HOW TO TURN AGILE A COMPANY?
Technology is not new as a disruptive force - but it is accelerating change like never before today. Every single service is accessed digitally, in real time by the customer.

In that perpetual state of evolution, companies want to move quicker from strategic thinking to development and rollout of ideas, offers, services.

To do so and stay competitive while meeting changing customers’ expectations, companies are moving towards Agile transformation which is now a competitive lever:

- **Help business & IT** to be more customer centric.

- **Break with the rigid long-term plans & improve IT project quality and efficiency**: Large V-cycle programs are often risky and costly. They are risky because they take time to deliver and often meet partially their versatile objectives. Agile approaches enable teams to reduce costs by 15 to 20% with less documentation, faster collaboration, better integration and earlier detection of defects. The split of large programs into smaller synchronized projects which are more likely to succeed and stopped when needed, prevents major failures.

- **Strengthen company’s attraction**: adopting agility in its culture is an effective way to better attract digital experts (Big data, IA, Ux and UI designers, Scrum masters, Devops...). and retain employees.

But the objective of an agile transformation is not turning a traditional company into a digital pure player but transform the way the company innovates and delivers products and services, to face its challenges in the digital market, in accordance with the company’s DNA.

Beyond using the agile methodology on projects, the new challenge for companies is to bring to life industrialization of Agile, by shifting most of the delivery capabilities towards that model.

**To make this shift happen, Capgemini Invent, leader in Transformation & Technology has developed a 4s framework.**

Capgemini Invent 4S framework for Agile Industrialization

This framework structure our approaches in order to:
- Assess the current Agile maturity of an organization
- Select and implement the relevant levers to move at scale
- Synchronize the levers with the right tempo
Agile Delivery is characterized by iterativity and incrementality (being able to deliver a solution in smaller independent chunks which all carry a clear value for the customer). To speed up digital delivery and generate quick and demonstrable gains for the end user, teams must adopt an omnichannel product-centric organisation that promotes end-to-end autonomy.

This end-to-end autonomy is based on 3 key requirements:

- **Autonomy in decision-making**: the team is multidisciplinary and mobilises all key competencies it requires, both Business & IT, to facilitate decision-making regarding the product line.
- **Build-to-Run autonomy**: The end-to-end Agile delivery of a team includes scoping, specifications, development, testing and deployment of their features backlog.
- **Build & Run autonomy**: the team manages the build of their product and its application maintenance (Run).

When it comes to make Agile Delivery at scale, the main challenge will be the agile teams coordination while preserving their own autonomy. Capgemini Invent has implemented successfully Agile Delivery Models to reach an 80% ratio of Agile delivery capabilities.

**How to turn agile a company?**

1. **Agile Release Train delivery is cadenced in “Program Increment” of 5 sprints**
2. **Each agile release train addresses its portfolio of EPICs that is refined in features by product management**
3. **For an increment: feature teams engage themselves on refined features to implement (user stories)**
4. **During the PI, teams integrate continuously the stories to allow release on demand**

A **SAFe® based operating model to structure business & IT relationship on business transformation**
Change of Delivery Practices needs to be coupled with a move to Cloud Strategy. Indeed, one key technological enabler is to support incremental integration (through fast provisioned environments) and faster time to market (through continuous testing and implementation).

The cloud transformation can be split in two dimensions: providing for new digital services a set of native cloud-based tools and infrastructure that can be used to create code, test it continuously, and deliver it on demand; and turning key legacy components into cloud compliant ones to allow the same velocity of implementation that digital cloud natives solutions. This transformation is complex, but recent technologies like containers can provide virtually the same performance than native cloud solutions without a full rewrite of legacy applications.

2/STRUCTURE
Governance structure needs to be rethought to support innovation and differentiation strategies focusing on client rather than on organisational silos

An agile organisation at scale is based on multidisciplinary Agile teams with functional and technical skills. The teams to manage their products independently, covering a very wide scope, from back-end activities to the application layer (front-end) across development (build) and maintenance (run) phases.

To achieve this, new structure models need to be set up:

First, highlight what are the strategic portfolio that support company’s innovation and transformation.

