



EA CONNECT DAYS 2019

Europe's Leading Enterprise Architecture Conference



Technology Risk Management – Leverage ServiceNow Discovery

Patrick Schober | Director Professional Services

Bonn, 27. November 2019

Today's agenda

Why Technology Risk Management?

Automation is key

LeanIX approach to Technology Risk Management

“

As organizations **accelerate their digital transformation** plans and processes, many companies will choose to **stop updating** or supporting old versions of their software, exposing themselves to **cyberthreats, system failures, increased costs** and **future planning limitations**.

”

Imperatives to manage Technology Risk



Proper succession
planning for technology



Stay compliant to ever
changing regulations



Constantly modernize
growing IT environments



Promote agility and
shape business models

Cost factors and potential losses due to obsolete technology

| Cost Factors | Potential Costs/Losses |
|--|---|
| Extended support Costs <ul style="list-style-type: none">• Vendor Support Costs• In-house/outsourced Support Costs | The cost of supporting standard PCs running Windows XP per year is \$780 (\$7.8 million per year for 10,000 users). |
| Delayed project planning <ul style="list-style-type: none">• Delayed Revenue• Increased project overheads | On average, large IT projects run 45% over-budget and 7% over-time while delivering 56% less value than predicted. |
| Cyber breaches and litigations <ul style="list-style-type: none">• Loss of data and reputation• Penalties and litigation costs | The global average cost of a data breach is around \$3.86 million. Equifax data breach: \$242.7 million as of 2017. |
| Low performance of obsolete technologies <ul style="list-style-type: none">• Low customer satisfaction• Low efficiency | \$13,202.80 a year is lost per employee on unproductive tasks because of low performing technologies. |
| Unavailability/downtime of systems <ul style="list-style-type: none">• Low customer satisfaction• Revenue loss• Reputation loss | Downtime, per hour and per system, is \$100,000 and has the potential to rise to hundreds of millions of dollars (e.g., the outage of British Airways in May 2017 cost \$102.19 million). |

The difficulty of containing Technology Risk

Complication

Lack of visibility into growing and decentralized IT-Landscapes

Available information on wrong level of abstraction

No technology risk assessment on project level

High costs of unmanaged technology risks

EA Contribution

EA blends business & IT views

Puts information into context for decision makers

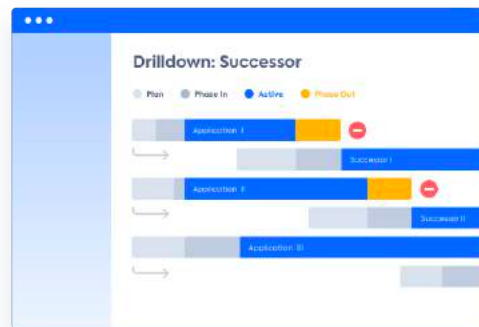
Integrates cross-disciplined tools and procedures

