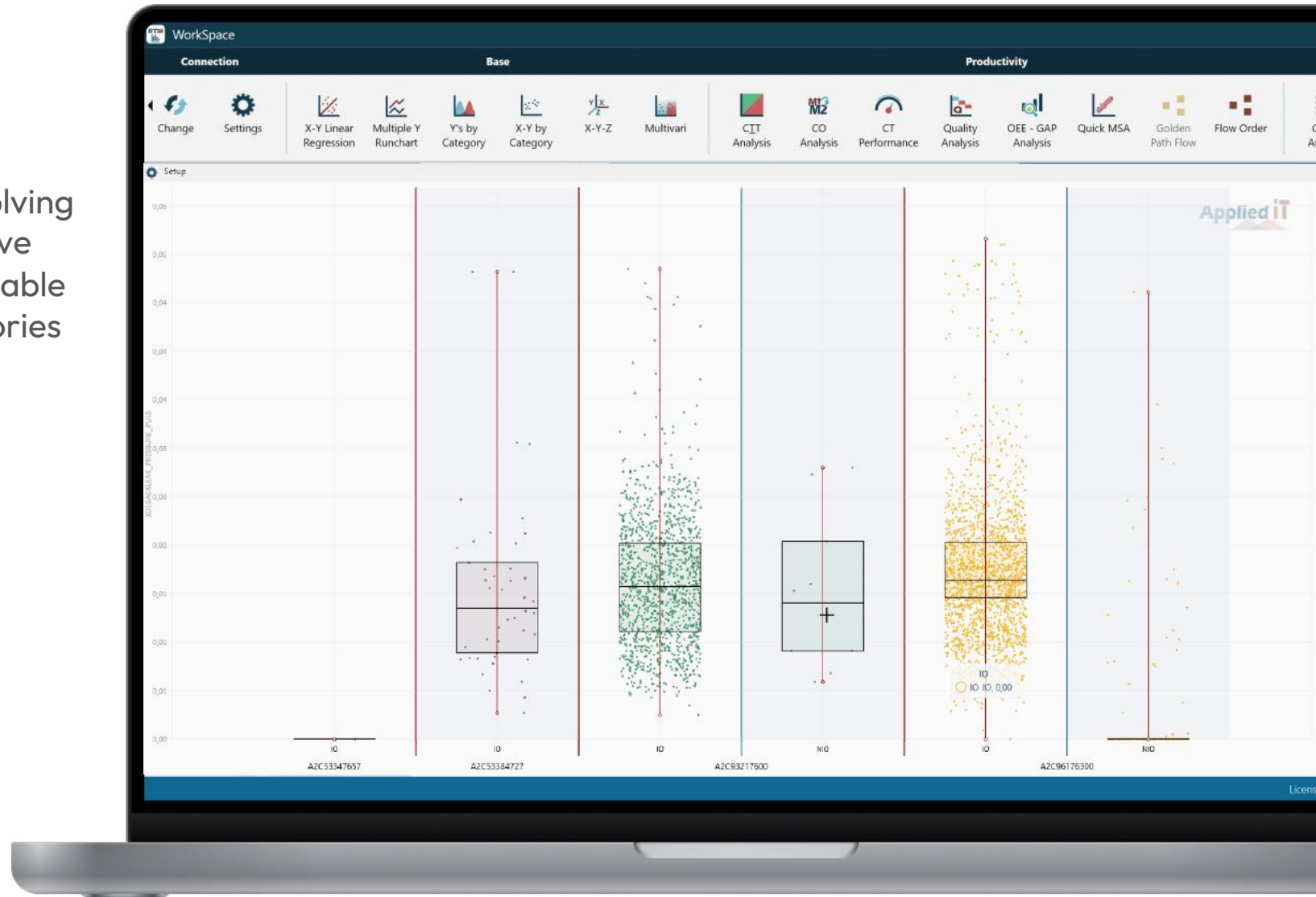
RTM PRO

Multivari

Multi-vari can be very useful for analysis involving multiple categorical variables, you can observe the distribution/variation of a numerical variable according to the hierarchy of multiple categories
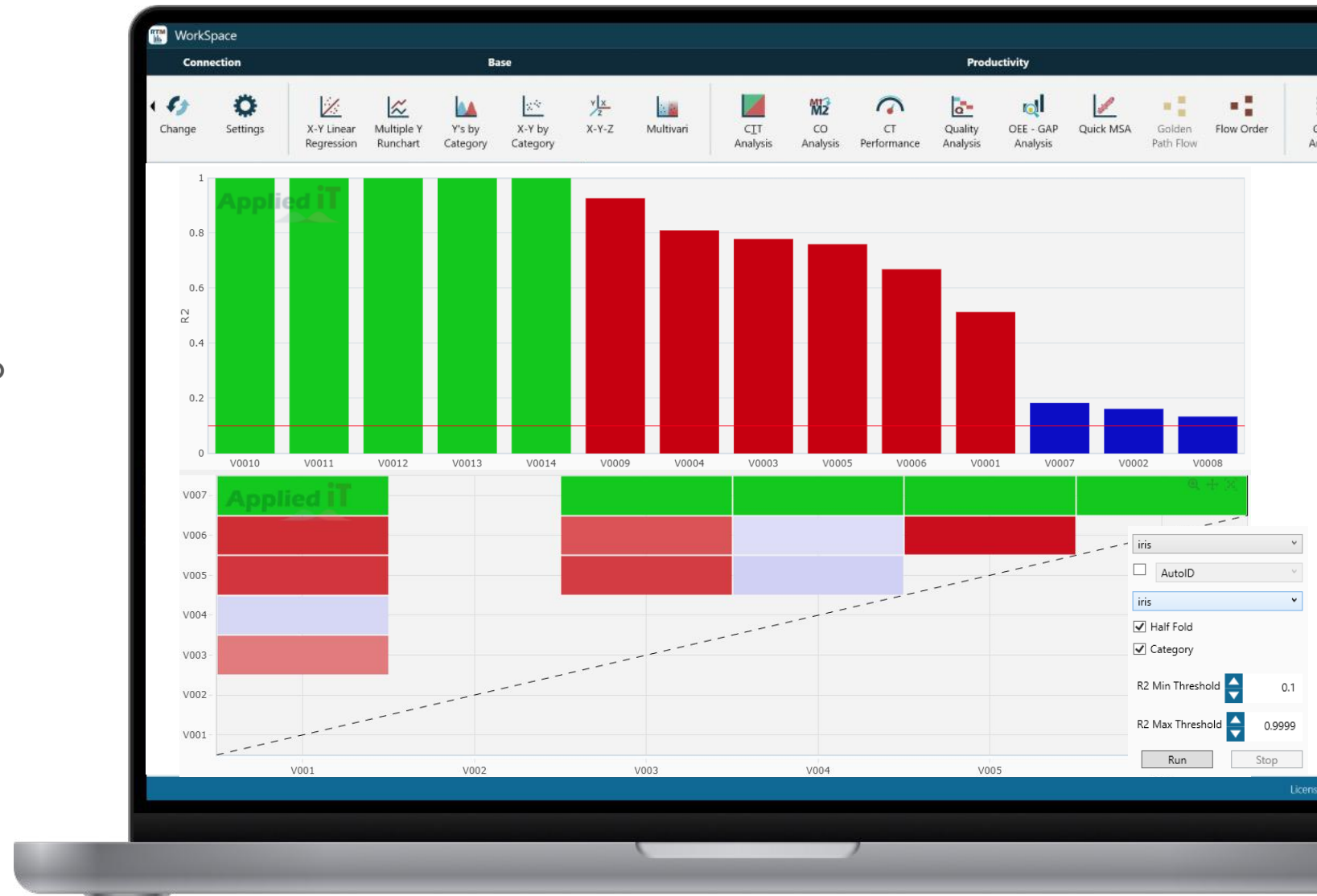
RTM PRO

Wormhole

The Wormhole –ADA (Automated Data Analysis) Engine can analyze the correlation among every variable within a dataset on a mouse click. It provides results graphically in a very intuitive manner by means of a Pareto and a "Data Image".