Two, identify the EPICs as the largest initiatives that implement strategic portfolio.

Three, assign prioritized EPICs to the appropriate value stream.

Value streams allow companies to reshape their Business/IT organization and governance to make it more client-centric.

Value streams are end-to-end processes (from a client’s need to its realization), which are linked to supporting application systems.

Their main objective is to create independent functional domains, therefore facilitating decision-making at the right level and autonomy for agile teams, both on IT and Business issues.

Value streams are also allocated a budget, which is to be granted on their current applications (build & run) and on new products to be developed. Value streams are the only way to provide autonomy to group of teams, required to practice iterative delivery at a large scale.

Assigning budgets to Value streams is a major disruption in the way companies can leverage their technology investments. With the Value Streams companies are investing money in value creation areas instead of funding IT projects or Application Management services.
• Strategic portfolio are built on strategic themes for the enterprise that support company innovation and transformation
• Each portfolio is built on some EPICS with their own Bcase and implementation strategy roadmap (MVP)
• Each portfolio is processed by a Kanban allowing EPIC monitoring

• Value streams are client oriented governance and organization responsible for a proper perimeter of business processes and solutions
• Each value stream is funded by a proper budget reflecting EPICS contribution and product & services investment strategy
• Value streams are supported by one or several Agile Release Train (ART) of one hundred people each, ensuring the delivery and the run of the business solutions
• A distinct organization is to set up for big non modular legacy solutions and common components that cannot be dedicated to a value streams. They act as provider for value stream ART and have to synchronize their priorities and planning for their transformation
This model is the basis for a "product-based" organization, as opposed to a "project-based" organization. The main advantages are: more client-knowledge for agile teams enabling efficient feedback loops, the end of the "stop & go" effect when launching & ending a project / program, the decentralization of decision-making.

As the company is divided in value streams responsible for their perimeter, each one can implement its own technical roadmap, that improves gradually IT urbanization and API creation, according to functional priorities.

However, as not every application can be split easily, the teams that are responsible for those applications will then work as 'suppliers' for other value streams, with dedicated approaches to manage their backlog priorities iteratively, even in a V-cycle mode. This allows to have a progressive transformation to switch V-cycle teams into agile value streams.

3/STAFF
Agility transforms the roles and culture of a company, which requires anticipation and change management

The new roles defined in Agile methodologies have disrupted the Strategic Workforce Planning of companies.

These new roles (Product, Scrum Masters, UX Designers, Full-Stack Developers, etc.) as well as the specific skills linked to these roles are, for the most part, often missing. Given that, these skills are scarce and difficult to source, it is therefore crucial to develop them internally.

To do this, it becomes necessary to have a skill development plan which combines recruitment, upskilling and reskilling, aligned to the new roles and processes that support the company’s agility.

Moreover, agility provides change in the management structure as the teams become more autonomous, managers become less necessary than functional or technical experts, which implies to imagine new career paths.

To manage smoothly this transition, HR departments have a key role to play:
- Turn to a more horizontal organisation with a maximum of 3 to 4 levels between an employee and the top management
- Propose an ambitious training plan for the managers so that they can easily transition from the "command & control" management style to a "coaching" posture
- Design functional & technical expertise career paths that offers professional development and visibility, equivalent to the Management career path

These new career paths help diversify professional opportunities that are as attractive and as rewarding as the ones offered by the management career path, which is not something all employees aspire for.
• SAFe bring a new governance framework with new roles that have to be staffed at each level (portfolio, value stream, agile release trains, teams)

• A proper study is necessary for the enterprise which wants to adopt Safe in order to:
  • Review job descriptions in order to enclose SAFe roles
  • Study employee journey to access these roles and to evolve in the company
  • Find dedicated training cycles to empower these roles toward agility
4/ Strategy
The company’s transformation to agility is a long-term strategy

Digital natives and start-ups have integrated agile manifesto by design in their company’s culture, processes and behaviors. On the contrary, traditional companies have spent lot of time and energy to install hierarchical organizations and processes that allow control and optimization. Moreover, as digital natives and start-ups started fresh with their IT, based on recent technologies standards, traditional companies must cope with intricate legacy systems which are challenging to upgrade at the pace of the market. The step is high and cannot be handled with a big bang transformation.