Is equipped to manage technology risk

Automation enables you to keep data maintained

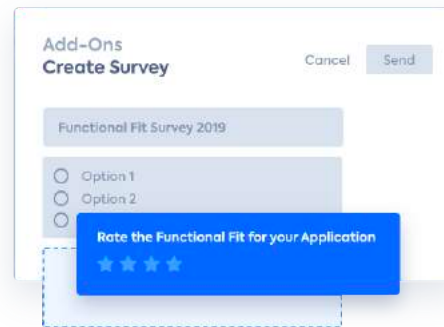
with  LeanIX

1 Single Source Of Truth



Excel Up- & Download
Easy Inline-Edit

2 Workflows



"Survey-Monkey" for
IT Landscape

3 Integrated


CMDB

 SIGNAVIO

 APPTIO

Integration of 3rd party
tools

4 Automated


CMDB + Discovery



LeanIX Cloud Native Suite

Discovery solutions
for on-prem and cloud
intelligence

High Degree of Automation

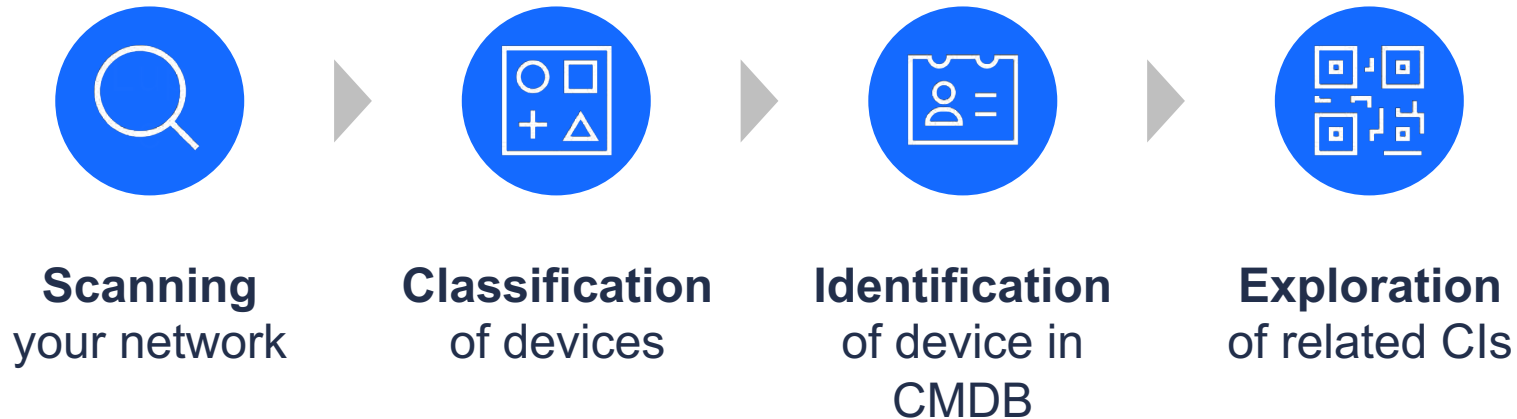
A brief introduction...

What is ServiceNow Discovery?

Discovery finds **computers, servers, printers**, a variety of IP-enabled devices, and the **applications** that run on them. It can then **update** the CIs in your **CMDB** with the data it collects.

How does ServiceNow Discovery work?

Horizontal Discovery

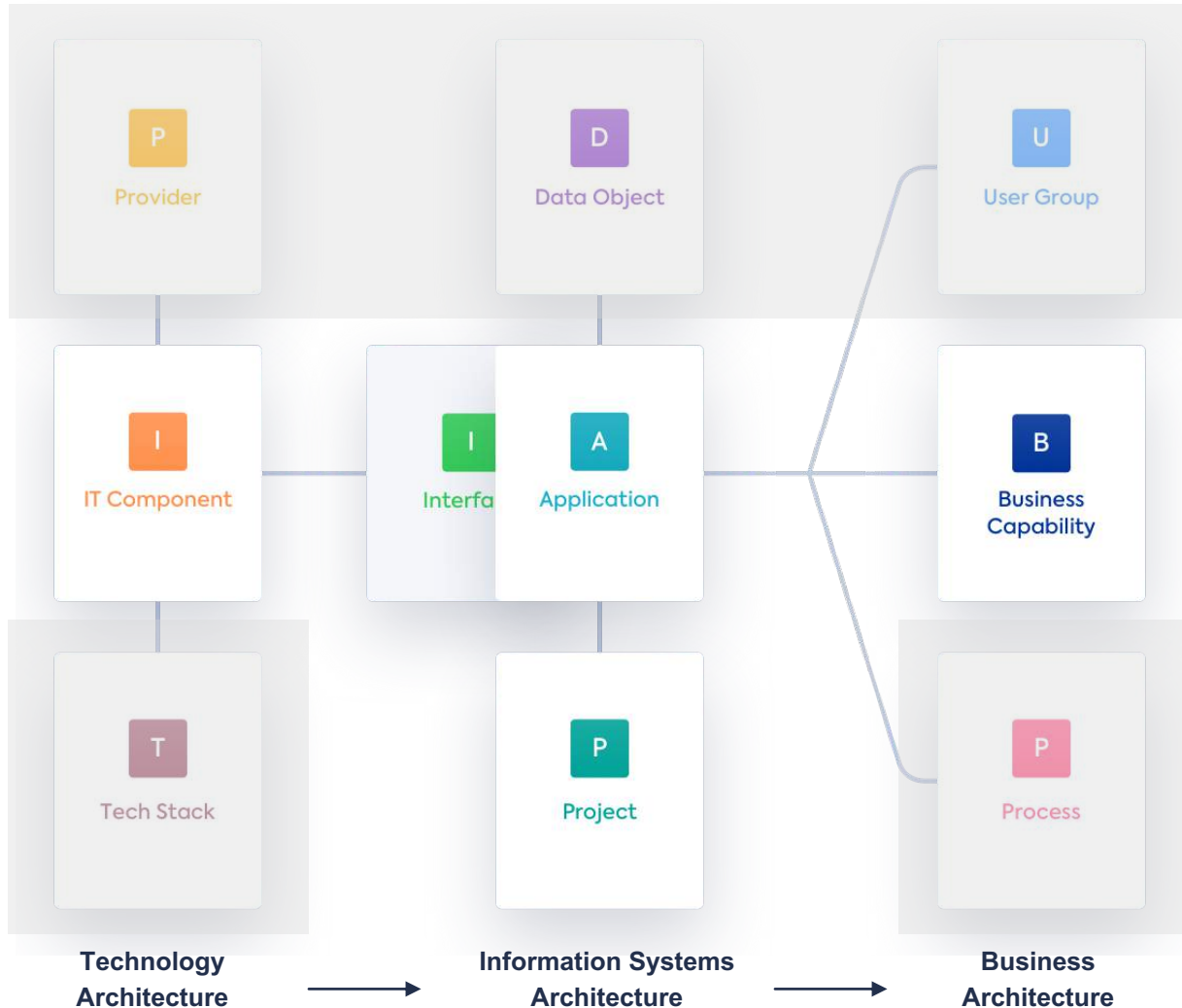


Service Mapping



How to do Technology Risk Management in LeanIX?

