



NIMBL

Connected Industrial Machine Powered by SAP BTP Redefines Customer Interaction

Nathan Williams
April 27, 2022



Today's Agenda



About NIMBL

A quick overview

SAP Business Technology Platform

Driving customer success through innovation

Gates Innovation Journey with SAP BTP

The business challenge, action plan, project details, solution and outcome

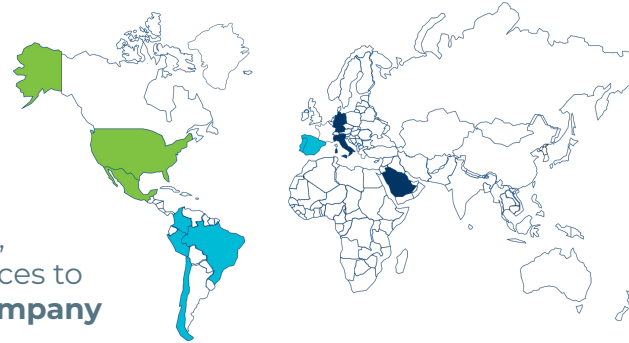
➔ OUR PURPOSE

We transform our clients into **digital, sustainable leaders** through innovation

👥 OUR PRESENCE

2,200+
People

An inclusive mix of cultures, competences, attitudes and experiences to create **One Unique Company**



📈 GROWTH

226 M\$
Revenue

Double digit growth year over year since 2004

🔌 WHAT WE DO

Digital Advisory
Software Atelier
System Integration

👤 INDUSTRY FOCUSED APPROACH



Supporting both Fortune 500 and Midmarket in 15 industry sectors

💎 HYBRID BY DESIGN

The **premium quality** of local niche players, the **coverage & portfolio** of global partners

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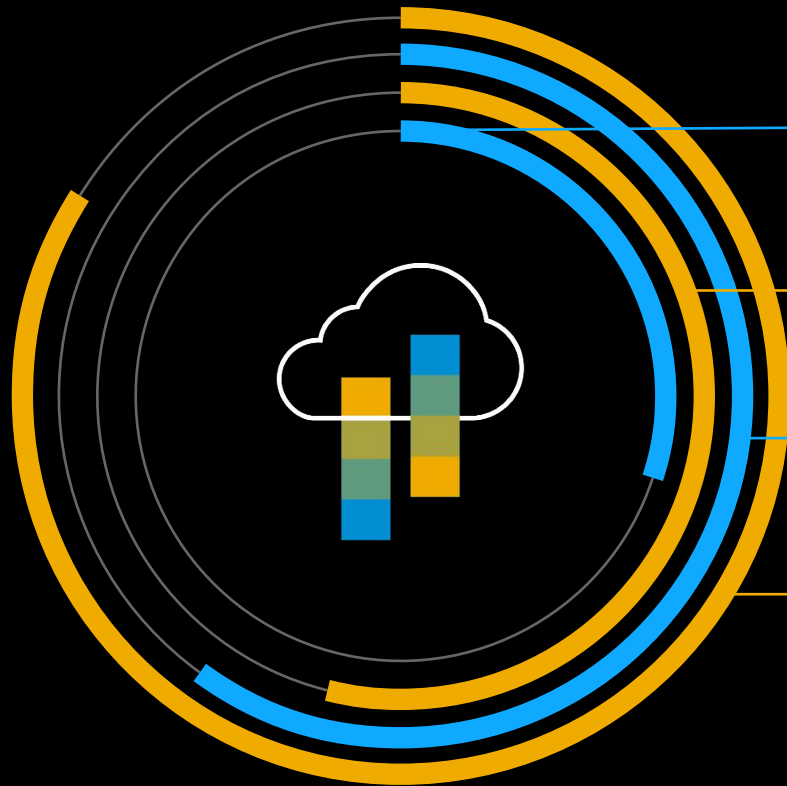
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SaaS and Innovation in the Enterprise

Large enterprises are using more than 200 SaaS apps¹



25% YoY increase in unique SaaS apps in usage¹

57% of companies joining industry clouds want better integration with their own technology³

50% of the SaaS stack changes every 2 years¹

84% of enterprises that use the cloud have a multi-cloud strategy²

25,496 app connections managed by average enterprise companies¹

¹ Ariel Diaz, "[2021 Annual SaaS Trends Blissfully Report](#)," Blissfully, September 2021.

