Capgemini ♠ invent

AGILE IT

HOW TO BOOST IT FOR THE DIGITAL AGE

The velocity of change and the diversity of digital business opportunities lead to a widening gap between business and IT

Business Requirements

Diversity of digital business opportunities		Technology (e.g. AI, IoT, analytics) enhanced products and services
Personalization of products and services		"Lot size one" and new consumerism
Increasing rate of business change		Shortened product cycles and time-to-market
Inevitable technology penetration		Disruptive and dynamic technology skill shift

IT Challenges

Inflexible legacy technologies		Silo architectures and complex point-to-point interfaces
Lack of customer orientation		Focus on enterprise IT and grown "silos"
Slow IT responsiveness and execution		Long delivery time, release cycles and hindering security requirements
Lack of digital IT skills and know-how		Outdated methodologies and tools

AN
AGILE IT
IS KEY FOR CLOSING
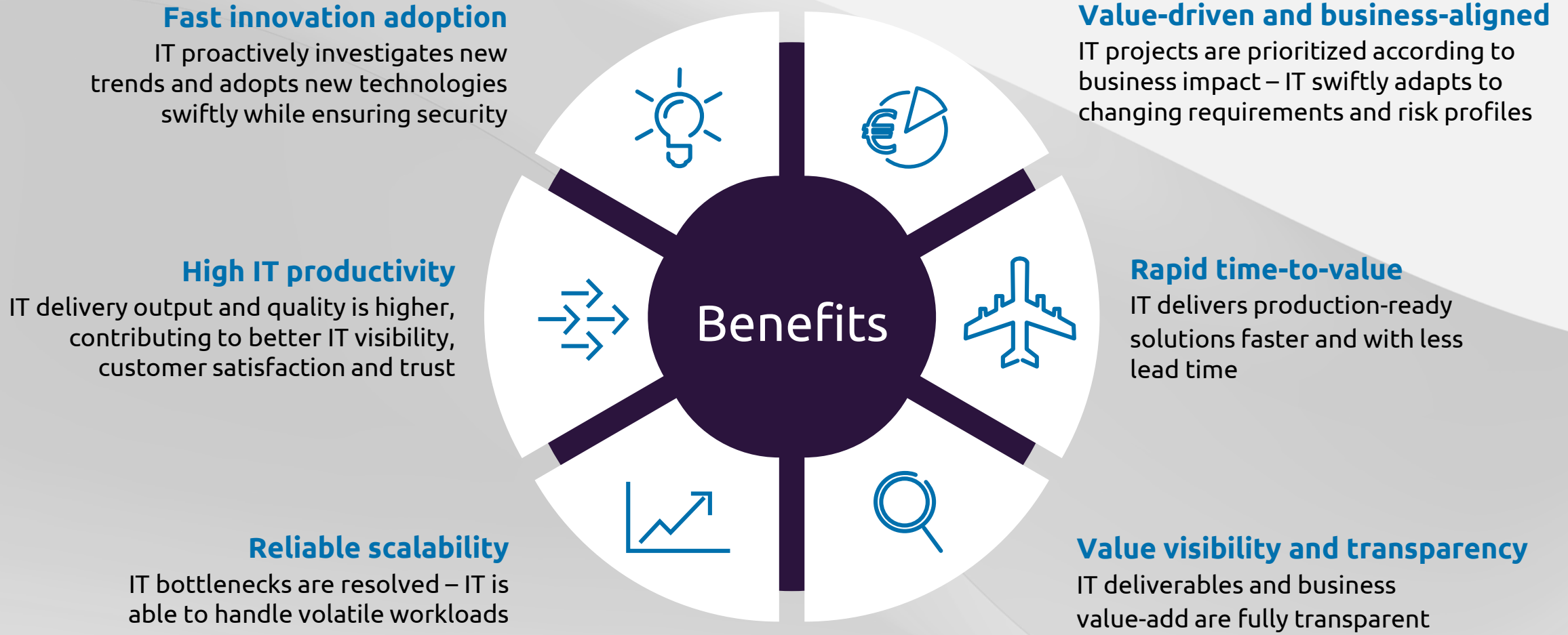THE GAP BETWEEN
BUSINESS & IT AND
BOOSTING
IT FOR THE
**DIGITAL
AGE**

AN **AGILE IT**
NEEDS TO BE SETUP AS A
TRUE END-TO-END CAPABILITY
GOING BEYOND DEVELOPMENT AND OPERATION
TO LEVERAGE ITS FULL BENEFITS

