

The background of the top half of the image features a central point from which numerous thin, multi-colored lines (blue, purple, pink, yellow) radiate outwards, resembling a starburst or fireworks. The right side of the image has a vertical gradient from dark yellow to bright yellow.

SAP Leonardo Live

Not just another business conference

Activate the Power of Connected Data Through Machine Learning-Based Live Insights

Helen Arnold, President, SAP Data Network
@Arnold_IH #SAPDataNetwork #LeonardoLive

PUBLIC

How important is generating value from data for your business?



Connected data

New realities

- **Exceptional** value in data through transactional and combined data
- **Machine learning** algorithms – exposed to massive data sets – become smarter. Move from Big Data to fast and actionable data.
- **Insight** is necessary but not sufficient. **Action** is essential.

80% of data is dark data



How and where to begin?

Artificial intelligence (AI) and machine learning (ML) technology ready for prime time

“Just as electricity transformed almost everything 100 years ago, ... AI will transform (industry) in the next several years.”

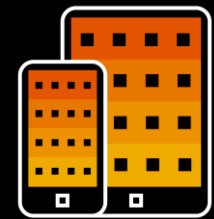
Andrew Ng



Artificial Intelligence &
Machine Learning, IoT,
Insights



Embedded Machine
Learning, Analytics
providing built-in guidance



Conversational
Applications: the new
User Experience

Digital transformation through data

Light up your dark data

Descriptive



What happened?

Diagnostic



Why it happened?

Backward looking
Understanding the problem, root-causing the issues

Revolutionize value

Predictive



What will happen?

Prescriptive



What action to take?

Forward looking
Embedded, real-time decision making

Technical inhibitors

- Data spread across 7–8 systems
- Takes too long to join and transform the data
- Poor quality of data, takes too long to cleanse

Business inhibitors

- Cultural mindset and structural issues
- Data privacy and security concerns
- Lack of sponsorship within the organization
- Lack of digital skills

Four distinct ways to generate value from data



Connected data is in the center to power your digital transformation

1 Use connected data to improve operational excellence

Imagine you automatically consume, process, and act on data insights from **transactional data in real time using machine learning** by integrating them into your application

Examples:

- Forecast replenishment
- Predict maintenance
- Hire the right people – accelerated time to value



Connected Data Takes Recruiting to the Next Level

Live Demo



Evidence-based recruiting

Imagine your recruiting process embeds “evidence” in every step of the recruiting process

- Add data-driven clarity from transactional data to the hiring process
- Secure the best talent faster by combining the power of connected data and machine learning
- Act on talent strategies in real time through simulations and predictions



Drive better business outcomes

SAP Fieldglass Live Insights



SAP Fieldglass 

Simulate and predict
external talent scenarios
real-time benchmarks.

Accelerate Digital Transformation Through Data **Reference Schindler**



Schindler data initiative Live Install



The screenshot shows a user interface for 'Live Install'. At the top, there is a circular icon with a mountain peak. Below it, the text reads 'Welcome to **Live Install!**'. A prompt says 'Please select a service to continue'. Three service options are presented in circular icons:

- Installation Tracking**: Includes icons of a wrench, a screwdriver, and a ruler. Role: SUPERVISOR Schindler.
- Client Installation Tracking**: Includes an icon of a building. Role: PROPERTY MANAGER Silverstein Property.
- 360° Elevator Lifecycle**: Includes an icon of a document with a graph. Role: PROPERTY MANAGER Hearst Tower.

Imagine a digital platform where all parties are connected and information is shared in real time

Example – leading-edge digital services

- New revenue opportunities discovered through
 - Premium service: 360-degree elevator lifecycle
 - Real-time customer installation tracking
 - Ability to predict issues and raise alerts during installation process