² Nick Golav, "[25 Must-Know Cloud Computing Statistics in 2020](#)," HostingTribunal.com, December 4, 2020.

³ Nadia Ballard, "[Industry Cloud: State of the Union 2021](#)", IDC Market Presentation, May 2021.

A woman and a man are leaning over a table in a factory or laboratory setting, looking at a robotic arm. The woman is on the left, wearing a light blue jacket, and the man is on the right, wearing a dark blue shirt and glasses. The robotic arm is positioned over the table, and there are various mechanical parts and tools scattered around. The background shows a blurred industrial environment with computer monitors and other equipment.

All that change adds up to Opportunity

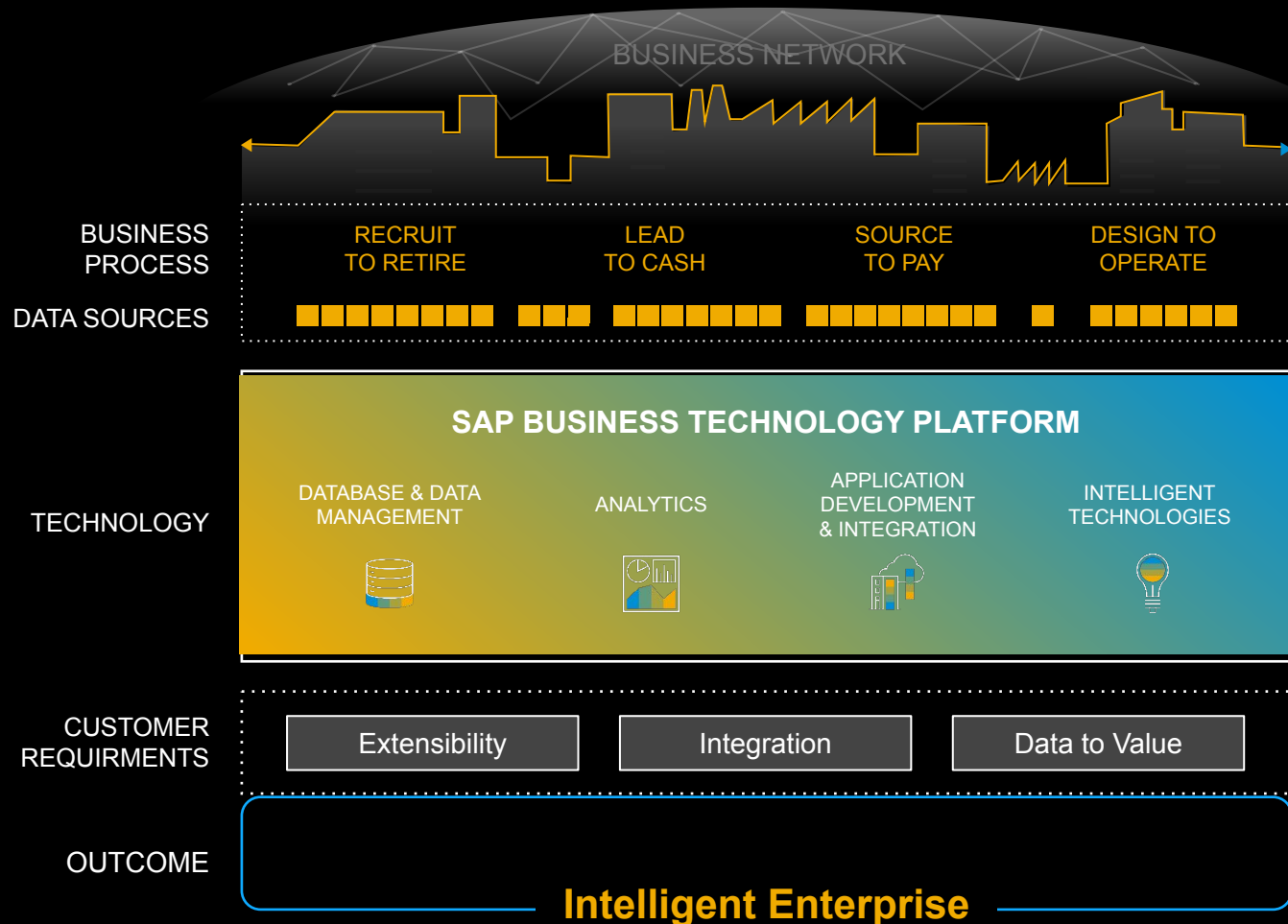
Customers want to adapt and get to market rapidly.