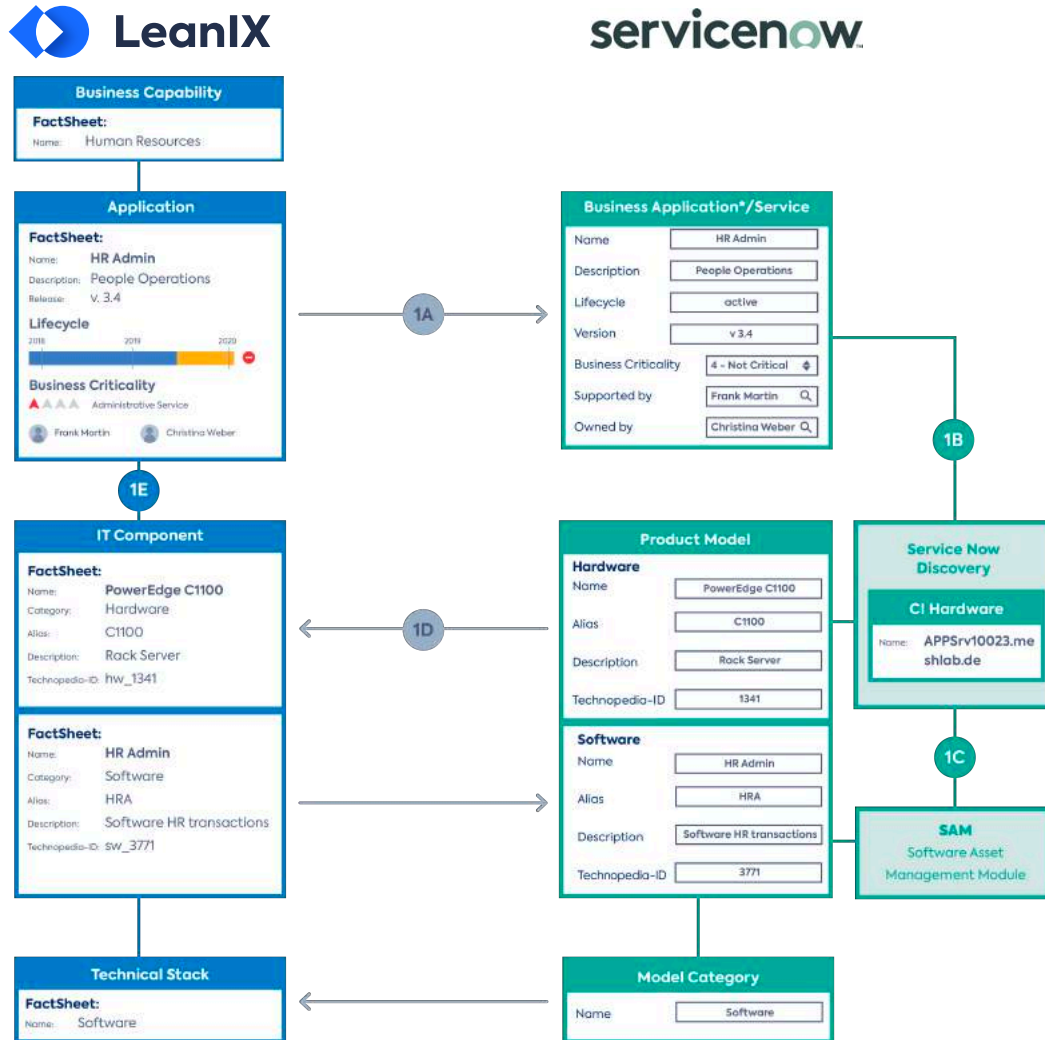
Steps to master Technology Risk



Minimum steps required

- 1 Make sure IT Components are maintained and linked to Applications
- 2 Score Applications regarding business criticality and IT Risk
- 3 Scope landscape according to risk scores
- 4 Derive and start projects to mitigate obsolescence

Automated Data Flows between Discovery, CMDB, and LeanIX



Integration Data Flow

- 1A Applications are synced to ServiceNow
- 1B Hardware is discovered using ServiceNow Discovery
- 1C Software discovered via SAM in ServiceNow.
- 1D Product Model (SW/HW) syncs products to IT Components in LeanIX
- 1E IT Components are automatically linked to Applications

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[Inventory](#)
[Reporting](#)

Jump to a Fact Sheet

+ Invite

What's new

?