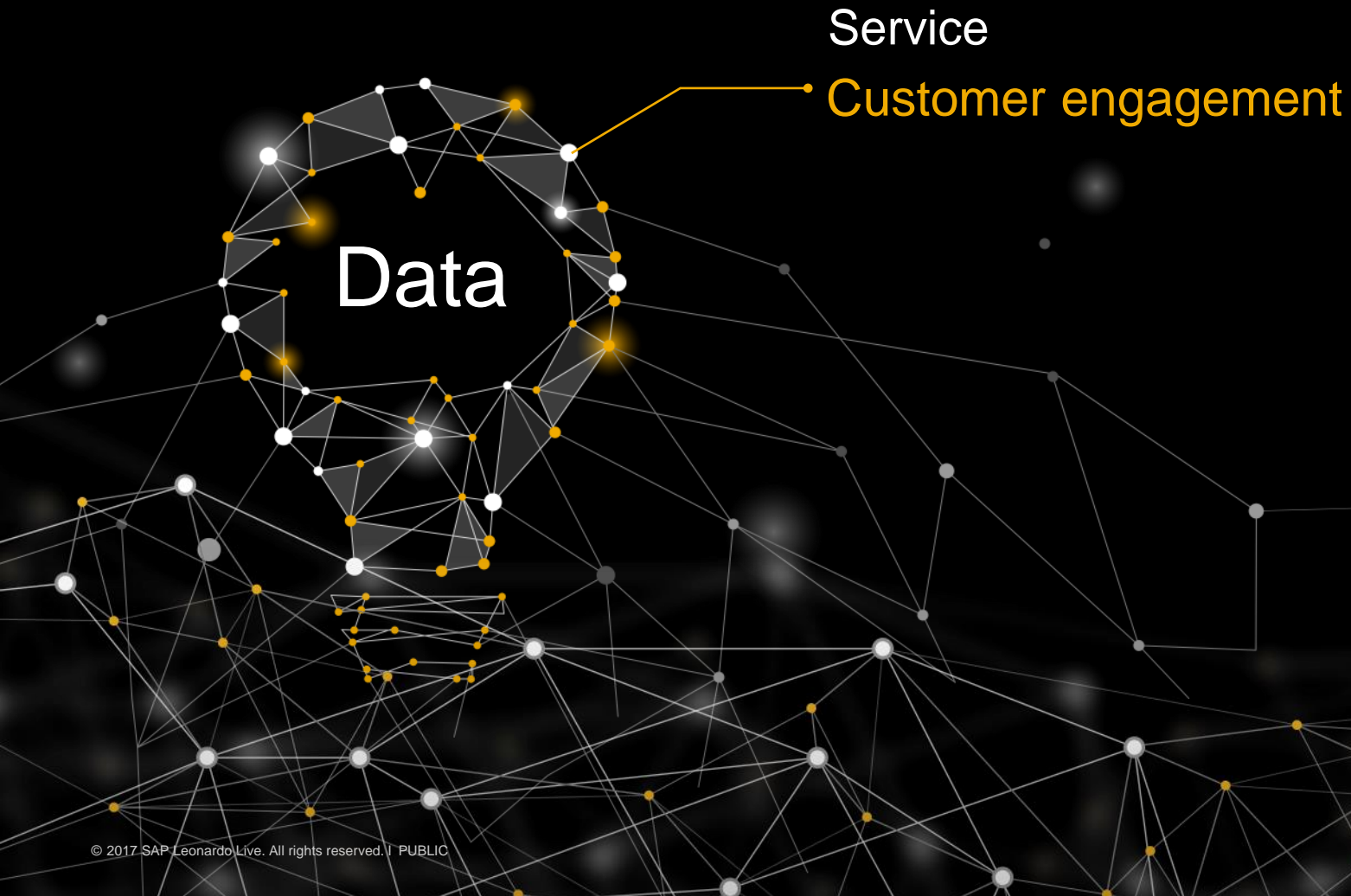
1 Schindler data initiative Live Install

Improve
Operational excellence

Data

The screenshot displays a mobile application interface for 'LIVE INSTALLATION' by Suzan Hurst. The main view shows project details for 'Elevator 8745639' with a 'low risk' status and a '97%' completion indicator. Key metrics include a forecast date of 4/20/17 (due 2 days), 330 forecast hours (under budget by 10 hours), and 97% forecast spend. The interface includes a 'Project Steps' section with a progress indicator for 'Step 7: Substeps', specifically 'Confirm master installation checklist'. A 'Review Installation Checklist' modal is open, showing a video recording of the installation site with a 'Review Installation Checklist' overlay. The checklist includes items like 'Sensor data records review' and 'Handover to customer'. At the bottom, there are 'Reject' and 'Approve' buttons. A weather widget shows 55°F with heavy rain on Thursday and 57°F with severe thunderstorm on Friday. A summary at the bottom right shows 0 reported hours and 94% of budget forecast spend.

