

Disciplined Innovation: A Case Study of the Amazon Working Backwards Approach to Internal Corporate Venturing

Practitioners can apply the framework presented to implement the Amazon Working Backwards approach effectively and create order in a naturally messy innovation process.

Aylin Ates 🝺 and Kumuda Suppayah

OVERVIEW: Internal corporate venturing (ICV) is a strategy used by established organizations; however, our knowledge is limited regarding its underlying activities and processes. As a methodical innovation strategy, Amazon's Working Backwards (AWB) has generated internal corporate ventures like Amazon Web Services Inc. Despite its proven success, AWB's broader application remains understudied. This study explores the application of the AWB approach beyond Amazon to bridge the knowledge gap regarding how other organizations use it to accelerate innovation activity that may lead to new internal corporate ventures. Our research of a Fortune 500 energy group demonstrates AWB's adaptability beyond Amazon's conventional setting, emphasizing its essential role in accelerating ICV by prioritizing customers, processes, and people. We present a framework that practitioners can use to effectively implement the AWB approach in diverse organizational contexts.

KEYWORDS: Amazon Working Backwards (AWB), Innovation, Internal corporate venturing

Aylin Ates is an associate professor of strategy and innovation at the University of Strathclyde Business School, Glasgow, UK. She is closely involved with business practice and policy through research projects, professional education programs, and various speaker and advisory roles. She has published more than 65 research articles and book chapters on strategy, innovation, and business resilience. Her award-winning research has appeared in international conferences, media, and prestigious academic journals and books. Her expertise in business resilience is recognized globally and has informed policy at the international level (for example, International Labor Organization, United Nations Industrial Development Organization). She has a PhD in strategic management from the University of Strathclyde and a BSc (Hons) in industrial engineering from Istanbul Technical University, Faculty of Management in Türkiye. aylin.ates@strath.ac.uk

Kumuda Suppayah is an innovation strategist and business transformation expert in the oil and gas sector. She has an MBA from the University of Strathclyde Business School. She worked as a management consultant at Accenture and currently works as the head of Innovation Strategy in a major oil and gas company. As a dynamic change catalyst, she is a visionary leader in driving impactful transformations. With a wealth of expertise in strategy and innovation management, she spearheads successful, adaptive innovation initiatives across diverse industries. She is interested in establishing productive entrepreneurial ecosystems and leads internal corporate venturing initiatives from ideation to successful launch to market. kumuda_suppayah@petronas.com

DOI: 10.1080/08956308.2024.2326805

Copyright © 2024, The Author(s). Published with license by Taylor & Francis Group, LLC

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http:// creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

Interest in internal corporate venturing (ICV) has grown in recent years as researchers and practitioners contend that it can contribute significantly to the evolution of a firm's sustainability and innovativeness (Narayanan et al. 2009; Gutmann et al. 2019; Zhang and Biniari 2021). Accelerated change arising from various external environmental triggers such as the global pandemic, rapid technological advancements, and climate change have led to stronger calls for organizations to become sustainable and thereby heightened interest in ICV. Companies feel pressured to try various innovation efforts (Nakata and Hwang 2020) that may lead to the creation of new ventures to revitalize and future-proof their businesses. Established companies are increasingly embarking on entrepreneurial processes as ICV facilitators and innovation enhancers to attune their organizations to the fast-changing environment and navigate toward sustainability (Lin and Lee 2011; Bierwerth et al. 2015; Rigtering and Behrens 2021).

ICV involves the creation and ownership of new businesses within an organization by creating new and innovative products and services (Morris et al. 2008). Some internal corporate ventures can be part of a preexisting internal organizational structure, while others may reside in newly established entities within the company structure (Phan et al. 2009). ICV is considered a resource-effective strategy and is closely linked to innovation (Narayanan et al. 2009). Innovation is inherently messy. While systematic innovation aims to instill structure by aligning invention with adoption through a disciplined framework (Gamota 2020; Denning 2021), the complexity of this process often poses challenges. Two surveys by McKinsey & Company conducted a decade apart, one in 2007 and the other in 2019, highlight the ongoing struggle of achieving successful innovation (Barsh et al. 2008; Bar Am et al. 2020). The 2007 survey highlighted that over 70 percent of executives identified innovation as a top priority (Barsh et al. 2008). The 2019 survey revealed a similar response among executives but noted they continue to struggle with building innovations effectively and attaining desired outcomes (Bar Am et al. 2020; Soto-Simeone et al. 2020).

ICV has evolved over time as organizations have tried different methods to shift and alter their businesses in response to internal and external changes. Most ICV attempts have resulted in abysmal failures, however, due to ICV's complexities and the fact that companies underestimate organizational, market, and venture management factors that influence ICV outcomes (Macmillan and George 1985). The lack of a cohesive approach to unlock ICV's potential remains a challenge that limits the pace and momentum of innovation and the creation of new sustainable competitive advantages (Narayanan et al. 2009; Weiss and Kanbach 2022).

Amazon's renowned Amazon Working Backwards (AWB) approach is an exemplar of a methodical innovation process (Bryar and Carr 2021). AWB has contributed significantly to Amazon's recognition as a serial innovator that builds successful internal corporate ventures (Manly et al. 2022). Amazon explicitly attributes its standing as a highly innovative technology company to the efficacy of the AWB approach (Tucker 2018). Innovation, ICV, and AWB are connected concepts as organizations engage with AWB as a method to develop innovative products and services, and some of these innovations turn into internal corporate ventures.

Increasingly, companies turn to ICV to revitalize their operations, build new capabilities to achieve innovation, and create better value (Narayanan et al. 2009). However, our knowledge is limited regarding what methods, organizational mechanisms, and activities are enabling or limiting a successful internal corporate venture. Amazon contends that its AWB approach is non-proprietary and transferrable to any organization (Bryar and Carr 2021). Researchers are exploring its applicability in diverse organizational contexts in order to understand critical success factors and potential drawbacks when implementing AWB (Gamota 2020; Denning 2021). The broader efficacy of AWB beyond Amazon, however, remains relatively unexplored.

