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# 17 to 1

" ALL THE NEWS  
YOU NEED TO KNOW "

# News·Today

MONDAY, OCTOBER 2012  
Vol. MCMXX, No. 144672

FOUNDED 1851

# BAD NEWS!!

adpdpou i pe

**Mirror NEWS** How we use cookies

Real news, real entertainment... in real time

FRONT PAGE **US (X)** SPORT 3AM TV LIFESTYLE MONEY PLAY OPINION

News · UK News · Christmas storms

# Energy company promises to TRIPLE compensation for people affected by Christmas storm power cuts

Dec 28, 2013 12:53 By Jessica Beest 1 Comments

**news.com.au** Elizabeth has a mom network.

National World Finance Sport Entertainment Lifestyle Travel Technology Video

You are here: news.com.au World

## world

# CEO for UK Power Networks, Australian businessman Basil Scarsella grilled by MPs over Blackout Britain

This story was published: 16 DAYS AGO | JANUARY 21, 2014 9:56PM

**4 News** WATCH LIVE 7pm weekdays

UK WORLD POLITICS BUSINESS SCIENCE TECHNOLOGY CULTURE

SATURDAY | 28 DECEMBER 2013 | UK

# We saw nobody at Christmas: anger grows as power stays off

*“The electric utility model is  
doomed to obsolescence”*

**Bloomberg**

THE SAN DIEGO  
**UT**  
UNION-TRIBUNE

92¢  
PLUS TAX

- **Massive outage:** 1.4 million SDG&E customers powerless
- **The cause:** Failure in Arizona triggered cascade of events
- **No school:** All county public schools are closed today
- **Water worries:** City issues boil-water order in some areas
- **What's next:** Power to be restored in waves into Saturday



Darkness envelops downtown San Diego as the region endures Thursday's massive power outage, which began at 9:38 p.m. SEAN M. HAPPEY • UT

# BLACKOUT

2 MAIN LINKS TO

OUTAGE CALLED

Columbus, Ohio • Apr 06, 2014 • 53° Partly Cloudy

# The Columbus Dispatch

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Today

Hot Links: Plane crash • Photos: Crew • Gov. Kasich's dropout plan • Abbott Nutrition • The Mailbox • Towing bill p

Home > News > Business

## Does AEP do a good job keeping the power on? State thinks so



View Larger

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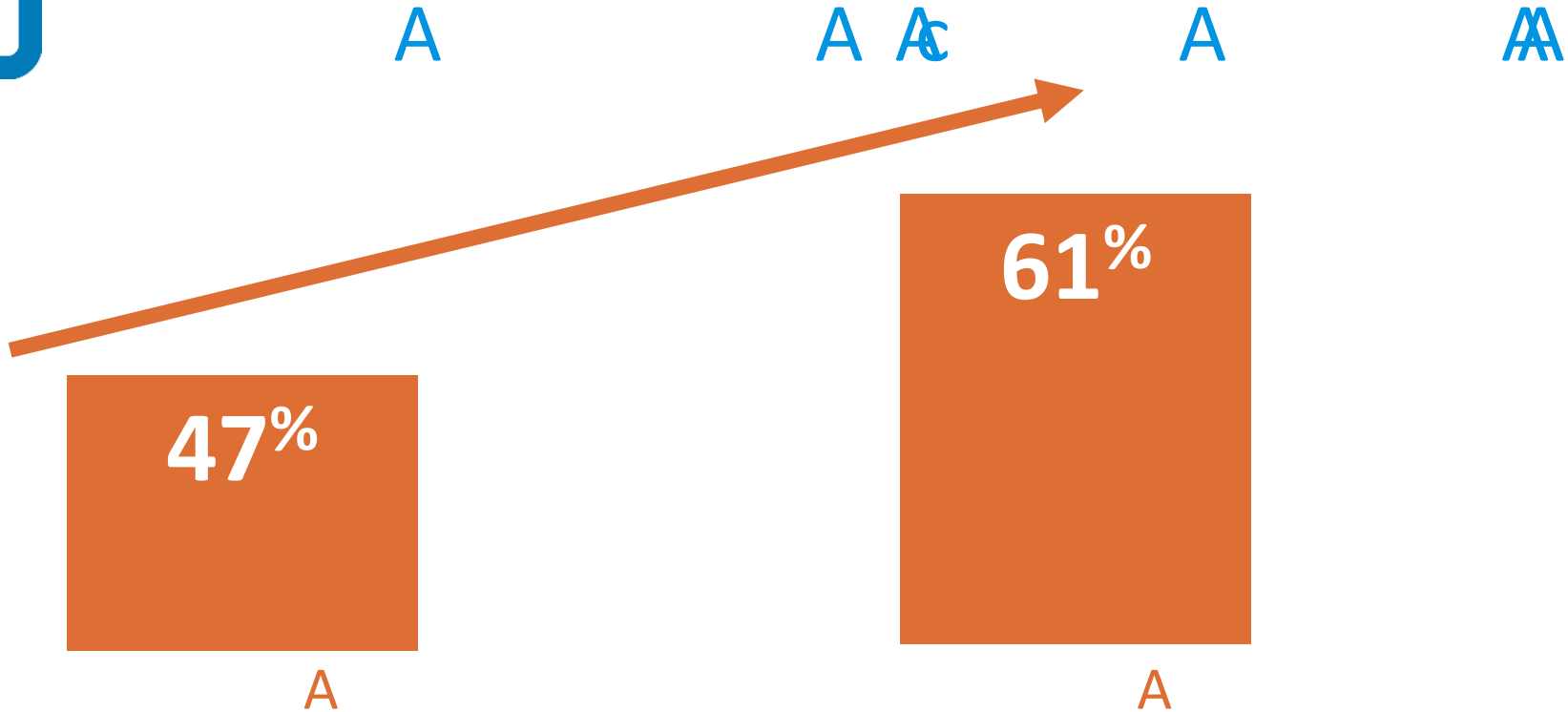
Twitter







