KEYSIGHT WORLD 2019

Paving Your Way in Design, Manufacturing and Redesign Using PathWave

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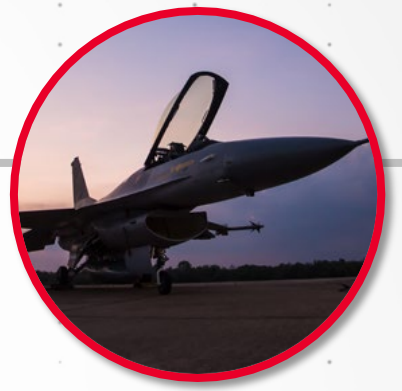
Gone are the Days of Simple Design

Smart Devices

Smart Cities

Smart Automotive



Smart Defense

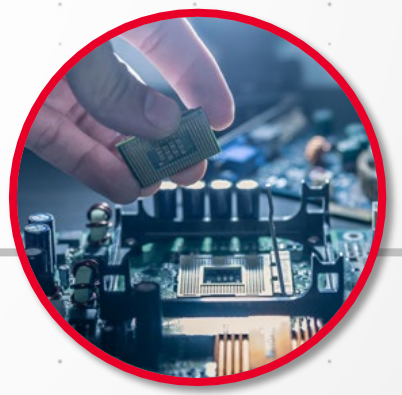
Every Year, Designers Push New Limits:

Longer Battery Life, Smaller Components, Higher Levels of Integration

Smart Energy

Smart Mobile

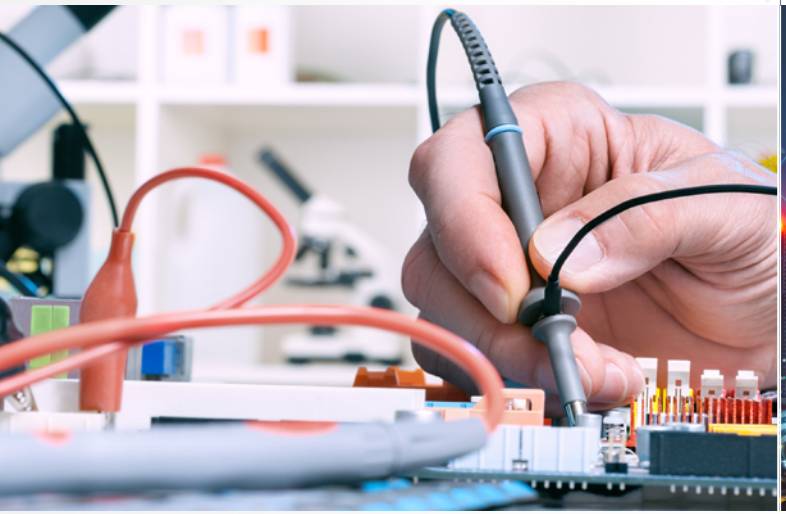
Smart Transportation



Smart Compute

Design & Test Requirements are Growing Exponentially

5G NR	Wireless Coexistence	EMI/EMC and Regulatory Test
20x more conformance tests than 4G	Wi-Fi, Bluetooth GPS, FM Radio, 4G, 5G,NFC, RFID, Qi	20+ IEC and EN Standards



Classic Challenges Are Still Pervasive

Hours spent collecting and correlating measurements

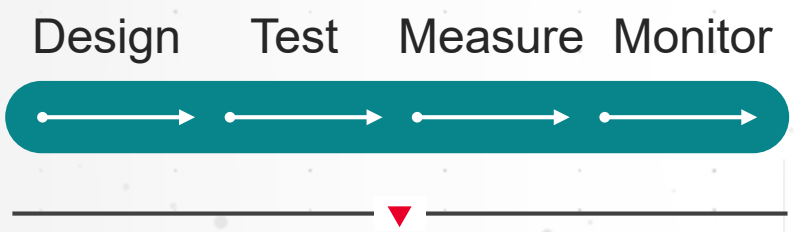
Engineers program the same tests multiple times

