

Applying Techno Vision 2025

Capgemini 

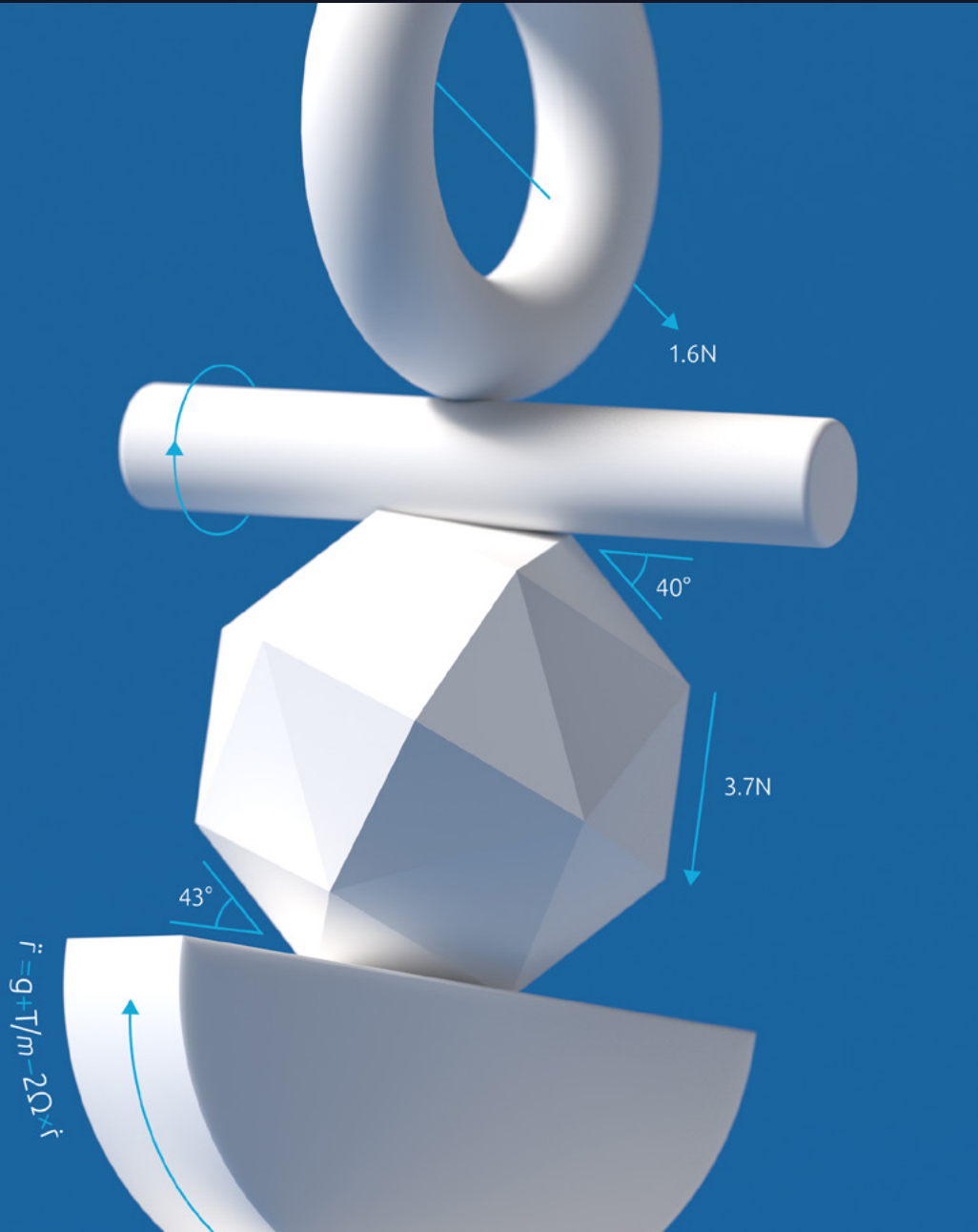
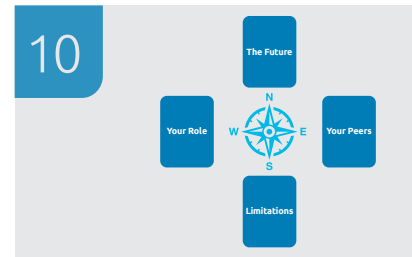


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Introduction

In the years since TechnoVision's inception, our dependency on technology has increased exponentially. Technology brings us closer, allowing us to operate – facilitating collaboration, creativity, and community. So much so that the very notion of a business not using technology seems incomprehensible. What may once have been perceived as a superfluous luxury, is now wholeheartedly part of the package. And it pertains in equal parts to what we, at least so far, call business and technology.

The technological universe continues to expand, augment, and adapt at a phenomenal rate. Physical and virtual worlds merge, robots teach themselves, and the quantum realm looms ever nearer. All of this can be daunting: to know what to do, where to go, and how to adapt, all for the benefit of the organization. To respond successfully, it requires more dialogue than ever, between everyone in the organization, regardless of business unit, role, or technological affinity.

