

Collaborative Parts Management with

ptc navigate™

&

CADENAS  PARTsolutions

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15.03.2017



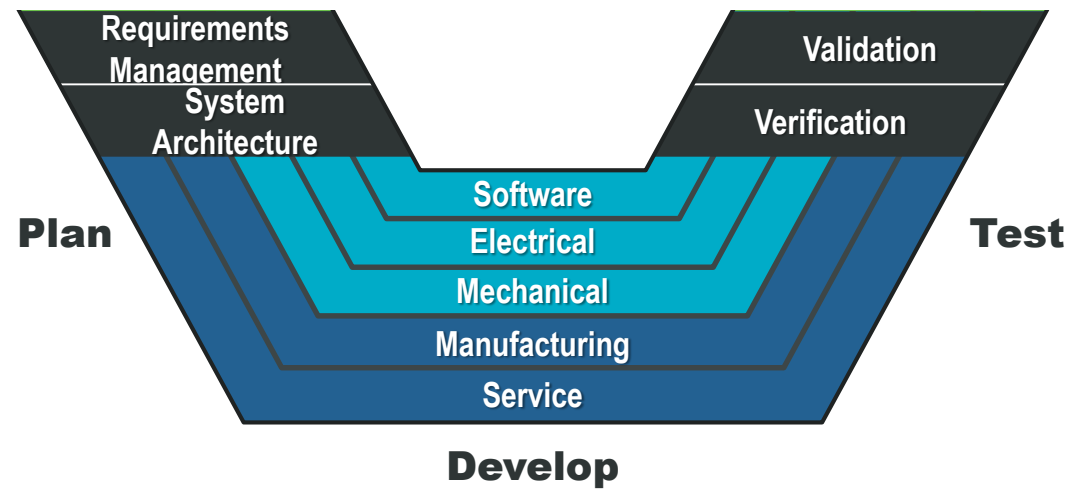
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MOTIVATION: WHY CADENAS & PTC?