Workarounds and translators are needed to connect software

Project status is checked manually

Getting Ahead Requires a New Approach

Most Organizations Use Standalone Products

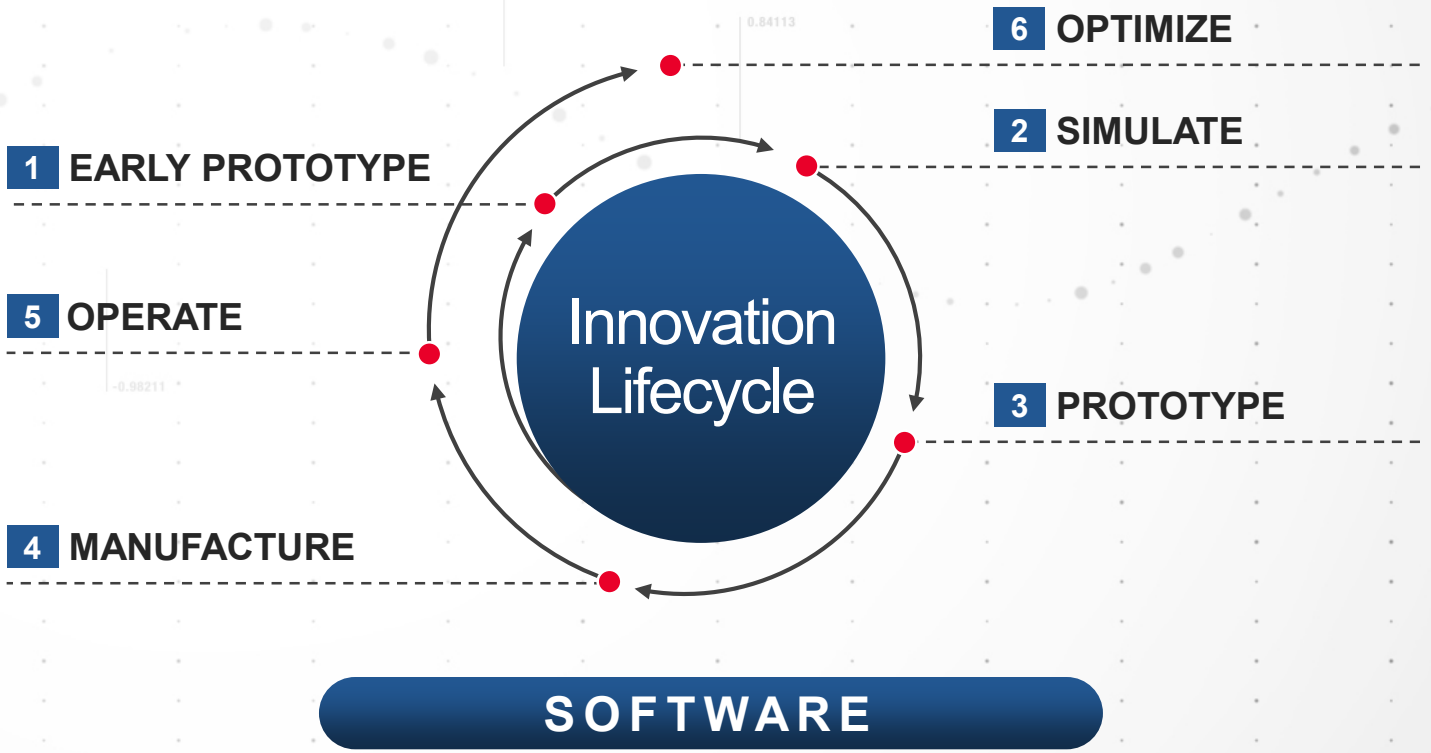


Siloed datasets

Disconnected workflows

Higher risk of errors

Keysight Enables the Entire Innovation Lifecycle



Keysight PathWave Accelerates Development Workflows

PATHWAVE

OPEN

Flexible Environment for Customer Development

SCALABLE

Design and Test from Desktop to Cloud

PREDICTIVE

Data Management & Advanced Analytics

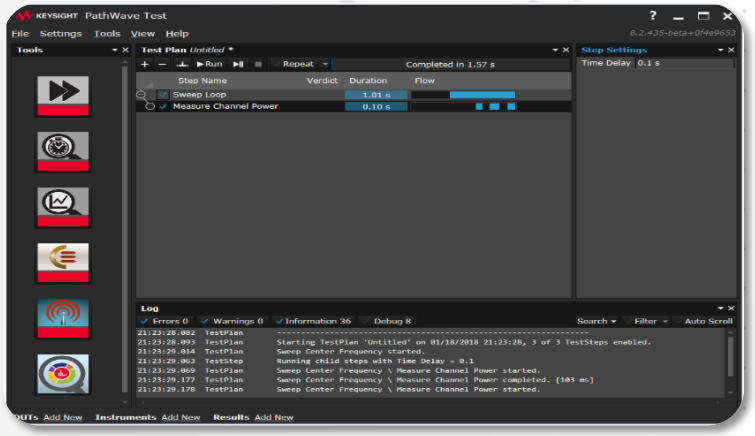
Platform for Connected Agile Workflows

PathWave 2018 Highlights