This is where TechnoVision shines, as it is designed to facilitate technology business dialogues and storytelling. To achieve that, we don't stop at just presenting our 37 technology trends in an online report, even if it is through an accessible, well-structured framework, based on the contributions of Capgemini's leading experts. Over the course of time, we have pioneered and developed various ways in

which you can apply TechnoVision to any given idea, problem, project, or corporate setting, and to think creatively in ways in which you may not have thought of before.

Also, it is simply more fun to kick technology to the curb and immerse ourselves with ideas in another format. When it comes to applying TechnoVision, often an open dialogue, some storytelling on a theme, a pack of cards, or a wall of boxes delivers more impact than presenting a slide deck or reading a document.

Depending on your level of knowledge, understanding of TechnoVision, or even the amount of time you have available, there's something here for everybody, whether you are an IT expert looking for new angles, or a tech-curious businessperson wanting to understand the buzz. Obviously, we assume you have already studied TechnoVision 2025, or one of the accompanying TechnoVision industry playbooks.

Applying TechnoVision aims to inspire you to open your own TechnoVision dialogue, with colleagues, clients, and stakeholders alike. It's provided to help shape the conversation about your future.

Innovation is also inherently rebellious. It feeds off testing boundaries, challenging norms, and disregarding the conservative.

Time to play, TechnoVision style.



Applying TechnoVision

There are many ways to apply TechnoVision, like brainstorming entirely new ideas, systematically crosschecking an architecture, design or invent on innovation potential, using it as a playful dialogue tool between all involved in technology business change, or just trusting on good old serendipity to find an unexpected angle when tackling a tough challenge.

Above all, TechnoVision is a tool to tell a technology business story; a story that shapes an opportunity, answers a question, gives direction, resolves an issue, or simply delights an audience. It is always a story to be told between people, from both the business and IT sides of an organization (if there are still different sides, that is). Choosing the right building blocks — studying them, interpreting them, discussing them with others — is already part of the storytelling. Then, the blocks are woven together with other views, considerations, and scenarios to create a unique technology business story that addresses a specific need, challenge, or opportunity.

The TechnoVision framework can be shuffled, and described in a multitude of ways, turning each of the 37 trends into colorful, real-life discussion points to be deliberated and conjugated alone, online, or in vibrant debate with others. However, they are presented, they can tell a technology-enabled customer story, a day in the life of an employee, a breakthrough in a process, or a new, disruptive product.

As a rule of thumb, we prefer to apply TechnoVision in a lively workshop setting. Usually taking place in one of our [Applied Innovation Exchange \(AIE\)](#) labs, or our [Accelerated Solution Environment \(ASE\)](#) environments using the colorful, real-life TechnoVision Cards — each containing a short elevator pitch of a trend and a QR code for more detailed content. However, as the world has changed and we see the normalcy of remote working and reduced travel, so has our approach to applying TechnoVision and our need to think differently.

While there is no real substitute for human contact, we have provided many tools to help you explore TechnoVision 2025 in your own office or remote working setting.

If you want your own set of card decks, the designs are open, published, and free to use. Be sustainable, have your assets printed and produced locally as much as possible!

We look forward to learning how you may pioneer any additional formats to apply TechnoVision, and we welcome hearing about your own applying TechnoVision stories.



Gen AI: TechnoVision Prompt The Future Digital Assistant

Interact with the TechnoVision Digital Assistant that uses generative AI to provide tailored answers to complex business, technical, and strategic questions. It's the quickest and simplest way to understand today's pressing technology topics. It's as easy as using simple chat

Olivia: A 'face-to-face' conversation with Gen AI

As you approach the kiosk, you look at the woman in front of you and talk about any subject in the most natural language possible. Olivia is, probably, the most human way to converse with artificial intelligence.

Using your voice (a chat version is also available, of course), you can ask about TechnoVision or request a wine suggestion to pair with a pasta carbonara (pancetta or guanciale?).

Who benefits from Olivia

Olivia is designed to cater to any industry. She adapts to different sectors, offering information and personalized solutions in an intuitive and natural way.

While she talks to you, she can connect, for example, to a stock system, CRM, or trigger processes that greatly increase operational efficiency. The sky is the limit.

Interaction and connectivity

In addition to the voice interface, which provides a natural and engaging communication experience, Olivia can be connected to any AI with an API. And, obviously, she can also take on any appearance — human or not, to make communication more accessible and educational.

Olivia's role at Capgemini

Olivia has a versatile and flexible interface, adaptable to a wide range of use cases. This includes opening doors with new clients interested in Gen AI, to interacting and making sales in physical stores. Olivia is much more than a virtual assistant; she is a dialogue partner capable of transforming the way people interact with technology.





Cards: TechnoVision Poker

Create technology stories that address business challenges, opportunities, potential innovations, strategies, or architecture — all while playing a poker-like game with cards. Use it as an introduction to general technology trends, or as a team-building tool to familiarize business and technology teams with TechnoVision's capabilities. You can even apply it as a hands-on 'ice breaker' during transformation workshops

Who's it for?