# IT priorities:



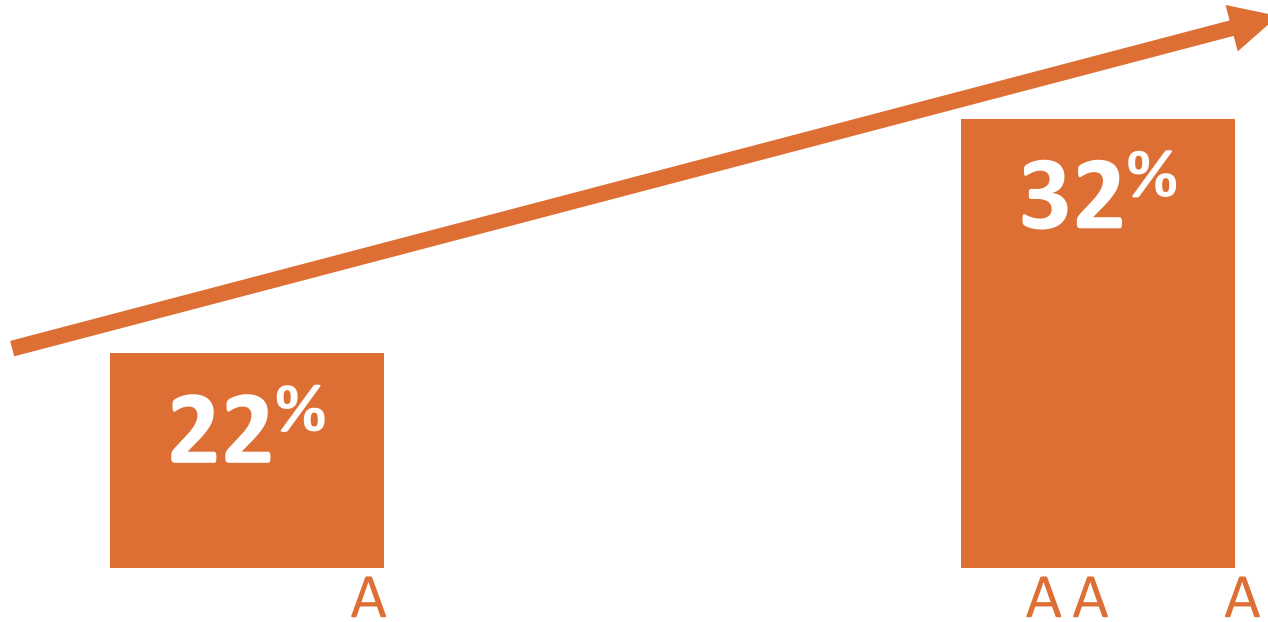


# IT spending:

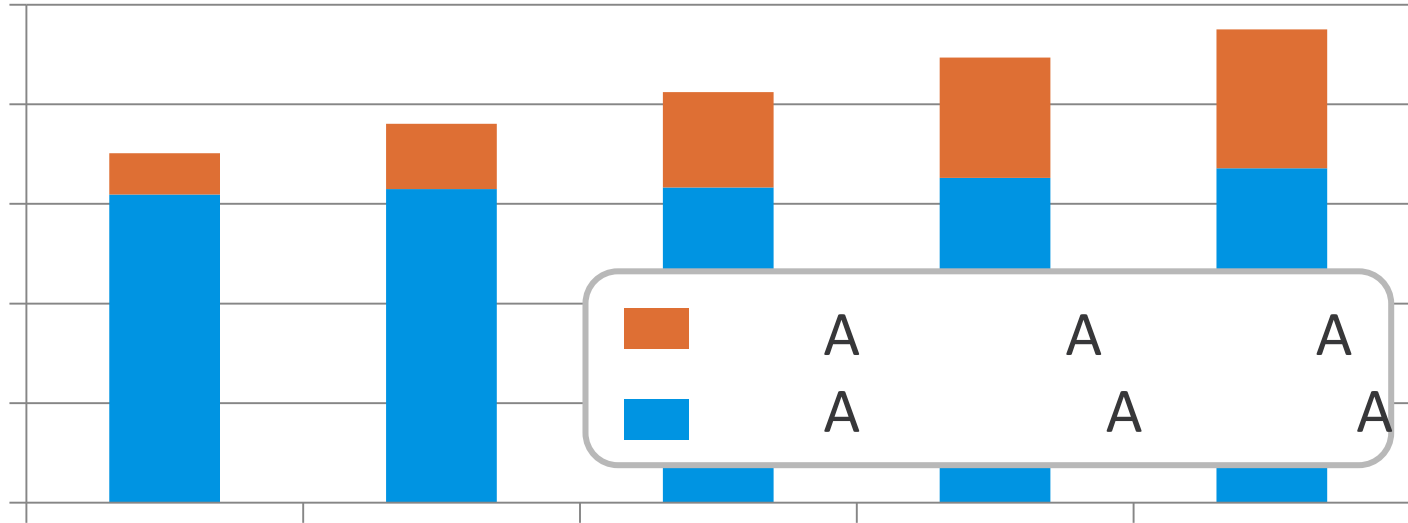
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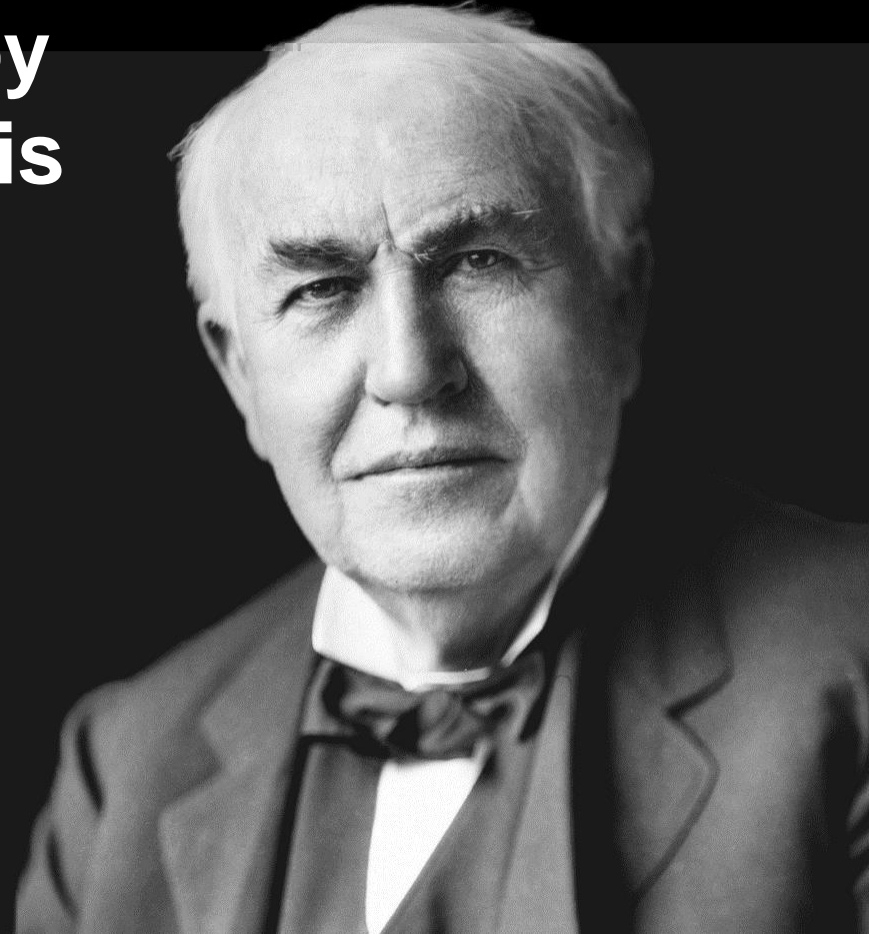