PATHWAVE

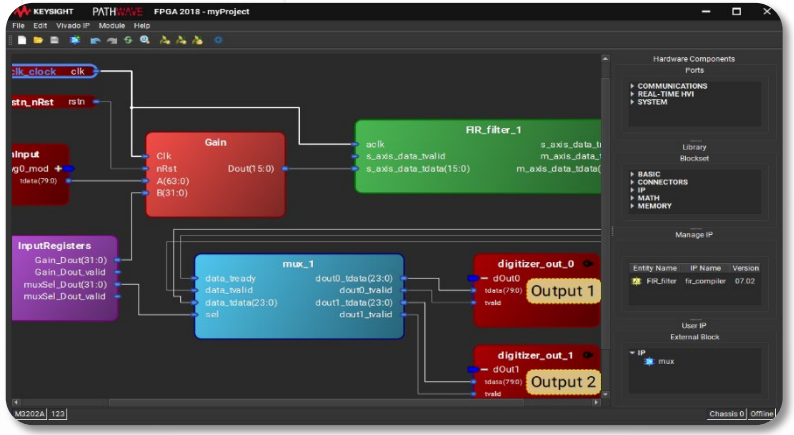
OPEN

PathWave
Test Automation



SCALABLE

PathWave
FPGA



PREDICTIVE

PathWave
Manufacturing Analytics

Open Environment

Our Customer Journey

- Customers want an open solution
- Workflows customized for speed, scale
- Faster design, lower fail-rates, lower cost of test

PathWave Test

CHALLENGE

Higher 5G test channel count resulting in increased costs and manufacturing delays

SOLUTION

Cloud-based RF and function test environment

RESULTS

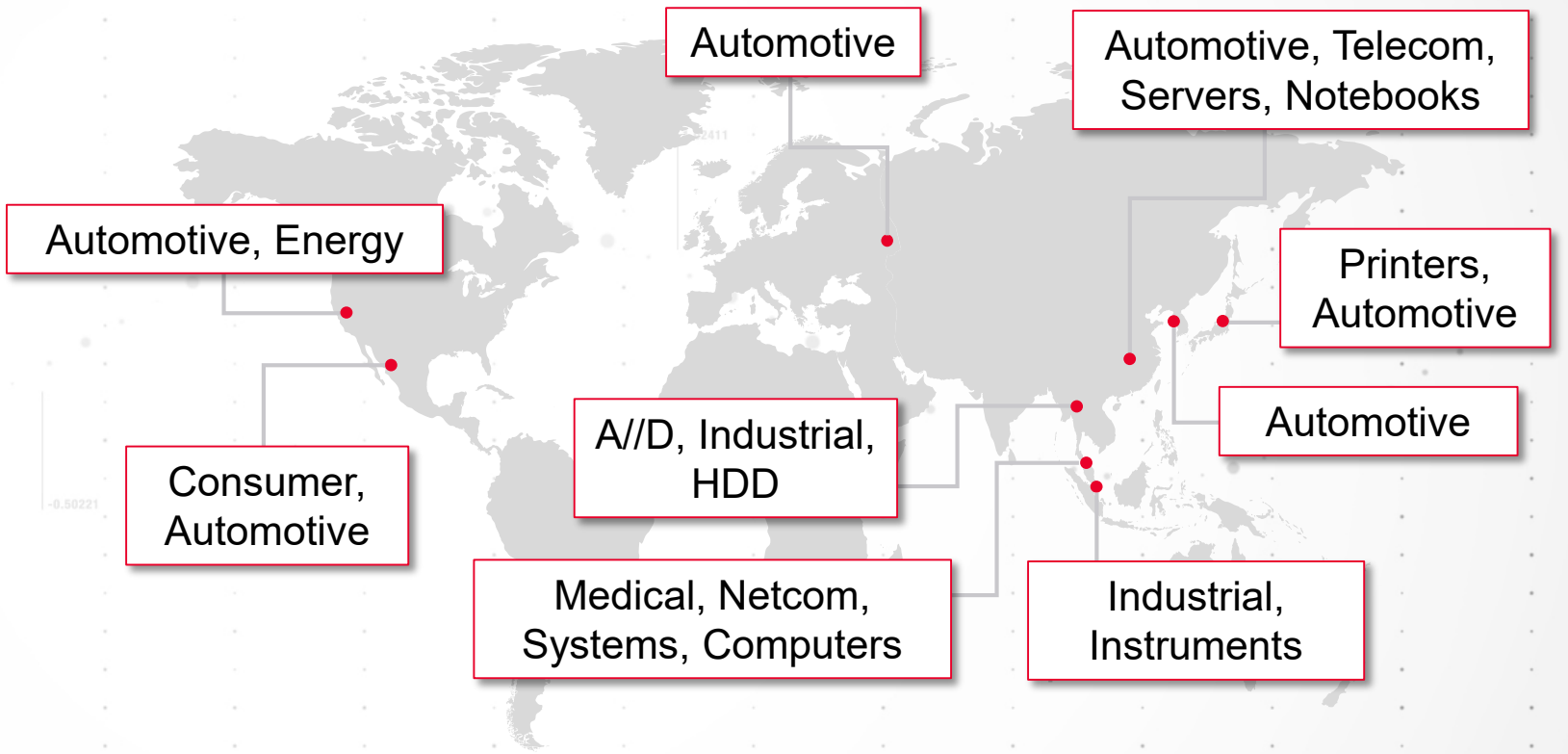
- Universal tester covers **7 test scenarios**
- Tool utilization lowered costs **10x**
- Measure **20x faster**