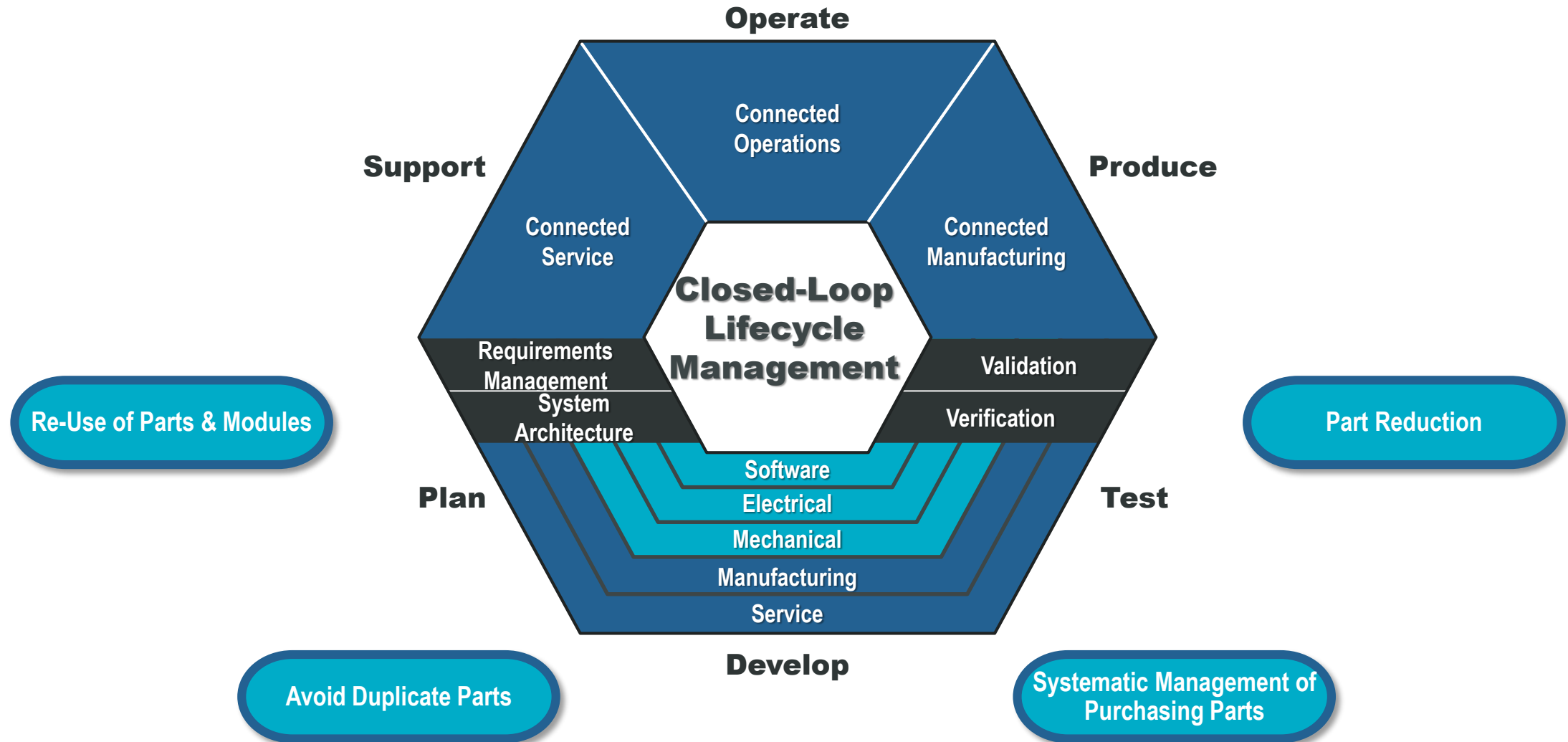
MOTIVATION

Common Business Challenges of Customer's & Complementary Solutions



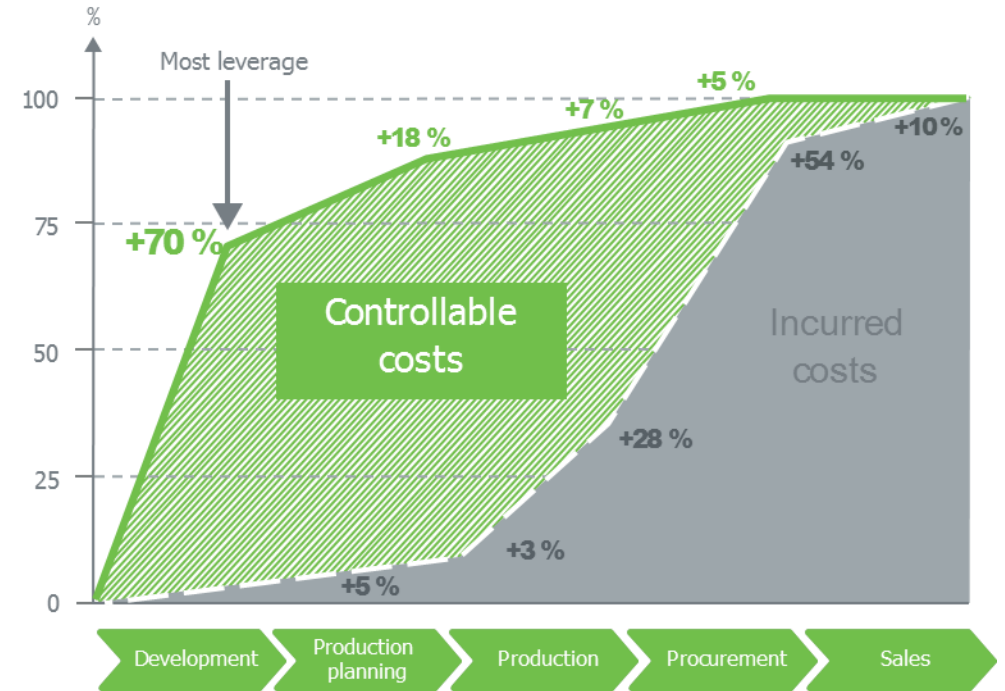
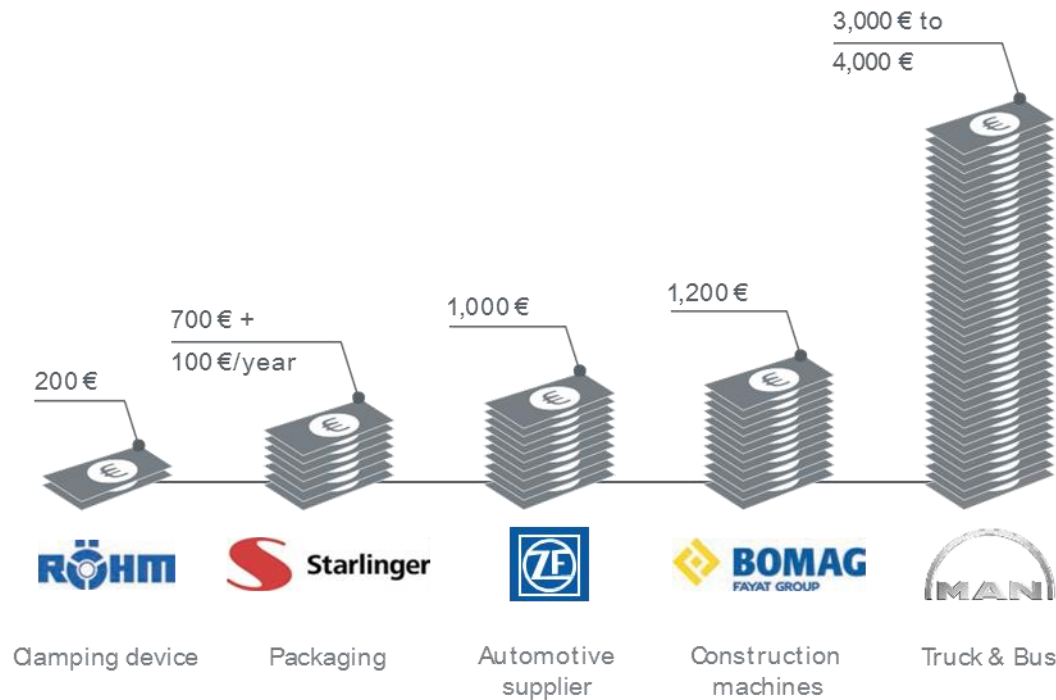
MOTIVATION