Filters

TYPE

Application (1)

HIERARCHY LEVEL

Level 1 (1)

SUBSCRIPTIONS

n/a (1)

Subscription role

DATA QUALITY

No responsible (1)

Quality Seal broken (1)

No description (0)

No lifecycle (0)

TRASH BIN

Archived (2)

LIFECYCLE

Any

Plan

Phase in

Active

Phase out

End of life

n/a (0)

point of time

2018-02-07

Today | End of Month | End of Year

TECHNICAL FIT

Inappropriate (1)

Default Bookmark changed

Type: Application

Lifecycle: Any (Today)

Save

...

Total 1 results

Sort by: A ... Z

As Table

HR Admin

Application

This is our key HR system, mainly used for Payroll. Also used for Recruiting (since 2018).

Set your role - 53% complete - 2018-02-07 05:41 - Active -

ACTIONS

New Fact Sheet

Export

Import

RECENTLY VIEWED

HR Admin


Dell 5875

New Application


HR

IBM BladeCenter Blade HS22

Support



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[What's new](#)


Filters

TYPE

IT Component (9)

HIERARCHY LEVEL

Level 1 (9)

PROVIDERS

☐ Dell (4)
 ☐ IBM (2)
 ☐ Gateway (1)
 ☐ n/a (2)
 [Advanced Filter](#)

TECHNOPEDIA ID

☐ Linked (6)
 ☐ n/a (3)

OTHER TAGS

Default Bookmark changed
 x Type: IT Component
 x Lifecycle: Any (Today)
 [Save](#)

Total 9 results
 Sort by: A...Z
 As Table

| | |
|---|--------------|
| Dell 5875 | IT Component |
| Set your role · 44% complete · 2018-02-02 18:33 · Active · | |
| Dell Power 710 Express | IT Component |
| Set your role · 19% complete · 2018-02-07 05:30 · Phase out · | |
| Dell PowerEdge C6100 Rack Server | IT Component |
| Set your role · 19% complete · 2018-02-02 18:16 · Active · | |
| Dell PowerEdge M710HD Blade Server | IT Component |
| Set your role · 11% complete · 2018-02-07 05:52 · | |
| Gateway ThinkServer TD230 | IT Component |
| Set your role · 19% complete · 2018-02-07 05:49 · Phase out · | |
| IBM BladeCenter Blade HS22 | IT Component |
| Set your role · 19% complete · 2018-02-07 05:31 · Phase out · | |
| IBM x3690 X5 Rack | IT Component |
| Set your role · 19% complete · 2018-02-02 18:13 · Phase out · | |
| ThinkStation S20 | IT Component |
| Set your role · 3% complete · 2018-02-02 17:37 · | |
| XPS 14z | IT Component |
| Set your role · 3% complete · 2018-02-02 17:37 · | |

ACTIONS

[+ New Fact Sheet](#)
[Export](#)
[Import](#)

[Technopedia](#)

RECENTLY VIEWED

[Dell PowerEdge M710HD Blade Server](#)
[ThinkStation S20](#)
[Dell 5875](#)
[Gateway ThinkServer TD230](#)
[HR Admin](#)

Support

Calculate risk scores based on survey answers

| Score | Implication |
|---------|---|
| 0 - 6 | Neglectable Not enough or wrong functionality / Risk impact |
| 7 - 12 | Watchlist Medium risk. Mid-Mitigation recommended |
| 13 - 18 | Sever Risk Highly business and IT Risk. Short term mitigation highly recommended |
| 19 - 24 | High Risk Core Application with high IT Risk – Mitigation to be started immediately |

LeanIX Dashboard Inventory Reports Jump to a Fact Sheet + Invite What's new ?

← Survey: ITR Survey Applications Map Analysis 2019

Design Survey Run Survey Status & results

Preview Save & Next

ITR Survey Applications Map Analysis 2019

Technical Documentation

- Well Documented.
- The application is documented, but need improvement.
- There is no documentation to support the maintenance of the application.

OBSESCENCE

Functional Application Obsolescence

- No obsolescence
- With obsolescence, application managed by San Tech.
- With obsolescence, application managed by a 3rd party.