In this study, we aim to answer the following questions: How can the AWB approach be used to accelerate innovation efforts leading to new internal corporate ventures in an external company? What are the critical success factors and common pitfalls? We present a case study of a large multinational energy company where we examined the efficacy of the AWB approach and identified critical success factors and common downsides. We provide actionable insights for practitioners that can enrich and guide innovation initiatives within diverse organizational settings.

Literature Review

Corporate venturing encompasses the multifaceted processes linked with innovation (Narayanan et al. 2009; Slade 2020). Corporate venturing practice has three primary forms: internal, cooperative, and external corporate venturing (Gutmann et al. 2019; Enkel and Sagmeister 2020). Cooperative corporate venturing refers to entrepreneurial initiatives where an organization and one or more external entities co-own a new business (Rossi et al. 2019; Zhang and Biniari 2021). External corporate venturing involves an organization investing in or acquiring a new business developed by external parties, typically emerging ventures, or early-stage startups (Markham et al. 2005; Kuratko 2010). Although external corporate venturing offers access to market-ready, less risky innovative products and services from startups, it requires substantial investments (Slade 2020).

Increasingly, organizations turn to ICV for innovation and resource efficiency. A research gap exists regarding which activities and factors influence the success or failure of ICV in established organizations (Hill and Georgoulas 2016; Makarevich 2017). To bridge this gap, we explore the Amazon Working Backwards (AWB) approach.

Amazon seeks to uncover new corporate ventures (Lerner 2013) with the potential to augment or supplant existing business portfolios (Lin and Lee 2011; Gutmann et al. 2019). The AWB—also called "Working Backwards" or "the Amazon Method"—has facilitated the successful scaling of new corporate ventures (Bryar and Carr 2021). The AWB approach is used as an innovation methodology that can lead to the creation of novel, customer-driven internal corporate ventures (Bryar and Carr 2021). "Working Backwards" is a concept practiced by Amazon employees to systematically vet new product and service ideas by listening to and working closely with the customer (Bryar and Carr 2021; Halkett 2021). This practice of working backwards demonstrates the company's commitment to "customer obsession" over a narrow focus on competitors.

The AWB transformed Amazon's conventional innovation approach of building costly prototype solutions and products first, which required costly investments and had a high risk of failure at launch if product-market fit tests failed (Bryar and Carr 2021). Amazon has applied the AWB concept to Amazon Web Services, or AWS, a successful example of an ICV that enables the development of customer-defined use cases for tailored digital products and solutions for each of its cloud platform customers (Jassy 2020; Amazon Web Services 2024).

Proving there is a customer is one of the challenges for any new internal corporate venture. AWB's key principle is to start by defining the customer experience, and then iteratively working backwards and failing fast through small experimentations to build clarity around what the customer wants and needs and the solution that will serve

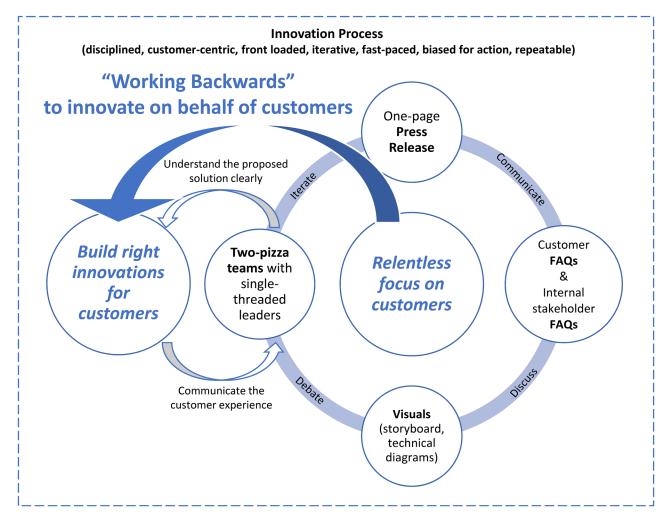


FIGURE 1. Central artifacts of the Amazon Working Backwards

them best (Tucker 2018). Establishing a rapid-feedback loop from the customer experience with the solution subsequently helps to build operations incrementally and keep investments practical, while establishing a viable business for the new product. The AWB process prioritizes documenting customer-centric ideas, iterative discussions among team members, and pursuing truth seeking (Halkett 2021). The AWB is based on sharing and debating by developing written documents and visuals as central artifacts (Figure 1).

The principal tool in AWB is a written narrative document, called the PR/FAQ (Press Release/Frequently Asked Questions) that articulates the ICV vision in a succinct PR format, with an FAQ section to address critical concerns about the new solution's customers, operations, and business model. The PR/FAQ documents include answers to questions about defining the customer, identifying their challenges, recognizing opportunities, highlighting the primary customer benefits, determining customer needs and desires, and clarifying the proposed customer experience (Halkett 2021). The AWB process is fast paced and allows early failure if necessary

(Bryar and Carr 2021; Drift 2021). Small teams with single-threaded leaders focus on separate customer problems.

ICV can be a powerful strategy for established organizations to innovate and remain competitive in rapidly changing markets (Jackson and Haubelt 2017). Public sector organizations have used the AWB to address problems like gun violence and road safety (Loewenherz 2022); broader knowledge of its adoption in different contexts, however, is limited.

> Internal corporate venturing can be a powerful strategy for established organizations to innovate and remain competitive in rapidly changing markets.