Common Business Challenges of Customer's & Complementary Solutions



POTENTIAL OF SYSTEMATIC PARTS MANAGEMENT

Real world data:
 Average costs per part
 Internal calculations vary - depending on industry.



70% of total product costs can be influenced during development phase

Optimizing reuse rate of existing parts and reducing parts multiplicity influences the expenses for your product during the development in a way that is not possible at a later point of time.

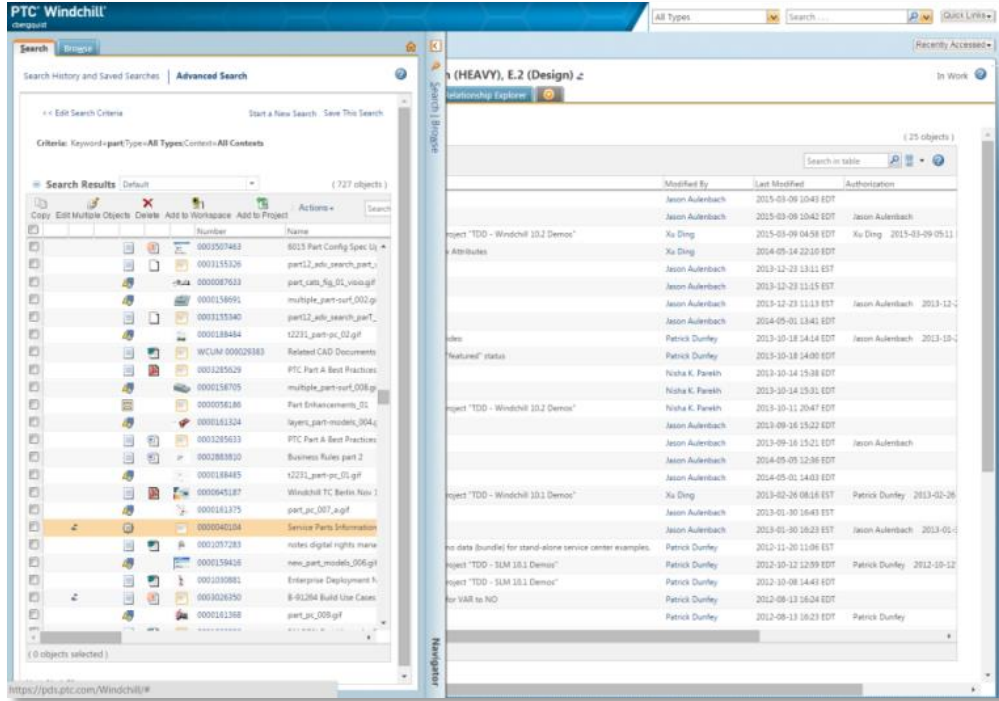
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HOW:
PTC NAVIGATE & CADENAS