The user can further analyze a particular parameter by simply clicking within the graph.

RTM PRO

Special Search

The Special Event functionality searches for outliers or special values of a serial number within all the variables and tables of the database.

It provides a list of "suspicious" parameters for the reference serial number in question. Very useful when you need to know everything about an outlier or field retuned part.
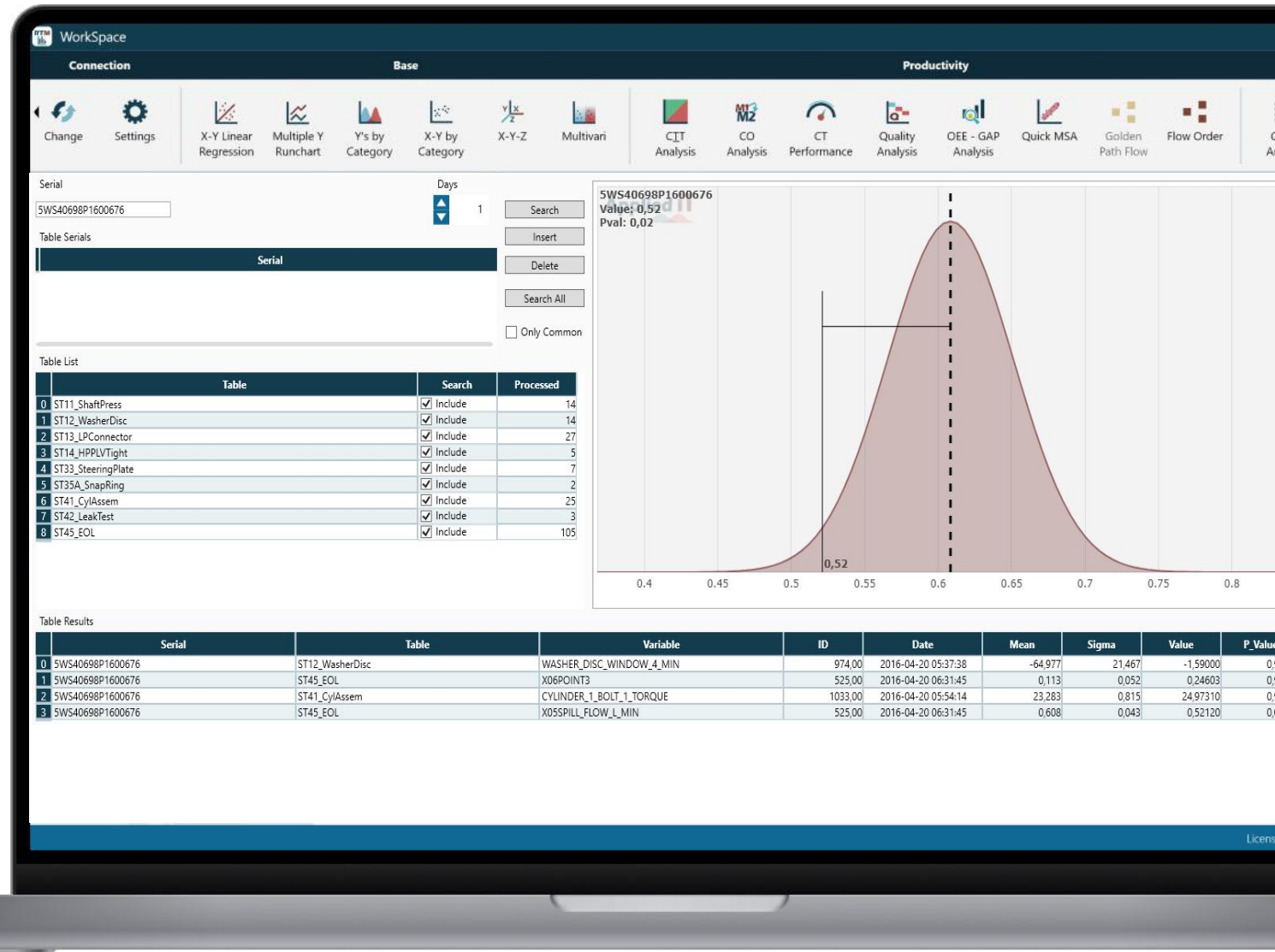
RTM PRO

