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an imprint of **Olevio**BAI press

Emergence is published by



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businesssagility.institute/emergence

n Mar 23 & 24, Business Agility Conference will return to New York after two years with an apt theme—Moments of Connection. The focus this year is to reconnect the business agility community and re-create moments for collective intelligence and understanding through the conference. From the beginning, the fundamental premise of the conference has been such that anyone who is part of the conference should be able to get on stage and share their thoughts on what they have learned from their experience so that attendees should be able to draw inspiration from it. With this year's conference being in a hybrid state, I hope you're as excited as I am about what's in store for all of us. This special conference edition is curated as a testament to you and shares a rich and worthy combined knowledge and experience of our contributors - Shannon Ewan (I), Todd Rebella (2), Aimee Palmer (3), Pia-Maria Thorén (4), Jeev Chugh (5), Sally Elatta (6), Trisha Hall (7), Rakesh Kondvilkar (8), Amol Pradhan (9), Pete Behrens (10), Nizar Khoja (11), Hendrik Esser (12), Marcin Floryan (13), Darja Smite (14), Jens Coldewey (15), Ram Bathija (16), Carol McEwan (17), Kemmy Raji (18), Howard Sublett (19). As the business world is reshaping with the COVID era, we look at the dimensions of organizational resilience through community robustness and creative agility. Organizational resilience is an important driver for gaining a competitive advantage. We have some deeper conversations on organizational resilience, organizational ambidexterity, dynamic capabilities, and transformational leadership. We build on these insights to advance a more comprehensive and complex approach to resilience dynamics in organizations. Organizational resilience is an ambidextrous dynamic capabilities

proach to resilience dynamics in organizatinathat allows firms to take competitive advantage by rapidly and efficiently coping with adversity. The strategic consequences are borne by organizations, which are the result of a combination of competing exploration and exploitation measures taken in the face of adversity. There's an articulated fundamental contradiction between robustness and agility. Attaining organizational resilience is possible by structurally separating robustness and agility, and shifting attention from and to inversely. And, recognizing the usefulness of organizational context which enables and encourages leaders to engage in a robust and agile behavior. Organizational resilience, it is a dynamic capability of firms that is built with sensing, seizing, and transforming opportunities.

I hope you connect, enjoy and cherish the experience of this conference with fellow leaders, and will share and expand on the collective knowledge and learning beyond the conference after these two days. We couldn't have been successful without your support, so thank you. Have fun!

Manoj Khanna, Managing Editor & Publisher



**Contributors** 

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wo years ago, our community gathered in New York for the 2020 Business Agility Conference. We didn't know it at the time, but this was the last event before the world shut down. We laughed, we shared stories, and we even had the chance to enjoy a Broadway show together—not knowing it would be the last show for more than 12 months.

Those of you who attended the 2020 conference will remember us standing on stage to announce that the World Health Organization had just declared COVID-19 a global pandemic. New York shut down around us. The mood turned sombre and reflective as we all boarded our flights and returned to our everyday lives... lives which, for many of us, would soon become unrecognisable.

Now, in 2022, we're finally ready to get together again. And, as we were one of the last global agile events before the shutdown, It seems serendipitous that we are also one of the first global agile events to launch as the world reopens. We are delighted to have you with us for this long-overdue comeback.

This special edition of Emergence celebrates the 5th Business Agility Conference. In it, you will find articles and insights from many of our members and partners from around the world. Whether you are holding this in your hand while standing in NYC with us, or reading it online while waiting for the virtual conference to begin, these stories can help to connect us.

Which brings us to the theme for this conference—Moments of Connection.

For two years now, we've been talking about a "new normal," and we see and feel this supposed new normal everywhere. We see it in that slight hesitation people have when they meet. Should they simply wave? Should they extend their hand for a shake or an elbow bump? Or maybe their counterpart is comfortable putting aside social-distancing norms for a hug.

But it's no longer about a new normal. There is no new normal. It's unlikely that we'll ever return to the same ways of living that we enjoyed in 2019. COVID has continued to impact people around the world since it was first identified, and the world is slowly reshaping around it. Perhaps the only thing to do is to prioritize the one thing that will keep us sane through it all: human connection.

That is my ask of you over the next two days. Be deliberate and create those moments of connection. If you are physically with us, remember that connection doesn't have to be physical. Be empathetic to others. Not everyone is ready for a hug or a handshake. But be there for others—listen more than you speak.

