PLANVIEW®

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HORIZONS
The Planview Customer Conference

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SUPERCHARGED APPLICATION PORTFOLIO & IT ASSET MANAGEMENT

WILLIAM J ROBINSON

SANDIA NATIONAL LABS

NNSA
National Nuclear Security Administration

U.S. DEPARTMENT OF ENERGY

Sandia National Laboratories

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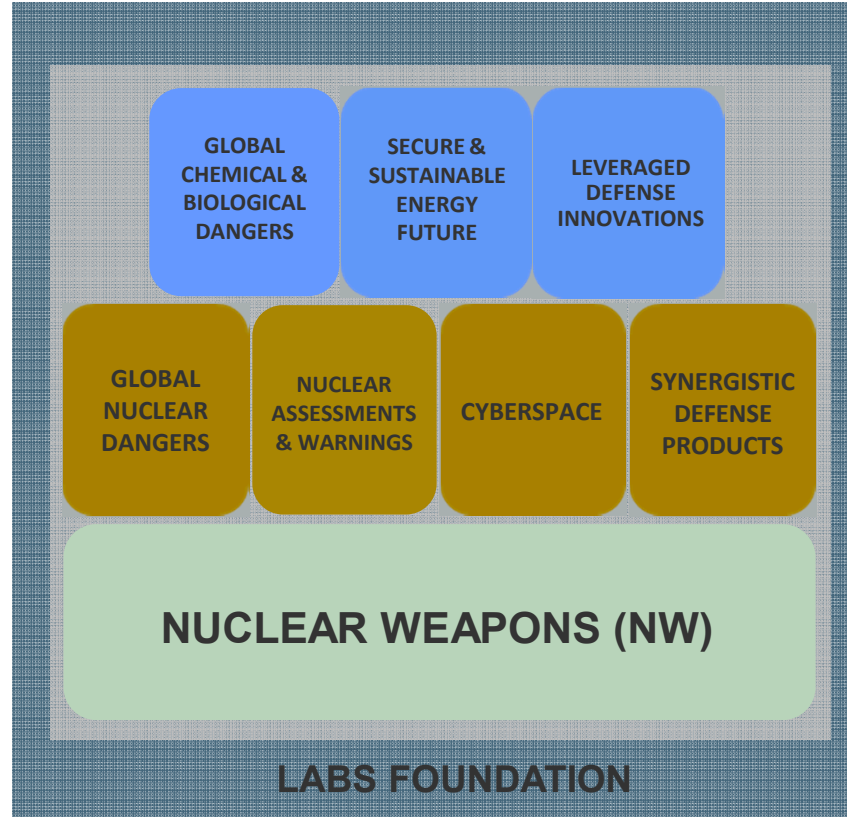
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SANDIA'S HISTORY...
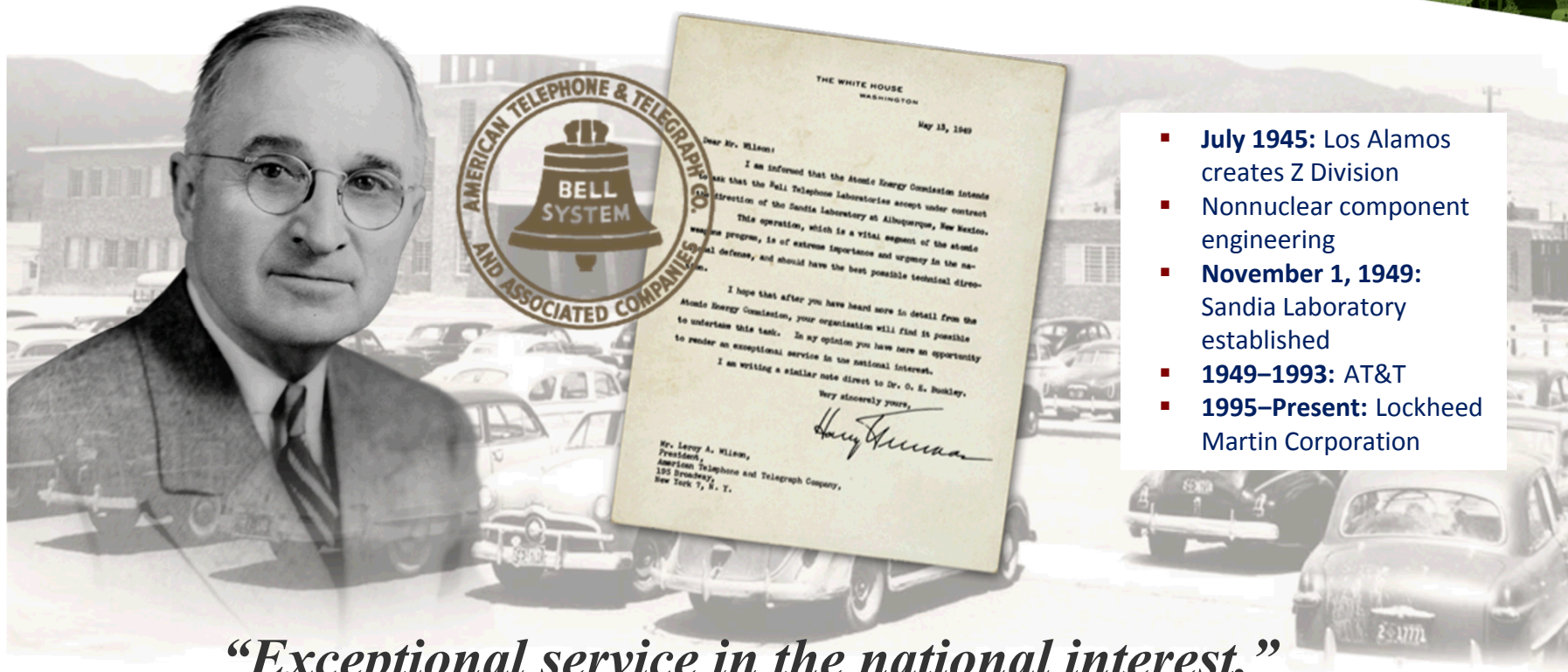
- **July 1945:** Los Alamos creates Z Division
- Nonnuclear component engineering
- **November 1, 1949:** Sandia Laboratory established
- **1949–1993:** AT&T
- **1995–Present:** Lockheed Martin Corporation

"Exceptional service in the national interest."