PCA

A PCA (Principal Component Analysis) is used to reduce the dimensionality of a data set.

This is useful when the number of variables is too high and the analyst to reduce the dimensionality to gain better insight.
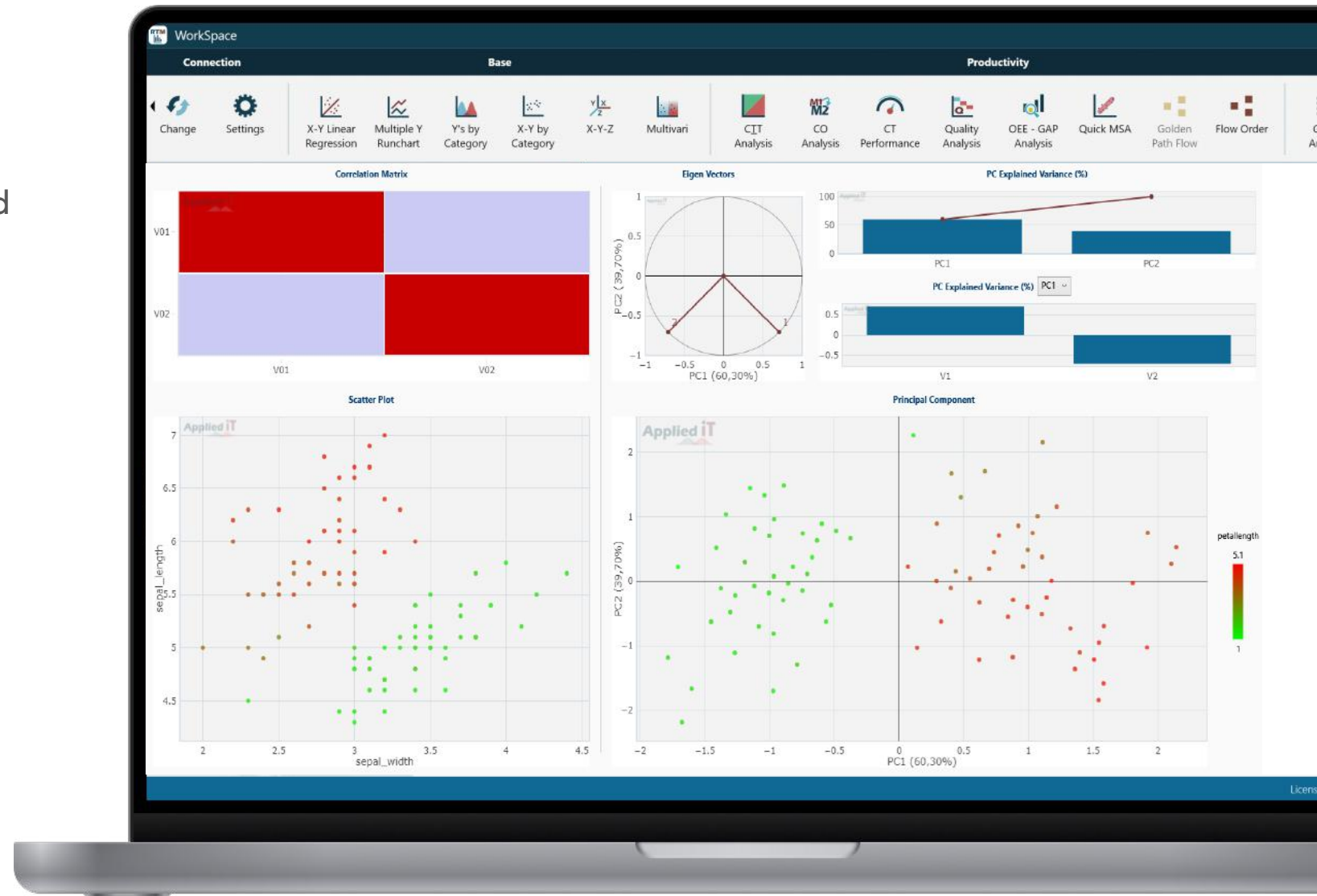
RTM PRO

CycleTime to Time (CTT)

CTT is a powerful way of monitoring stations cycle time (CT). It does not only provide the CT of every part which goes through a specific operation, but it is also possible to see the downtimes/idle.