Supplier Support

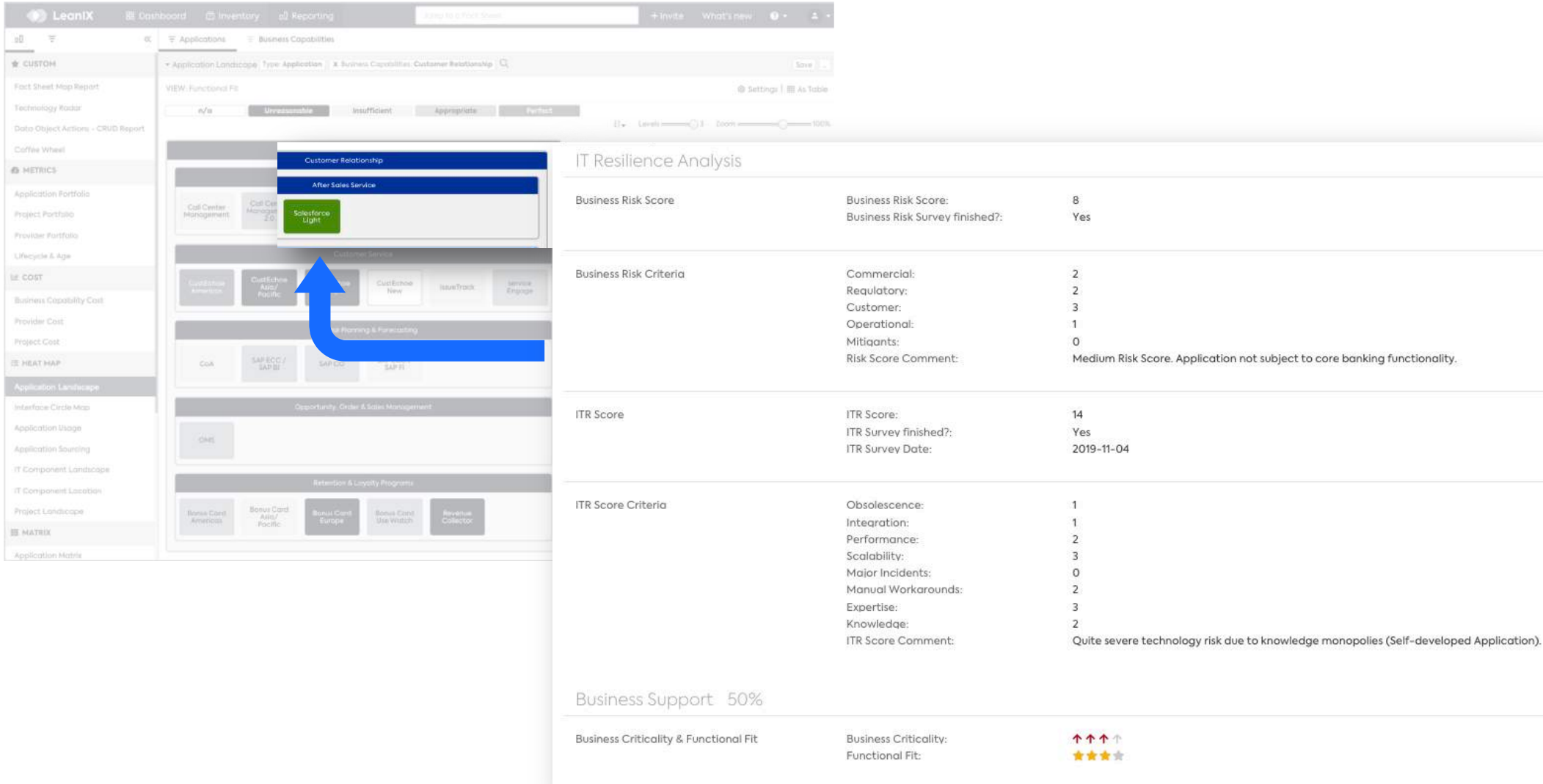
- With available support.
- Not available from supplier, but assumed by San Tech as Best Endeavour.
- Support discontinued or not offered.

Integration Score

```
var scoreInt=0;
var scorePer=0;
var scoreSca=0;
var scoreWrk=0;
var scoreExp=0;
var scoreKnl=0;
var scoreTotal=0;
// Integration evaluation.
if (answers[0]=== 'Minimal or no integration with serious impact.'){
  scoreInt = scoreInt +3;
}
if (answers[0]=== 'Medium/low integration needing optimization and process improvement for full integration'){
  scoreInt = scoreInt +2;
}
if (answers[0]=== 'High degree of integration with a desirable improvement.'){
  scoreInt = scoreInt +1;
}
```

Check syntax

Automatically include scores in Fact Sheets




The screenshot displays the LeanIX interface. On the left, a sidebar lists various reports and metrics. The main area shows the 'Application Landscape' with a hierarchical view of business capabilities and applications. A blue arrow points from the 'Customer Relationship' business capability to the 'IT Resilience Analysis' fact sheet.