To do it, they need to bring innovation into their business faster.

But they must take care not to explode costs or create unmanageable infrastructure.

SAP Business Technology Platform – The platform for the intelligent enterprise

Driving customer success without disruption



Deliver the Intelligent Enterprise

- Uniting disconnected functions and processes
- Bridge cloud and on prem environments.
- Innovate rapidly around SAP and third-party applications.
- Synchronize data, processes, and people without disrupting core solutions.
- Delivering targeted, industry-specific content
- Driving continuous innovation at a faster pace
- Leveraging SAP's Ecosystem to deliver innovation to customers even faster, using a platform standard that integrates seamlessly with SAP's long term strategy.

SAP BUSINESS TECHNOLOGY PLATFORM

DATABASE &
DATA
MANAGEMENT



ANALYTICS



APPLICATION
DEVELOPMENT
& INTEGRATION



INTELLIGENT
TECHNOLOGIES



Data Storage

Data Processing

Data Integration

Data Orchestration

Information Governance

Master Data
Management

Business Intelligence

Augmented Analytics

Predictive Analytics

Collaborative Planning

Data Warehousing

Integration

Extensibility

Business Process
Optimization

Business Services

User Experience

Artificial Intelligence

Machine Learning

Intelligent Robotic
Process Automation

Blockchain

Internet of Things

- SAP HANA
- SAP HANA Cloud

...

- SAP Data Warehouse Cloud
- SAP Analytics Cloud

...

- SAP Integration Suite
- SAP Extension Suite

...

- SAP AI
- SAP Intelligent Robotic Process Automation

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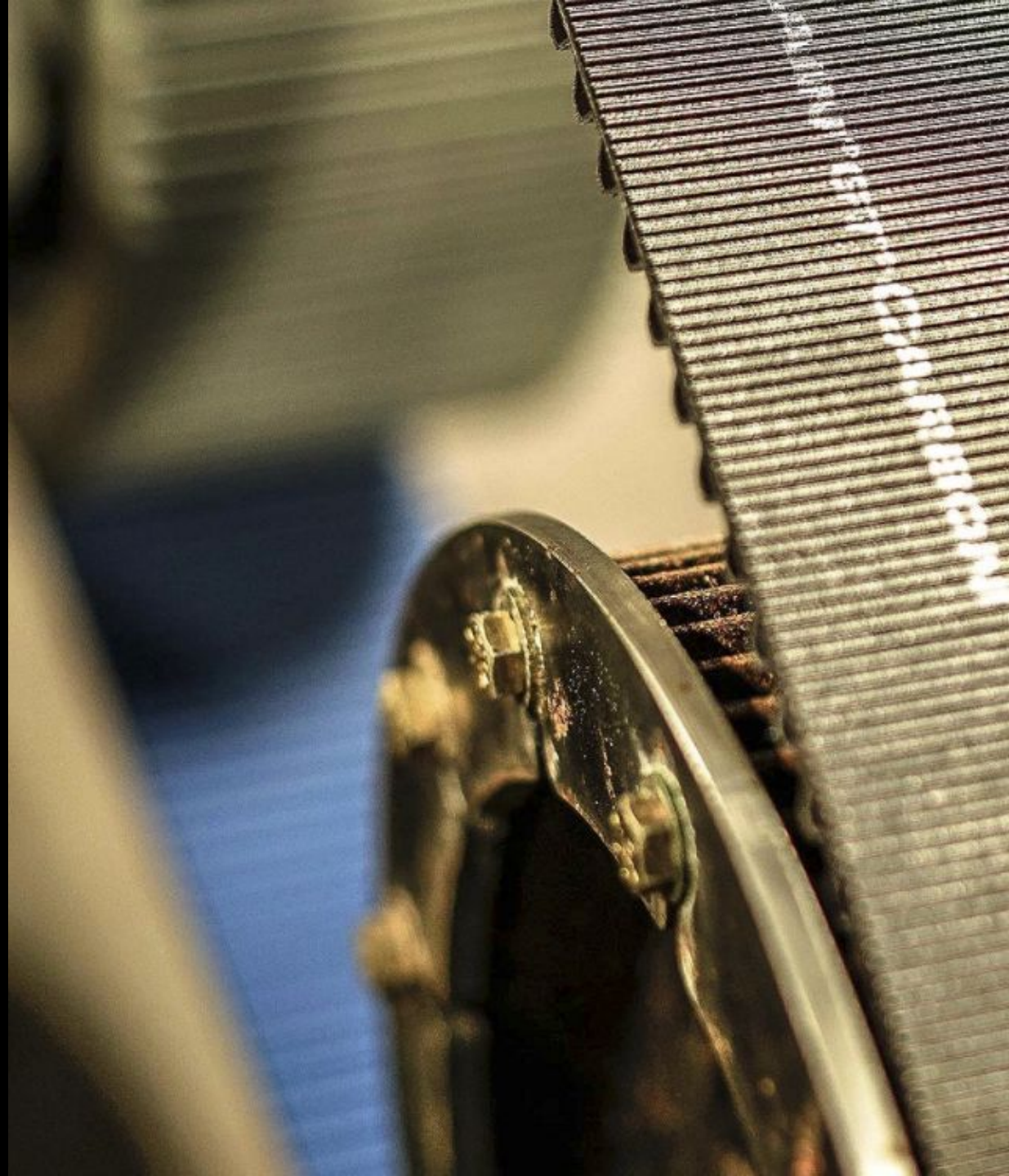
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Leading manufacturer of power transmission belts and fluid power products achieves market disruption with a manufacturing