CURRENT SITUATION & CUSTOMER CHALLENGE



- Enterprise systems are **too complex for many roles** to get information themselves
- Even with in-depth training, infrequent **users forget how to get information**
- A single application **does not include all information needed** by role for a task

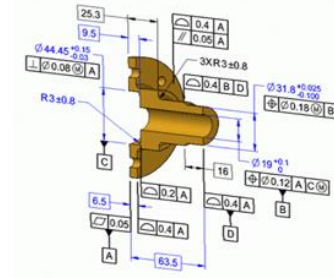


Designer/Engineer

Request product info



Tooling Designer



Purchasing Agent



Quality Inspector



Process Planner

- Expert users become **bottleneck** for getting product information
- Expert users are **distracted and burdened by requests** from many roles
- Enterprise interfaces can be customized but it is **often costly to create and maintain these customizations**

ptc navigate™ AS A SOLUTION FOR CONNECTED PLM



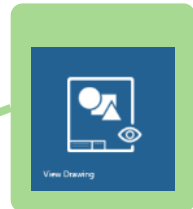
Designer Engineer

Just the information needed:
Aggregated together from all the owning systems

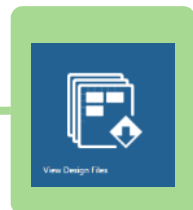


Based on
thingworx®
Technology

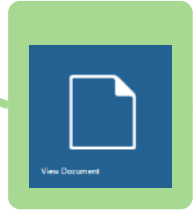
Role-based Apps



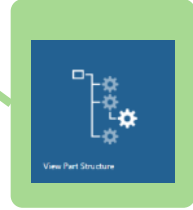

Tooling Designer




Purchasing Agent




Quality Inspector




Process Planner

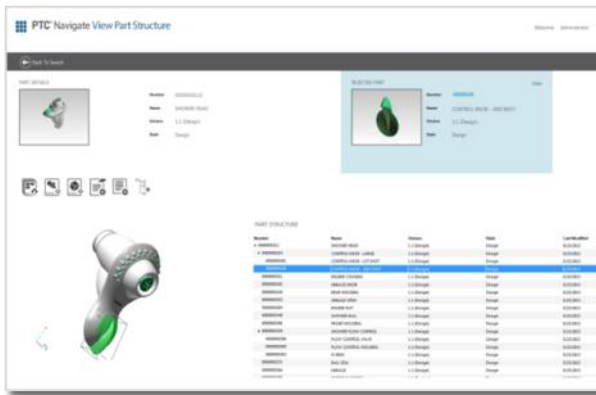
ptc navigate™ view
first OOTB apps in a series

Use OOTB Apps

Build custom versions of OOTB Apps

Build new, custom standalone apps

Embed apps or mashups in Windchill Contexts



PTC Navigate View Parts List

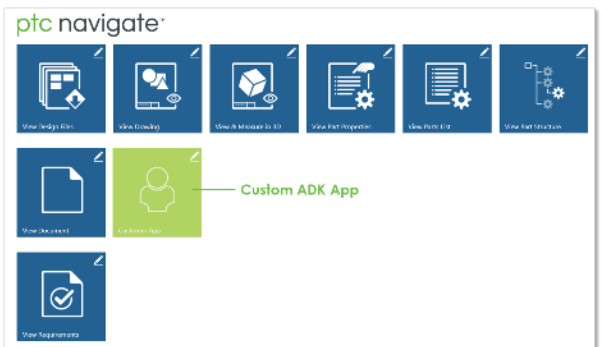
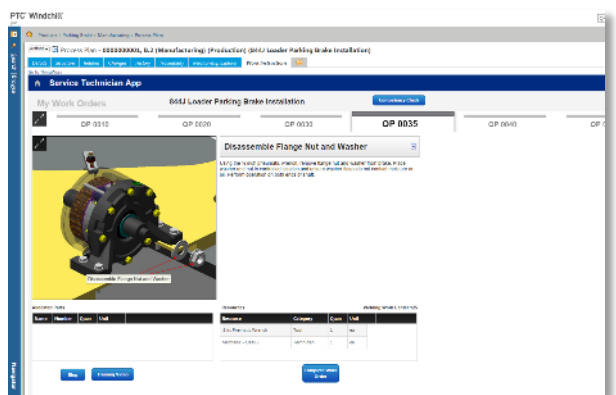
PART ID: 100-00000000000000000000