An Agile IT boosts IT delivery for the business, enables fast and secure innovation adoption and enhances scalability

Fast innovation adoption
IT proactively investigates new trends and adopts new technologies swiftly while ensuring security

Value-driven and business-aligned
IT projects are prioritized according to business impact – IT swiftly adapts to changing requirements and risk profiles

High IT productivity
IT delivery output and quality is higher, contributing to better IT visibility, customer satisfaction and trust

Benefits

Rapid time-to-value
IT delivers production-ready solutions faster and with less lead time

Reliable scalability
IT bottlenecks are resolved – IT is able to handle volatile workloads

Value visibility and transparency
IT deliverables and business value-add are fully transparent

An Agile IT requires eight enablers across all IT dimensions

New Business & IT Collaboration

Close collaboration through business-IT partnership, end-to-end accountability and co-location

Entrepreneurial Culture

Mindset shift supported by new way of working, culture allowing failures, learning & entrepreneurial thinking

Agile and Innovation Techniques

Advanced adoption of innovation and agile methods (design thinking, hackathons, DevOps, Scrum)

Autonomous Teams

Autonomous, cross-functional and self-organizing teams work iteratively in IT delivery

Flat IT Organization

Hierarchy-free IT organization instead of hierarchy-defined IT organization

Digital Skill Shift

Digital skill shift through enhanced skill management (digital academy, certification) and talent attraction

Digital Platform Architecture

Cloud orchestration, automated and secure infrastructure management and modular plug-and-play architectures

Partner Ecosystem

Orchestration of digital solution and innovation partners to scale and innovate at high rate

Each of the eight enablers requires **building up capabilities** that determine the mastery of Agile IT

Enabler	Underlying Capabilities			
New Business & IT Collaboration	Business-IT partnership	End-to-end accountability	Strategic advisor role	Measured by business impact
Entrepreneurial Culture	Digital vision	Digital mindset	Entrepreneurial thinking	
Agile and Innovation Techniques	Iterative & incremental methods	Product centricity	Flexibility and creativeness	
Autonomous Teams	Self-organizing teams	Cross-functional teams		
Flat IT Organization	Direct communication & decision-making	Role-based leadership	Optimized number of hierarchy levels	
Digital Skill Shift	Digital tech-savviness	Digital talent management		
Digital Platform Architecture	Self-services	Automated IT infrastructure	Modular plug-and-play architectures	
Partner Ecosystem	Ecosystem orchestration	Scalable capabilities	Partnerships for innovation sourcing	

New Business & IT Collaboration Collaboration between business and IT needs to evolve towards a trusted partnership with joint targets.

In many organizations, alignment between business and IT used to be challenging. However, a trustful partnership is a crucial element of an Agile IT. This largely depends on how IT is perceived by the business and how IT positions itself towards the business. IT needs to be a reliable and value-adding partner. Generally, this implies an evolution from a reactive relationship of client and provider to a proactive joint partnership.

Agile IT masters have often installed dedicated business-IT partner roles that have end-to-end accountability in IT delivery from ideation to operation. In an Agile IT, a business-IT partner is not just a demand management interface, but a strategic advisor and innovation driver who contributes to the business' strategic digital agenda. As a result, an Agile IT is closely aligned with its business customers. Both share joined and measured targets.

Entrepreneurial Culture Leaders have been talking a lot about entrepreneurial culture, but a start-up mentality needs to become alive on an operational level.

An entrepreneurial culture is an enabler for an Agile IT. The organization's culture transformation is guided by a long-term vision as well as a digital IT roadmap. Senior IT executives must be able to articulate and to explain this digital vision clearly, but also walk the talk and embrace the agile way of working themselves.

On an operational level, the mindset change begins with the empowerment of IT teams. This comprises freedom to experiment with new technologies, creating a culture of trust that sees mistakes rather as learning opportunity and by incentivizing entrepreneurial thinking (e.g. by establishing personal innovation budgets and formats such as "screw up" nights). An entrepreneurial culture goes hand in hand with a certain degree of team autonomy and flat hierarchies.