Energy Co Case Study

Energy Co (anonymized name) is a Fortune 500 global energy group with operations in more than 100 countries. It aims to produce and deliver sustainable energy solutions. Its business portfolio includes cleaner conventional and renewable resources such as gas, liquefied natural gas, hydrogen, and solar energy, and it offers a wide range of advanced products and technological solutions, such as optimized offshore and onshore pipelines, carbon capture and storage, solar panels, electric vehicle charging facilities, and sustainable aviation fuel. The company is committed to talent development and views employees as key partners for growth. Energy Co's approach to innovation is driven by progress toward achieving the future of energy sustainability, and it strives to actively diversify its portfolio with new internal corporate ventures and innovation (Block and Macmillan 1993; Narayanan et al. 2009; Lin and Lee 2011). To achieve its aims, Energy Co has formed 143 teams and identified 58 innovation projects using the AWB approach since 2021. The company has created two new internal corporate ventures as an output of this disciplined innovation process.

Method

We used an inductive, qualitative research design that is grounded in a single, illustrative case study (Yin 2003; Siggelkow 2007) in a large multinational company context. We draw on our single case study to illustrate examples (Eisenhardt and Graebner 2007). Our research demonstrates the particularity and complexity of a single case while developing a better understanding of ICV activity within different circumstances (Stake 1995).

A single case study methodology was appropriate due to its efficiency (Stake 1995) to assess implementation of AWB beyond the context of Amazon. This single case study helped us characterize the ICV process in its unique circumstances. The unit of analysis is the organization rather than any individual ICV initiatives or any specific innovation projects. For confidentiality reasons, we cannot discuss the extent of

TABLE	1.	Interviewees'	profile
-------	----	---------------	---------

specific ICV activities or definitions of the innovations incorporated in the case study. We anonymized interviewees' identities and removed any reference to specific example projects.

Following the principles of purposive sampling to select research participants (Ritchie, Lewis, and Elam 2003), we conducted semi-structured interviews with 11 experts who have practical experience with the AWB approach (Table 1). All interviewees actively engage in innovation-driven ICV agendas. They all had a minimum of five years' work experience. Interviews lasted approximately 60 minutes. All interviewees consented to the interviews being recorded. We transcribed all interviews.

We used Zoom to interview geographically dispersed respondents in October and November 2021 during the COVID-19 pandemic. The interview questions focused on ICV through the creation of new business or products/services, and new segments that the company wants to venture into (Table 2).

We also collected and analyzed secondary sources from Energy Co to triangulate our data and increase research reliability. These secondary data sources included the company website, newspaper articles, non-publicly available company reports (accessed by one of the authors for research purposes), internally conducted situational assessments, archival information, and publicly available written documents from media sources such as books, magazines, and newspapers. Other data sources included participant observations gathered by one coauthor in Energy Co's innovation workshops from 2021 to 2023. We also analyzed blogs and publicly available videos about the AWB methodology. The purpose of the secondary data collection and analysis was to identify any discrepancies in the findings.

We analyzed our qualitative data using the principles of thematic analysis (Braun and Clarke 2006) using Miro software for pattern searching in our dataset. The authors collaborated, and iteratively analyzed data using Miro, which eliminated the need for co-location. We summarized the interviews using respondents' quotations, noted in Miro,

Practitioner	Working Experience (#yrs)	Corporate Venturing Experience	Working Backwards Experience	Interview Timing	Pages of Transcription
P1	>5	Yes	Yes	Oct 2021, 60 min.	10
P2	>5	Yes	Yes	Oct 2021, 60 min.	12
P3	>5	Yes	Yes	Oct 2021, 60 min.	10
P4	>10	Yes	Yes	Oct 2021, 60 min.	11
P5	>20	Yes	Yes	Oct 2021, 60 min.	9
P6	>10	Yes	Yes	Oct 2021, 60 min.	10
P7	>10	Yes	Yes	Nov 2021, 60 min.	9
P8	>15	Yes	Yes	Nov 2021, 60 min.	10
Р9	>10	Yes	Yes	Nov 2021, 60 min.	10
P10	>15	Yes	Yes	Nov 2021, 60 min.	12
P11	>5	Yes	Yes	Nov 2021, 60 min.	12

TABLE 2. Interview questions

Interview Questions

- 1. Could you elaborate on your current role within the organization?
- 2. How is innovation being pursued in your context?
- 3. Does your organization support the creation of new internal ventures through innovation, new product, and service development processes?
- 4. Can you provide an example of a significant innovation project or an ICV initiative undertaken by your company?
- 5. Why did your company want to innovate for ICV?
- 6. How would you describe your personal experience with your company's approach to innovation and ICV?
- 7. Would you be able to walk us through the whole ICV journey?
- Have you used any structured innovation methods, such as Amazon's Working Backwards? If yes, please explain your experiences.
- 9. From your perspective, what are the primary challenges hindering or enabling your company's innovation processes?
- 10. How do you perceive Amazon's Working Backwards approach contributing to these challenges?
- 11. In terms of different types of methods that you have tried, do you think that the customer-centric AWB methodology works better or not? Please explain.
- 12. How about key enablers that you think helped you out or you wish you had?
- 13. Why is that challenge or success criteria so important?
- 14. What is the role of management? What are the management expectations in this entrepreneurial journey?
- 15. Is there anything else you would like to share or add?

with each respondent contributing approximately 11–12 quotations. Then, we linked these quotations together to form first- and second-order analyses and ultimately connected them to aggregate themes (Gioia et al. 2013). We also achieved data triangulation by comparing multiple interviewees' quotations on the same set of questions and comparing them with secondary data sources, showing data saturation across the dataset.

Our detailed categorization of the initial 31 emergent concepts is clustered around 16 categories. We discovered three new major themes, derived from a combination of nine second-order themes and the initial first-order analysis (Corbin and Strauss 1996; Gioia et al. 2013). Our data structure (Table 3) shows how our analysis progressed from raw data to themes, concepts, and overarching dimensions (Gioia 2021).

Results

All interviewees indicated they found the AWB approach useful and emphasized the importance of a customer-centric, fast-paced, and disciplined approach to ICV and innovation. For example, Practitioner 11 said, "It takes decades to establish a new space and you need to keep exploring, not just to survive the energy transition, but to be able to sustain for the future generation. This is why innovation is super important, we need to be relevant in the quickest way possible."

