



Robotic Test Automation

Innovative offering from Cognizant's Quality Engineer & Assurance practice

2024

Did you know that Cobots (Collaborative Robots) are doing end-to-end testing of Smart Devices?



Robotic Test Automation (RTA)



Niche solution for Smart device testing



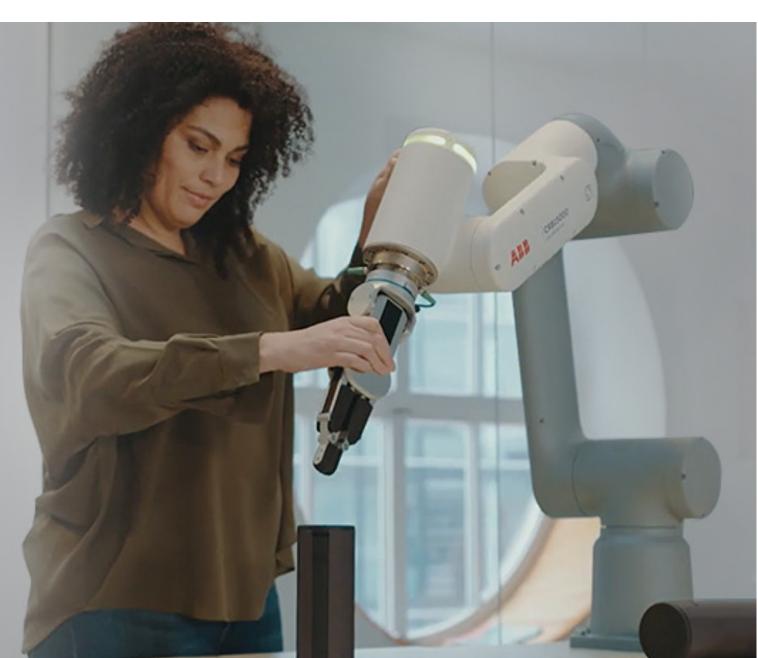
24x7 (physical + digital) automation



Precise and repetitive



Evidence for compliance



These are some examples of 'Smart Devices' across various industry segments

Products, Retail & Hospitality



POS devices



Smart meters (Energy, Gas, Water)





Kiosks & Terminals

Life Science & Health Care



Medical devices (Terminals)



Health care devices



Patient monitoring systems



Medicine & Drug

Banks, CMT, Insurance & Govt



Bank ATMs, Payment devices



Smart watch, Smart wearables



Homes Security devices



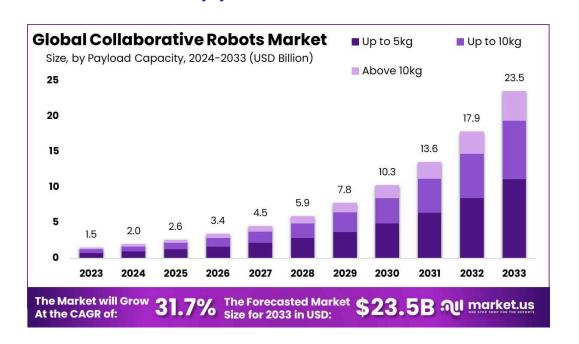
Betting and Gaming consoles

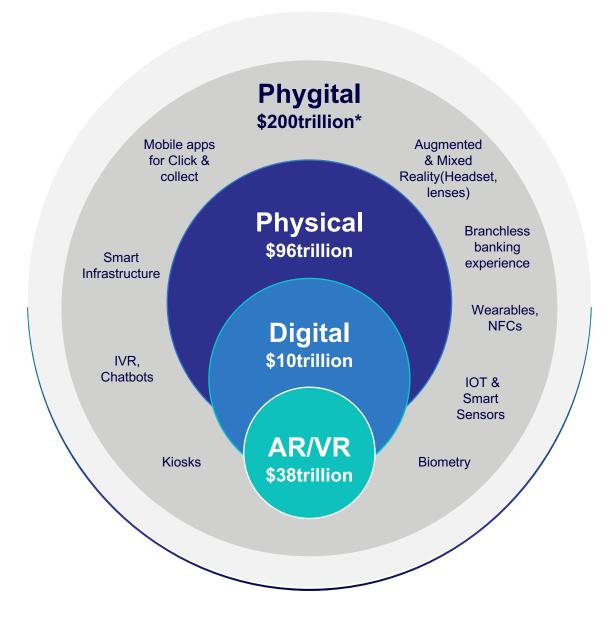
The Growth of Robotics

The Rise Of The Phygital Experience - Forbes



Phygital Retailing Strategy is Changing Customer Experience.
The 'phygital' market is poised to <u>exceed USD 200 trillion</u> within the next five years.





The challenges in testing Smart Devices can lead to costly mistakes & product launch delays

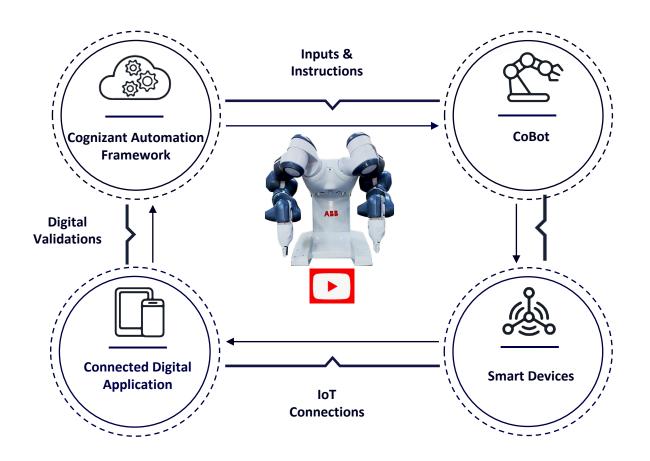
Complex ecosystem of the 'Smart Devices'



Point of failure

- Interoperability issues in the ecosystem
- Firmware updates challenges
- Third party Integration issues
- Usability issues
- App integration issues
- Limited evidences for regulatory/compliance mandates
- Security concerns

Innovative 'Robotic Test Automation' solution can solve the challenges in 'Smart device' testing



Salient Features of the solution

- ✓ Easy programming for Cobot actions and 'Phygital' (physical + Digital) validations
- ✓ Vision technology for visual validations
- ✓ API connectivity for data transfers
- ✓ Framework integration with test automation & other management tools
- Digital evidences to support regulatory/compliance mandates

Value additions and benefits

Robotic Test Automation



Continuous test automation for devices in E2E ecosystem



execution without 'human factor'



Success stories & Industry specific use cases

50+ Use Cases



Automation of Self-Checkout (SCO) Machines/Terminals



Automation of Pharma Diagnostic Lab Sample Analysis



Automation of Human-Machine Interface (HMI) terminals



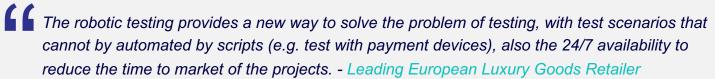
Automation of Smart Meters for Electric and Gas



Automation of ATM Devices



Automation of POS Devices











Our Robotics Labs are present globally



Strategic partnerships with the world leading robot manufacturer - ABB





For more details, write to us at:

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Appendix – The Growth of Robotics

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