2 Schindler data initiative Live Install



Client Installation Tracking

James Lewis

Address: Three World Trade Center, 175 Greenwich Street
Owner: Silverstein Properties
Type: Schindler 5500

10%

Expected Readiness Date	Due Date	Hours Already Spent	Budget Hours
5/18/17	5/18/17	40	400

Project Steps

1. Confirm Site Plan
2. Control Site Preparation
3. Call Off Material
4. Material Delivered
5. Installation start
6. Installation End
7. Final Approval & Handover

Step 2 Substeps

Substep	Completed on	Details
Access to site ready	4/11	...
Shaft ready		...
Electricity available		...

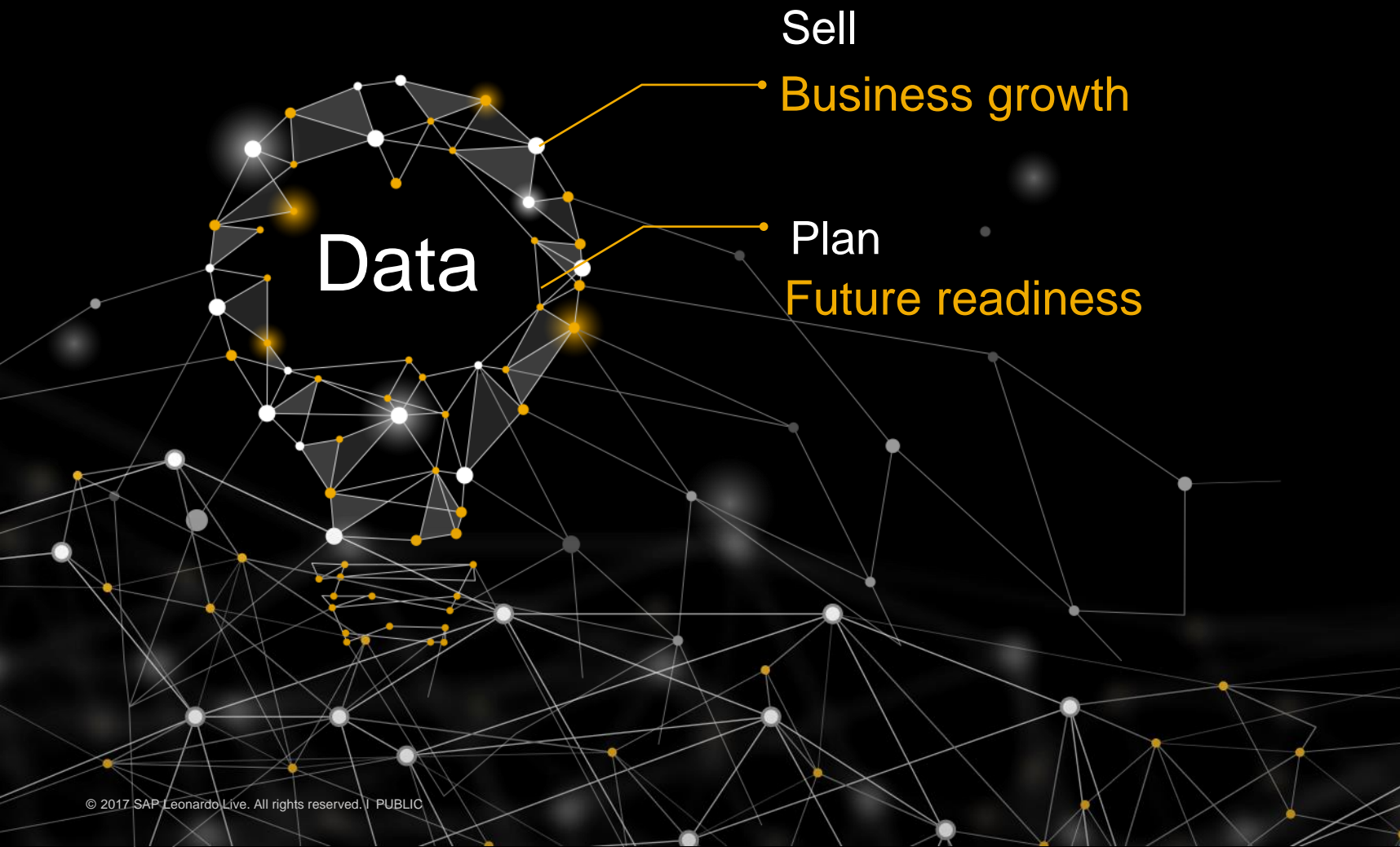
Step 2 Indicators

40% Completion	4/23 Forecast Date (▲ 0 days)	8 Spent Hours
----------------	-------------------------------	---------------

Delay Mitigated ▲ 0 Days

Reason	▲ 3 days	Weather conditions, power setup delayed by GE
Mitigation	▼ 3 days	Increased workforce by 1 external worker reduced the delay by 3 days

3 4 Schindler data initiative Live Install



360° Elevator Lifecycle
Jack Roberts

Hearst Tower, Elevator 945856254 12

Address: Hearst Tower, 300 West 57th Street, 959 8th Avenue
 Client: Hearst Cooperation
 Type: Schindler 7000

Date of Installation
6/2/16