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OUR NATIONAL SECURITY MISSIONS

GLOBAL CHEMICAL & BIOLOGICAL DANGERS

SECURE & SUSTAINABLE ENERGY FUTURE

LEVERAGED DEFENSE INNOVATIONS

GLOBAL NUCLEAR DANGERS

NUCLEAR ASSESSMENTS & WARNINGS

CYBERSPACE

SYNERGISTIC DEFENSE PRODUCTS

NUCLEAR WEAPONS (NW)

LABS FOUNDATION

SINCE THE 1950s, SANDIA'S NON-NW MISSION WORK HAS INCREASED FROM 0% TO 60%

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WHERE ARE WE?

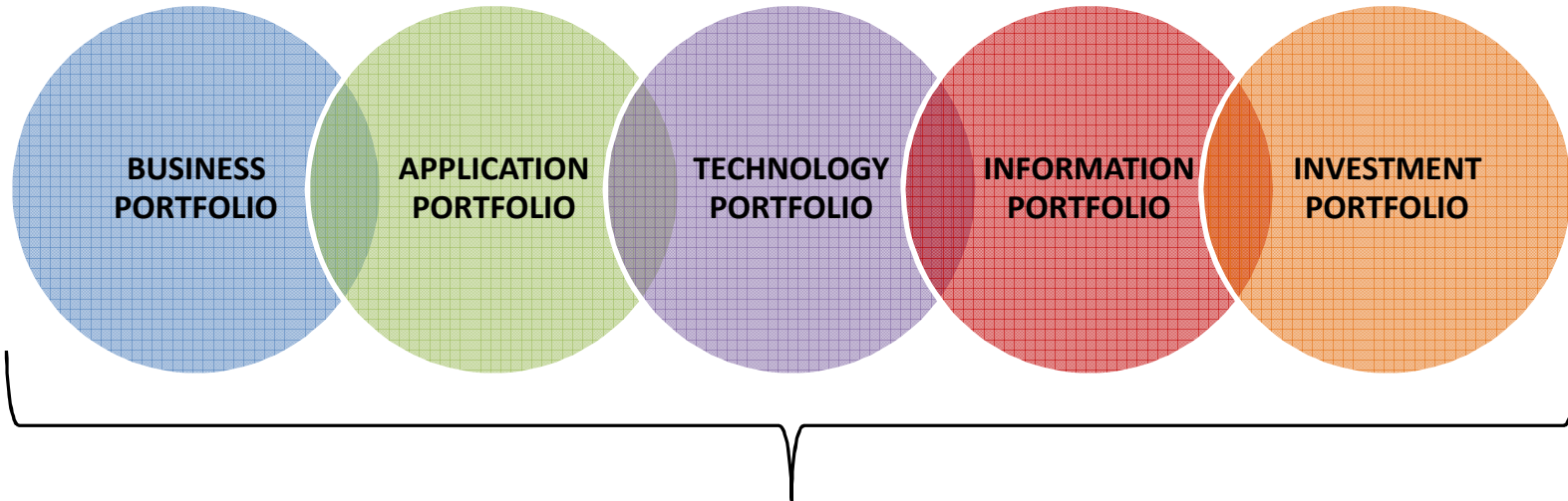Albuquerque, NM

Livermore, CA

Kauai, HI

Waste Isolation Pilot Plant, Carlsbad, NM

Pantex Plant, Amarillo, TX

Tonopah, NV

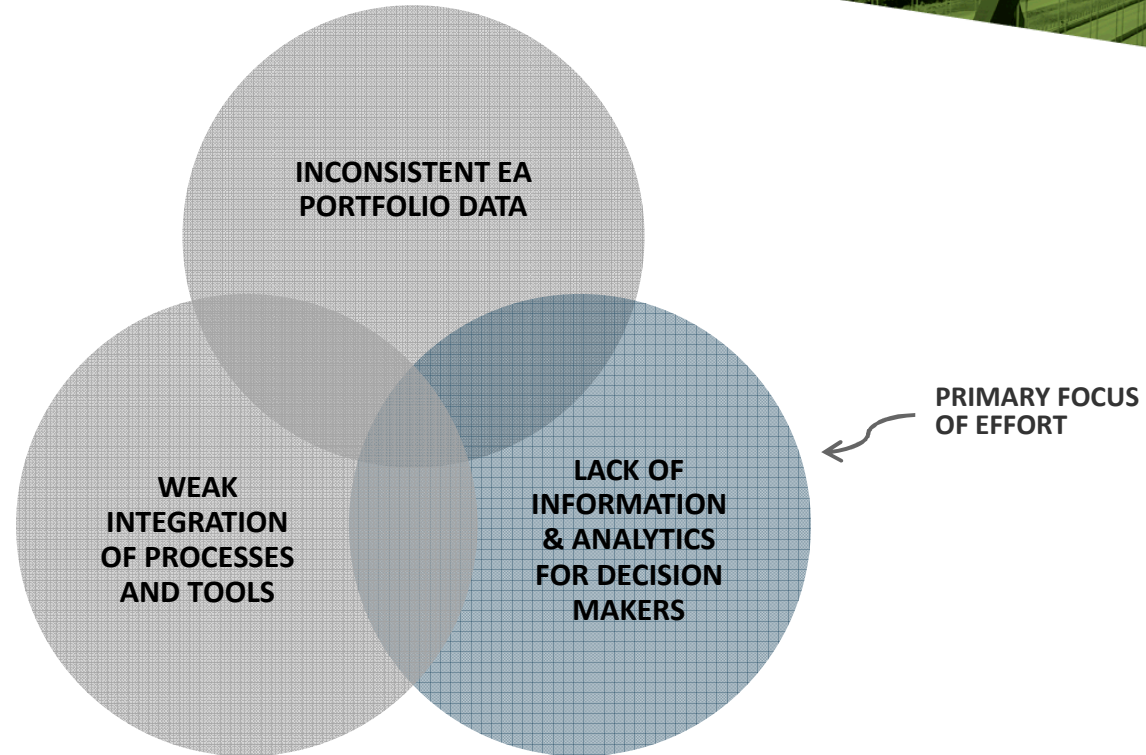**ON-SITE WORKFORCE OF 12251 EMPLOYEES (AND ABOUT A DOZEN EXTRATERRESTRIALS)**

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ENTERPRISE ARCHITECTURE: A CONCEPTUAL BLUEPRINT THAT DEFINES THE STRUCTURE OF AN ORGANIZATION.

BUSINESS PORTFOLIO

APPLICATION PORTFOLIO

TECHNOLOGY PORTFOLIO

INFORMATION PORTFOLIO

INVESTMENT PORTFOLIO

"THE INTENT OF ENTERPRISE ARCHITECTURE (EA) IS TO DETERMINE HOW AN ORGANIZATION CAN MOST EFFECTIVELY ACHIEVE ITS CURRENT AND FUTURE OBJECTIVES."

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PREVIOUS STATE OF SANDIA'S EA PROGRAM