CTT is a powerful tool for cycle time reduction projects or quantifying productivity on a single graph.
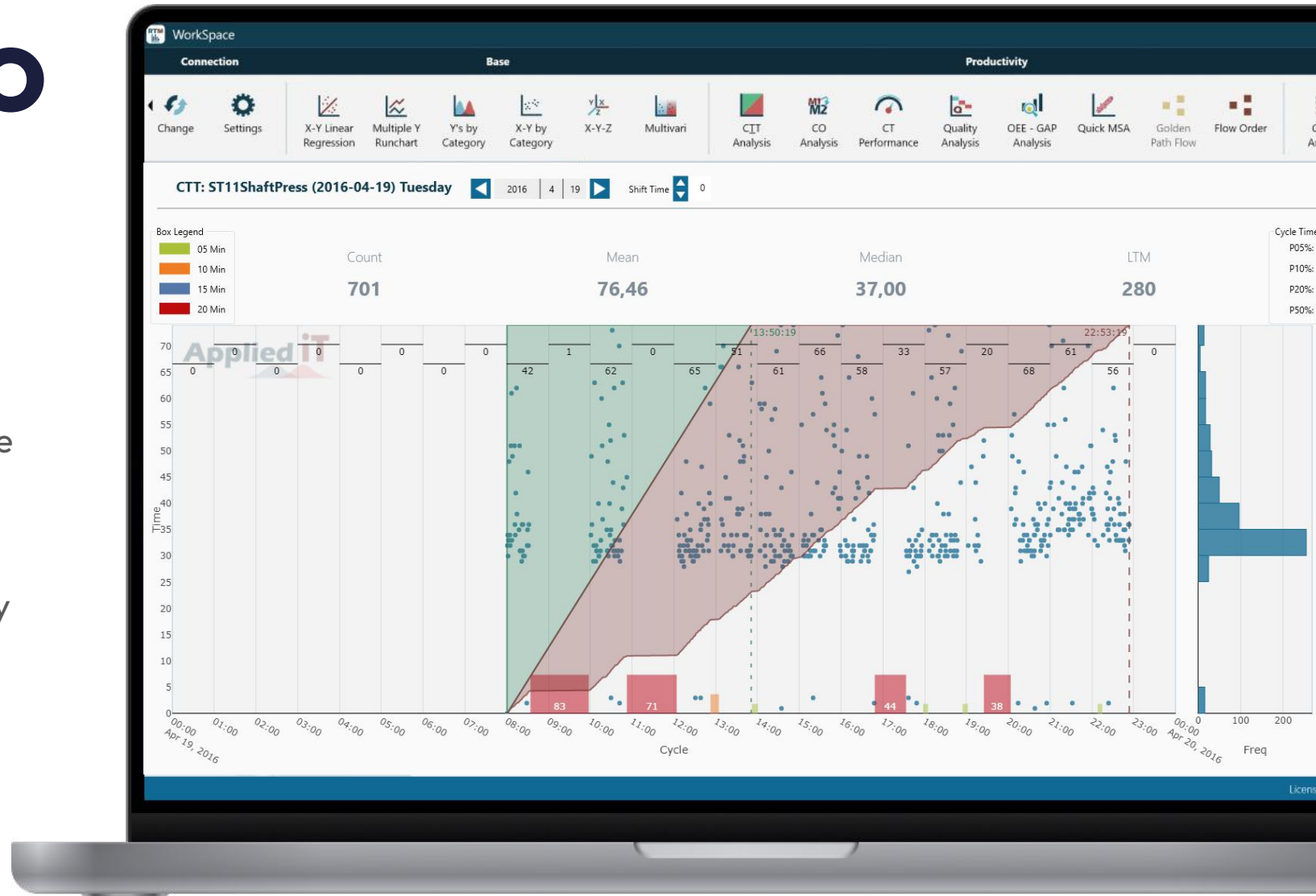
PRODUCTS / RTM PRO

Continuous Improvement 4.0

Less time	Less effort	More efficiency

PRODUCTS / RTM PRO / TRAININGS

Certifications in advanced analytics

	Beginner	Advanced	Expert
Available Trainings	■ Introduction & Basics ■ Import Excel File ■ Connection & Configuration ■ Filters ■ Run Chart & Histogram ■ Pareto Analysis ■ X-Y Linear Regression ■ X-Y-Z ■ CTT Analysis (Production Time)	■ Wormhole – ADA Engine ■ Capability Analysis (Cp, Cpk) ■ Y's By Category ■ Multivari ■ Trend (running average) ■ DBScan Clustering ■ X-Y by Category ■ Group Analysis ■ Pair Analysis ■ Special Event Search	■ SPC & SPC Monitoring ■ Key variables - Report ■ Key variables – War room ■ Multiple Linear Regression (MLR) ■ Principal Component ■ Analysis (PCA) ■ Golden Path Flow
Requirements	■ Attendance	■ Attendance ■ Test	■ Attendance ■ Test ■ Internal project

PRODUCTS

RTM Lite

It is a web-based solution to provide additional insights which can give a better breakdown of high level KPIs and go down to the machine level to identify root cause.

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PRODUCTS / RTM LITE

Special Events

Problem Solving Analytics Tool

It searches for special causes of a specific Serial Number within all the stations it goes through

PRODUCTS

Trans**Flow**

TransFlow is an application that monitoring all the transactional data within every process.