Operating Hours
6,768

Current Status
Green

Latest Health Check Report 3 days ago

■ Elevator Real Data ■ Expected

<p>Supervisory Systems</p> <ul style="list-style-type: none"> Tele-Alarm ● Tele-Monitoring ● <p>Emergency Components</p> <ul style="list-style-type: none"> Evacuation system, battery ● Emergency cabin light ● Special operation mode ● <p>Internal Systems</p> <ul style="list-style-type: none"> ● 	<p>User-relevant Systems</p> <ul style="list-style-type: none"> Door opening & closing ● Cabin movement & speed ● Overload measurement ● Light curtain of door ● Cabin levelling accuracy ● Cabin light ● Buttons & indicators inside cabin ● Buttons & indicators outside cabin ●
---	---

Upcoming Tasks

	Scheduled on	Details
<input type="radio"/> Cleanup Service	5/11	⋮
<input type="radio"/> Maintenance Service	5/12	⋮

Document Center

Data initiatives – lessons learned



Agility
Rigid discipline



Data quality
“Vorsprung durch Qualität”



Mind-set and collaboration
Transformative power



Value – humble beginnings
Small is beautiful



Prototyping
Seeing is believing



Skills
Lack of digital skills

**Power of connected data –
opportunities outweigh
the risks**

How and where to begin?