We identified three major themes in applying the AWB approach—a disciplined focus on customers, process, and people.

Disciplined Focus on Customers

We found that a relentless focus on customers is integral to the effectiveness of the AWB approach. The process creates a mental model for always starting from the customer's perspective before building any innovations, leading to internal corporate ventures. "Lean Startup, design thinking, and Scrum are tools . . . don't be dogmatic, because customers are different . . . we were primarily using design thinking methodology, but this year we introduced Working Backwards, where you must focus on the user, too," explained Practitioner 2. "Working Backwards is a much more organized method on how you want to get to innovation and what works, what doesn't work." All our respondents described the AWB approach as a core strategy for rapid development of a new business opportunity or idea in close collaboration with customers. Practitioner 6 said, "We wouldn't say we have an ambition for things to build . . . we have an ambition to delight the customer all the time and that the customer dissatisfaction is like the petrol that drives our innovation engine."

We observed that customer centricity helped de-risk market entry while building experience. Several interviewees explained that the AWB experience mitigates the common risk of early-stage innovative venture failure by anchoring internal corporate venture initiatives to urgent customer pain points. Use of the AWB approach at Energy Co enables the identification of an early adopter as a customer who is willing to cocreate a solution prior to launch. According to our interviewees, this allows for incremental improvement of an idea that is low cost and keeps expectations clear based on customer needs. Practitioner 5 highlighted the importance of engaging with customers who are potential early adopters: "The team had this illusion that customers looked at company reputation and products needed to be perfect going out the door, but early adopters are much more forgiving with things that don't work . . . that's why they're early adopters."

Disciplined Focus on Process

Our results show that a disciplined process such as the AWB is a mechanism that can bring a small team of diverse but otherwise inexperienced people in entrepreneurship together to build innovations. "AWB tools create synchronized lingo to align understanding, expectations between innovators as well as top management," said Practitioner 3. "Working Backwards is a set of simple and replicable tools that does

> We identified three major themes in applying the AWB approach—a disciplined focus on customers, process, and people.

TABLE 3. Data structure

Overarching Dimension 1: Discipline	ed Focus on Customers
Second-order Themes (Activities)	First-order Categories (CSFs and Pitfalls) and Example Quotations
Put customers at the forefront	—Having customer centricity as a key success criterion
	—Working closely with customers to bring clarity of vision
	"Last year, we were primarily using design thinking methodology to make sure that whatever we come up with it has to be customer centric. This year we introduced the Working Backwards methodology and we're using that, which is also very customer centric, and we are amalgamating it together with all of the other design thinking tools that we have."
	" if you can prove to your customer, then you can prove your pain points, only then do you go into the solution having that clarity in vision and alignment among the team, as well as the participants and management, it really helps frame the direction for them. It lessens the anxiety of the whole innovation process."
Seek early adopters	—Building a reputation that your solution has demand
	 —Establishing effective communications with early adopters
	—Mitigating market risks
	" especially in the beginning, you need to find early adopters."
	" product-market fit is built into working backwards."
	"Oh, let's just do what we are doing, because that is what is our cash cow is and this is very risky. We don't even know what is happening or whether it will be successful or not."
Commit to execution	—Developing cohesiveness
	—Fostering agility
	"That alignment was a steep learning curve for all of us, because everyone will keep changing their mind as to what we should be doing or what is required at that point in time."
	"You always jump to what you know is tangible. But the working backwards methodology forces you to stop and say just focus on who's your persona, what are the pain points first, if you can't convince me on that don't even talk to me about any solution. Then, you implement the solution through agile practices.
Overarching Dimension 2: Discipline	ed Focus on Process
Allocate sufficient resources	—Demanding resource efficiency
	—Balancing the primary focus on core business activities that competes with allocating attention and resources to innovation
	"Internal corporate venturing, which I think is really dependent on management, whether they really want to support the projects with resources I think a lot of companies nowadays want to do innovations, but it is really very surface level, very lip service, but when you go to them with a proposal and tell them they need to invest a certain amount of money, they step back and say, 'Oh, let's just do what we are doing.'"
Establish effective venturing	—Promoting creativity
	—Set clear expectations
	"This is repeatable like every innovation project that I've worked on over the past year boils down to a basic set of steps which is (1) talk to the customer. Really learn what is the customer wants Then it's really about thinking big, really pushing ourselves to come up with solutions to what we've heard with the customer, that is really creative "
	"It is the expectation. Expectation setting on what is required from the teams at the different points in time and okay, because what happened last year was also management felt that they can, they need to push further, dream bigger all the time We moved from so many different ideas, but because we didn't have a common understanding of what good looks like, we never get an approval of the idea."
Use replicable innovation tools	—Providing a structured approach for internal corporate venturing
	"Everyone knows backwards Amazon narratives all of the mechanisms that you read online are all true but, really, then the main thing is it forces you to be really talking to customers and be clear about what you're learning."
	"Ninety percent of the value comes from sitting down and really understanding the customer and whether you then do it in a PR/FAQ."
Overarching Dimension 3: Discipline	ed Focus on People
Empower internal teams	-Refraining from a culture overly reliant on leadership or subject matter experts for decision-making
	—Assigning accountability to employees
	"It's more of empowerment. It's less on direction but more on empowerment of the employees who take responsibility and make the decisions on their own."

(Continued)

Overarching Dimension 3: Disciplined Focus on People			
Establish an agile and supportive internal ecosystem	—Avoiding a management system characterized by high specialization, standardization, and inflexible internal processes.		
	"The ecosystem is like a network of people that you can reach out to for mentoring, funding, market access, as well as space to test solutions."		
Encourage entrepreneurism	—Departing from a "Failure is not an option" culture		
	"I think another thing is I'm allowing people to fail. It's something that needs to be there first before innovation can really take place. For us we've been very grateful that we have that because I know that they have allowed us to fail and fail fast and learn and grow. That's the difference, that mindset shift has made a world of difference."		
	"We have our internal corporate venturing we already do, and to be fair we already have this entrepreneurship mindset, as part of our culture belief now."		

not require special skills to use, which is helpful for innovation."