It allows you to detect possible bottlenecks in the transaction and it also uses advanced analytics in order to highlight which are the fastest processes.
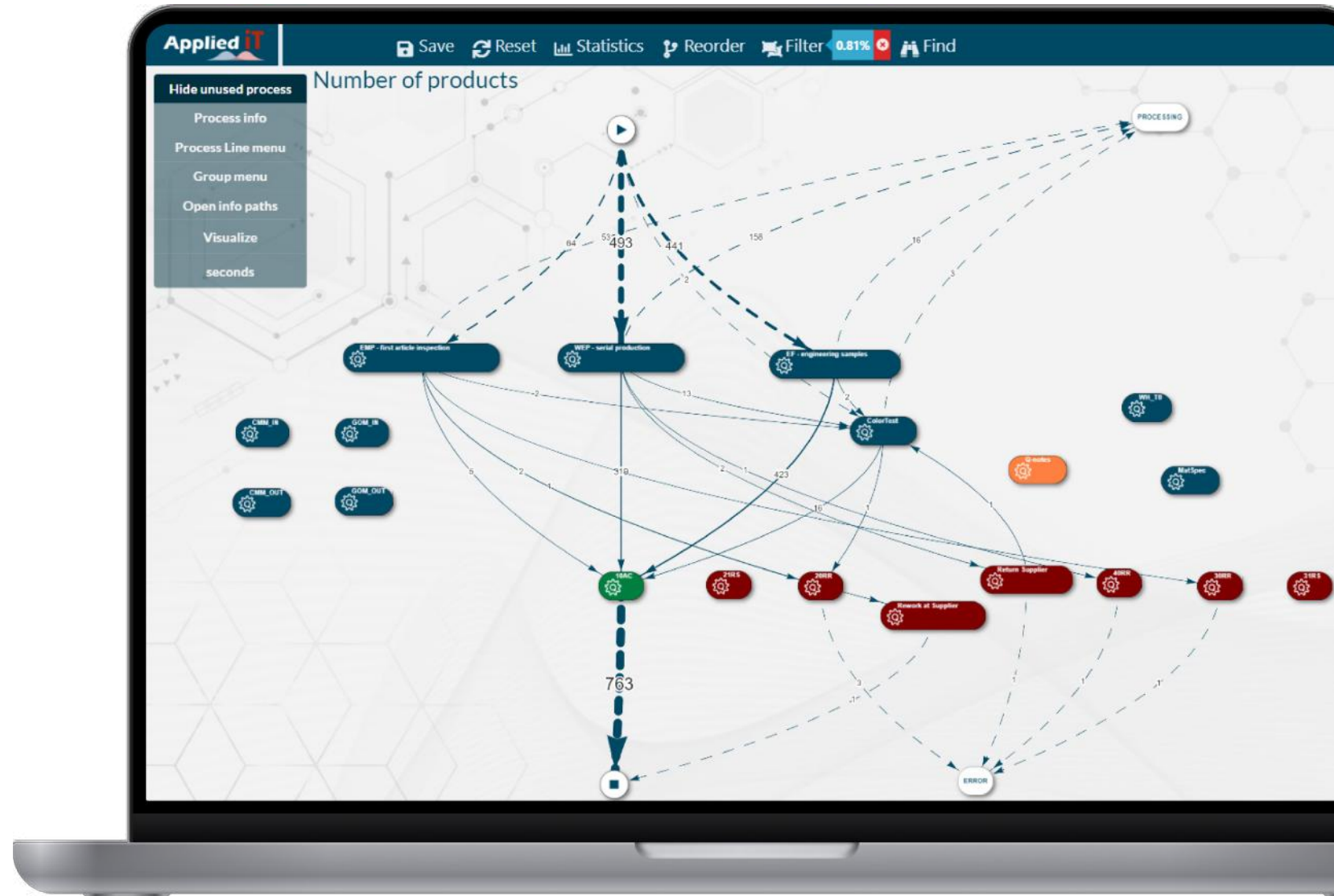
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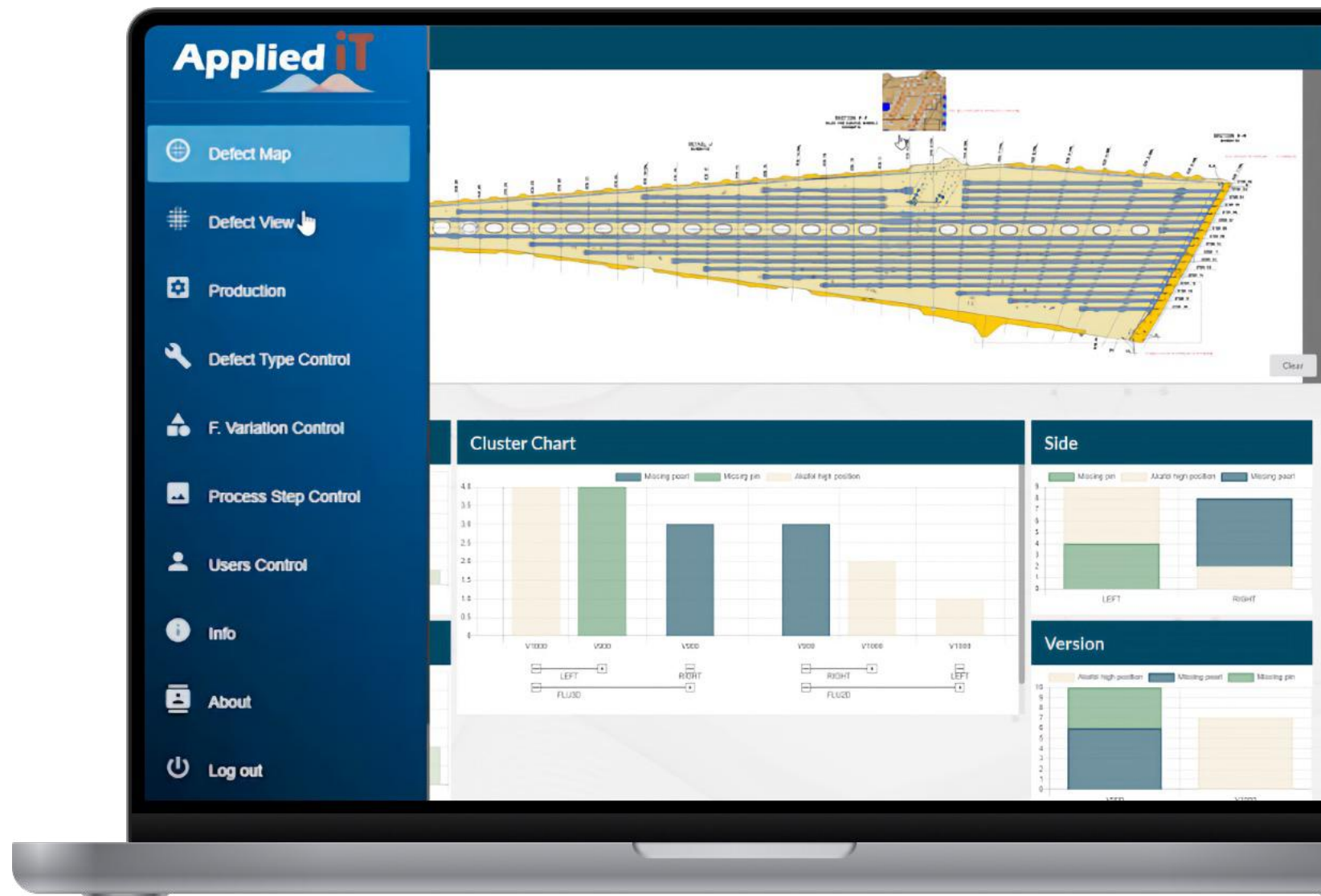
PRODUCTS