INCONSISTENT EA PORTFOLIO DATA

WEAK INTEGRATION OF PROCESSES AND TOOLS

LACK OF INFORMATION & ANALYTICS FOR DECISION MAKERS

PRIMARY FOCUS OF EFFORT

WE STARTED WITH A CLEARLY ARTICLULATED PURPOSE:

DEPLOY AND EXPLOIT THE RIGHT TOOLS AND THE RIGHT PROCESSES, IN A LIGHTWEIGHT AND AGILE MANNER, TO MORE EFFECTIVELY EXPOSE, ASSESS, AND MANAGE SANDIA'S EA PORTFOLIOS.

NOW...HOW DID WE GET THERE?

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BE SPECIFIC IN TERMS OF SCOPE...

ESTABLISH INITIAL APPLICATION PORTFOLIO IN NEW TROUX VERSION → **DEVELOP INITIAL TROUX INSIGHT PERSPECTIVES** → **DEFINE, DOCUMENT AND IMPLEMENT THE DATA STEWARDSHIP PROCESSES**

ALL GOALS AND DELIVERABLES WERE TANGIBLE AND OBSERVABLE

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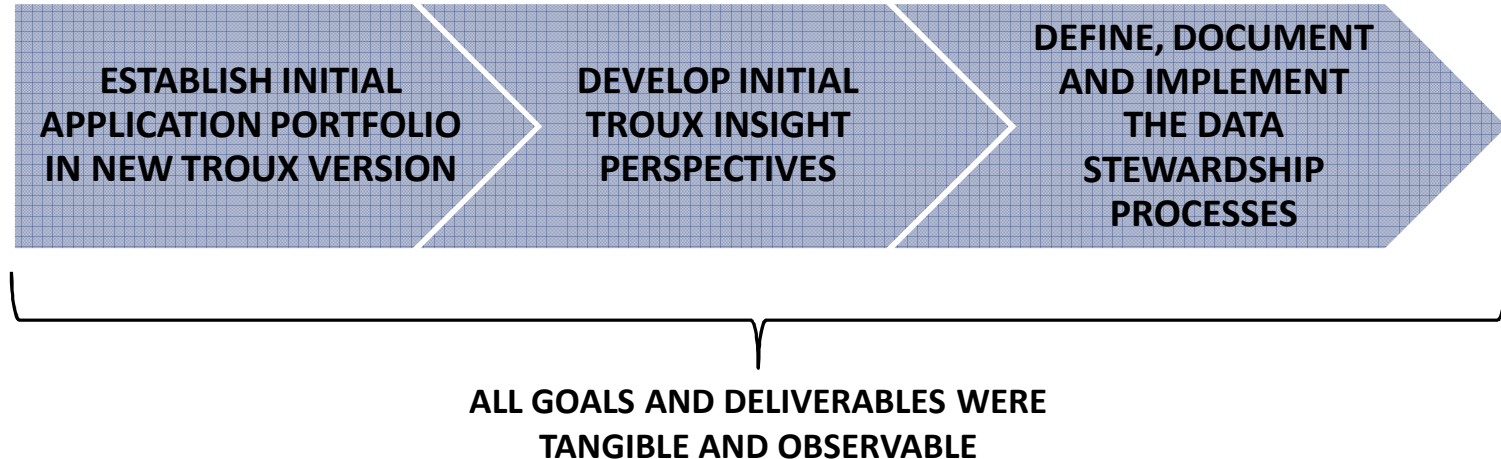
BE SPECIFIC IN TERMS OF SCOPE (CONT'D)...

THIS IS THE ULTIMATE STATE OF A ROBUST EA PROGRAM

DEPLOY BDNA NORMALIZE CAPABILITY

DEVELOP RISK-BASED INSIGHT PERSPECTIVES

ASSESS PORTFOLIO AND DEVELOP PROPOSALS (ONGOING)

ALL GOALS AND DELIVERABLES WERE TANGIBLE AND OBSERVABLE

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EMPLOY A PROCESS THAT GETS TO DONE...FAST...