TABLE 3. Continued.

We observed that a preparation phase before adopting the AWB process is required. Respondents said often companies that are new to ICV or innovation begin grandly without establishing a solid strategy or setting clear expectations at the outset, which causes issues later in the process. Practitioner 11 referred to mass innovation campaigns and hackathons as "Innovation Theatre," implying that it is all for show with low intention towards actionable outcomes and benefit to the company. This preparation phase should include establishing the entrepreneurial process with replicable innovation tools, investing in development of a conducive internal environment and culture, and committing necessary resources to enable teams.

Our findings show that conflicts may arise because leaders often seek certainty, but employees cannot guarantee success in every innovation initiative. This situation can create a culture that fears failure and hampers employee exploration of new opportunities. "Investors want one thing, but internal bosses want another, which causes innovators to lose focus and waste resources," said Practitioner 3. Establishing alignment between leadership expectations and employees helps foster successful innovations. Practitioner 4 said, "The executive support and willingness to make it happen and to be open minded enough to explore ways to make things better are important in the execution of the AWB approach."

All interviewees said that effective allocation of resources is an indicator of accountability given to teams pursuing innovations. Participants agreed unanimously that a lack of investment hinders the progress and success of ICV teams, resulting in an inability to enter the market. "Getting the right balance for financial resources, talent, and solutions for internal corporate venturing are some of the challenges. The wrong team will bring you to the wrong way, finding right talent is important," remarked Practitioner 1. Besides that, if you want the right diamond, you need to put money at the right place that demand exists."

Disciplined Focus on People

Our findings reveal the importance of transforming current organizational control to empower small, focused teams to

build innovations on behalf of customers in the AWB process. The practitioners interviewed frequently highlighted the importance of empowering employees to take initiative and the presence of an agile internal ecosystem as necessary facilitators for disciplined innovation. All interviewees agreed that entrepreneurism can be cultivated through the use of replicable innovation tools and experiential learning. Practitioner 1 clarified that they believed anyone could adopt entrepreneurism in corporate settings, as it is not solely a personality trait but rather a skill that can be honed through consistent practice. "Working Backwards enables people in the organization to have same mental models, enabling people to work as one team," they said.

We observed that after promoting an entrepreneurial mindset among employees, the agile ecosystem effectively distributes accountabilities and enhances team empowerment through a disciplined process and rapid feedback loops established within the company. Practitioner 1 described an agile internal ecosystem as a network-based support system that provides mentoring, funding, market access, and space to test ideas and solutions. The internal ecosystem should be flexible and agile enough to allow early failure. Also, Practitioner 1 said, "By following the principles of AWB, we work on a hypothesis-based approach to find an idea. Then do innovation sprints to complete the project in small bits, done in a short period of time."

Our results show that implementing an agile internal ecosystem heightens the visibility of all activities and performance across the company, simplifies the coordination of strategies, and empowers bottom-up initiatives. Practitioner

> Our findings show that conflicts may arise because leaders often seek certainty, but employees cannot guarantee success in every innovation initiative.

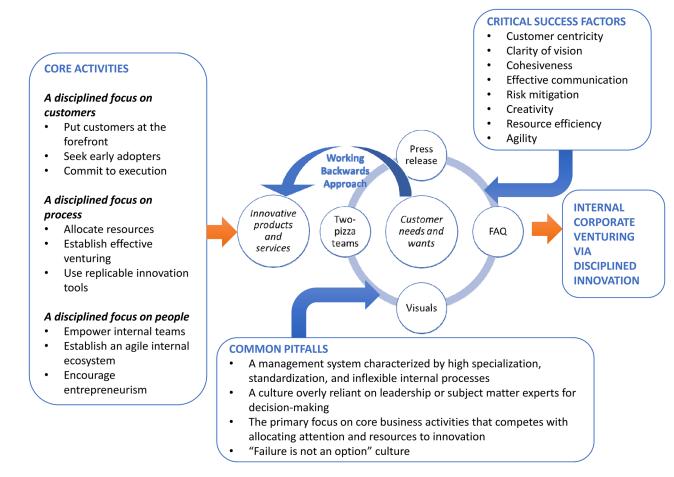


FIGURE 2. Conceptual framework for implementing Amazon Working Backwards for internal corporate venturing

2 said, "We empower all our employees as leaders, we say that you're an owner, and as an owner, you're accountable for the outcome. The way that you spend your resources is up to you. So that means, I don't need to go to the CEO to get permission to do this thing. Instead I find the person who is able to provide resources, and they empower me to do it." We found that empowerment mechanisms need to be disciplined and formalized to ensure people have access to resources and top management support in the internal ecosystem.

Innovation, ICV, and Amazon Working Backwards feed into each other and create an ecosystem where sustainable businesses thrive through customer-people-process–centric approaches.

Discussion

Many organizations typically start their new internal corporate ventures by initiating the development of a new product or service (Block and Macmillan 1993; Narayanan et al. 2009; Amazon Web Services 2024). All respondents in our study agreed that this approach may involve intensive time and resource requirements and pose a serious risk of failed investment if there is no match between product and customer. Some companies, backed by strong top-down drive, may continue to enhance a product to ensure success through "brute force" as suggested by one of our interviewees. Bryar and Carr (2021) have proposed that to reduce the risk of failures, it is best to first understand the customer's urgent needs deeply. The success of the AWB approach reinforces their idea.

In this study, we aimed to clarify the pitfalls and success factors for adopting the AWB approach in a non-Amazon context. Based on our results, we developed a framework for effectively implementing the AWB to foster innovation and ICV (Figure 2).