For those joining virtually: Stay connected and talk. Most people, when given the option over the past two years, will leave an online conference immediately after it wraps up instead of staying behind to chat. They don't skip talks to hang out with people they meet or to get new ideas in the industry. This aspect of connection is missing from most of our lives. So, be deliberate.

This conference brings together amazing people like you; transformation leaders who have walked the path to greater agility and thrived along the way. Throughout each day, executives, practitioners, and thought leaders will share concise insights and authentic experiences, interspersed with facilitated deep-dives to give you the chance to share your own insights, discuss what you're learning, and brainstorm with other leaders.

Take the time to expand your local and international network and forge new connections that bring a newfound energy to your business agility journey.

Most importantly? You'll discover you are not alone.

Lvan Leybourn
CEO and Co-founder,
Business Agility Institute



# Moonshots for Net-Zero 2050 Transforming Oil & Gas

Rakesh Kondvilkar Amol Pradhan

### **EXECUTIVE SUMMARY**

The Paris Agreement aims to avoid dangerous climate change by limiting global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels. This treaty urges organizations around the world to take rigorous and immediate action to halve global emissions by 2030, achieving "net zero" carbon emissions by 2050 at the latest. The ultimate goal of this agreement is to deliver a healthier, fairer zero carbon world before levels of atmospheric carbon reach an irreversible tipping point . To clarify, net zero is a state in which greenhouse gases being released into the atmosphere are balanced by an equal or greater removal out of the atmosphere.

This document outlines an action guide based on key steps taken while co-designing and implementing a purpose-driven agile transformation with a large Oil & Gas Organization in South-East Asia. The document focuses more on the production and operation value stream, more commonly known as upstream. This part of the organization is mainly responsible for exploring, drilling and producing Oil and Natural Gas. Therefore, upstream is an area where immediate action is needed to support the global mission of halving emissions by 2030.

The document includes a brief summary of the following experiences:

- Inspiring and aligning people through World Work initiatives
- Embedding continuous prioritization as a regular habit for people, without relegating Safety & Quality to a lesser priority
- Cultivating a culture of personal transformation, innovation, collaboration, psychological safety, and growth mindset to support the organization's new-found purpose and business strategy

- A common—but often-neglected—problem introduced, as a result of agility in the organization: The adding of several meetings into everyone's calendar without first removing anything from the ecosystem
- Most coaches and change agents at the moment predominantly work in IT departments across several domains, and therefore lack necessary knowledge and experience regarding the needs of asset-heavy industries.

This document tends to avoid going into the details of any specific Scrum or Kanban implementation, as there is a lot of material already available online that better explains the specifics. Instead, this focuses on the leading asset-heavy industries (e.g. Oil & Gas, Aerospace, etc.) transformation approach and action steps.

Based on our first-hand experience, we believe the following recommendations will put you on a path to success:

- Identify a purpose that goes beyond mere profits and revenues;
- Give equal weight to encouraging Personal Transformations;
- Coach your leaders to create a culture that is supportive of your business strategy;
- The Agility Training must be relatable i.e. specific to your industry;
- Synchronize your cadences to optimize the business outcome; and
- Before adding new activities to the ecosystem, identify what non-valued activities can be removed

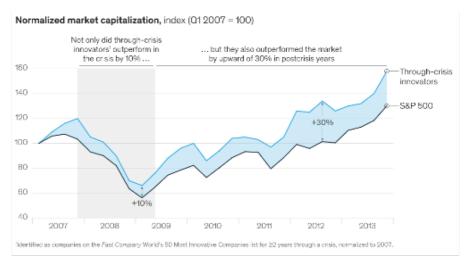
### INTRODUCTION

Per World Energy Outlook 2018, the total indirect greenhouse gas (GHG) emissions from oil and gas operations is about 15% of the total energy sector GHG emissions. If we add the direct GHG emissions, then the total shoots up to 42% of global emissions. Even though climate change is a greater concern and immediate steps must be taken to rectify it, the world still needs Oil and Gas to run its economy. It, therefore, becomes crucial to reduce the immediate impacts associated with producing and consuming these fuels (given that Oil & Gas will be a part of the global energy system for decades to come).