A **multinational engineering company** fostered IT innovation and time-to-market through a new customer-focused IT collaboration model

Situation	Impact
IT organization faced challenges with high overall complexity and missing business orientation. A new business & IT collaboration model with a customer-oriented way of working was introduced. IT staff were trained to promote digital vision and mindset.	▪ Higher transparency through clear responsibilities ▪ Faster decision-making ▪ Clearer focus on innovation ▪ Rapid ramp-up of new projects, due to higher relevance of business KPIs for the IT

Agile and Innovation Techniques **Adopt agile methods to ensure better alignment and provide business value earlier.**

An agile product management that is set up in iterative cycles allows to adopt a strong customer perspective from early on. This sprint-based logic allows to take customer feedback into consideration throughout the process. Besides aligning customer expectations and the actual product closely, this also decreases investment risks, since results (and benefits) become tangible early. Corrective measures can be taken if results do not fit expectations.

Apart from agile product management, agile IT organizations master further agile and innovation techniques (e.g. follow DevSecOps principles, leverage hackathons). Engaging agile coaches, who support and coach in adopting agile methods quickly in day-to-day operations, has been proven very effective for improving this agile capability.

Autonomous Teams **are aligned and driven by a common goal and not an operational leader.**

A key success factor for an Agile IT is setting up autonomous teams that follow the two main concepts of self-organization and interdisciplinarity. Thus, agile teams differ greatly from traditional teams, that are often limited by organizational boundaries. Agile teams are assembled cross-organizational and aligned by common task and objective.

The way of working changes from a mostly silo-oriented mode to cross-functional collaboration. Self-organization means to empower these teams to decide on how to best employ their available resources to accomplish their assigned objectives. In a dynamic ever-changing digital world, autonomous teams enhance organization flexibility, creativity, trust and productivity.

A captive finance company introduced a capability-driven IT operating model and enabled its employees for global collaboration

Situation

Decisions were moved to an operational level to empower IT employees and drive innovative delivery. With a main focus on key IT capabilities, assets could be developed jointly and secure across regions in end-to-end responsible teams. Fast prototyping infuses other areas and contributes to a value-add for the business

Impact

- Global collaboration
- Better business-IT alignment
- Better integration of digital security into IT development
- Quicker solution finding
- Higher employee satisfaction
- Innovative mindset
- High acceptance of agile methods

Flat IT Organization It is not about number of hierarchies – it is about decision-making and the role of leaders.

Agile IT organizations promote a flat and democratic hierarchy model. They allow for direct and hierarchy-free communication across all IT areas – instead of following a rigid chain of command. This enhances exchange and decision processes.

Additionally, agile organizations apply role-based leadership with leaders, who coach associates instead of directing and controlling them. Thus, they promote entrepreneurial thinking and culture. Agile organizations find the right balance between their ability to scale and an entrepreneurial start-up spirit that keeps bureaucracy at bay. As a result, they meet changing business demands faster and in a more innovative way.

Digital Skill Shift Trends change quickly – staying up to date requires continuous learning and skill enhancement.

For an Agile IT, digital skill management requires tech-savviness, new ways of learning and talent attraction. To master quickly evolving innovative technologies and trends like artificial intelligence, data analytics, digital security, IoT and augmented reality, it is crucial to grow digital evangelists in-house and provide them with (technical) career paths to advance further. Providing continuous self-learning opportunities is essential to transfer emerging digital trends into digital skills quickly.

Beside tech-savviness and technology adoption, new ways to attract talents need to be explored (e.g. hackathons, speed dating formats, bug bounty programs). New, digital job profiles, secondments as well as innovation incubators are proven tools to further develop and support digital IT talents.

Associates of a **professional services company** were provided training and certification to develop digital skills

Situation	Impact
Associates are provided a digital upskilling program. They can achieve different mastery levels – certified by a digital committee. The upskilling program provides access to a network of partners, start-ups and events.	▪ Raising awareness for tech trends and digital skills (e.g., cloud, digital security) ▪ Swift adoption of knowledge about new technologies ▪ Efficient training through playful elements ("gamification") ▪ Increased motivation and knowledge building

Digital Platform Architecture **Forgetting the digital architecture is a showstopper for agility.**

Agile IT masters have defined their digital architecture enablers and constantly push their realization forwards. They pursue architecture as a service concepts – such as Infrastructure as a Service (IaaS) or Platform as a Service (PaaS) – to better scale and automate provisioning of secure IT services. Without hosting any physical assets, they shift focus towards growing and transforming their business in a resilient manner.

On the business layer, they enable agility for new business scenarios via APIs, microservices and backend integration technologies. They deploy platform-independent applications, resulting in less testing and reduced risks in case of malfunctions. Modern architectures incorporate digital security and protect the organization from leaks, hacks and business interruptions.