We argue that innovation, ICV, and the AWB approach complement each other. These concepts feed into each other and create an ecosystem where sustainable businesses thrive through customer-people-process–centric approaches. A disciplined innovation process paves the way for creation of effective internal corporate ventures in established companies. This process is characterized by some key activities and enabling factors.

ICV positively impacts the company's expansion by strengthening portfolio diversity while maintaining essential strategic connections between the new portfolio and the company's primary organic growth drivers (Lin and Lee 2011). Researchers have observed that these linkages enable the strategic renewal of companies that are focusing on innovation-driven ICV (Bierwerth et al. 2015; Denning 2022). However, we found that internal corporate ventures backed by their larger, well-established parent company might use that advantage to access funding and resource pools. While respondents in this study considered leveraging internal resources and capabilities as an advantage for internal corporate ventures, in fact, this advantage might make the broader environment imbalanced in favor of incumbent firms. Unequal access to resources creates adversity and prevents organically grown startups and independent ventures from flourishing (Balachandran 2024).

Ironically, Lerner (2013) emphasized that established organizations depend on the pool of organically grown independent ventures (startups) as a source for new ventures and acquisitions. The larger business ecosystem needs to consider how the environment should be balanced to create the necessary synergy between corporate venturing and independent startups.

Our study underlines the necessity for a preliminary phase before adopting the AWB approach. Establishing a disciplined (Gamota 2020; Denning 2021), entrepreneurial process with conducive internal environments (Amo 2010; Bierwerth et al. 2015), cultural shifts, and commitment of resources serves as a vital foundation for effective AWB implementation. Conflicts arising from a lack of alignment between leadership expectations and employee capabilities highlight the need for cohesive strategies that promote innovation that aligns with organizational goals (Whipp, Rosenfeld, and Pettigrew 1989). Successful implementation of the AWB approach necessitates a paradigm shift towards customer-driven innovation, methodical processes, and a supportive internal ecosystem (Adner 2017), enabling organizations to drive ICV.

Managerial Implications

When applying the AWB approach for ICV, practitioners should follow these steps:

- 1. Create a story and succinct narrative with a deep *focus on the customer.*—By first defining the customer, and the user experience, the AWB approach leads teams to think and better understand the corporate venture's value proposition from the customer's perspective.
- 2. Establish *clarity of vision* to ensure that the product meets functional and emotional customer needs, wants, pain points, and provides clear benefits.—The process of drafting a mock 1-page *press release* helps teams critically review, iterate, and clarify the vision and goals of the ICV

project, increase alignment among teams and decision makers, and ensure a shared understanding of intended innovation outcomes.

- 3. Ensure *cohesiveness* so that everyone involved—from product managers and developers—is aligned with the project's purpose and goals, reducing the likelihood of miscommunication.—Achieve cohesiveness through the optimal sizing of teams—that is, *two pizza-teams*, meaning that the optimal team can be satisfactorily fed with just two large pizzas.
- 4. Establish *effective communication.*—The AWB approach encourages an open communication strategy in preparing for potential internal stakeholders and customer concerns in *the FAQ document*. Developing the FAQ helps anticipate challenges and prepare solutions beforehand.
- 5. Implement *rapid risk mitigation.*—By systematically and rapidly vetting an idea through close collaboration with customers, a team can identify potential issues early in the process. Teams can mitigate risks before investing significant time and resources into development.
- 6. Allow *creativity* to flourish.—By starting with the customer needs and working backwards, teams can think out-of-the-box about how to achieve the stated goals and build innovation and unique solutions that lead to new internal corporate ventures.
- 7. Ensure there is *resource efficiency* and *agility.*—Having a clear, shared understanding of the end goal reduces time and resources wasted on irrelevant features in products that do not contribute to the overall vision (Denning 2022). The AWB approach applies agile principles to enable the incremental development of products and services (Sommer 2019) to ensure investments and resource utilization are optimized as teams iterate their new solutions.

Practitioners should be aware of the following pitfalls when implementing the AWB approach:

- 1. *Highly specialized and standardized management systems* along with existing rigid internal processes can be barriers.—The AWB's central tenet is to approach innovation in a systematic and iterative manner. This requires agile processes to be set up for decisions and investments toward incremental product development, and to rapidly ensure progress at pace.
- 2. A decision-making culture too dependent on input from leadership or subject matter experts.—Companies with highly specialized management systems have stable decision-making processes that leverage subject matter experts or appointed leadership. In applying the AWB approach, decision makers need to avoid personal biases by listening to feedback and data developed by the teams using a disciplined process (Gamota 2020; Denning 2021). Too much dependency on leaders will hinder the successful adoption of the AWB.
- 3. Core business focus that competes for attention and resources with innovation.—Companies unprepared to demarcate and

carve out sufficient resources and managerial attention toward the developmental work will struggle to demonstrate commitment towards innovation. A focus on firefighting and survival will hinder progress for those using the AWB approach.

4. The *"failure is not an option" culture* can be problematic.— The iterative nature of AWB means teams will experiment with ideas and may have failures along with successes as they correct their pathway to proving strong product-market fit.

Limitations and Future Research

Our qualitative study is limited to investigation of a single case study in a large energy group. Future research could explore the application of the AWB approach in diverse company settings, including small and medium-sized enterprises. Researchers could also employ different methodologies like multiple case studies, large-scale surveys, or longitudinal studies. It would also be valuable to conduct future studies that focus on prioritization of the themes and the critical success factors identified in our study. Such information will provide deeper insights into the salience of the themes identified in our study for effective decision-making processes. Ongoing research will refine our understanding of the AWB approach in building disciplined innovations and new ventures, which will enhance companies' innovation efforts in this domain.