2020 brought multifold challenges to the Oil & Gas industry. The United Nations had initiated a necessary call to action to save the planet while, at the same time, the COVID-19 pandemic was growing at a threatening pace. The pandemic's impacts upon the supply chain system made it increasingly difficult to keep industries in operation at remote locations. The world also saw a sudden change in the usage patterns of energy sources due to lockdowns in several countries. The Climate Change Conference (COP26), held at Glasgow in 2021, saw an announcement by the United Kingdom that it would end the sale of new petrol

and diesel cars by 2030. This was a strong indication that the future would see different usage patterns and demands of Oil & Gas emerging across the world. The United Kingdom's leadership further announced a doubling of international climate finance, pledging £11.6bn to developing nations over the next five years (up to 2025/2026).

For Oil & Gas conglomerates, it was becoming increasingly clear that they had to reimagine and reinvent themselves if they were to survive the changes in the usage patterns of Oil & Gas. This was reinforced by the Paris Climate agreement, which strongly encouraged countries to pursue cleaner energy sources after the year 2030. For these conglomerates, onboarding a transformation journey to reach net-zero by 2050 and reinventing themselves as "energy companies" was nothing less than Moonshot Thinking. Now, Moonshot Thinking may not be difficult but Moonshot Execution definitely is. However, despite the inherent challenges, Moon-Shot Thinking has the potential to reap 10 times the amount of gains. Below is an exhibit from McKinsey & Company's article that shows how organizations that maintained their focus on innovation during the crisis outperformed the market during the later recovery.



Jan 2022Rakesh Kondvilkar and Amol Pradhan

While it's good to prepare for the future, it's also vital to recognize that the demand for Oil & Gas won't drop significantly for at least a few more decades, the pandemic won't continue forever, and as the world recovers from the crisis, organizations still have an uphill challenge to face as they reduce emissions from existing assets.

For the South-East Asian Oil & Gas Organization in question, adjusting their upstream to contribute to their net zero 2050 vision would require several changes to the ways of working to foster innovation, cultivate growth mindset, and support its strategic vision. This transformation might be the biggest in its 100+ year history.

A combination of UN's Climate change initiative and COVID-19 pandemic generated multitude of challenges to the Oil & Gas industry.

significant investment has to be Autho-

rized for Expenditure by the governing

The home country for these projects is a

a big role in the prioritization of business

initiatives within the region. Therefore, transparency, governance, securing buy-

ins, and complying with regulations are

to slow down the overall progress.

critical. However, it also has the potential

developing nation and may need addi-

tional finance to support such climate change initiatives. These factors may play

body agreed upon by the PS partners.

#### **KEY CHALLENGES**

### Supply chain

Many of the assets belonging to this South-East Asian organization are in far-remote locations that require a minimum of three modes of transport to reach from the nearest city's main airport. In general, the procurement of materials had long lead times, and the COVID-19 pandemic was only adding to timeline woes. The pandemic created a new set of challenges regarding the organization's ability to deploy people at this asset location due to country-wide lockdowns, quarantine periods, and reduced workforces due to social distancing norms. The project that supports the operations of these assets had already suffered delavs due to natural disasters that rocked Indonesia in 2018. The pandemic further affected this entire supply chain, thereby making the production and operations of these assets even more difficult.

### **Partnerships**

Oil & Gas projects are executed through Production Sharing Contracts (PSC) where this organization is designated as the operator responsible for implementing the project on behalf of the PSCs. Therefore, each new idea that has

### Lack of culture that supports the business strategy

The organization has been experimenting with agile and lean practices in randomly chosen internal business units. This approach struggled to create a conducive culture that was supportive of its business strategy, and failed to sustain agile practices and deliver desired business outcomes. In short, the siloed implementations created more problems than they could solve. Lack of strategic direction and a culture that was supportive of agility resulted in more dysfunction and silos in the production and operations value stream. As per the famous Peter Drucker quote: "Culture eats strategy for breakfast".

### Possibility of chaos and anarchy

Most agile coaches, consultants, and transformation coaches are predominantly working in Banking or IT domains or have a background specific to those domains. The current talent pool within and outside of this organization may feature people with little experience in the Oil & Gas industry. Therefore the organization must focus on hiring experienced talent that can adapt to the industry context. If we get agile implementation wrong here (e.g. removal of a step in an established process under the presumption of it being a wasteful activity), it may result in human loss, safety, quality, or compliance issues.

#### **ACTION GUIDE**

### Create a culture that is supportive of your organization's strategy

In the year 2020, the global leadership group identified a new purpose for the organization: Achieve net zero by 2050 or sooner. To transform itself into an "energy company", it started with a zero-based approach including restructuring, re-organization, re-imagining, and re-inventing itself. There were strategic goals identified for the immediate decade i.e. the year ending 2030.