# Asset Health and Analytics Software



**Opportunity is missed by most people because it is dressed in overalls and looks like work.**

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# What are today's challenges?

**1. Needs**

**2. Generation & storage**

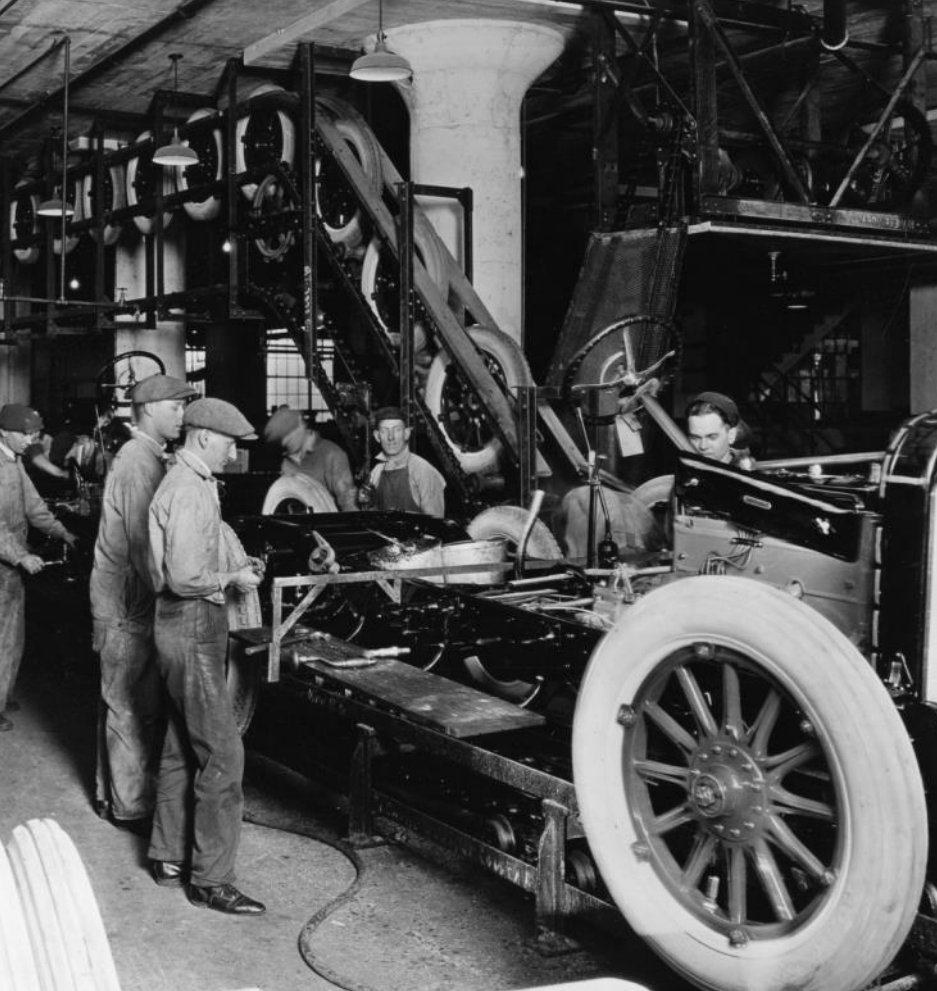
**3. New services**

**4. Streamline operations**

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7703696251527149265646381575248522600830  
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Union Metal Fluted Steel Poles  
Design No. 3375