Conclusion

Jeff Bezos famously introduced a distinctive practice within board meetings, reserving "an empty seat" for an imaginary customer, which many consider a testament to the tech giant's commitment to embedding a mental model in the company that is focused on the customer. In this study, we pinpointed three primary focal points in implementing the AWB approach: a disciplined emphasis on customers, processes, and people. We demonstrated how an energy conglomerate successfully applied the AWB process and highlighted challenges they encountered. Practitioners can apply the lessons learned to generate order in a naturally messy innovation process to create new internal ventures.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Aylin Ates (b) http://orcid.org/0000-0003-4072-5519

References

- Adner, R. 2017. Ecosystem as structure: An actionable construct for strategy. *Journal of Management* 43(1): 39–58. doi: 10.1177/ 0149206316678451
- Amazon Web Services. 2024. Cloud computing with AWS. https://aws.amazon.com/what-is-aws/

- Amo, B., 2010. Corporate entrepreneurship and intrapreneurship related to innovation behaviour among employees. *International Journal of Entrepreneurial Venturing* 2(2): 144– 158. doi: 10.1504/IJEV.2010.034819
- Balachandran, S., 2024. The inside track: Entrepreneurs' corporate experience and startups' access to incumbent partners' resources. *Strategic Management Journal*. Early view. doi: 10.1002/smj.3576
- Bar Am, J., Furstenthal, L., Jorge, F., and Roth, E., 2020. Innovation in a crisis: Why it is more critical than ever. McKinsey & Company, January 17. https://www.mckinsey. com/capabilities/strategy-and-corporate-finance/our-insights/ innovation-in-a-crisis-why-it-is-more-critical-than-ever
- Barsh, J., Capozzi, M. M., and Davidson, J., 2008. Leadership and innovation. McKinsey & Company, January 1. https:// www.mckinsey.com/capabilities/strategy-and-corporatefinance/our-insights/leadership-and-innovation#/
- Bierwerth, M., Schwens, C., Isidor, R., and Kabst, R. 2015. Corporate entrepreneurship and performance: A meta-analysis. *Small Business Economics* 45(2): 255–278. doi: 10.1007/ s11187-015-9629-1
- Block, Z., and Macmillan, I. 1993. *Corporate Venturing*. Boston: Harvard Business School Press.
- Braun, V., and Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3(2): 77–101. doi: 10.1191/1478088706qp063oa
- Bryar, C., and Carr, B. 2021. Working Backwards: Insights, Stories and Secrets from Inside Amazon. 1st ed. London: Pan Macmillan.
- Corbin, J., and Strauss, A. 1996. Analytic ordering for theoretical purposes. *Qualitative Inquiry* 2(2): 139–150. doi: 10.1177/ 107780049600200201
- Denning, S. 2021. Generating market-creating innovation by working backwards from the future. *Strategy* & *Leadership* 49(6): 9–14. doi: 10.1108/SL-10-2021-0094
- Denning, S. 2022. Leadership transformation reading list: insider guides to customer-centricity, Agile management and visionary innovation. *Strategy & Leadership* 50(1): 9–11. doi: 10.1108/SL-11-2021-0121
- Drift, 2021. Working backwards with Amazon's Colin Bryar Bill Carr. YouTube video, 55:32. https://www.youtube.com/ watch?v=buXWZodS3k4
- Eisenhardt, K. M., and Graebner, M. E. 2007. Theory building from cases: Opportunities and challenges. *Academy of Management Journal* 50(1): 25–32. doi: 10.5465/amj.2007. 24160888
- Enkel, E., and Sagmeister, V. 2020. External corporate venturing modes as new way to develop dynamic capabilities. *Technovation* 96–97:102128. doi: 10.1016/j.technovation.2020.102128
- Gamota, D. 2020. Why disciplined innovation matters most now. *Forbes*, June 19. https://www.forbes.com/sites/forbestechcouncil/ 2020/06/19/why-disciplined-innovation-matters-mostnow/?sh=29de9401c207
- Gioia, D. 2021. A systematic methodology for doing qualitative research. *The Journal of Applied Behavioral Science* 57(1): 20–29. doi: 10.1177/0021886320982715
- Gioia, D. A., Corley, K. G., and Hamilton, A. L. 2013. Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods* 16(1): 15–31. doi: 10.1177/1094428112452151
- Gutmann, T., Kanbach, D., and Seltman, S. 2019. Exploring the benefits of corporate accelerators: investigating the SAP

Industry 4.0 Startup program. *Problems and Perspectives in Management* 17(3): 218–232. doi: 10.21511/ppm.17(3).2019.18