Prioritized Product Backlog

Sprint Backlog

Daily Scrum Meeting

Every 24 Hours

Sprint or Iteration

15 - 45 Days

Backlog Tasks (Defined and Estimated During Sprint Planning)

Potentially Shippable or Finished ("Done") Work Product

TROUX DATA SOURCES

ENTERPRISE ARCHITECTS

ARCHITECTURE DECISION PROCESS (ADP)

ENTERPRISE PROJECT MANAGEMENT (EPM)

EA PORTFOLIO UPDATES

APPLICATION PORTFOLIO UPDATES

PROJECT INFORMATION

COMPLETED

PLANNED (NEAR TERM)

PLANNED (LONGER TERM)

TROUX

TROUX DATA COLLECTOR

PEOPLE & ORG INFORMATION

DATA WAREHOUSE

APPLICATION UPDATES

NORMALIZED IT ASSET INFORMATION

TECHNOPEDIA INTELLIGENCE

BDNA DATA EXTRACTOR

DATA STEWARDS

TECHNOPEDIA

DEPLOYED IT ASSETS

ADDM/SCCM/ CASPER

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TROUX 101

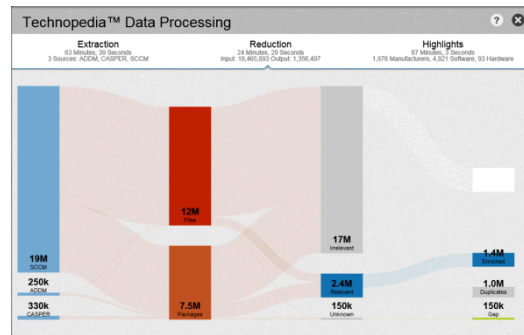TROUX ENABLES THE MANAGEMENT OF THE ORGANIZATION'S PORTFOLIOS...

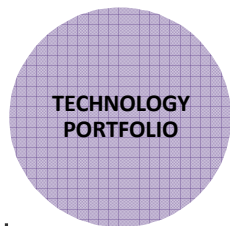AND EXPOSES PORTFOLIO INFORMATION TO ENABLE DATA-DRIVEN DECISION MAKING
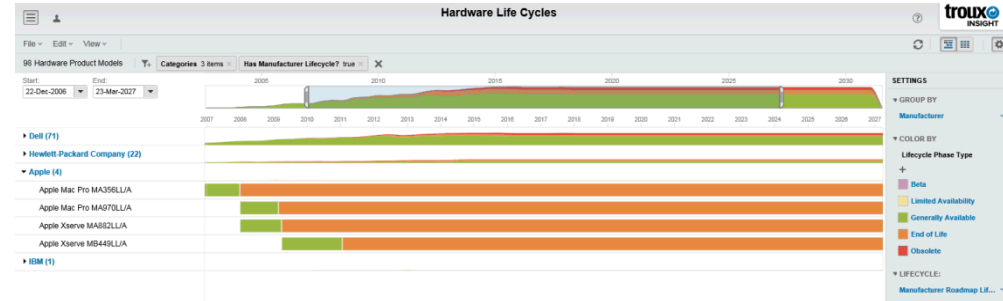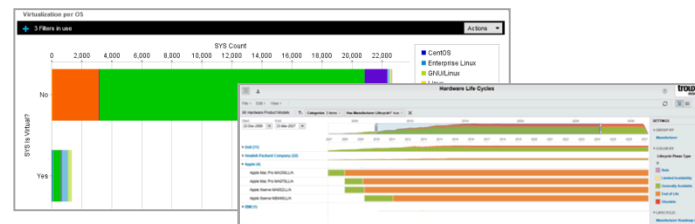
BDNA 101
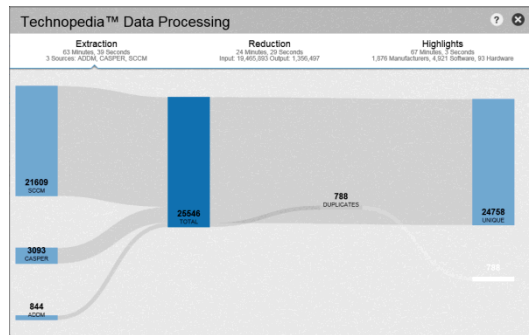
CULLS AUTO-DISCOVERED INFORMATION FROM 1...n
SYSTEMS

RENDERS AUTO-DISCOVERED DATA CONSISTENT & COMPLETE AND
ENRICHES IT ASSET INFORMATION (INCLUDING STANDARDIZED
CATEGORIZATIONS)

TECHNOLOGY
PORTFOLIO

POPULATES TROUX
TECHNOLOGY PORTFOLIO
(VIA INTEGRATION UTILITY)