SAP Leonardo

Digital Innovation System

Solution Ideation
& Vision



Rapid
Prototyping



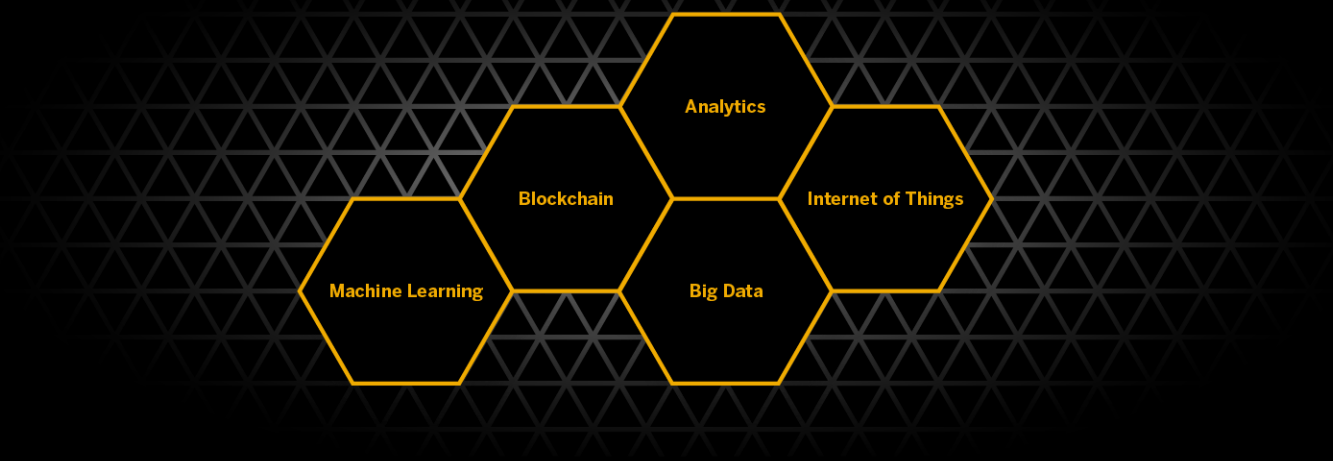
Business Case
Development



Technology
Blueprint

**SAP Leonardo
Capabilities**

Design Thinking
Services



SAP Cloud Platform

Microservices | Open APIs | Flexible Runtimes | Integration

Multi-Cloud Infrastructure

SAP Data Center



Microsoft Azure



Data intelligence is not **just about data**

Constant data flow

- Real time
- Transactional
- Multisources and formats

Infrastructure and governance

- (Un)+structured
- Anonymization
- Private and confidentiality

Interconnectivity

- Normalization across domains and customers
- Insights from connected data

Context-sensitive

- White labeling
- Extensibility
- Ecosystem-enabling

Cloud attributes

- Consumption-based
- Short update cycles
- Easy on-/offboarding

Data
Ingestion

Data
Storage

Data
science

Data
Distribution

Data
Consumption

- ✓ Data quality
- ✓ Data cleansing
- ✓ Streaming data
- ✓ Self-service preparation

- ✓ Metadata management
- ✓ Security and governance
- ✓ Multitenancy

- ✓ Machine learning
- ✓ Computing framework
- ✓ Modeling and algorithms

- ✓ Content distribution
- ✓ One-to-many cloud deployments
- ✓ REST APIs

- ✓ Visualization
- ✓ Usage metering
- ✓ Commercialization
- ✓ Scalability

Get started with your first prototype

Timeline Value in 4 months

3 days – ideation workshops with customer

Ideation

4 weeks – prototype

Exploration

3 months – proof of value

Go to market

Production



Value from the get-go

Ideation – run through workshop framework

- Prioritize scenarios
- Identify value drivers
- Map needs to data assets
- Document data assets, availability and privacy considerations.
- Ensure fit for business need
- Determine business case and market value

Present business case to stakeholders for approval.

Piloting

- Deliver intelligence in data and show tangible value
- Visualize Insights
- Sandbox environment
- Test with internal stakeholders
- Define business model

Value realization

- 3 months – proof of value
- Finish MVP build
- Test with key customers
- Develop business and distribution models

Productive use

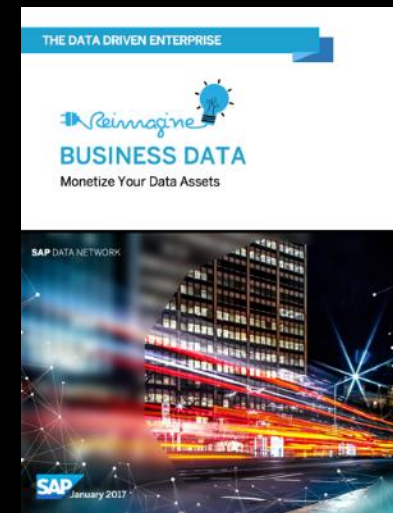
- Production environment
- Cloud SLA
- Global deployment
- Back-end integration

Book your **ideation workshop** now

E-mail us: datanetwork@sap.com

Download our **white paper**

www.sapdatanetwork.com/Reimagine.pdf



© 2017 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.

See <http://global.sap.com/corporate-en/legal/copyright/index.epx> for additional trademark information and notices.