digital twin.

- \$4.74B Market Capitalization.
- \$3B Estimated Gross Revenue.
- Based in Denver, Colorado.
- 14,000 employees.
- 30 countries.
- 100+ Manufacturing Facilities.



*“How do we provide **real-time insights** and data from our industrial machines, both from a customer usage perspective and to provide users important information when we launch new products?” ***

**Jason Taylor,
Vice President, Global Digital & Innovation, Gates Corporation**

The Technical Reality

Legacy on-premise database built on Microsoft Access

Had not invested in modernization of key industrial machinery

Lack of any real-time information or connectivity

Unable to understand usage, status or whereabouts of machinery

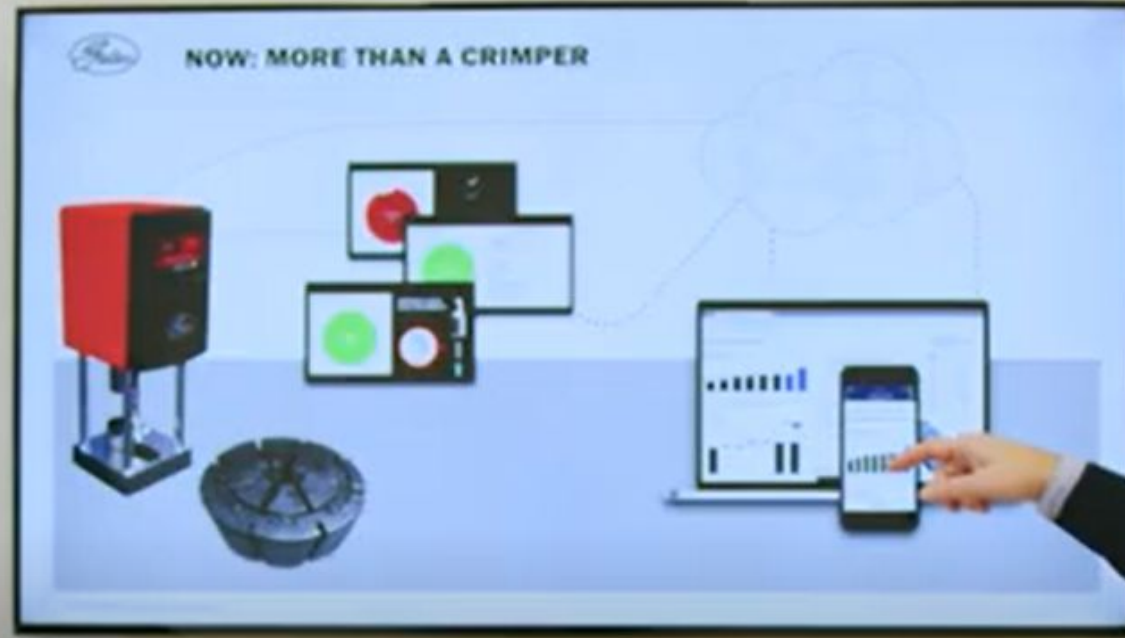


- The Gates Corporation manufactures hoses and couplings
- Couplings are attached (crimped) on the end of a hose
- Gates also manufactures the machines that crimp couplings onto hoses
- Over 40K machines dispersed worldwide