ENABLES VIEWING OF ENRICHED TECHNOLOGY INFORMATION
IN BOTH TROUX AND *BDNA ANALYZE*

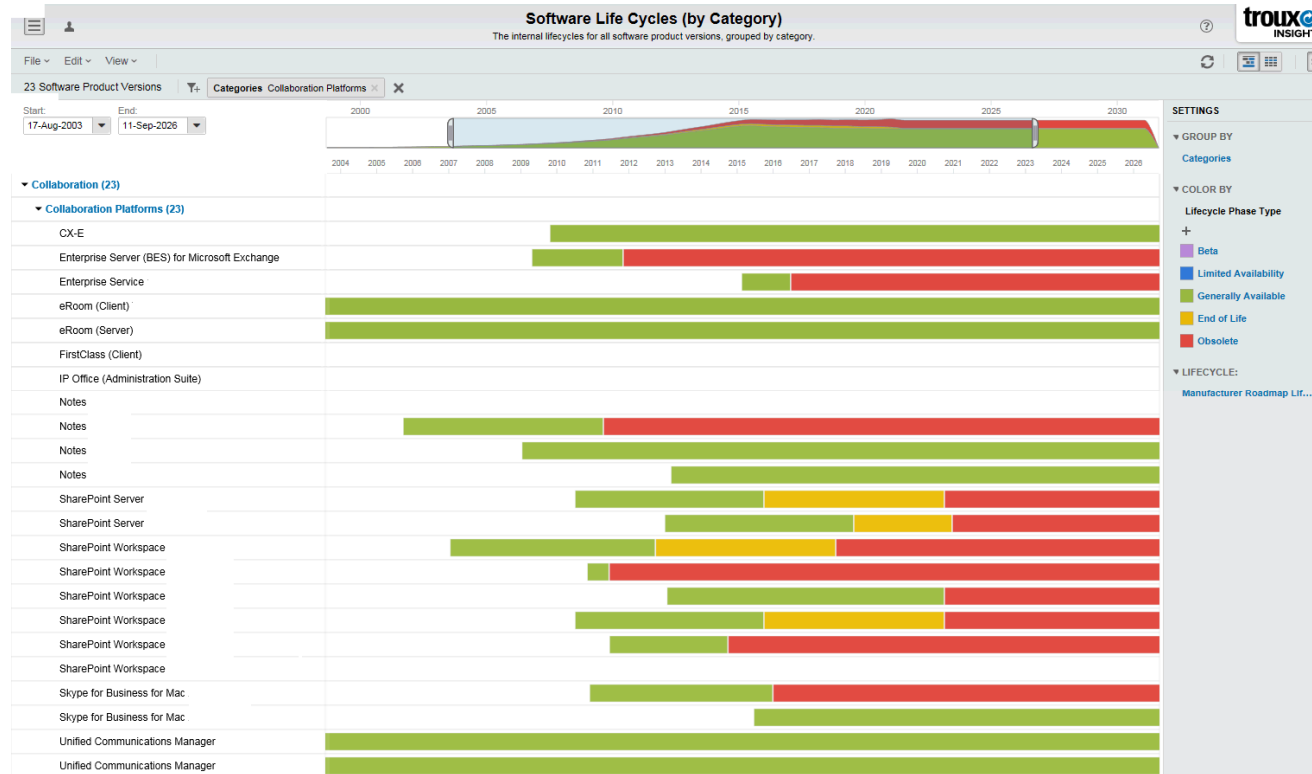**BUT EVEN IF WE IMPLEMENTED THIS SOLUTION SET – A KEY QUESTION WOULD REMAIN...**

WHAT DO WE WANT OUR ENTERPRISE ARCHITECTURE PROGRAM TO LOOK LIKE?
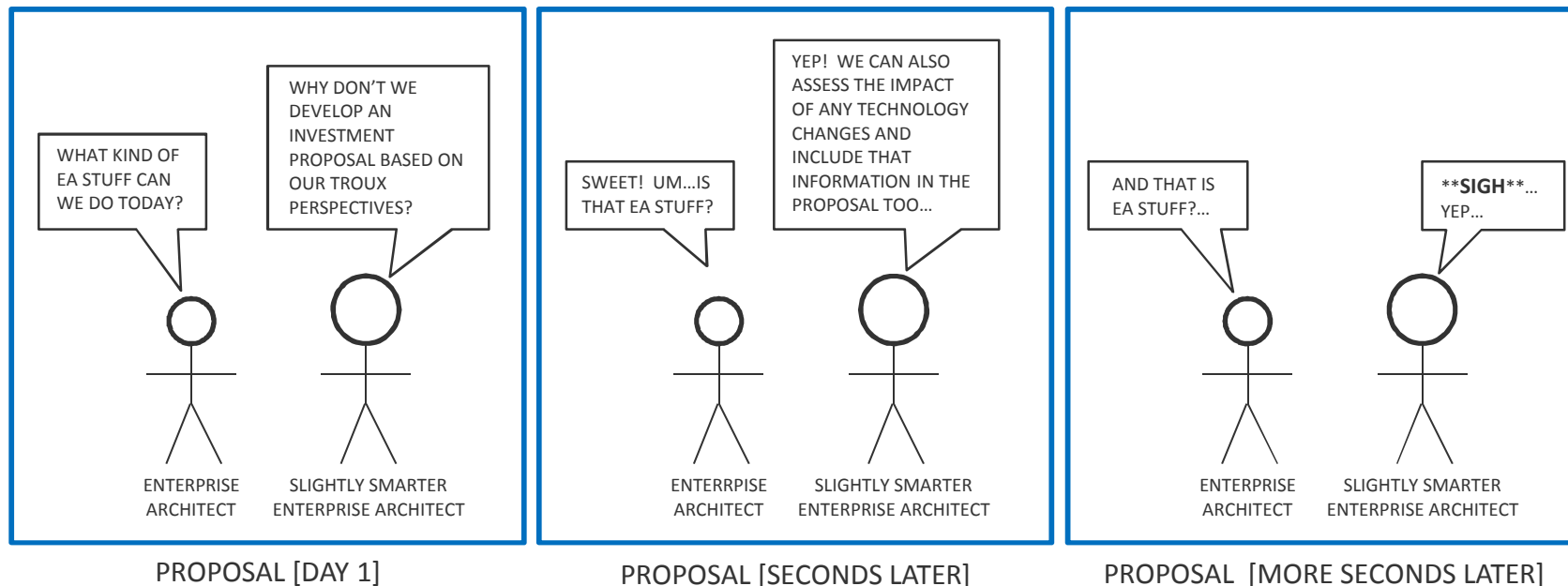
TROUX & BDNA VALUE – SCENARIO #1