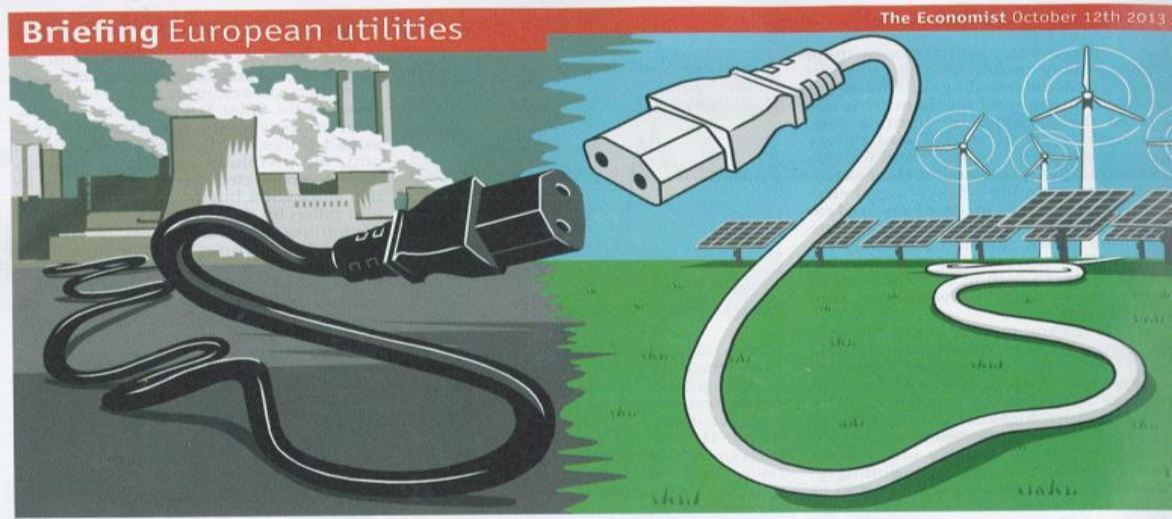
# Surplus



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### How to lose half a trillion euros

#### Europe's electricity providers face an existential threat

ON JUNE 16th something very peculiar happened in Germany's electricity market. Wholesale electricity prices fell by more than a third since 2010. At the second-largest utility, RWE, recurrent net income has also fallen by a third since 2010. As the company's chief financial officer laments, "Conventional power generation, quite suddenly as a business unit, is fighting for its life."

where electricity from renewable sources has grown fastest. The country's biggest utility, E.ON, has seen its share price fall by three-quarters from the peak and its income from conventional power generation (fossil fuels and nuclear) fall by more than a third since 2010. At the second-largest utility, RWE, recurrent net income has also fallen by a third since 2010. As the company's chief financial officer laments, "Conventional power generation, quite suddenly as a business unit, is fighting for its life."

# Surplus Customer Retention





# Surplus

# Customer Retention

# New competitors







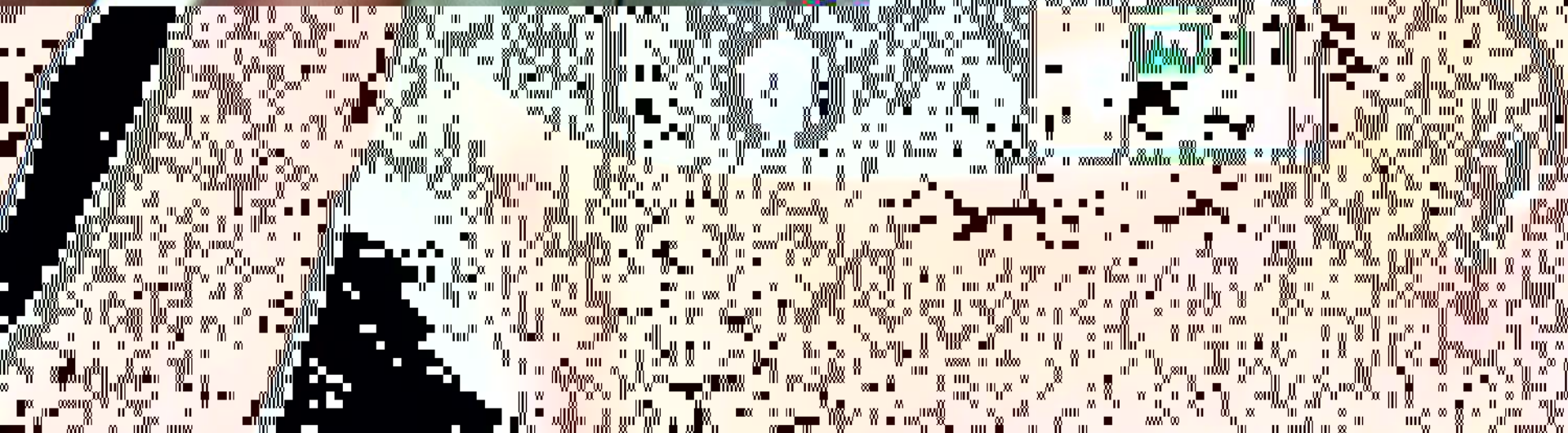
# Modernizing gives customers more

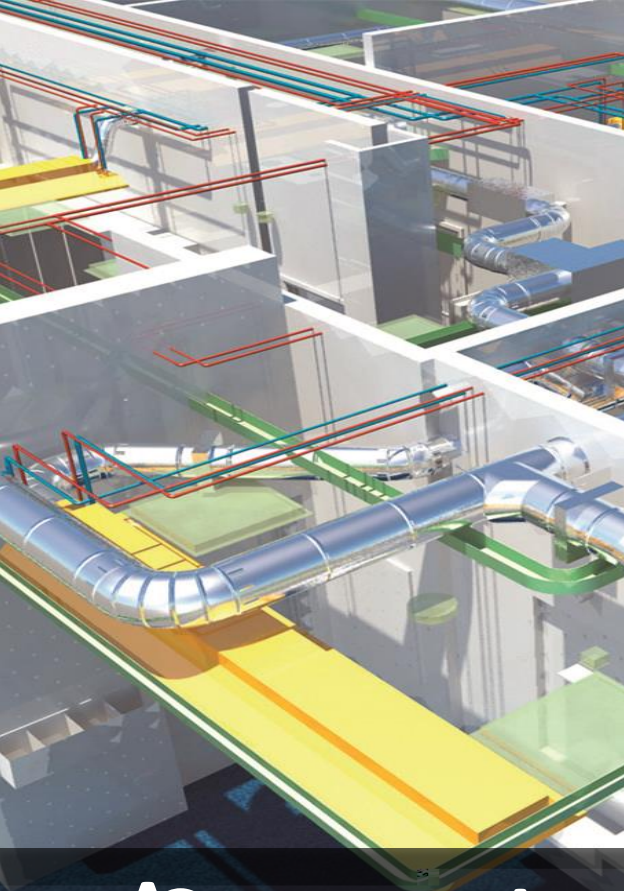


IT gets *it.*









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0.9 billion sensors in 2009

26 billion in 2020

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Power and productivity  
for a better world™