5G Network Equipment Manufacturer

Case Study

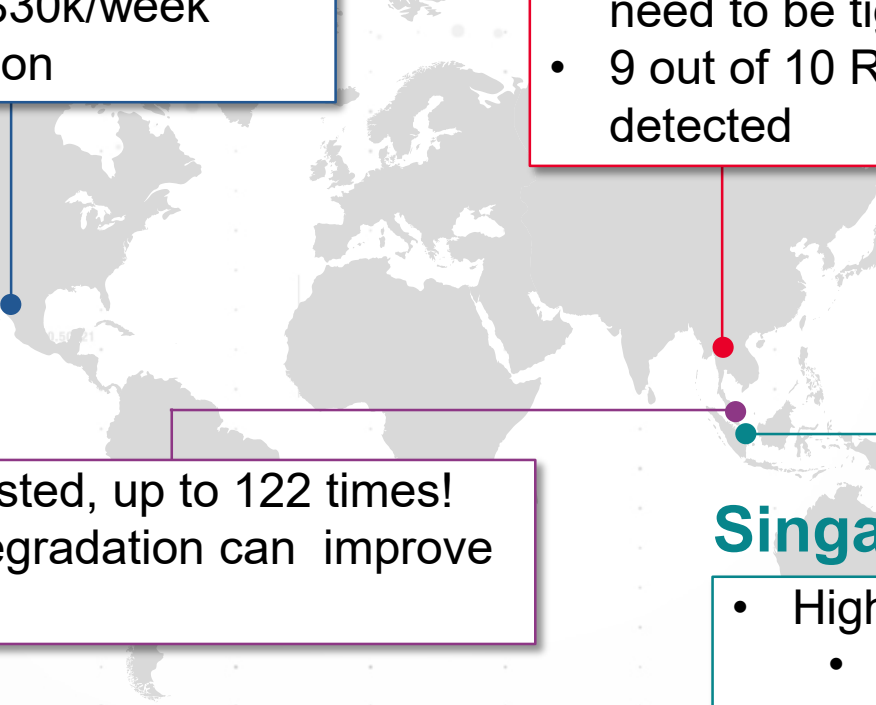
Pathwave Analytics Global Use Cases

- **> 500G+** Data Ingested / Processed
- **> 30+** Customers Analysis Completed
- **> $10M** Costs Savings Projections
- **4** Global Customers



PathWave Analytics

Customer Success Story: Global EMS Company



Mexico

- Retest Improvement: 1.3% to 2.7%
- 300 boards/week @$100 ea = $30k/week
- 40% potential scrap rate reduction

Thailand

- Devices pass ICT and FCT but fail at customer end
- Pattern analysis suggests test limits need to be tightened
- 9 out of 10 RMA has anomalies detected

Malaysia

- 13% of boards retested, up to 122 times!
- Predicting probe degradation can improve output by 20%

Singapore

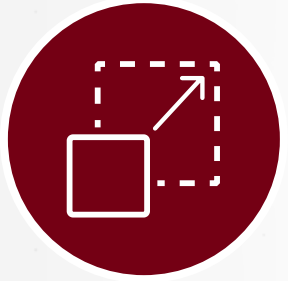
- High Retest Rates
  - Suspected wrong or bad components mounted
  - Probe degradation detected

Open

PathWave connects and integrates design and test resources

- Open APIs allow for simplified and rapid customization
- Easily integrate best-in-class technology, including 3rd party software and hardware

Scalable



Design and test from desktop to the cloud

- Save transition time between development phases in your design and test workflow
- Optimize test workflows leveraging programmable hardware and software

Predictive

PathWave provides powerful analytics tools for better decisions

- data analytics to identify trends and troubleshoot issues
- End to end health monitoring of each resource

PATHWAVE

Creating partnerships with customers to innovate game-changing technologies, and accelerating workflows for faster time to market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