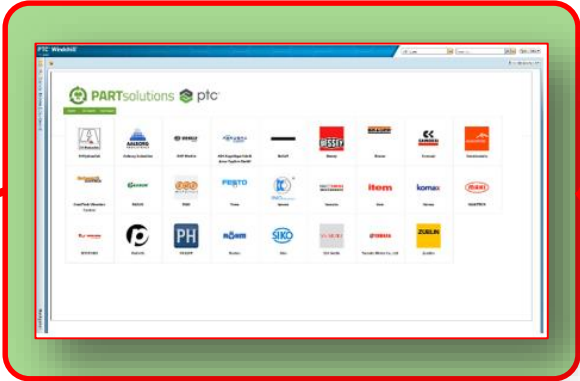
Part: 00000000000000000000

Revision: 1.0 (Default)

Status: Released

Number	Name	Version	Status	Quantity	Unit	Last Modified By	Last Modified	Quantity	Units	Check
00000000000000000000	00000000000000000000	A.1 (Default)	Released	1.00	ea	Ray Charle	January 31 2016	1.00		100
00000000000000000000	00000000000000000000	A.1 (Default)	Released	1.00	ea	Ray Charle	January 31 2016	1.00		100
00000000000000000000	00000000000000000000	A.1 (Default)	Released	1.00	ea	Ray Charle	January 31 2016	1.00		100
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Parts Manager Role