KNOCKOUTS [DAY 1]   KNOCKOUTS [THE NEXT DAY]   KNOCKOUTS [THE NEXT-NEXT DAY]
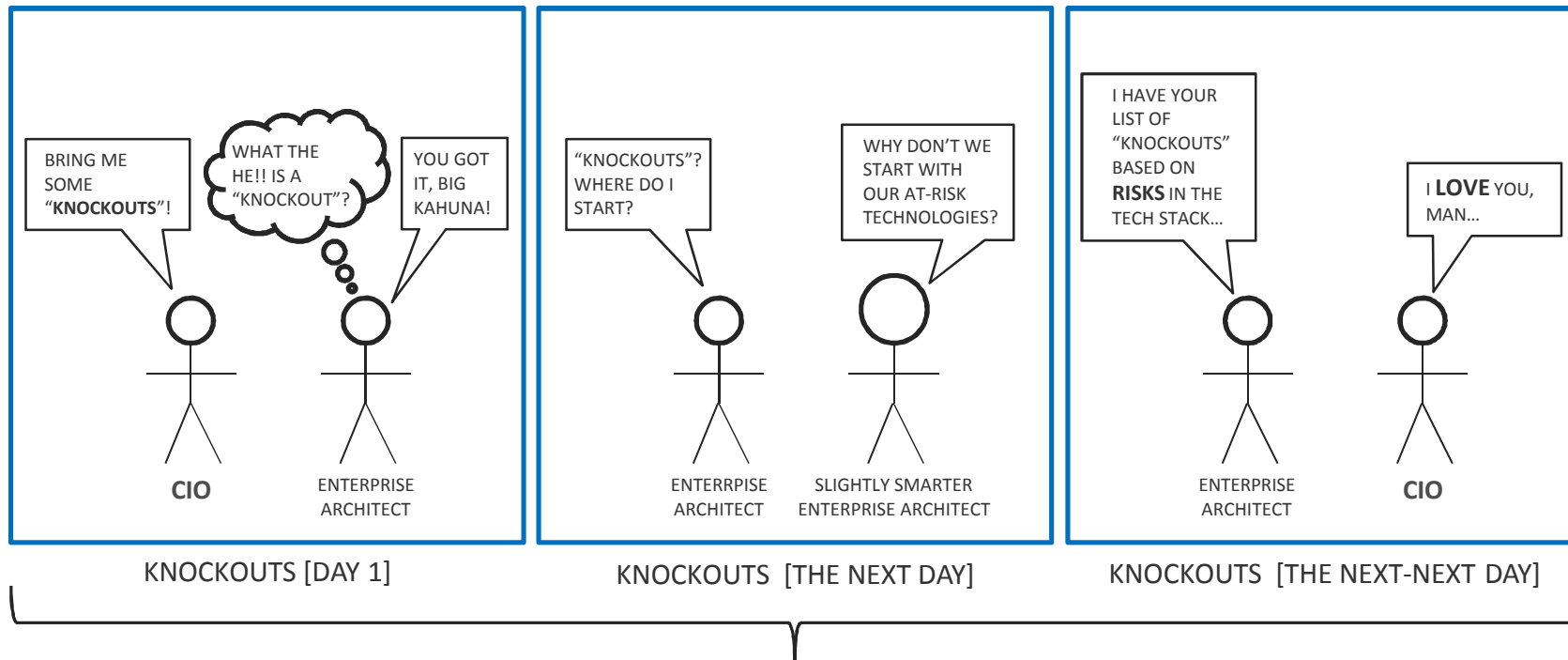
RISK-BASED PERSPECTIVES CAN DRIVE "KNOCKOUT" PRIORITIES

LIFE CYCLES AND RISK PERSPECTIVE

TROUX & BDNA VALUE – SCENARIO #2

PORTFOLIO-BASED PERSPECTIVES CAN DRIVE PROPOSAL DEVELOPMENT AND INVESTMENT DECISIONS
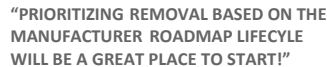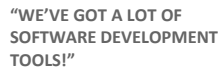
INFORMATION EVOLUTION

TROUX AND BDNA CAN BE USED IN CONCERT TO PROVIDE DECISION MAKERS WITH RAPID, HIGH-VALUE ANALYTICS

MORE EVOLUTION

PRODUCT COUNTS BY STANDARDS CATEGORY

"WE'VE GOT A LOT OF SOFTWARE DEVELOPMENT TOOLS!"

"WHY SO MANY DEVELOPMENT ENVIRONMENTS AND HOW DO WE PRIORITIZE THEIR REMOVAL?"

"PRIORITIZING REMOVAL BASED ON THE MANUFACTURER ROADMAP LIFECYLE WILL BE A GREAT PLACE TO START!"

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QUESTION:

WHERE DOES THE MAJORITY OF RISK (AND COMPLEXITY) EXIST IN YOUR EA PORTFOLIO?
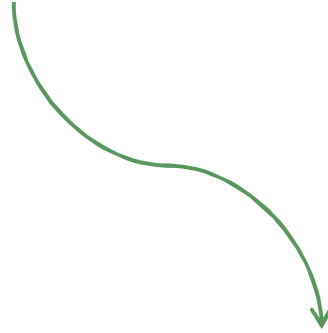
ANSWER (AND ANOTHER QUESTION):

IT IS MOST LIKELY THAT THE MAJORITY OF RISKS AND COMPLEXITIES ARE IN YOUR TECHNOLOGY PORTFOLIO...BUT WHY?

THE SHEER VOLUME AND SCOPE OF THE TECHNOLOGY PORTFOLIO CREATES RISK AND COMPLEXITY

66,796 (7.87%)
59,649 (7.02%)
103,874 (12.23%)
71,975 (8.48%)
546,827 (64.40%)

- 1E
- Adobe Systems
- Apple
- Microsoft
- Oracle

THE TROUX-BDNA SOLUTION ALLOWS ORGANIZATION TO EFFECTIVELY MANAGE THEIR IT ASSETS BY CREATING TRANSPARENCY AND CLARITY WITHIN THE TECHNOLOGY PORTFOLIO

THE GOLD STANDARD
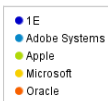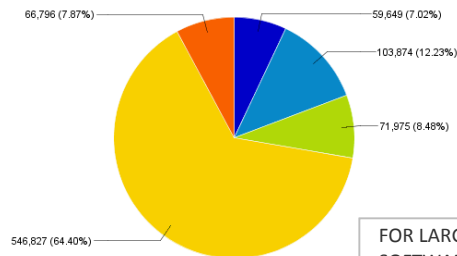
FOR LARGER ORGANIZATIONS THE NUMBER OF SOFTWARE INSTALLATIONS CAN BE DAUNTING