Most transformations focus heavily on executing the implementation of a certain established agile framework or designing something of their own. These transformations often emphasize an agile mindset without giving attention to cultivating an agile culture. The expectation here is that the agility training delivered would enable that culture.

In most agility training packages, agile mindset or growth mindset concepts are delivered in a couple of slides focused only on the organization's agility perspective. The "What's in it for me?" factor is left unanswered or rather not given due importance. The regional transformation office in South-East Asia identified this as a potential problem in embedding a new culture, therefore it focused on activities that would encourage its people to undertake Personal Transformation. Below are some of the key activities undertaken to cultivate a culture that is supportive of the organization's purpose and strategy:

• A practical workshop on Growth Mindset, that successfully established a connection with the personal and professional lives of participants was facilitated for over 150 individuals. The workshop was full of exercises that connected the concepts with their personal lives. Once the "What's in it for me?" question was addressed, it was natural for people to implement the concepts into everyday practices, be it professional or personal.

- Agile Leadership Community of Practice was established to connect aspirants and established leaders within the region. The community enabled cross-training, accelerated learnings via the sharing of each other's embarrassing stories, and created a psychologically safe place for the group to hone their leadership skills.
- Regional Leadership members were encouraged to provide teambased recognitions over individual recognitions. Furthermore, the team-based recognitions were provided at consistent and regular intervals, and the guidelines for recognizing teams included "Being Agile" characteristics. Team members were encouraged to use the existing reward point system more often than usual to recognize or thank someone for good work and growth mindset behavior. The recognitions were a motivational factor for not only achieving the business outcomes but also to encourage living the desired culture by instilling the right behaviors.

### Apply systems thinking

Just re-structuring your organization i.e. announcing Tribes, Squads and Chapters might be your 1st step towards agility, but that alone won't inject agility into your business processes. To enable agility, you will need Systems Thinking, a holistic approach to identify solutions that consider you as a part of a larger ecosystem. Adopting agility into just one small part of the value stream will not optimize the entire delivery system. Your speed of delivery will be limited to the slowest integration point in your value stream. Therefore if we are to accelerate the delivery, then the entire value delivery system needs to be a part of the transformation journey and their interactions should be systematically set up such that it provides clarity for the people involved.

In South-East Asia, there was increased focus on providing clear guidance. To facilitate this, a map of interactions was created to ensure the right people were involved in decision-making and delivery processes. This activity

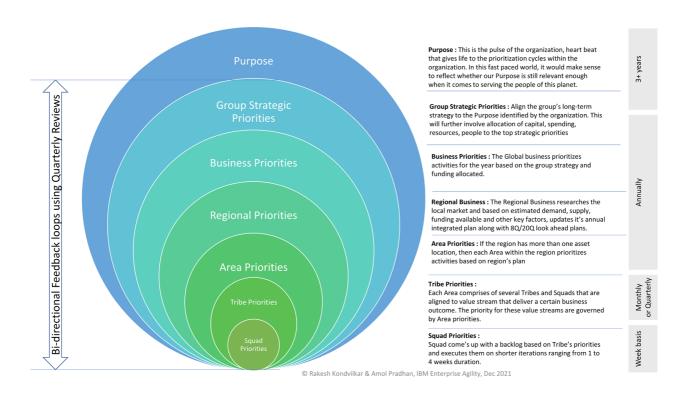
helped everyone within the value stream understand their role and expectations, and to achieve alignment on business solution delivery. The leadership of each tribe further acknowledged the foreseeable problems that could occur with the new setup, and offered to brainstorm together to resolve those problems.

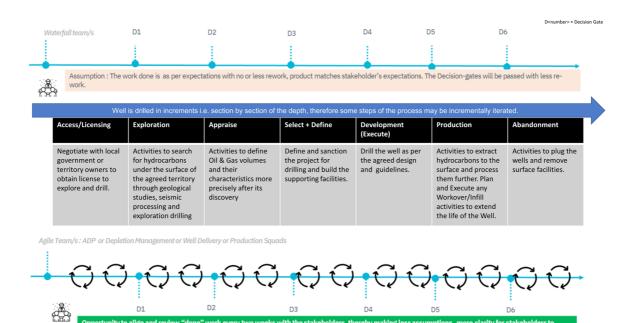
### Meeting proliferations

Before setting up new agile meeting cadences, identify the current set of meetings on everyone's calendar. Free up their calendars by removing duplicate or obsolete meetings. Provide a guard-rail for setting new meeting cadences so that people are clear on the meeting's objectives and can self-validate if they need to be involved. This ensures that the people involved have the available capacity to engage themselves in the transformation initiative with more focus, less confusion, and peace of mind.