Partner Ecosystem **Focus on your competencies, but do not forget to learn from and to share with your partners.**

An Agile IT proactively manages its partner ecosystem. Such a partner ecosystem develops three different specific types of partners to make IT delivery more scalable, innovative, secure and cost-efficient.

First, commodity IT services are best provided in a cost-efficient and scalable way by cloud IT partners. Second, innovation partners like startups, universities or joint ventures with industry leaders are set up to drive IT innovation and to differentiate business via technology-enhanced products. And third, solution partners support accelerated business growth and transformation by quickly rolling-out proven IT solutions to new markets.

A **multinational energy provider** rebuilt its IT infrastructure to reduce delivery times

Situation

An energy provider designed and implemented a fully automated IT infrastructure. As a result, savvy employees were provided with secure self-services, including automated monitoring and backups.

Impact

- Reduction of delivery times with automated tools from months to minutes

- Automated management of computing power resources done by software robots

- Higher level of automation and self-service, security compliance, higher ROI by reducing costs of not-used physical assets

How to get started?

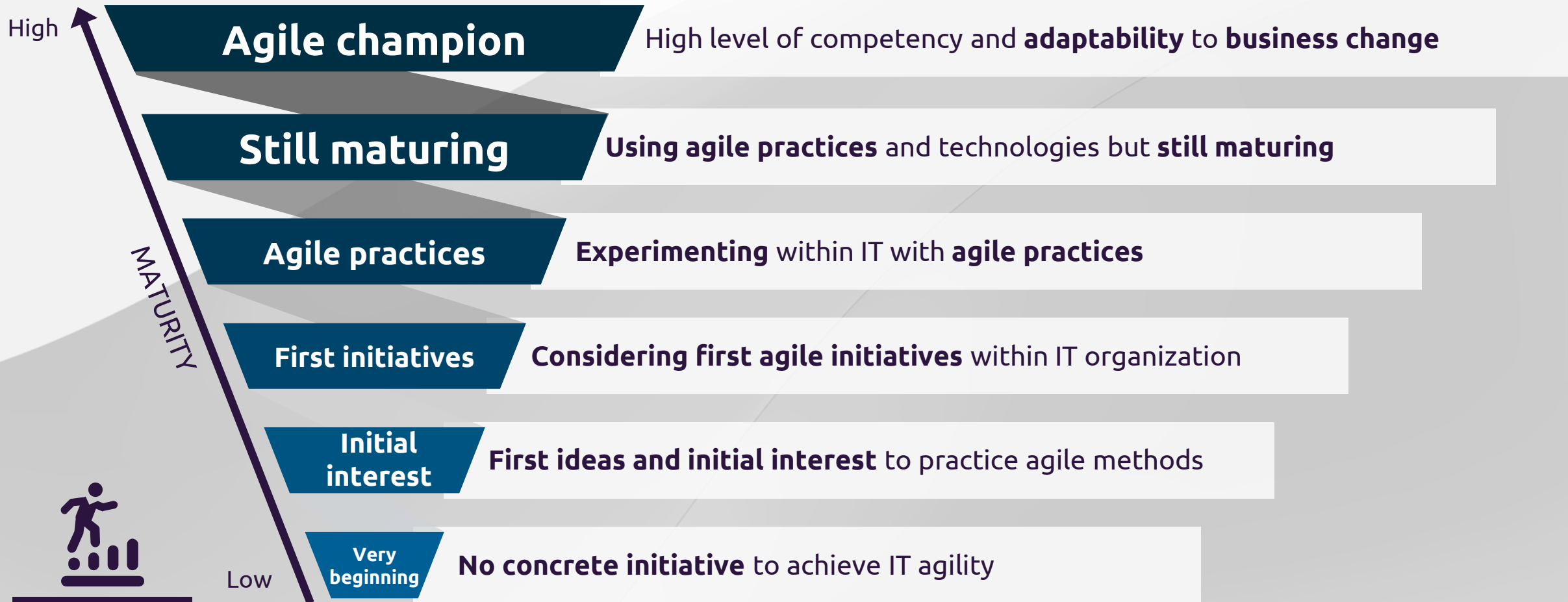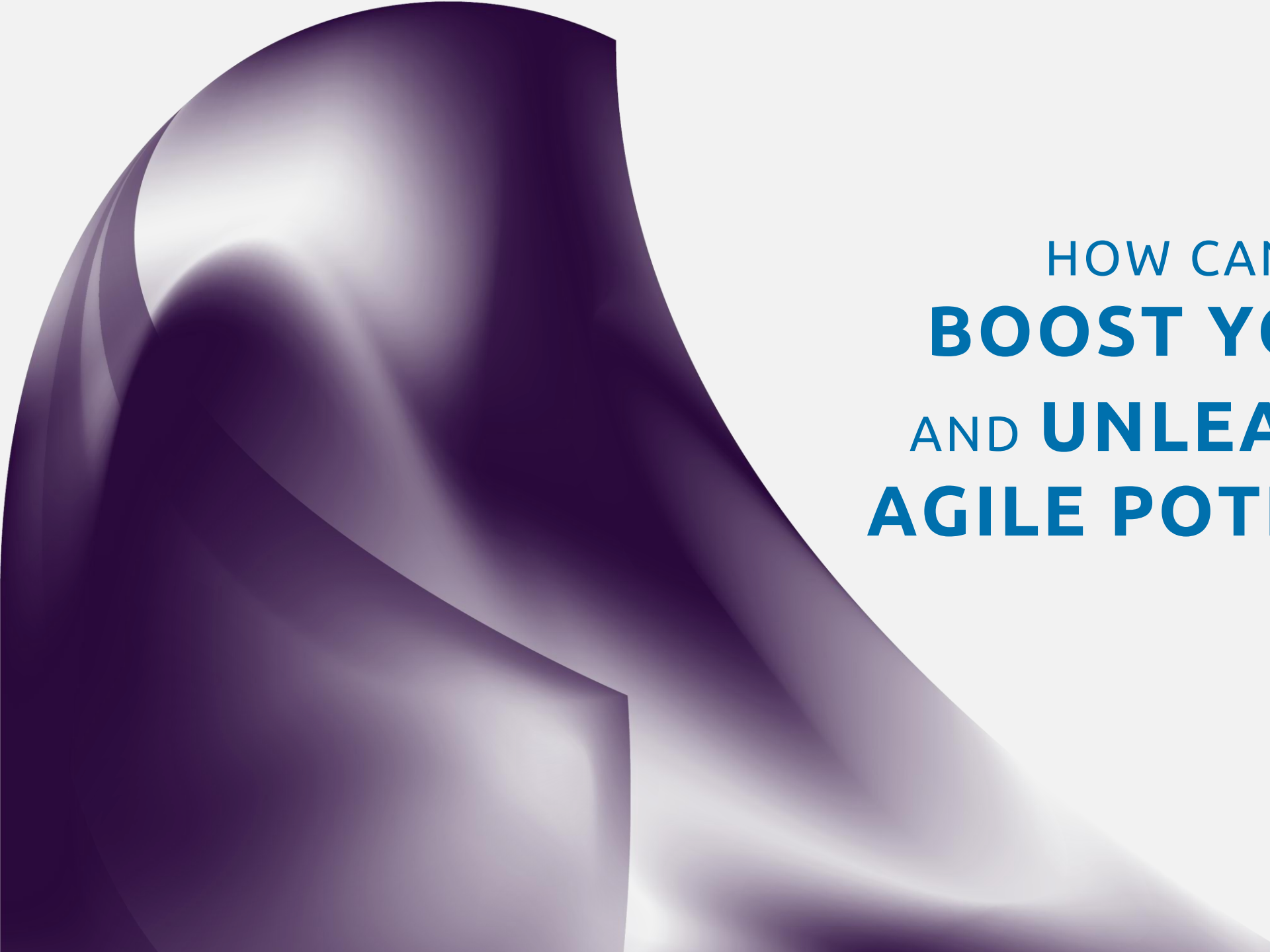| ~ 2-4 weeks	~ 2-4 weeks	~ 3-6 months	~ 1-2 year
Agile maturity	**Quick start**	**Agile pilots**	**Agile enablement**
Assess organizational readiness by measuring maturity of agile enablers	Derive impactful quick wins and draft long-term activities	Pilot quick wins and introduce Agile IT coaching	Comprehensive transformation towards Agile IT

Understanding the current level of Agile IT maturity lays the foundation for your individual Agile IT transformation

High

Agile champion — High level of competency and **adaptability** to **business change**

Still maturing — **Using agile practices** and technologies but **still maturing**

Agile practices — **Experimenting** within IT with **agile practices**

First initiatives — **Considering first agile initiatives** within IT organization

Initial interest — **First ideas and initial interest** to practice agile methods

Very beginning — **No concrete initiative** to achieve IT agility

Low

MATURITY

HOW CAN WE
BOOST YOUR IT
AND **UNLEASH ITS**
AGILE POTENTIAL?

Let's talk Agile IT ...

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