Function Model

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Customization

CUSTOMIZATION

RTM Lite

About client

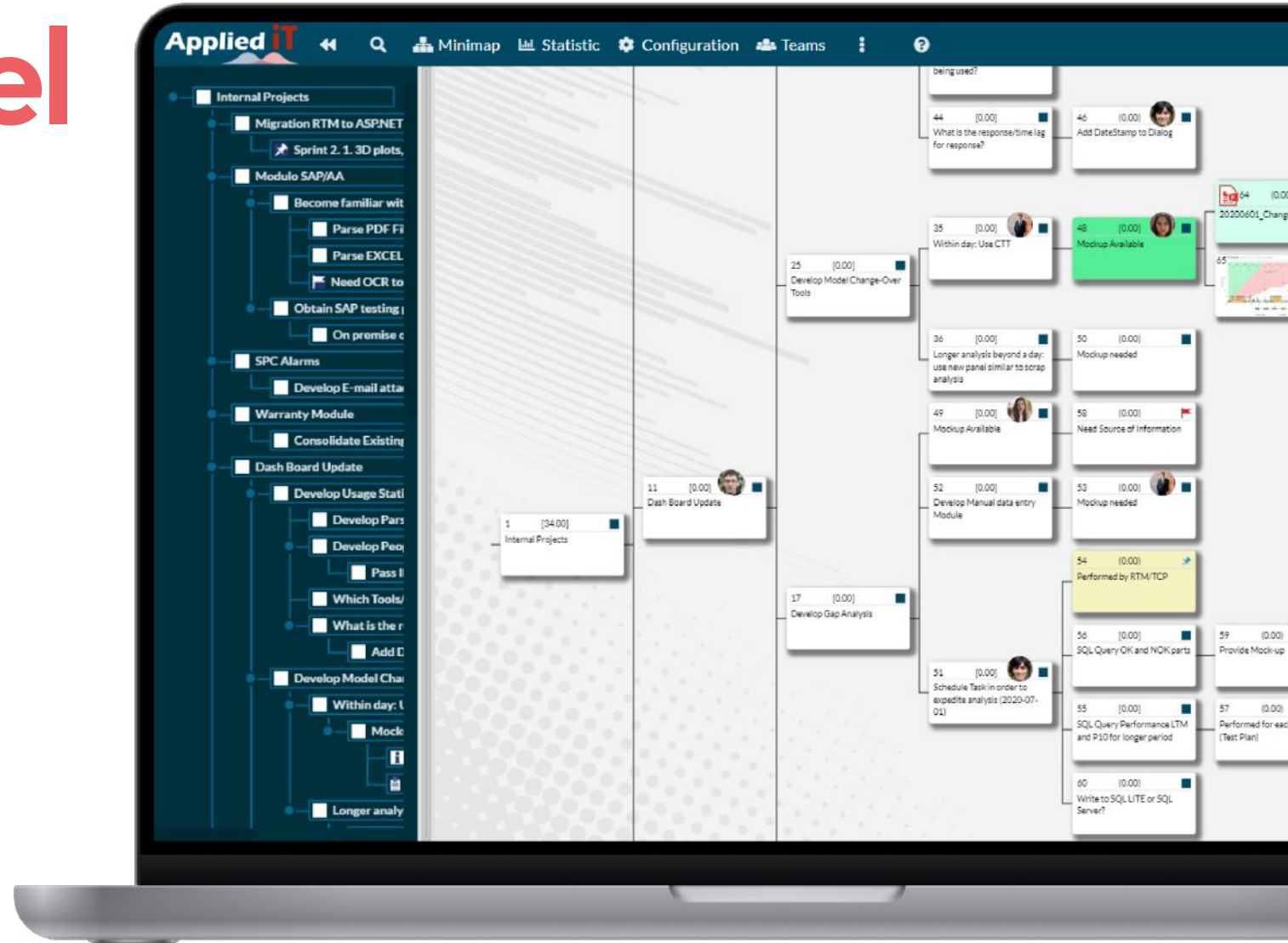Commonly known as Continental or colloquially as Conti, is a German multinational automotive parts manufacturing company specializing in brake systems, interior electronics, automotive safety, powertrain and chassis components, tachographs, tires and other parts for the automotive and transportation industries.

Project details

We develop a personalized web app for the visualization of graphs for CTAT analysis with a filter system adapted to the client's specifications.