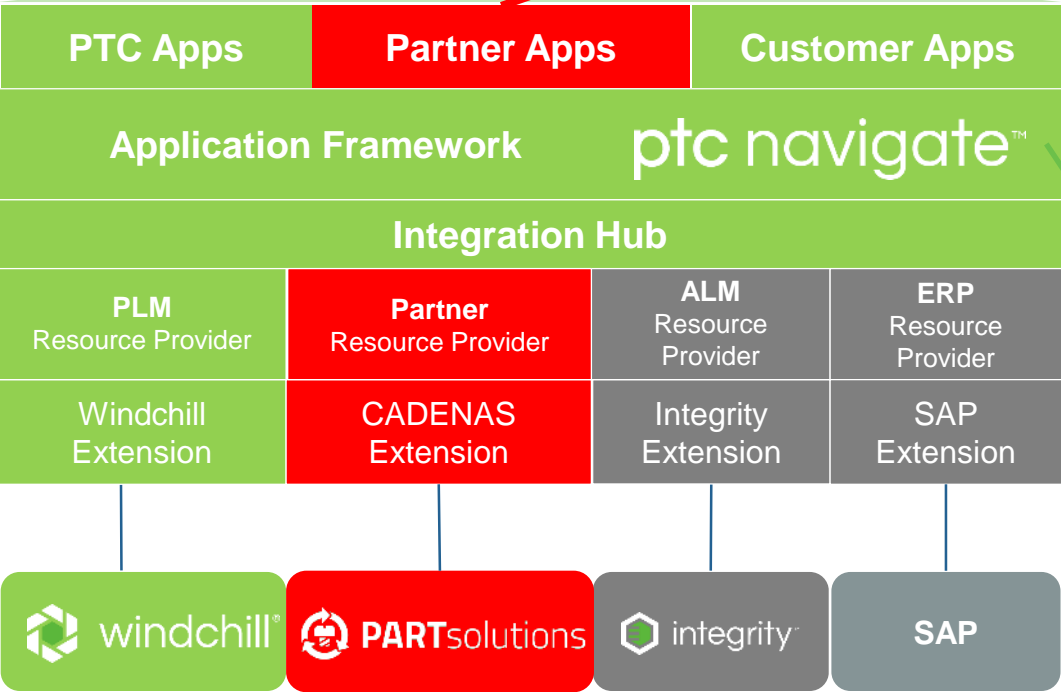


Design Reviewer Role



Purchasing Role

CADENAS Mashups
as new Custom Apps in
ptc navigate™



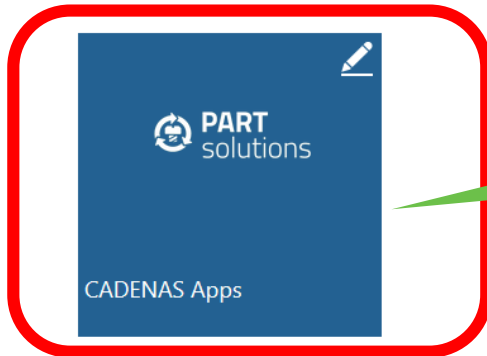
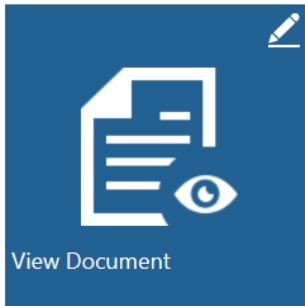
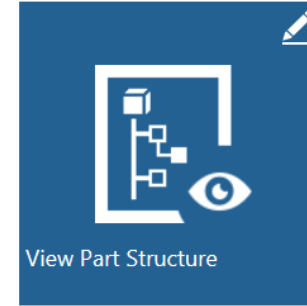
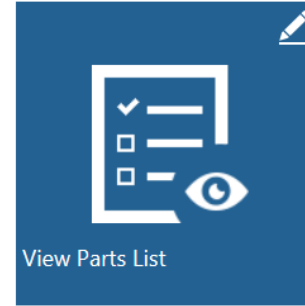
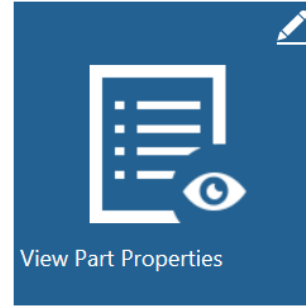
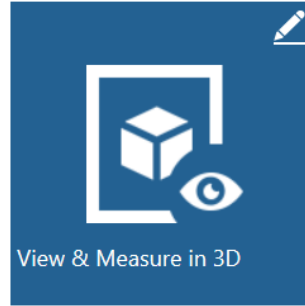
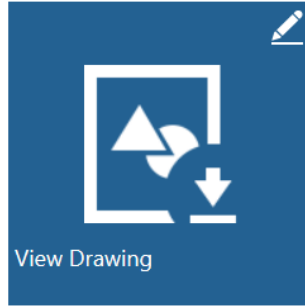
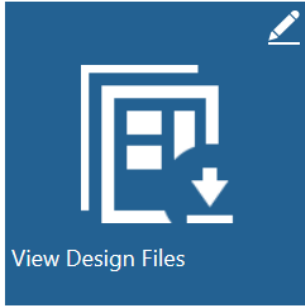
New PTC Navigate Application Framework provides:

- Common user experience model & components
- Common search services
- Common authentication services
- Common role management/behavior

