Automate. Accelerate. Deliver digital business outcomes with game changing speed

Business Speed Series   **3 minute read**

The Economics of developing custom software

Experieco is has produced a series of five insight papers into how application development and integration have dramatically changed with modern application development platforms and iPaaS (Integration Platform as a Service) technologies.

1. Economics of developing custom software
2. PACE layered application model
3. OutSystems and Workato: Powerful together
4. Business uses for OutSystems and Workato
5. From "doing" digital to "being" digital

Traditional (high code) custom application development is complex, slow, expensive and ''corrodes'' over time, increasing technical debt and leading to a high total cost of ownership (TCO). The economics of this paradigm are such that only the most urgent, highest value, critical business needs justify custom software development.

Even when it was justified, applications built are invariably less flexible and unable to adapt to business changes. Even worse, they often need to be replaced within 10-15 years, with the journey starting over again.

Luckily, the economics and speed of developing custom software has radically changed.

Cloud native custom apps are becoming faster to build when harnessing pre-built micro-services, but the radical speed change comes from using modern application development platforms.

Custom software is faster and easier to build with these new technologies compared to traditional development. In many cases, it's 2-3 times faster, complementing the radical speed advantages of application development platforms. using new generation 3.0 iPaaS can deliver between 30-100% increased productivity versus traditional ESB platforms.
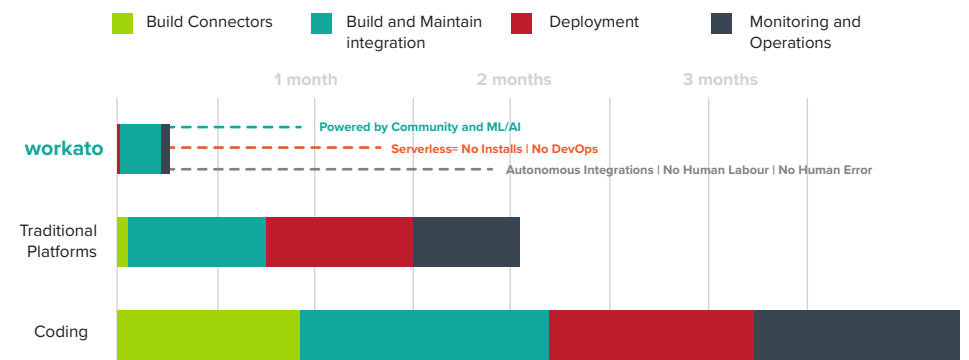
These platforms enable the automation of many development and operations tasks and support custom code , making them suitable for for building applications ranging from simple departmental fixes to highly complex enterprise-wide solutions.

OutSystems modern application platform – example build and run TCO cost comparisons

Comparison initial capital cost - 3 example projects

Low Maturity	$979,110
Baseline Maturity	$831,600
High Maturity	$684,090
Outsystems	$442,695

Cost of traditional development vs OutSystems

Workato iPaaS (integration platform as a Service)

Build Connectors | Build and Maintain integration | Deployment | Monitoring and Operations

1 month | 2 months | 3 months

workato — Powered by Community and ML/AI — Serverless= No Installs | No DevOps — Autonomous Integrations | No Human Labour | No Human Error

Traditional Platforms

Coding

Timeframe of traditional development vs Workato

Since the technology layer is separated from the applications model, the underlying technology can evolve. Technical debt lowers while the speed of development and deployment increases. Businesses save on development costs and TCO plus increase their agility to respond to change.

Because the economics have changed, enterprises must re-evaluate the role custom and modern application development platforms play in their organisations. It is in their best interests tactically and strategically to use software that gives a sustainable competitive advantage and serves the long-term goals of a digital business.

Understanding the Digital Application Battlefield

Leading organisations harnessing modern application development and integration platforms are already producing discernible business advantages with their ability to build and maintain a competitive edge in a digitally-led world.

We can help you understand what these changing economics and technology approaches can mean for your organisation in achieving your strategic objectives.

Time for a mind shift

With modern application development platforms like OutSystems and integration platforms like Workato, the productivity gain and TCO cost reductions means organisations can implement more business requirements in existing systems or whole new applications to drive increased value for the organisation.

They enable new digital ways of working, such as customer self service via portals and increased mobile engagement with customers and field forces. They enable augmentation of back-end systems to provide automation of tasks and differentiated capability to increase competitive advantage.