Software EOL within 6 months

5 Filters in use

2015

2016

Install Count
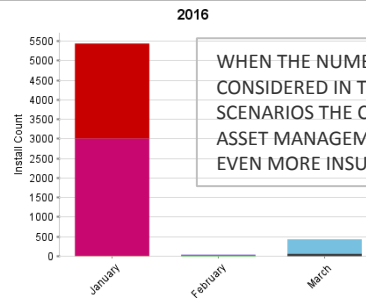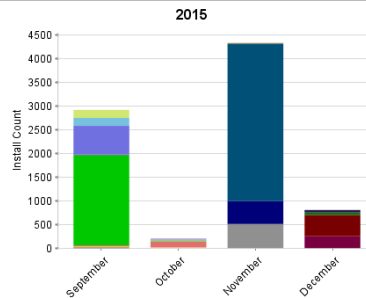
WHEN THE NUMBER OF INSTALLS ARE CONSIDERED IN THE CONTEXT OF EOL SCENARIOS THE CHALLENGE OF IT ASSET MANAGEMENT CAN SEEM EVEN MORE INSURMOUNTABLE

September   October   November   December

January   February   March

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THE APPLICATION LANDSCAPE CAN MASK COMPLEXITY

VIEW OF THE APPLICATION ENVIRONMENT

UNSEEN COMPLEXITY OF THE UNDERLYING ARCHITECTURE
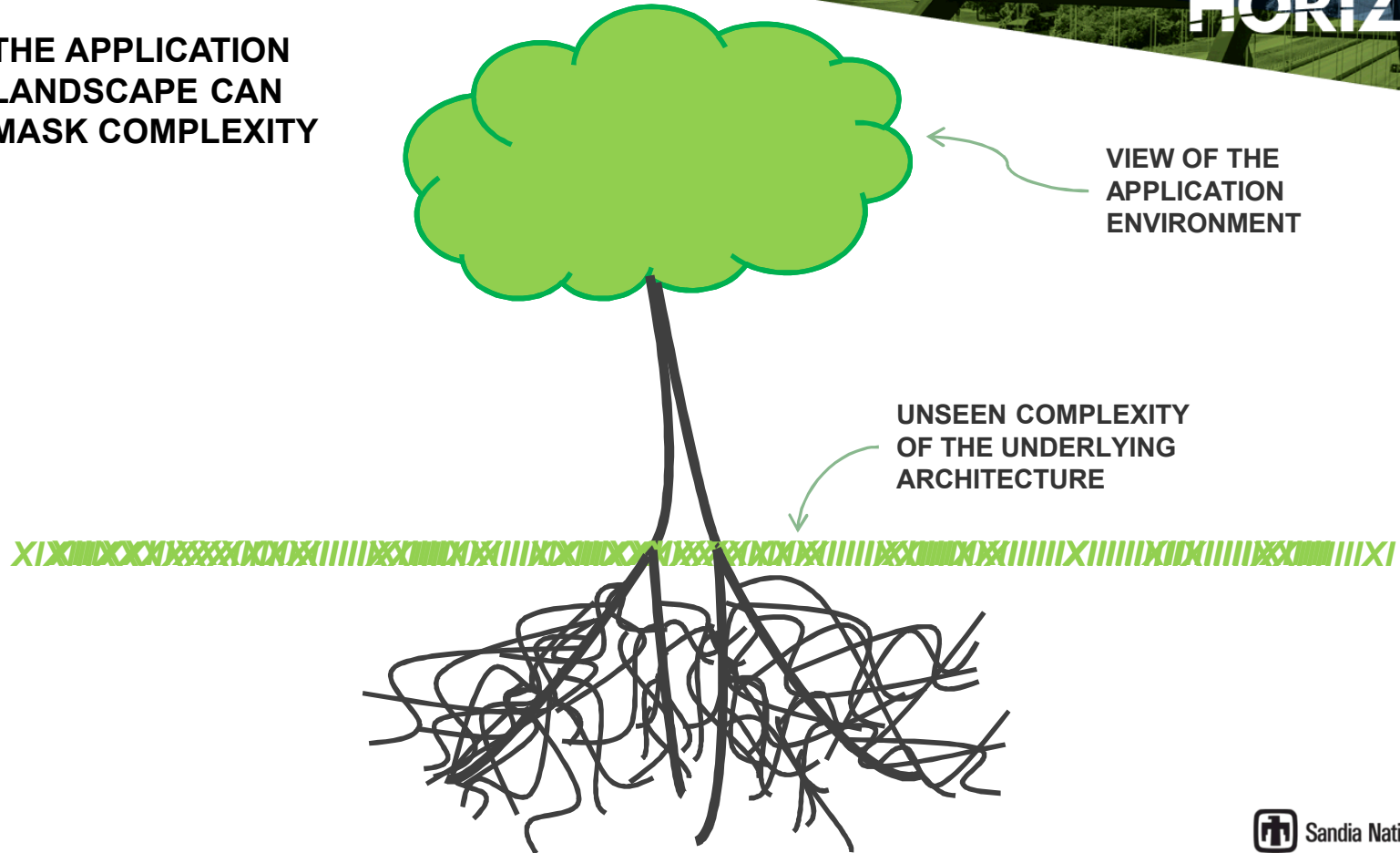
A RISK LESSON (FROM THE PAST…)

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| EXPERIENCED A CYBER INCIDENT ~3 YEARS AGO | → | IMPLEMENTED TROUX WITH TECHNOPEDIA NORMALIZE | → | NOW MONITOR AND ASSESS ALL EXISTING TECH AND DEVELOP PLANS AND PROGRAMS TO MANAGE RISK |