**VENTYX** ™  
AN ABB COMPANY





~150,000  
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\$42B

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+100

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# Fortune magazine:

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# MIT Technology Review:

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**FORTUNE** 2014

## World's Most Admired Companies

Recommend 438

### ABB \*\*

Top 50 rank: N.A.  
Rank in Industrial Machinery: 1+  
Previous rank: 6  
Overall score: 7.00  
Ticker: ABB

Headquarters:  
Zurich, Switzerland

More from Most Admired

#### Delta takes off

Led by CEO Richard Anderson, the airline is growing internationally, courting business travelers, and booking record profits.

Most admired celebrity pitchmen

Top companies in innovation, responsibility and

see full list

All-New CNNMoney App for Android

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# MIT Technology Review

LISTS SMARTEST COMPANIES INNOVATORS UNDER 35 BREAKTHROUGH TECHNOLOGIES NOMINATIONS

## 50 DISRUPTIVE COMPANIES 2013

Q+A Steve Ballmer  
Ambr's Better Battery  
Q+A Ursula Burns

BGI's Genome Machine  
Nest's Smarter Home  
Q+A Ben Silbermann  
Introduction

ALL NEW THIS YEAR PRIVATE PUBLIC

ABB	Aereo	Alta Devices	Amazon	Ambr	Apple	Aquilon Energy	ARM Holdings	Audi	BCI
BrightSource Energy	Corning	Coursera	CrowdStrike	Diagnostics For All	Dow Chemical	Facebook	Factual	Foundation Medicine	General Electric





— EXECUTIVE OFFICE

— REMOTE CONTROL CENTER

— LOCAL CONTROL CENTER

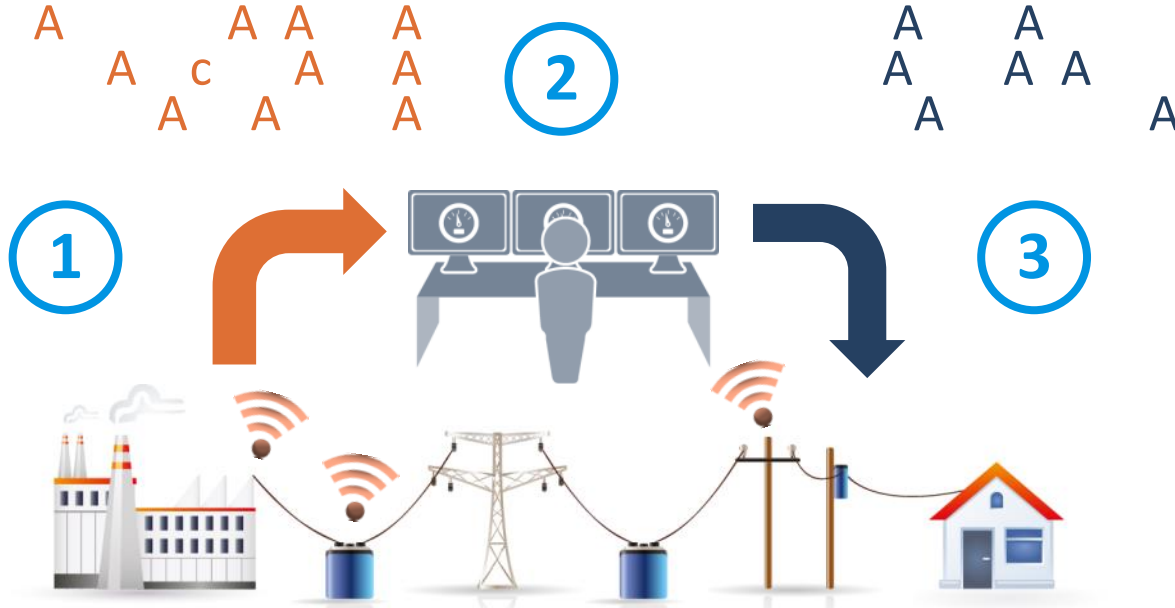
— PLANT FLOOR

— POWER GRID

# Information Technology

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## Benefits of the IT/OT Converged Enterprise