This transformation must be continuous and should leverage on existing experimentations and best practices in the company to go further in the implementation of agility.

In our experience, several key steps are to be considered when turning a company into agile:

A. Make a first marketable experience: it can be a flagship customer journey or customer service that has brought substantial business or client satisfaction leveraging agile practices. This experience would require an active coordination of various agile teams.

B. Prepare to scale: scaling agility to company-level brings more challenges and has to be prepared on several topics:

- Choose your agile delivery framework: if several frameworks can be used to experiment agility value in the company, when scaling agile, everyone has to speak the same language to better interact for the sake of delivery. Several agile frameworks exist to spread agile delivery in the whole company, almost all of them directly inspired from digital native practices. **SAFe** (Scaled Agile Framework) is the most used in the world, according to Version One’s Last State of agile report of 2018.

- Reshape your governance Framework: The governance has to be shaped at a company level, rethinking how to better impact clients in this digital context to create client-oriented value streams, regrouping people and IT systems that will implement the company’s differentiation strategy. The company’s projects portfolios have to be restructured as well to be customer and value centric, and animated collectively across the traditional organizational silos.

- Build the agile transformation Roadmap: As agility is spreading in the company, teams that will want to be part of the story will be numerous. Unfortunately, key resources that ensure good transformation conditions, which are consulting, coaching services, trainings, UX/UI experts, are often limited. It is important to build and communicate a clear roadmap of how the company wants to scale agility. We can see two ways to build this roadmap, that are not mutually exclusive. Those two ways allow two speed governance for projects, as agility is spread progressively, and v-cycle initiatives are still to be managed during the transition:

  - Fixed budget: A defined investment budget is fixed for agile transformation, and projects present candidature according to business criticality and context relevance

  - Fixed projects / Fixed value stream: The company defines a roll-out strategy, based on key initiatives and / or key products or customer journeys that have to leverage agility.
C. Install an agile & devops center of excellence supporting the agile transformation:

- **Install a homogeneous practice of agility**: when scaling agile, everyone has to speak the same language to better interact for the sake of delivery.

- **Support teams to practice Agile and Devops**: this structure should concentrate all the Agile & Devops coaching resources of the company, deployed beside agile teams according to the agile transforming roadmap. Centralizing the coaching resources presents several advantages: maintain homogeneity in agile practices and coaches level, organize and capture feedback loop and encountered difficulties at a company level, and make KPI monitoring easier, because coaches are the main witnesses of the transformation.

- **Structure competencies and learning journeys for key agile roles**: Agility relies on key roles as Product owner, scrum masters, and their equivalent for large scale coordination. Moreover, this is a global change for all managers that should have a key role to take to prioritize opportunities, provide business objectives and support teams in a different way. All these changes of roles and activities should be set-up by dedicated and practicing journeys that should be managed by the agile center.
- **Bring external feedbacks on successful agile transformations.** Finally, the hardest part of this transformation is to make the organization and culture change to unleash company agility. It is hard for a traditional company to provide some autonomy to the teams. A good test is to count the number of committee a team and its managers should attend between when they have a new idea of a new service or functionality, and when first code line is written.

It requires a general commitment on the need of change to achieve company’s strategy. The agile center has a key role to play, especially in providing the company new practices, new ideas as well as in interacting with all functions of the company to provide awareness on that change.

D. Imagine the future agile operating model
- Companies that successfully manage both Agile Delivery intensity and Business/IT Agile Governance, will change dramatically the ways they are working. They will have the Agile maturity not only to create business value and innovation quicker, but also to drive the reskilling of their employees and adapt their operating model to the new world of work.

Capgemini Invent has defined a maturity model, based on our experience, that can be used to drive the agile transformation.