- Halkett, R. 2021. Working backwards: Amazon's approach to innovation, YouTube video, 2020, 17:21: https://www. youtube.com/watch?app=desktop&v=aFdpBqmDpzM
- Hill, S. A., and Georgoulas, S. 2016. Internal corporate venturing: A review of (almost) five decades of literature. In *Handbook of Research on Corporate Entrepreneurship*, edited by Shaker A. Zahra and Robert E, Buuck, 13–63. Northampton, MA: Edward Elgar Publishing.
- Jackson, K., and Haubelt, L. 2017. Adaptive innovation. *Research-Technology Management* 60(6): 36–41. doi: 10.1080/08956308. 2017.1373049
- Jassy, A. 2020. Forum for growth & innovation: Overcoming the capitalist's dilemma, with Andy Jassy, CEO of Amazon Web Services. The Distruptive Voice podcast, September 1, 53:04. https://www.hbs.edu/forum-for-growth-and-innovation/ podcasts/disruptive-voice/Pages/podcast-details.aspx? episode=15834284
- Kuratko, D. F. 2010. Corporate entrepreneurship: An introduction and research review. In *Handbook of Entrepreneurship Research*, edited by Zoltan J. Acs and David B. Audrestsch, 129–163. New York: Springer Link.
- Lerner, J. 2013. Corporate venturing. *Harvard Business Review*, October. https://hbr.org/2013/10/corporate-venturing
- Lin, S., and Lee, J. 2011. Configuring a corporate venturing portfolio to create a growth value: Within-portfolio diversity and strategic linkage. *Journal of Business Venturing* 26(4): 489–503. doi: 10.1016/j.jbusvent.2009.10.005 10.1016/j. jbusvent.2009.10.005
- Loewenherz, F. 2022. Working backwards from Vision Zero to improve road safety. AWS, October 20. https://aws.amazon. com/blogs/publicsector/working-backwards-vision-zeroimprove-road-safety/
- MacMillan, I. C., and George, R. 1985. Corporate venturing: Challenges for senior managers. *Journal of Business Strategy* 5(3): 34–43. doi: 10.1108/eb039073 10.1108/eb039073
- Makarevich, A. 2017. Organizing for success in internal corporate venturing: An inductive case study of a multinational consumer goods company. *Creativity and Innovation Management* 26(2): 189–201. doi: 10.1111/caim.12213 10.1111/caim.12213
- Manly, J., Ringel, M., Baeza, R., Cornock, W., Paschkewitz, J., MacDougall, A., Harnoss, J. D., Apostolatos, K., Backler, W., Meinecke, H., Koslow, L., Pieper, C., Gross-Selbeck, S., Unnikrishnan, S., Panandiker, R., and Sano, N. 2022. Are you ready for green growth? BCG, September 15. https:// www.bcg.com/publications/2022/innovation-in-climateand-sustainability-will-lead-to-green-growth
- Markham, S. K., Gentry, S. T., Hume, D., Ramachandran, R., and Kingon, A. I. 2005. Strategies and Tactics for External Corporate Venturing. *Research-Technology Management* 48(2): 49–59. doi: 10.1080/08956308.2005.11657305 10.1080/ 08956308.2005.11657305
- Morris, M. H., Kuratko, D. F., and Covin, J. G. 2008. *Corporate Entrepreneurship* & *Innovation* 3rd ed. Mason, OH: South-Western/Thomson Publishers.

- Nakata, C., and Hwang, J. 2020. Design thinking for innovation: Composition, consequence, and contingency. *Journal of Business Research* 118(C): 117–128. doi: 10.1016/j.jbusres.2020.06.038 10.1016/j.jbusres.2020.06.038
- Narayanan, V., Yang, Y., and Zahra, S. A. 2009. Corporate venturing and value creation: A review and proposed framework. *Research Policy* 38(1): 58–76. doi: 10.1016/j.respol.2008.08.015 10.1016/j.respol.2008.08.015
- Phan, P. H., Wright, M., Ucbasaran, D., and Tan, W. L. 2009. Corporate entrepreneurship: Current research and future directions. *Journal of Business Venturing* 24(3): 197–205. doi: 10.1016/j. jbusvent.2009.01.007 10.1016/j.jbusvent.2009.01.007
- Rigtering, J. C., and Behrens, M. A. 2021. The effect of corporate—start-up collaborations on corporate entrepreneurship. *Review of Managerial Science* 15(8): 2427–2454. doi: 10.1007/ s11846-021-00443-2 10.1007/s11846-021-00443-2
- Ritchie, J., Lewis, J., and Elam, G. 2003. Designing and selecting samples. In *Qualitative Research Methods*, edited by Laura Maruster and Maarten Gijsenberg, 77–108, London: Sage.
- Rossi, M., Festa, G., Papa, A., and Scorrano, P. 2019. Corporate venture capitalists' ambidexterity: myth or truth? *IEEE Transactions on Engineering Management* 68(2): 430–441. doi: 10.1109/TEM.2019.2903984 10.1109/TEM.2019.2903984
- Siggelkow, N. 2007. Persuasion with case studies. *Academy of Management Journal* 50(1): 20–24. doi: 10.5465/amj.2007. 24160882 10.5465/amj.2007.24160882
- Slade, K. 2020. Innovation management in a multicultural context. *Research-Technology Management* 63(6): 31–40. doi: 10.1080/ 08956308.2020.1813495 10.1080/08956308.2020.1813495
- Sommer, A. F. 2019. Agile Transformation at LEGO Group. Research-Technology Management 62(5): 20–29. doi: 10.1080/ 08956308.2019.1638486 10.1080/08956308.2019.1638486
- Soto-Simeone, A., Sirén, C., and Antretter, T. 2020. New venture survival: A review and extension. *International Journal of Management Reviews* 22(4): 378–407. doi: 10.1111/ijmr.12229 10.1111/ijmr.12229

Stake, R. E. 1995. The Art of Case Study Research. Thousand Oaks: Sage.

- Tucker, R. B. 2018. How does Amazon do it? Five critical factors that explain Amazon's incredible success. *Forbes*, November 1. https://www.forbes.com/sites/robertbtucker/2018/11/01/ how-does-amazon-do-it-five-critical-factors-that-explainamazons-incredible-success/?sh=20b737d941b9
- Weiss, L., and Kanbach, D. 2022. Toward an integrated framework of corporate venturing for organizational ambidexterity as a dynamic capability. *Management Review Quarterly* 72(4): 1129–1170. doi: 10.1007/s11301-021-00223-y 10.1007/ s11301-021-00223-y
- Whipp, R., Rosenfeld, R., and Pettigrew, A. 1989. Managing strategic change in a mature business. *Long Range Planning* 22(6):92–99.doi:10.1016/0024-6301(89)90106-410.1016/0024-6301(89)90106-4
- Yin, R. K. 2003. *Case Study Research Design and Methods*. 3rd ed. Thousand Oaks, CA: Sage.
- Zhang, Y., and Biniari, M. 2021. Forging a Collective Entrepreneurial Identity within Existing Organizations through Corporate Venturing. *International Journal of Entrepreneurial Behavior* ∂ *Research* 27(6): 1502–1525. doi: 10.1108/IJEBR-08-2019-049210.1108/IJEBR-08-2019-0492