CUSTOMIZATION

Parsing Tool

About client

Commonly known as Continental or colloquially as Conti, is a German multinational automotive parts manufacturing company specializing in brake systems, interior electronics, automotive safety, powertrain and chassis components, tachographs, tires and other parts for the automotive and transportation industries.

Project details

We develop a custom web app for managing the data parsing of your databases, being able to navigate through them and create new structures and patterns.
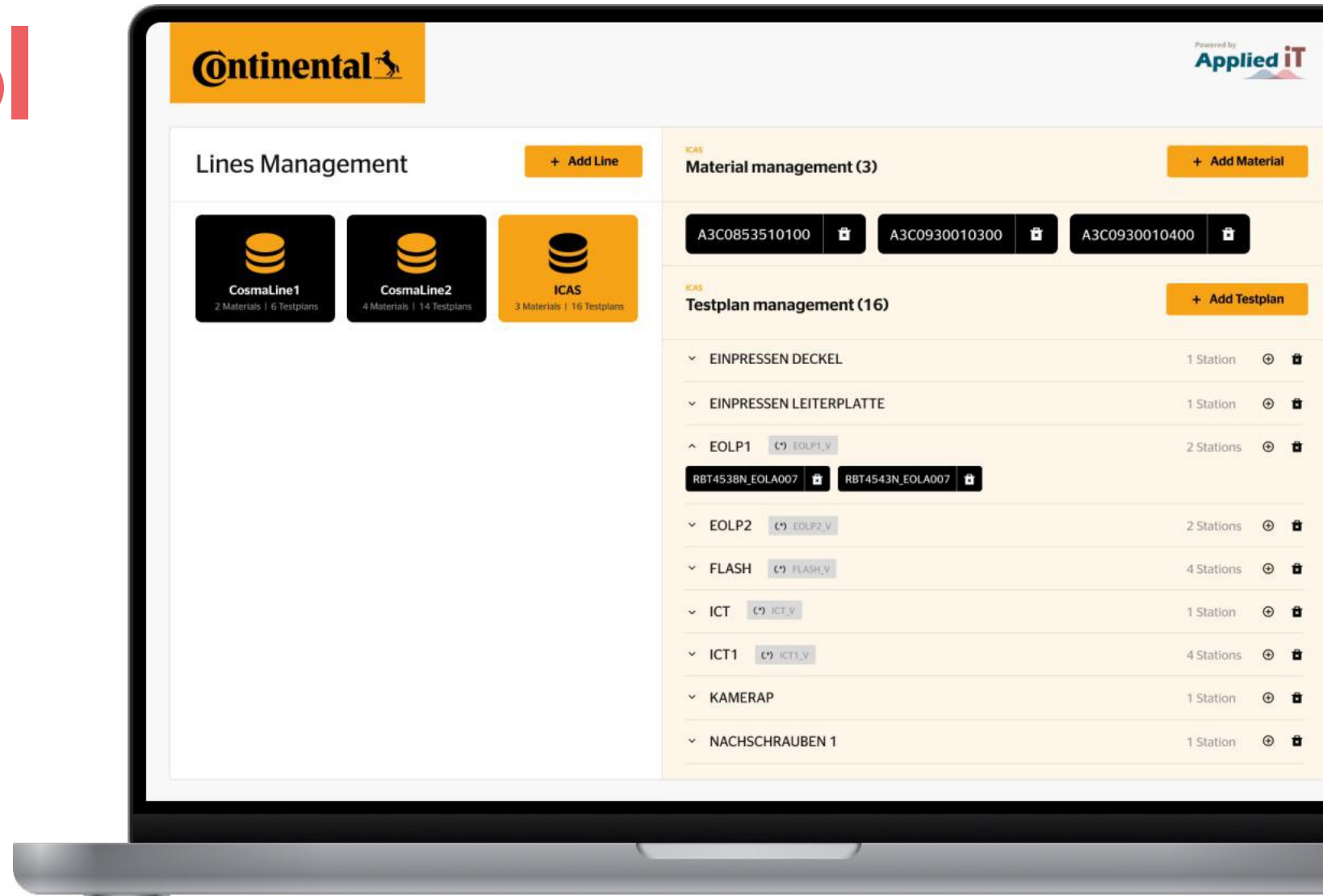
CUSTOMIZATION

Managing Data

About client

Lindner Group is a leading company for the building envelope, interior fit-out and insulation. We advise, develop, produce and implement products and projects for our customers - from single-trade jobs to turnkey solutions, for new buildings and renovations.

Project details

We develop a custom web app for the introduction, validation and management of your data structure. Improving the uniformity of the data and the speed of access to them.

CUSTOMIZATION

Defect Map

About client

Schuberth GmbH is a German producer of safety helmets, producing combat helmets for Bundeswehr (Gefechtshelm M92), protective headgear for Formula One, motorcyclists and industrial workers. Schuberth is currently based in Magdeburg and employs about 300 employees, producing 1.5 million helmets each year.

Project details

Develop an app for the control of defects in helmets through a 3D model on which to mark the defects located during manufacturing. Being able to access production data in a temporary interval.

CUSTOMIZATION

RTM Lite

About client

Schuberth GmbH is a German producer of safety helmets, producing combat helmets for Bundeswehr (Gefechtshelm M92), protective headgear for Formula One, motorcyclists and industrial workers. Schuberth is currently based in Magdeburg and employs about 300 employees, producing 1.5 million helmets each year.