Capgemini Invent agile maturity matrix

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<thead>
<tr>
<th>AGILE FOR PROGRAM COORDINATION</th>
<th>AGILE FOR COMPANY OPERATING MODEL</th>
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</thead>
<tbody>
<tr>
<td>• Agile@Scale framework is used for strategic and transversal business/IT programs</td>
<td>• A business / IT governance is set with transversal portfolios and client centric value streams</td>
</tr>
<tr>
<td>• These programs are supported by dedicated agile &amp; devops experts and coaches</td>
<td>• Agile is used for IT and non IT activities, as a best practice</td>
</tr>
<tr>
<td>• Programs are autonomous on their fixed budget</td>
<td>• Agile roles are part of the business/IT organization, with dedicated training and evolution paths</td>
</tr>
<tr>
<td>• Light product mode governance, managed by IT</td>
<td>• IT systems are modular and split between value stream, non modular IT is kept as an exception for non strategic activities</td>
</tr>
<tr>
<td>• Each key agile role is staffed for programs, with dedicated training</td>
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</tbody>
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<table>
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<tr>
<th>AGILE FOR DIGITAL DELIVERY</th>
<th>AGILE BY ELIGIBILITY</th>
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<tbody>
<tr>
<td>• Agile methods are used mainly for digital projects</td>
<td>• Agility is a major stake for company, but with limited means to be spread at a large scale</td>
</tr>
<tr>
<td>• Few other business and IT departments are aware of benefits of agility for their activities</td>
<td>• Each project can attend to a go/no go committee to be delivered in agile methods, answering an eligibility questionnaire</td>
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<tr>
<td></td>
<td>• A dedicated budget is fixed per year for agile investments</td>
</tr>
<tr>
<td></td>
<td>• Key agile roles (product owner, scrum masters…) are managed properly in the company</td>
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As industrializing agility is a long term transformation, it requires getting a general commitment on the need of change to achieve company strategy. This awareness takes months, and the agile center has a key role to play, especially in bringing external feedbacks on successful agile transformations, as well as in interacting with all functions of the company to make make change hapen.
To bring value to our customers faster and to keep its trade momentum in a Digital world, Orange is developing its production capabilities in agile mode.

To make it happen, we chose SAFe which gives us methodological support points, common culture and practices.

Our challenge is to strengthen the collaboration of business and IT teams within multidisciplinary teams.

The goal is to lead our projects in an end-to-end logic, in order to better integrate the constraints of our back-office systems.

To date, we have more than 10 pilot trains and we learn from them:

• Technology is now part of the business and the first challenge is to switch our IT delivery units into agile “trains” with business and IT teams working together on a daily basis to create value for the company faster.

• The 2nd challenge relates to governance: The objective is to move from project-specific budget governance to value chain budget governance. These value chains are customer centric and are focusing business & IT teams on delivering the right value to the customers. Teams are autonomous to manage the innovations or the business as usual activities depending on the value chain they manage.

• Rethinking workspaces to foster physical and virtual collaboration between several teams is also a key success factor. The work cycles are punctuated by ceremonies coming together more than 100 people, 2 days per quarter. Every day the teams need to exchange and not waste too much time in synchronizing.

• The agile rely on new skills that are often difficult to staff and that need to be brought on board quickly: anticipating the recruitment and employees reskilling is key; defining attractive new career paths is just as important.

• Agile transformation takes time; it is a journey that goes through several phases: starting with the boarding of business leaders, training in the framework, and immediately launch experiments of agile trains without having necessarily defined the overall plan, build the new governance which is a real disruption in the management of budgets, define the roadmap of implementation and achieve the industrialization.

• In support of an Agile transformation, a centralized Agile Center of Excellence is an enabler to:
  - Bring expertise on the target operating model, agile & Devops culture
  - Facilitate the appropriation (culture, methods) and the identify all the ways of working that need to evolve (in particular with the transformer teams)
  - Coach operational teams and managers on practices, postures, mindset
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Capgemini Invent is an integral part of Capgemini, a global leader in consulting, technology services and digital transformation. The Group is at the forefront of innovation to address the entire breadth of clients’ opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of 200,000 team members in over 40 countries. The Group reported 2017 global revenues of EUR 12.8 billion. People matter, results count.

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