### **Prioritization & Planning**

The Purpose adopted by the organization guides the business strategy at the group level, and this further sets the strategy for our regions. The regions prioritize the initiatives based on current economic conditions, geography, asset mixes i.e., gas vs oil, offshore vs onshore, upstream vs downstream, the local government's political will and practices, and current Production Sharing Contracts (PSCs). Techniques and ideas that align with Net-Zero 2050 mission are brainstormed by the tribes during Quarterly planning events. Once agreed upon, these ideas are executed through squads using either the Scrum framework or Kanban Methods where prioritization is done on a weekly to monthly basis. The below exhibit shows the planning onion along with its cadences. Each peel of the onion reviews the plan and the outcome delivered each quarter during its Quarterly Business Reviews (QBR). Based on these reviews, the plan is adjusted for safer, lesser emissions, faster execution and better delivery of Oil and Gas in the market.





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With Agility, we can make this process more effective by:

- Identifying wasteful activities in this process that are performed as a part of prevailing culture but do not deliver significant value.
- Embedding regular and rigorous prioritization techniques in our squads to deprioritize low-valued objectives
- Planning for available capacity and asking for more when needed, thus avoiding burnouts and helping to deliver value more safely and with greater efficiency
- Keeping the squads closely aligned to stakeholder's expectations via consistent planning and review, thus ensuring the decision-making process becomes safer and faster
- Helping the squads learn and improve faster through consistent retrospectives. It is recommended that when a new squad is started, they implement frequent retrospectives until they are out of the storming stage of the Tuckman model.

### CONCLUSION

Exploring, Drilling and Productionizing an "Oil & Gas Well" is not a standalone job requiring just one team. It is a complex process supported by finance, procurement, legal, partner teams, rig contractors and more. Therefore, when implementing an agile solution, it is imperative that these support systems are also engaged in your agile transformation journey.

Agility practices can be new to this industry, and the learning curve and resistance to change can be higher. Therefore, patience and perseverance is the key to success.

Most agile coaches and consultants have coaching experience in Banking, Digital and IT domains. As such, it's necessary to avoid copying the success formula from your earlier industries or frameworks. Let the coach within you do more work than the consultant, wear the coach's hat, and allow your coach to come up with solutions to their own problems while you lead them as a facilitator in their thinking process.

Using the action guide steps, the example organization in Southeast Asia demonstrated a successful implementation of agile ways of working by completing an extremely complex milestone of "Gas Well" Work Over mission (well repair and maintenance mission) in about half the time as compared to earlier missions undertaken by the organization. By increasing focus on the culture aspect, a tribe that looks into exploration recently completed over 90% of its prioritized work in one quarter despite COVID-19 pandemic issues that rattled the entire home country, thereby ensuring that they stayed ahead of meeting predicted Gas demands within the region. The agility journey continues for this organization by finding and implementing new techniques to lower GHG emissions, lowering production costs, and continuing to maintain high safety standards, high reliability, and availability. Net Zero 2050 might look like a far-fetched goal but this organization is on the way to making it a reality.

The action guide is a summary of key steps that lead to the start of a successful transformation with an Oil & Gas organization. More and more organizations in this industry are looking forward to adopting these practices to accelerate their transformation journeys and sustain agile practices, values, and behaviors.



https://unfccc.int/process-and-meetings/ the-paris-agreement/the-paris-agreement

https://www.iea.org/reports/world-energy-outlook-2018/oil-and-gas-innovation

https://www.iea.org/reports/world-energy-outlook-2021

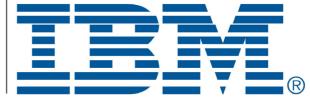
https://netzeroclimate.org/what-is-net-zero/

https://ukcop26.org/wp-content/up-loads/2021/07/COP26-Explained.pdf

https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/innovation-in-a-crisis-why-it-is-morecritical-than-ever#

https://www.forbes.com/sites/forbes-coachescouncil/2018/11/20/why-does-culture-eat-strategy-for-breakfast/?sh=2d28b0471e09

https://simonsinek.com/product/start-with-why/





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