"The event that triggered this enterprise's ITAM initiative for cybersecurity purposes was the leverage by hackers in 2012 of Adobe's ColdFusion product. The out-of-date versions of ColdFusion provided an entry point into the data structures within multiple enterprises to pull content from DLLs as implemented in common operating systems."
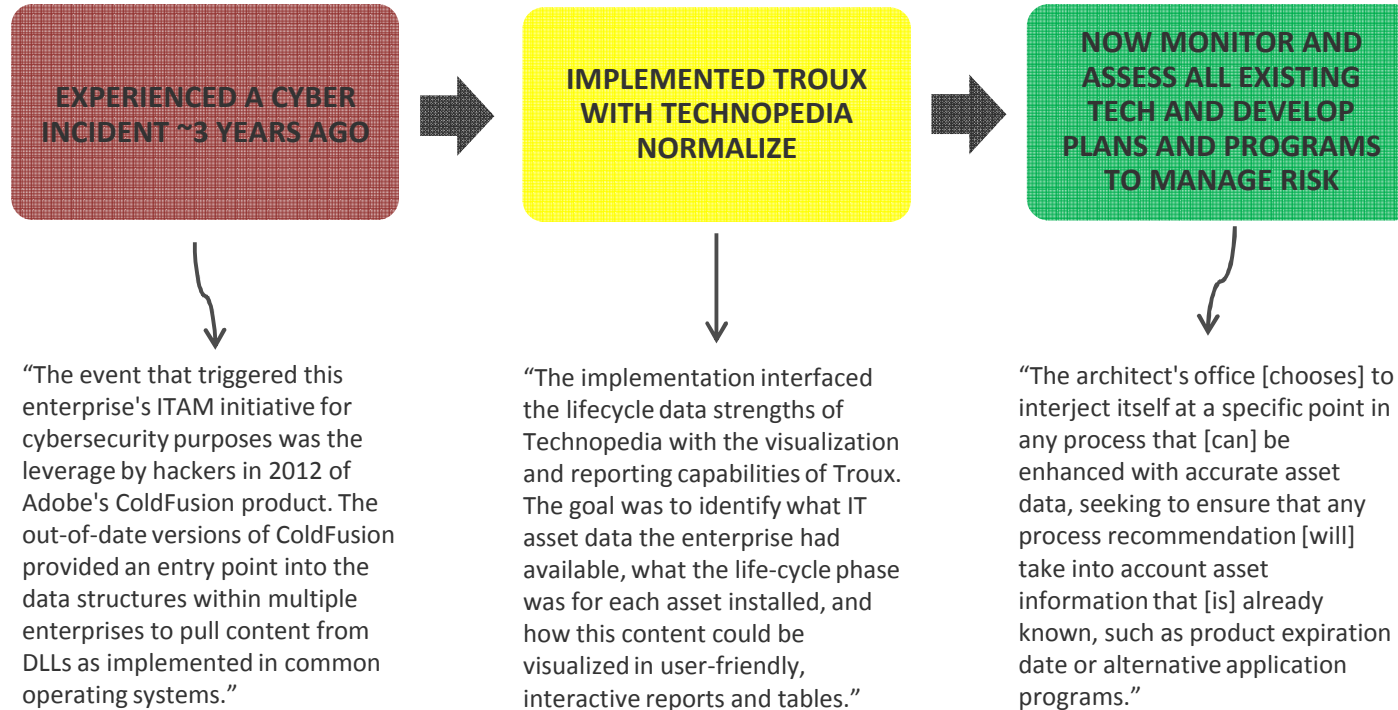
"The implementation interfaced the lifecycle data strengths of Technopedia with the visualization and reporting capabilities of Troux. The goal was to identify what IT asset data the enterprise had available, what the life-cycle phase was for each asset installed, and how this content could be visualized in user-friendly, interactive reports and tables."

"The architect's office [chooses] to interject itself at a specific point in any process that [can] be enhanced with accurate asset data, seeking to ensure that any process recommendation [will] take into account asset information that [is] already known, such as product expiration date or alternative application programs."

Keyworth, Bill, "IT Security: World-Class Enterprise Eases Cybersecurity Mandates", IDC Opinion, 2014.

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WHAT'S NEXT?

IT SERVICE MANAGEMENT INTEGRATION

TARGETED REPORTING PACKAGES

AUTOMATED ARCHITECTURE VETTING

INCREASED LIFE CYCLE MANAGEMENT & CYBER FOCUS

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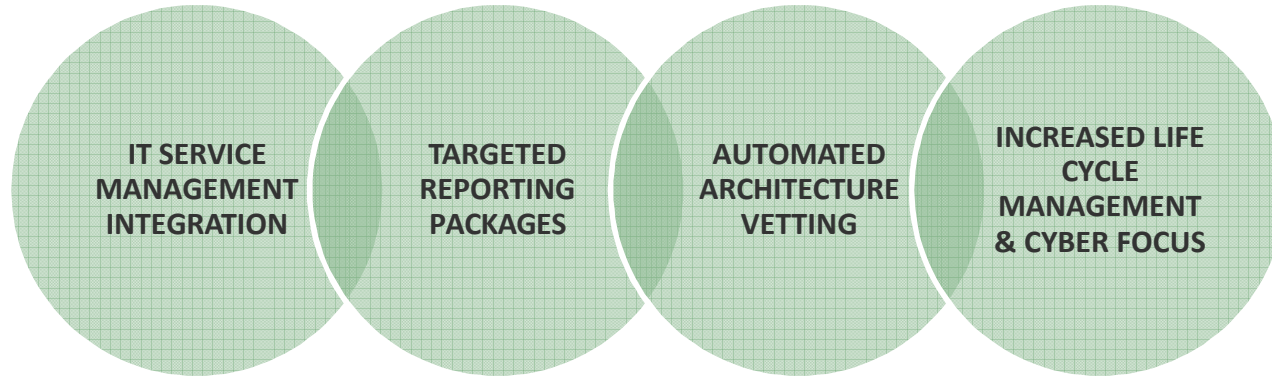
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Thank you!

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https://www.linkedin.com/pub/william-j-robinson/8/b75/b26