Gates had little to no insight into demand, machine activity and location, or parts usage.

*Machine Operators relied on paper manuals and technology that were decades old and in **dire need of modernization.***





Action Plan:

- Found a great partner team – SAP & NIMBL
- It started with a conversation focusing on the problem
- “Art of the Possible” approach to push the boundaries of innovation
- Limitations and technical solutioning were not discussed
- UX focused design with consumer-grade adoption in mind

Art of the Possible

The team made use of **Design Thinking** to ideate on how Gates' most popular crimper could leverage connected technology to achieve project goals:

- Upgrade the PC707 model to leverage “connected” controls
- Provide an upgrade kit to **modernize and connect** existing PC707's in the field with enhanced industrial functionality

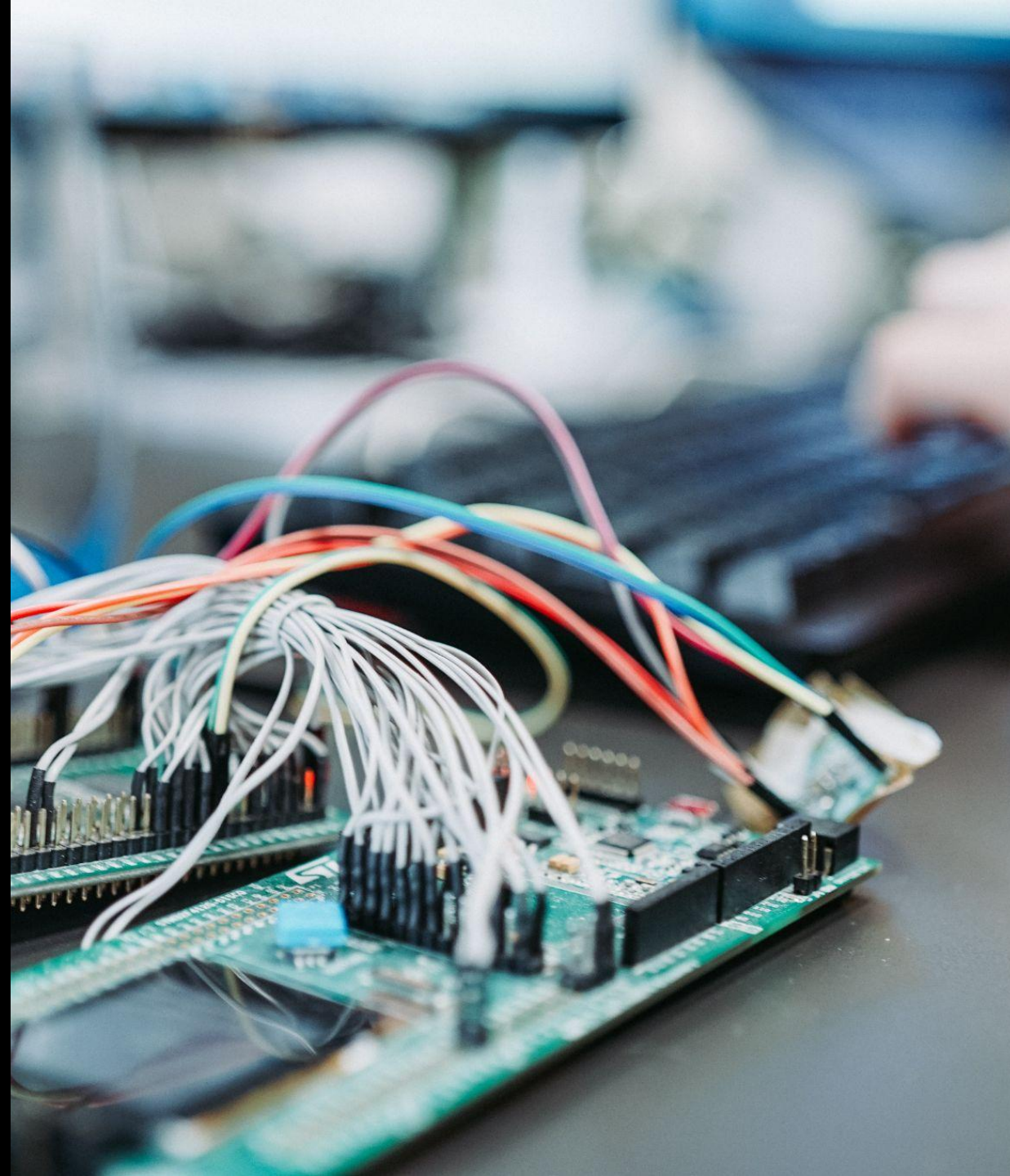


Back at NIMBL Headquarters:

- Decided to leverage SAP BTP to aggregate real-time machine data
- Determined BTP could visualize machine insights to meet reporting requirements
- Began screen design for a custom tablet application
- Engaged an engineering partner to **solidify the IoT approach** using sensors and a custom circuit board

The Engineered Prototype:

- 10 weeks to prove a BTP **Manufacturing Digital Twin** concept
- The machine is controlled via a custom tablet application over Bluetooth
- A “crimp” is performed within tolerance
- Data is aggregated, stored, and visualized using SAP BTP



The Manufactured Prototype:

- Further testing and refinement of the custom tablet application
- Fiori applications for master data administration
- Finalized dashboards in SAP Analytics Cloud
- Completed final engineering and manufacturing activities
- **New crimper machines shipped**





DRIVEN BY POSSIBILITY™

Leverage Known Technologies & App Best Practices :

- Pre-installed application delivered with new Crimper or Retrofit kit
- Published on private Google App Store
- Automatic updates
- Intuitive design with Gates digital branding
- Wizard-based setup
- Developed to be machine agnostic to allow for **ease of extension**



PRESS HERE TO BEGIN SETUP

Register Crimper

Crimper Serial # (where do I find this?)

8334571235

Gates Account # (Optional)

543678

Yes, I Consent to Data Usage Reports



Business Name

This will be used for Crimper Service & Crimp Reports.
Please ensure spelling & punctuation are correct.