What's the right application development and integration approach for your organisation?
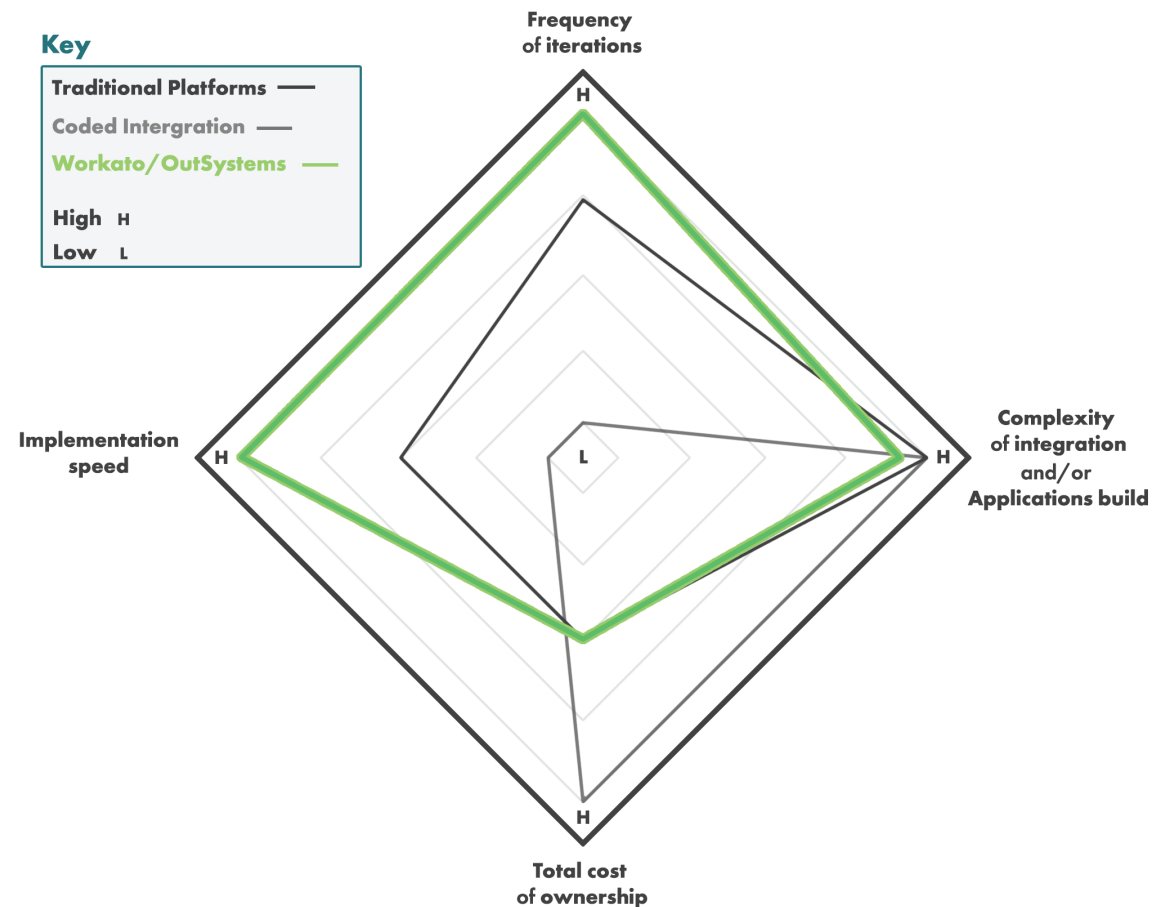
SaaS

Great when there's a high fit to business requirements. Typically low initial capital cost and rapid implementation. PACE considerations (refer Insight paper 2): Great for Systems of Record or operational systems not directly associated to delivery of differentiated services. May have high technical debt over the long term if over-customised.

Modern application development platfrom

Faster and easier to build custom software/apps to meet exact business requirements. Covers a broad spectrum of department to enterprise use cases. Underlying technology upgrades reduces future technical debt. PACE considerations (refer to Insight paper 2): Great for Systems of Differentiation and Innovation to comple-ment Systems of Record.

Cloud custom dev

Leveraging cloud services increases productivity compared with traditional development. High degree of complexity for build, deploy and run. Higher technical skills required. May have high maintenance/technical debt over the long term. PACE considerations (refer to insight paper 2): Great for Systems of Differentiation and Innovation for some native mobile designs and/or smaller web applications where enough efficiencies of low-code may not be realised.

Key

Traditional Platforms	——
Coded Intergration	——
Workato/OutSystems	——
High	H
Low	L

Radar chart axes: Frequency of iterations (top), Complexity of integration and/or Applications build (right), Total cost of ownership (bottom), Implementation speed (left).

Experieco Advisory and Development Services

Experieco offers both advisory and development services. We help your business understand the short-term tactical and long-term strategic benefits of modern application development and integration technologies. We design and develop solutions using the best technology approach for you.

Our specialised technical experience can help your organisation gain rapid insight and traction. Reach out to one of our team directly or via our website, and we will help you realise the possibilities for your business.

Next Steps

Contact Experieco to find out how we can help transform your business.

Visit our website
www.experieco.com

Email us
info@experieco.com