IT Resilience Analysis

| | | |
|---------------------------------------|---------------------------------|--|
| Business Risk Score | Business Risk Score: | 8 |
| | Business Risk Survey finished?: | Yes |
| Business Risk Criteria | Commercial: | 2 |
| | Regulatory: | 2 |
| | Customer: | 3 |
| | Operational: | 1 |
| | Mitigants: | 0 |
| | Risk Score Comment: | Medium Risk Score. Application not subject to core banking functionality. |
| ITR Score | ITR Score: | 14 |
| | ITR Survey finished?: | Yes |
| | ITR Survey Date: | 2019-11-04 |
| ITR Score Criteria | Obsolescence: | 1 |
| | Integration: | 1 |
| | Performance: | 2 |
| | Scalability: | 3 |
| | Major Incidents: | 0 |
| | Manual Workarounds: | 2 |
| | Expertise: | 3 |
| | Knowledge: | 2 |
| | ITR Score Comment: | Quite severe technology risk due to knowledge monopolies (Self-developed Application). |
| Business Support 50% | | |
| Business Criticality & Functional Fit | Business Criticality: | ↑↑↑↑↑ |
| | Functional Fit: | ★★★★★ |

EA
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LeanIX

Dashboard

Inventory


Reports

Jump to a Fact Sheet

+ Invite

What's new

?



☐ With Gaps and NO plan to mitigate them.

KNOWLEDGE

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CSA Technical & Functional Capabilities

Patrick Schober

☐ The CSA team capabilities (knowledge and resources) are adequate to fully support the application within SLAs.
 ☐ Gaps in CSA team capability results in occasional application SLA breaches.
 ☒ As a result of Gaps in CSA team capability, support of the application within SLAs are at risk.

Technical Documentation

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☐ Well Documented.
 ☒ The application is documented, but need improvement.
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OBSOLESCENCE

Patrick Schober

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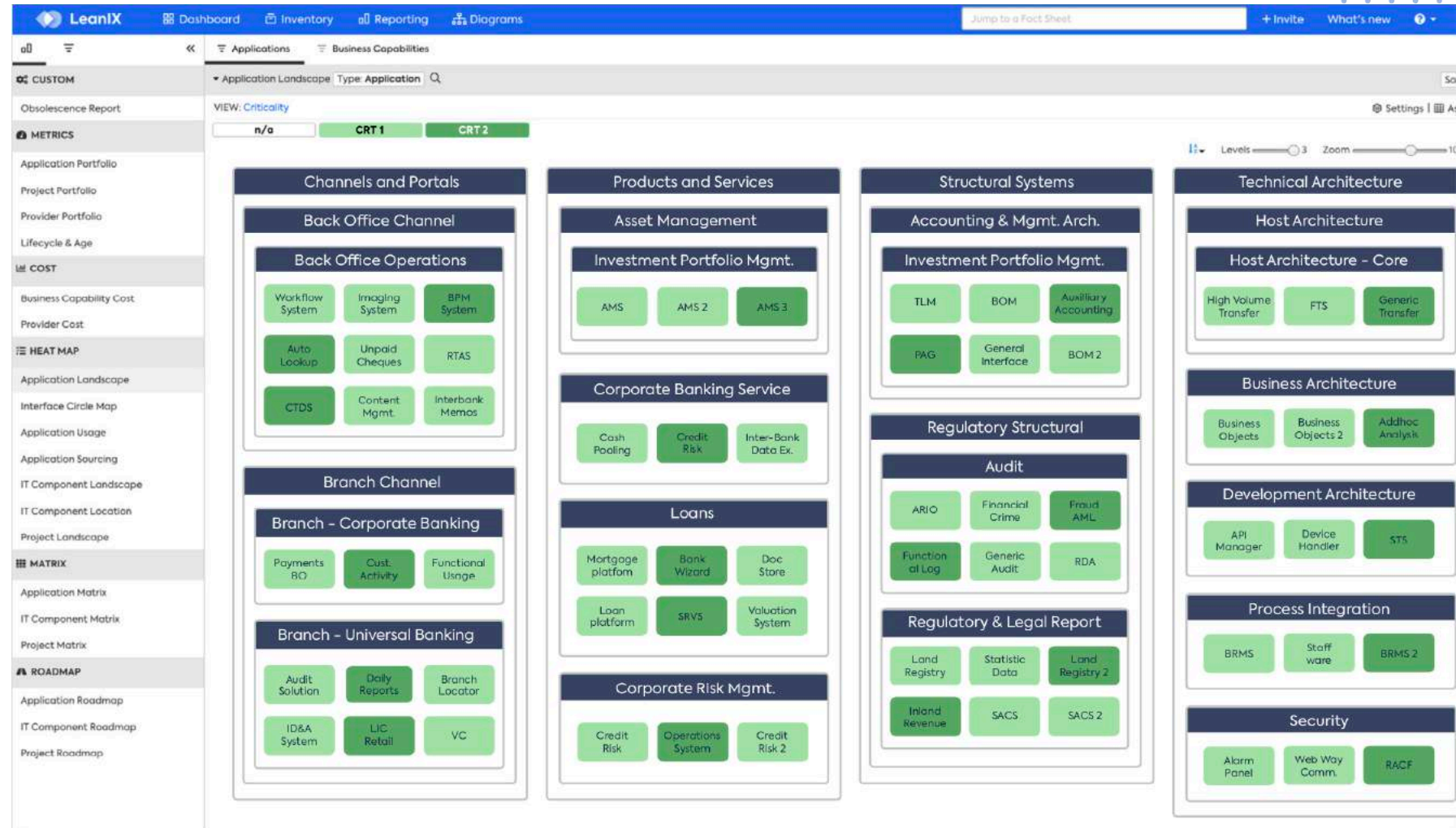
Vizualize Applications based on criticality