# Operational Technology

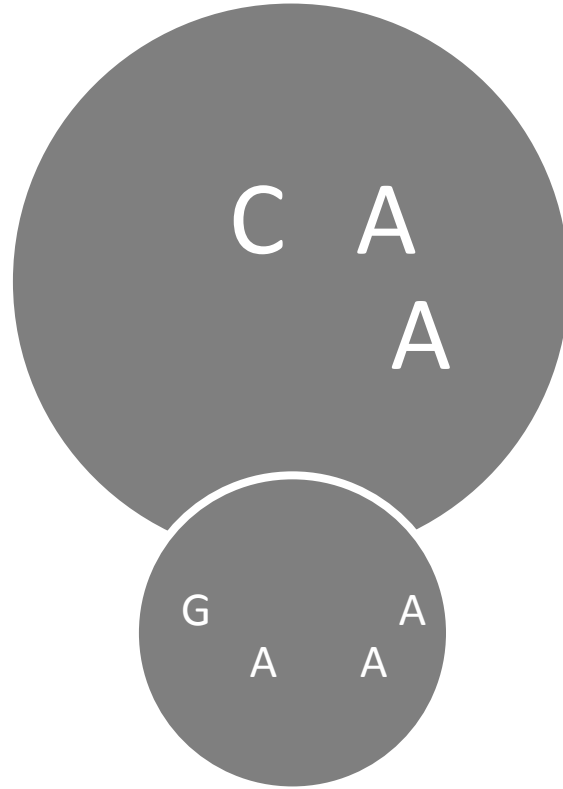
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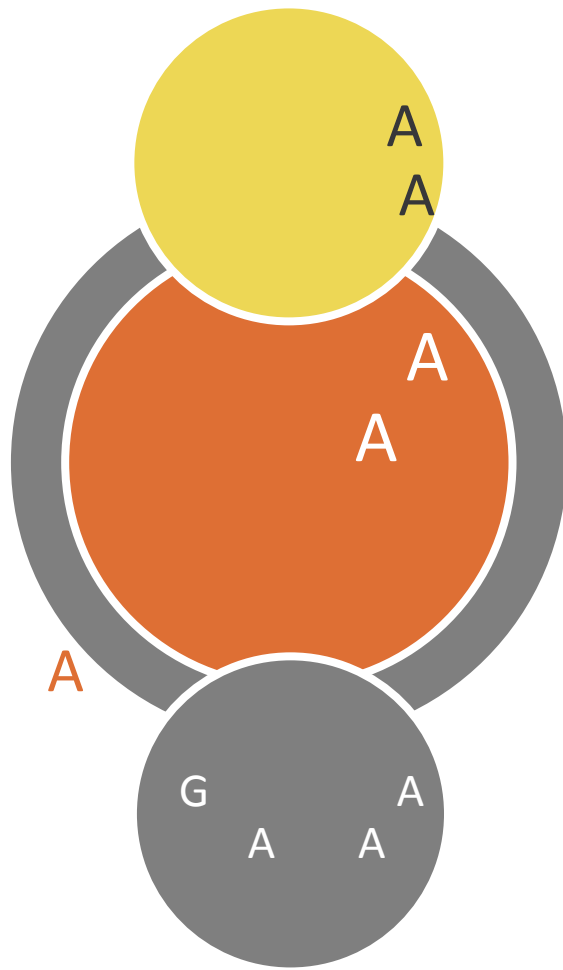
# Big Data for Asset Health