Project details

We develop a personalized web app for the visualization of graphs for CTT & GAP analysis with a filter system adapted to the client's specifications.
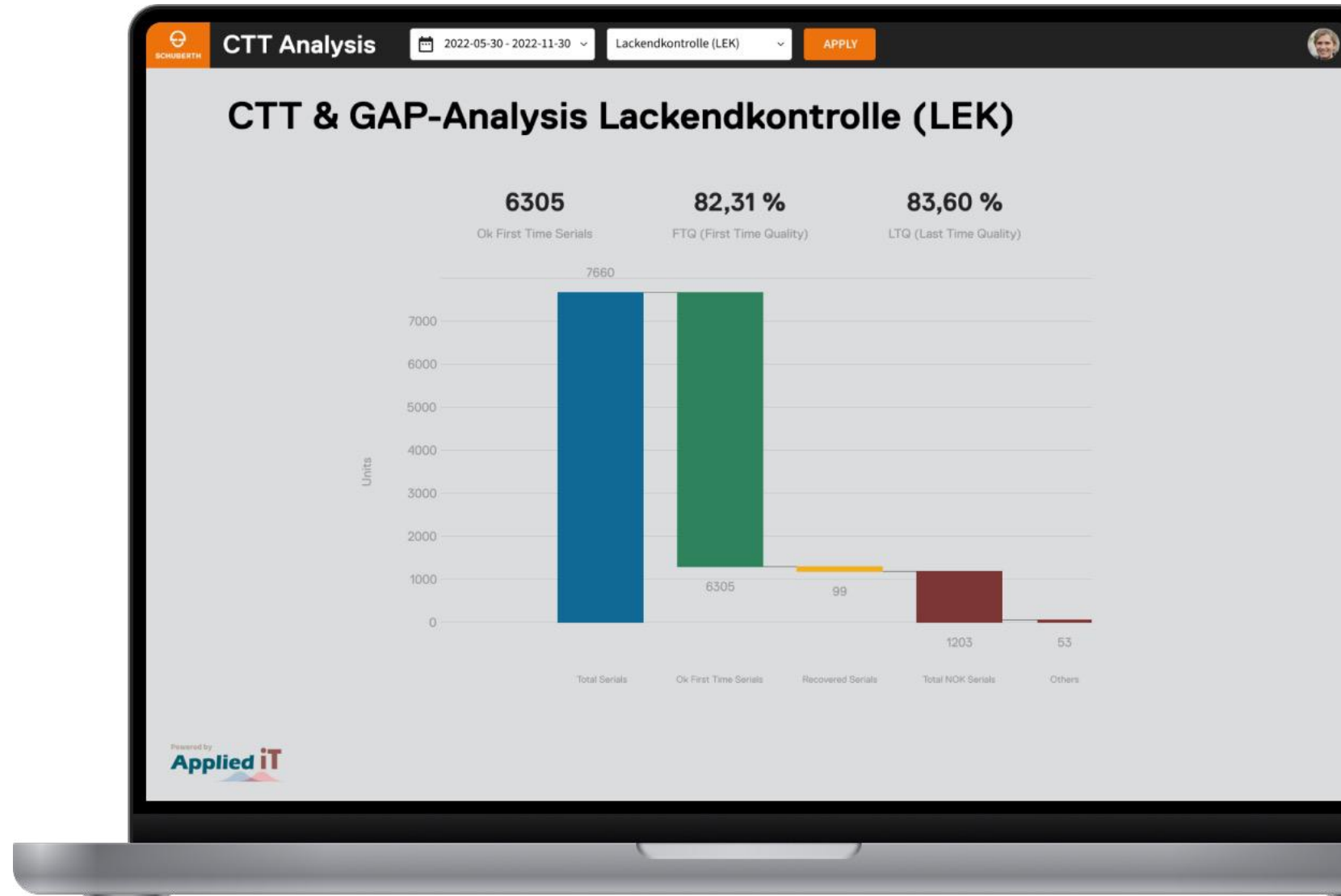
Timeline

Scope of implementation

Monitoring Scope

ERP Integration

Machine Connection

Configuration and testing

Working Methods

Start

Integration of Independent Data Table

Personalization, analysis and customer requirements

Training

Stabilization

Use cases

Maintenance

Improvement projects

7 Weeks

5 Weeks

2 Weeks

4 Weeks

9 Months

Scope of implementation

ERP Integration

Machine Connection

Working Methods

Integration of Independent Data Table

Configuration and testing

Personalization, analysis and customer requirements

Start

Training

Stabilization

7 Weeks

5 Weeks

2 Weeks

4 Weeks

Detail of Monitoring Scope

Use Cases

Ensure that the use of **AppliediT tools** has been **internalized**. (Correct files, supervised quality controls, fault reports, etc.) **Daily review of records, weekly meetings on incidents and causes.**
Until **a high level of satisfaction** is obtained in the **quality of the data (95%),** the next phase is not proceeded.

Improvement projects

With a historical record we can start working with the main users (middle management and management) **to detect areas for improvement, open improvement projects and follow up on them..**

Maintenance

In this phase the client has acquired the **ability to self-manage,** and our work is limited to **reinforcing concepts** if necessary.

2 Months

3 Months

4 Months

Takeaways

TAKEAWAYS

Benefits for your company

What are our added values and the advantages we offer?

Data into knowledge
AppliediT helps companies to transform data into knowledge achieving top performance competitiveness.

Data engineering services
AppliediT provides data engineering services for data restructuring and complex data transformation into simplified real time data ecosystems.

World class data solutions
AppliediT provides world class data solutions applications that goes from lean visualization platforms to advanced analytics tools to sophisticated Machine learning modules, successfully applied to industry complex processes.

Real time data
AppliediT is a solution technological provider that helps customers to access to Real time data for continuous improvement activities and more efficient decision making.
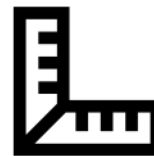
Own adapted solutions
AppliediT team is a multifunctional group of experts that adapts owned solutions on every project, customer, process to the customer needs.

AppliediT

Thank you!

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Partner & Managing Director

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