Acme Crimp

Business Address

123 Crimp Rd

Add a Building, Floor, Suite

City



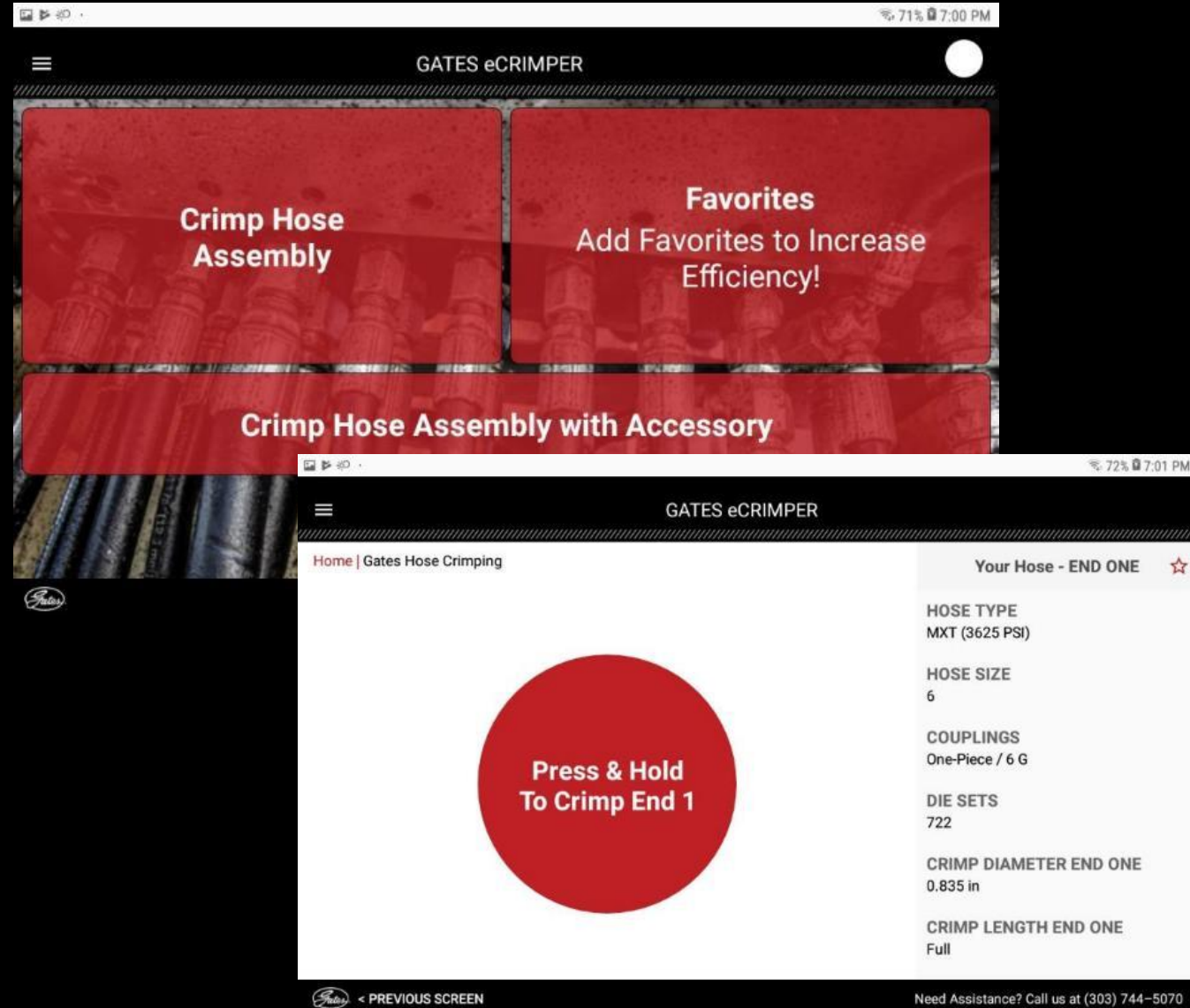
- User and crimp data is accurately linked with the customer and location
- Connected information maximizes eCommerce opportunities and refines data



PRESS HERE TO CONTINUE

Tablet Application:

- Large touch surface area
- Wizard-based hose + coupling selection
- Integrated with Gates' specifications catalog (in HANA)
- Crimp button and "dead man" safety switch
- All crimp operations logged
- Offline functionality supported



Gates Data Administrator



Internet

Firewall

SAP Business Technology Platform

Master Data Maintenance



SAP BTP Microservices



OData Services



Portal

Live Connection

SAP Analytics Cloud



SAP HANA Database

Modeling

Predictive

Text & Search

Spacial

Gates Datacenter



PLM Database



On-Premise Systems



Cloud Connector

Secure Tunnel



The Outcome:

- An innovative new Gates product offering.
- Connected technologies powered by BTP.
- Intuitive touch-screen application.
- Real-time insights, data and usage.
- **A Digital Twin was born**, laying the framework for demand generation and enhanced customer service.





Gates is providing the latest innovation in smart crimper technology. We are making connected technology available to every user in the market by including this innovation.

*We are able to provide our customers ways to always stay connected and be more efficient. The data that is now available provides Gates the ability to enhance the way we serve our customers providing an **enhanced customer experience**.*



Jason Taylor
Vice President, Global Digital & Innovation
Gates Corporation



Watch the [SAP video case study here!](#)

Key Takeaways

1. Department Harmonization is key to ensure strategies are aligned with technology.
2. A “Culture of Innovation” **propels digital transformation.**
3. Commit to innovation - Drive a product to market vs. viewing a pilot as success.
4. Dramatic digital transformation and a new product offering can be realized in 12 months.



nimbl
Techedge Group



**GATES®
WINS
2020
LEAP
AWARD
GOLD**

GC20™ WITH GATES®
CORTEX™ INTELLIGENCE



NIMBL Key Differentiators

- **Our People:** 50+ full time professionals dedicated to SAP BTP in North America
- **Our Investments:** BTP Advisory Program, BTP Incentive Program, Apple/SAP Partner
- **Our Proven Success:** Multiple BTP success stories, 2021 Hack2Build winners



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