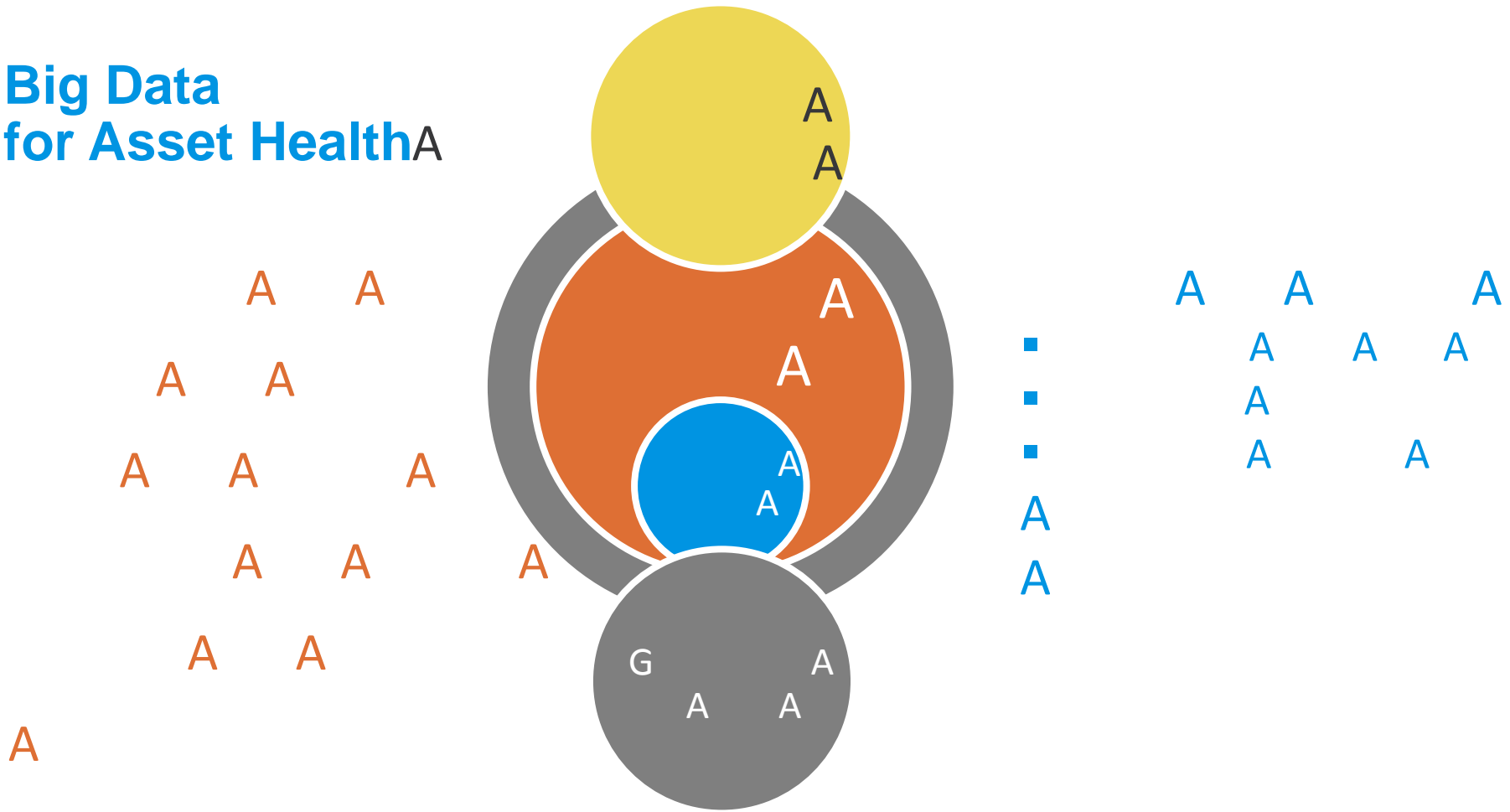
# Big Data for Asset Health

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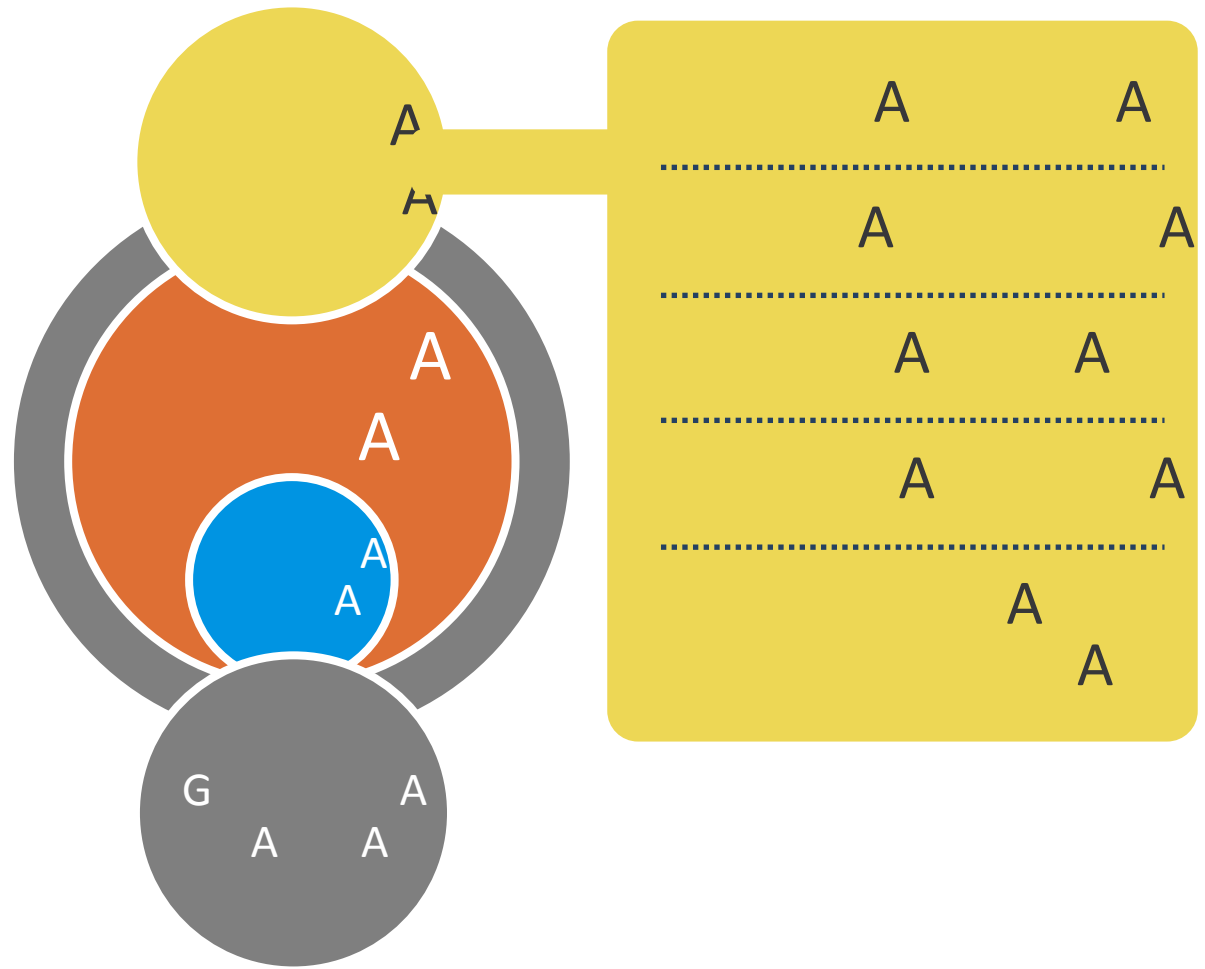
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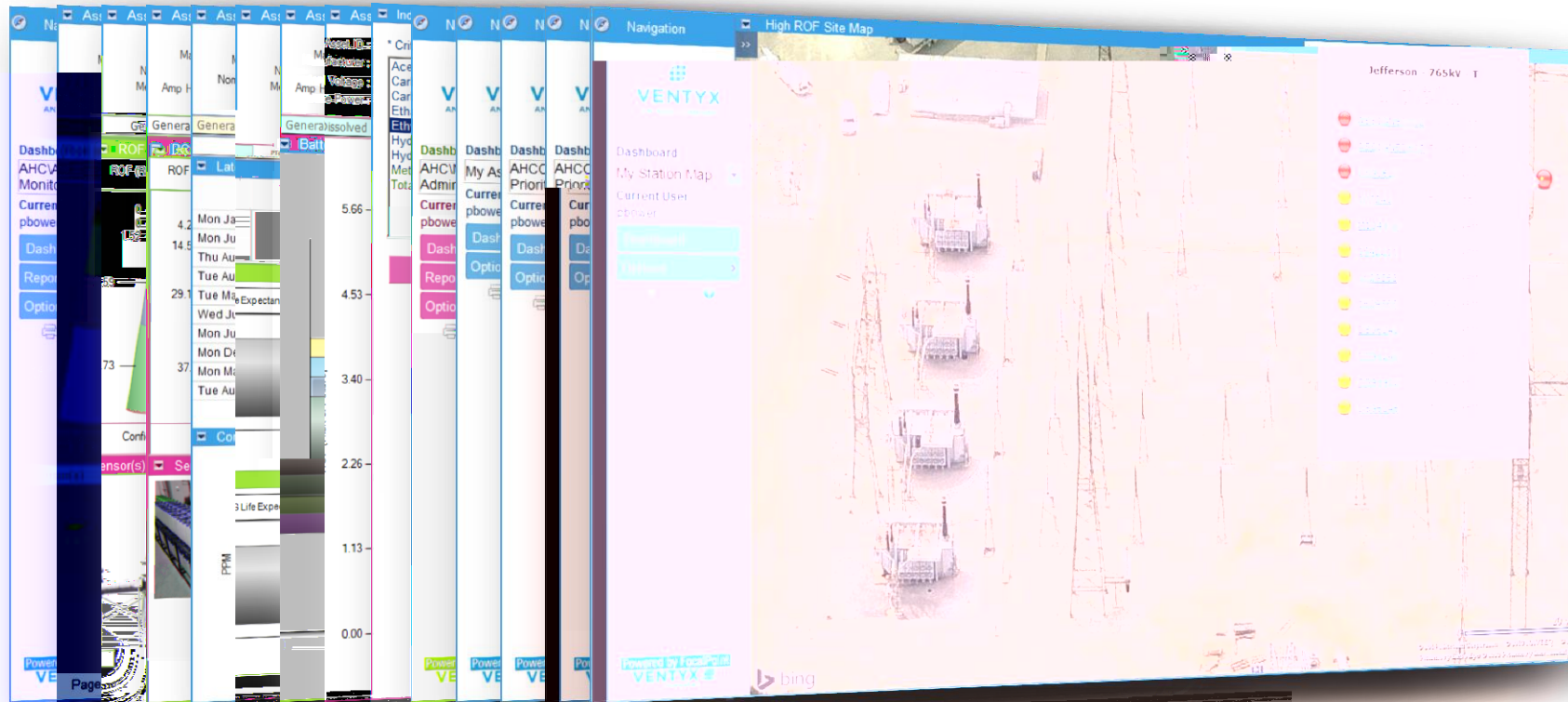
# Big Data for Asset Health