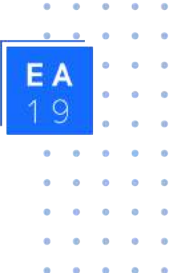
Differentiation of
Applications based on
“importance”



Categories as a guideline
for initial prioritization



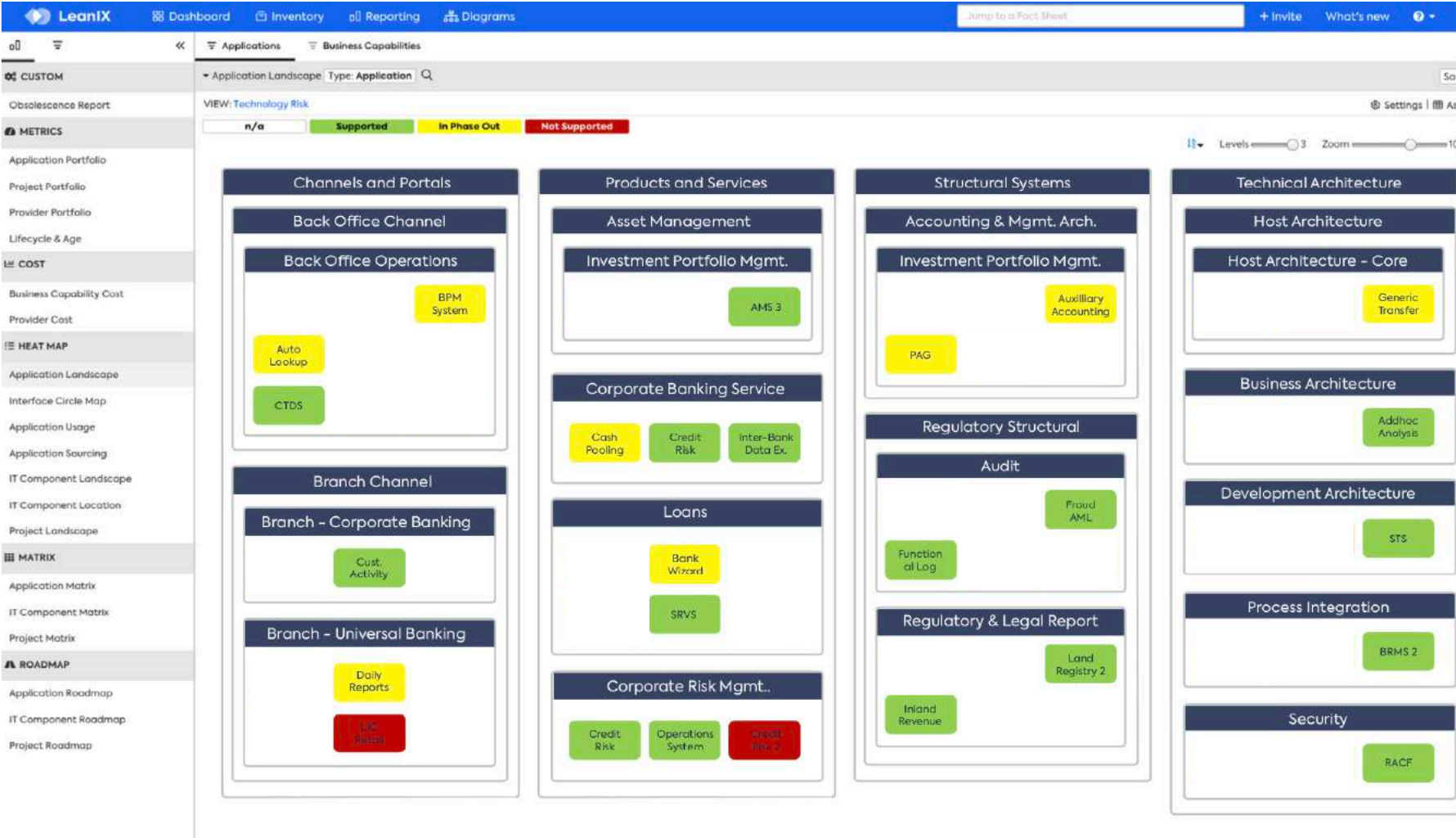
Show Technology Risk of critical Applications