BUILD NEW, CUSTOM STANDALONE APPS

ptc navigate™

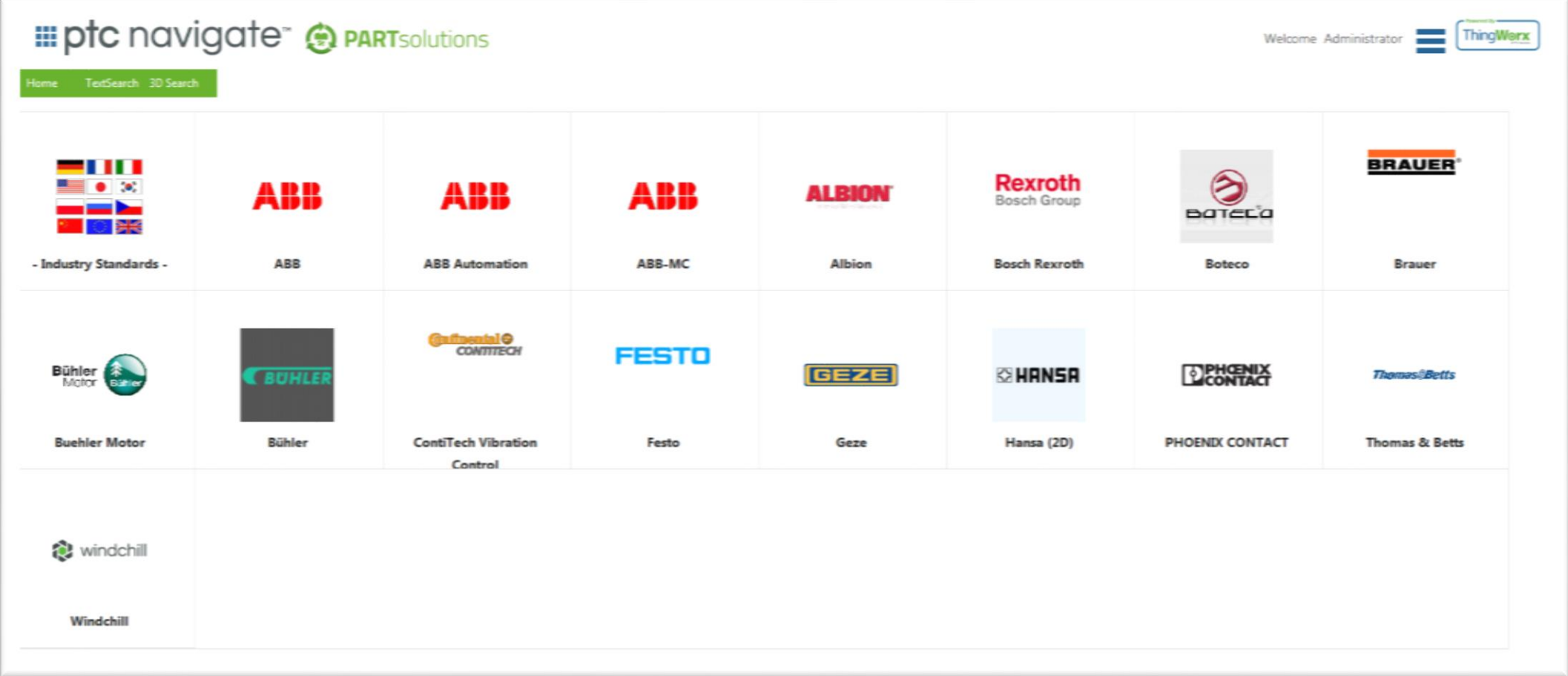
Welcome Administrator



CADENAS Apps included in ptc navigate Landing Page

BUILD NEW, CUSTOM STANDALONE APPS

CADENAS Catalogues as Standalone Navigate App



BUILD NEW, CUSTOM STANDALONE APPS

CADENAS GEOsearch as Standalone Navigate App

The screenshot displays the ptc navigate PARTsolutions GeoSearch interface. At the top left, the ptc navigate and PARTsolutions logos are visible. On the right, a user is logged in as Administrator, and the ThingWorx logo is present. A search bar is located at the top left, with a 'Home' button and a 'GeoSearch' button. A quality slider is set to 75, with a range from 0 to 100. A dropdown menu is open, showing a list of categories: - Industry Standards -, ABB, ABB Automation, ABB-MC, and Albion. The search results are displayed in a grid format, showing various mechanical parts with their respective similarity percentages and flags. The parts shown are:

- CPX-M (FESTO) - Similarity in %: 100
- DIN 7757 33 - Similarity in %: 100
- DIN 1756 - Similarity in %: 100
- DIN 20066 - Similarity in %: 100
- DIN 604 Mu - Similarity in %: 100
- DIN 43772 4 - Similarity in %: 100
- DIN 48173 6 - Similarity in %: 100
- DIN 605 Mu - Similarity in %: 100
- 1437290 (PHOENIX CONTACT) - Similarity in %: 100