# Big Data for Asset Health



# CAA A





# More relevant.

# Asset health innovation

**AEP**

®



**5m customers**



**11 states**



**40k miles of transmission lines**



**240k miles of distribution lines**



**16,760 circuit breakers**



**2,609 battery systems**



**6,423 transformers**



# Example of projected 5-year ROI

PAYBACK

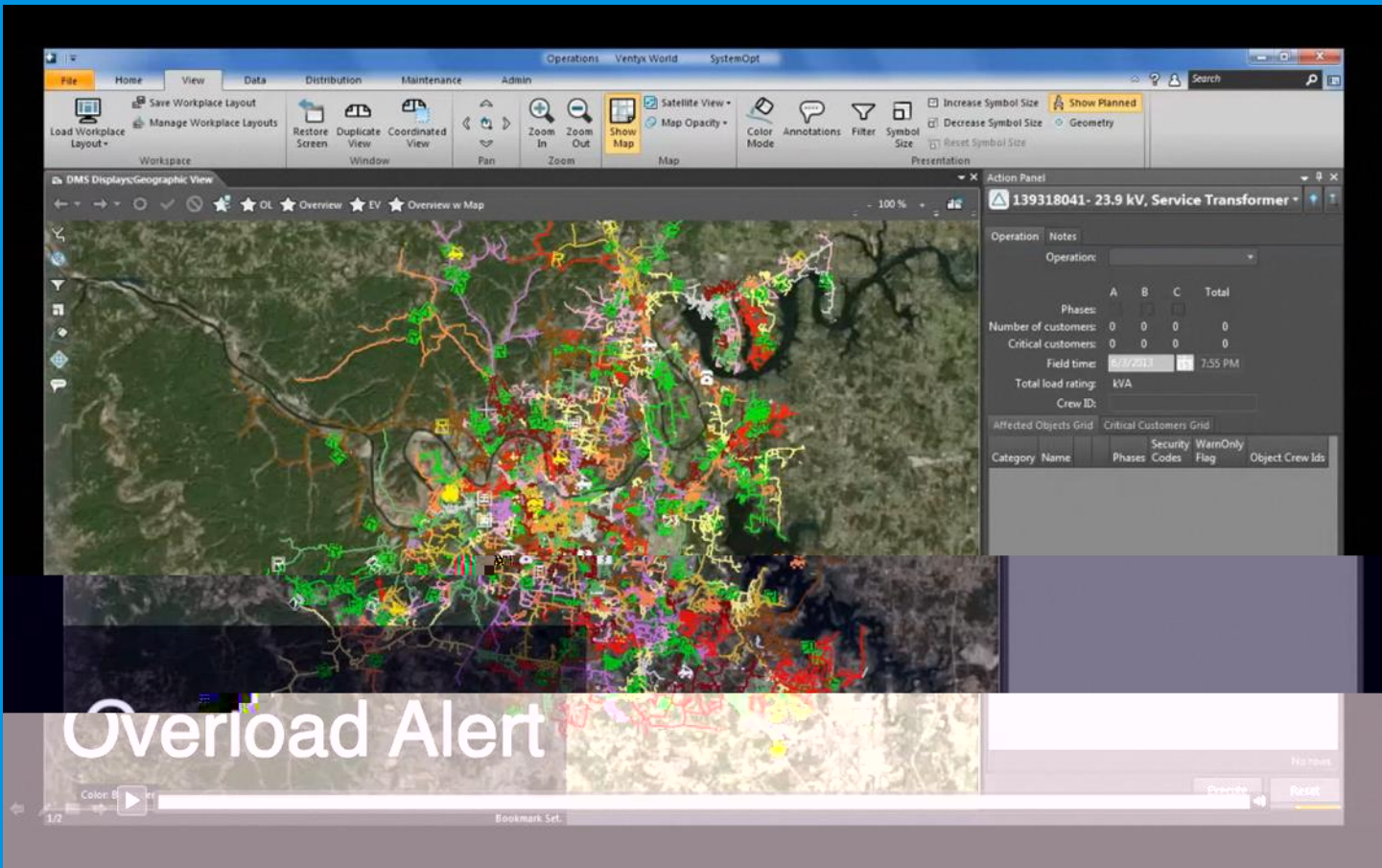


70%	80%	85%	90%	100%
Year 1 ROI Savings	Year 2 ROI Savings	Year 3 ROI Savings	Year 4 ROI Savings	Year 5 ROI Savings
A	A	A	A	A

~~AAAA~~ **Total ROI \$8,634,877**

# Outage lifecycle management

**JPS**



# Distribution optimization







# Opportunity through innovation drives relevance.



Men have become tools  
of their tools.

-