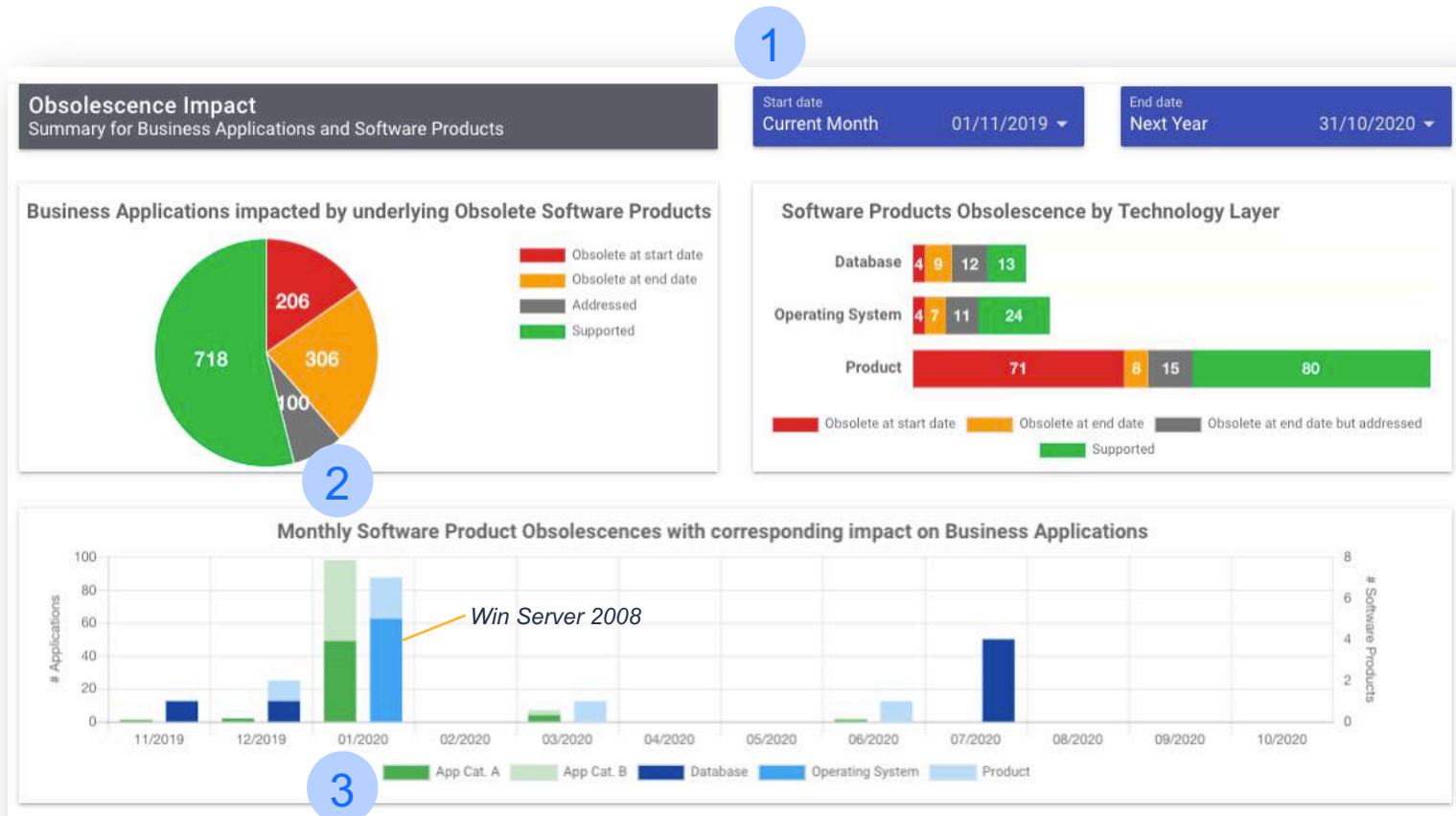
Filter for critical Applications



Apply Technology Risk view to narrow down scope



Informed decision making enabled by custom reports



- 1 Adapt the time scope for the reporting according to planning cycles
- 2 Be confident about Technology Risk which is already addressed
- 3 See upcoming obsolescence to take immediate action (in-depth analysis available, too)
- 4 Use reporting to align with IT-PMO and start resource allocation for necessary projects

Manage obsolescence dependencies in detail



See all ITCs that relate to
an Application



See all Applications
affected by an ITC

| 1 Applications | |
|--|---|
| BPM Systems | software products Σ = 44 10 9 8 13 4 |
| Active CAT A Santander UK Retail Technical Obs. equal or over 50 % | |

| 3 Software Products | |
|---|------------------|
| Red Hat 6.3 operating system 11/30/2020 | applications 258 |
| SQL Server 2013 database 1/1/2020 | applications 233 |
| Oracle EE11 product 4/30/2018 | applications 165 |
| IBM HTTP Server product 9/30/2015 ITR 2018 | applications 155 |

Technology Risk learnings



Risk & Innovation

be aware to switch
technology before
risks occur



Compliance

Stay compliant in an
ever changing
regulatory environment



Cost

Exceptional costs for
extended support or
internal security
measures

Thank you!
Any questions?