EMBED APPS OR MASHUPS IN WINDCHILL CONTEXTS



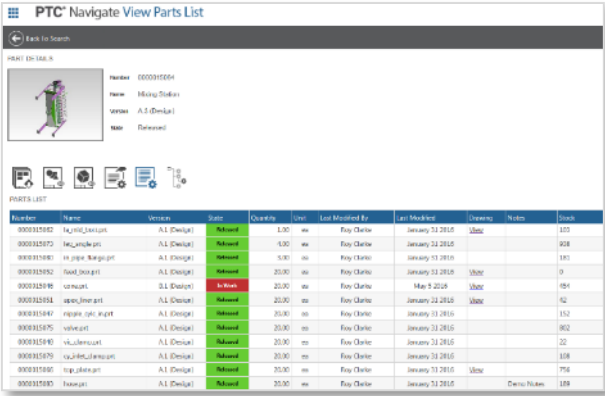
CADENAS GEOsearch in Windchill UI

The screenshot shows the Windchill user interface with a 'CadenasGeoSearch' mashup embedded. A green arrow points from the 'CadenasGeoSearch' menu item in the top navigation bar to the search results area. The search results are displayed in a grid format, showing various parts with their similarity percentages. The parts are categorized by manufacturer, including FESTO and others. The search results include:

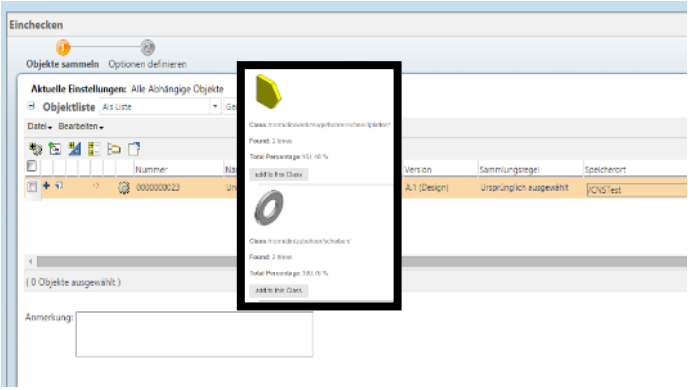
- 3525_1003_06.sc.prt (Similarity in %: 100)
- CP-E (Similarity in %: 50)
- BPL (Similarity in %: 50)
- CPV10-MP (Similarity in %: 50)
- CTSL (Similarity in %: 50)
- K (Similarity in %: 50)
- CP (Similarity in %: 50)
- HAPB (Similarity in %: 50)

- customers and partners can take advantage of navigate framework and ThingWorx platform to create new or extend existing role-based experiences

- Example Ideas:



Add custom attributes to existing apps



Custom App to classify parts based on GEOsearch

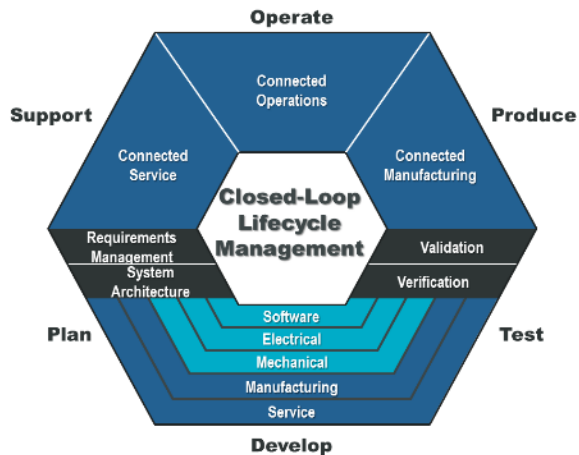


Custom App to display Duplicate and Make/Buy info

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SUMMARY

Addressing Business Challenges through collaborative Parts Management



Re-Use of Parts & Modules

- **Make own part / module catalogues available in Windchill**
 - Including documentation, drawings & viewable
 - Integrate to standard part handling processes

Avoid Duplicate Parts

- **Facilitate search & find of reusable parts, e.g. by**
 - Geometrical or full text search
 - High Performance (seconds vs. minutes/hours)
 - Integral view on company and standard parts
 - Combination of search methods (color, similarity, topology, attributes and others)

Systematic Management of Purchasing Parts

- **Consistent processes** and user experiences
- Consistent classification
- Full Windchill PartsLink integration
- PTC Navigate provides common user experience & role specific access

Part Reduction

- **Specific reports** support role responsibilities, e.g.:
 - Engineering Manager – design approvals
 - Standards Department – find similar parts
 - Procurement initiatives – clean-up of duplicates



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