Just like the previously described TechnoVision theater, this method lends itself well to representatives with little or no technical knowledge, expertise, or experience. The session can be completed with a small team of 3 to 5 people, but it is much more effective with multiple tables with at least 3 team members, reporting out to each other and building on each other's stories.

Preparation

Participants will preferably have some basic knowledge of TechnoVision, although we do understand it can be difficult to gather a team consisting of equally informed members. Set up round tables to accommodate as many card-playing teams as needed. Each player can be provided her own card deck (typically an excellent giveaway, serving as a reminder of the session afterwards). Alternatively, every table has just one card deck. One of the players is assigned the card dealer as she will manage the chosen combination of cards and will also stay at the assigned table to tell the story to the members of other tables — while the rest of the players will rotate in a carousel around the other tables.

Introducing the workshop

The workshop opens with a short, high-level introduction of the TechnoVision framework, the structure of the clusters (the 'what') and design principles (the 'how') and relatable examples. Rely on the attendees to study the content of the cards themselves after selecting them and provide just enough information to help them make the right choices for the cards. Then, describe the process of forming tables, building a technology business story, and reporting out. The problem-owner describes the challenge at hand; it can be a strategic question, a conundrum, a quest for ideas, a process redesign, a service, or a product.

The format

Form the table teams. The team size will depend on the number of people, time, and tables available (more report-outs take more time).

Each table team will discuss and select the cards that are of interest for the challenge at hand. The individual players can do this by first studying their own deck (if they have it), or jointly exploring one deck (if only one is available per table). The selection should typically consist of a minimum of 3 cards and a maximum of 7 (5 seems a good average).

The teams should study the cards, reading the elevator pitches and maybe scanning the unique QR codes with their smart phones for more information. If the cards are examined by individuals, team members can then explain the cards to each other. By building on each other's ideas, the digital story gradually comes together through the combination of cards. In the end a digital royal flush is created, containing the selected cards in an agreed sequence and with an agreed storyline.

Take 15 to 30 minutes to build a technology business story, depending on how much time is available.

Reporting back

Each table will visit all other tables, on a rotating basis. However, the selected card dealer will stay all the time at her table, telling the created story to the members of the visiting tables — of course supported by the selected 'royal flush' cards. The storytelling should not take more than 5 minutes per round, keeping the story crisp and to the point. Teams could photograph the final card positions for later use. The visiting teams then provide feedback to the card dealer, highlighting both what they learned from the particular card story and what their own story could add to it. A feedback round should be time-boxed to 5 to 10 minutes each, depending on the time available.

At the final round, the players join their own table again, evaluating and summarizing the insights they gained, as well as hearing from the card dealer what she has observed and heard.





Card Deck: Pick a Card

Pick a card, any card. Outside of the world of witchcraft and wizardry, this old magician's trick is a good one. Perfect for those discovering TechnoVision for the first time, or who would like to delve deeper into a specific container or trend, our colorful deck can guide the way, and see what takes your fancy

Who's it for?

Anyone. If you can get hold of some cards, you can play it.

Preparation

On a large flat surface (floor or table comes to mind), lay the cards out — face up — grouped in their containers.

The format

Don't explain TechnoVision. Just ask all participants to have a brief look at the display of TechnoVision cards and choose a card that — on its title alone — intuitively matches their interests or ambitions. Ask every participant to give an elevator pitch on why they selected a particular card and if applicable, what personal next step they assign to it. Take a picture of every individual showing their card. Finally, take a group picture. Distribute to all participants for later reference.



Card Deck: Randomizer

Boost innovation with a, seemingly, random approach to TechnoVision and think outside the box (specifically card box in this instance). Played alone or in a group, this quick method is perfect if you only have a few minutes to deliberate, need some time to think, or want an easy icebreaker in a workshop. It also can be played for a longer time, creating more ideas and insights along the way. Trust on the power of serendipity to find new, unexplored perspectives on ideas, challenges and opportunities that seem already clear or unsolvable

Who's it for?

Anyone. If you can get hold of the TechnoVision card deck, you can play it.

Preparation

Cards shuffled and at the ready, no other preparation required.

The format

Take a random card from the TechnoVision deck and use it to explore a given subject, challenge, or innovation — or simply as a conversation starter in a workshop or meeting.

On your own? Take a card from the TechnoVision deck and use it to explore a given subject. You can even take two or three and see how you can connect them to help you with a challenge in your own time. Need more information, scan the QR code and enjoy the read.

In a group? Without explaining TechnoVision, ask each participant to take a random card from the deck, look at it, and think how it may align with their interests or ambitions. Ask every participant to read their card and what personal next step they assign to it. Ensure that these assignments are recorded and referred back to at a later date.

Card Deck: Tarot

We cannot guarantee that the trends in TechnoVision will happen at a certain date and time, but we are pretty sure they give a reflection of the future and how you can deal with it.

The wise shamans used their 'medicine' or 'oracle' cards to achieve exactly that. Nowadays, Tarot is still an instantiation of it. The person who needed advice, would frame a question, then draw a card. The explanation of the meaning of the card was not so much through interpretation by the letter — but more for the person to reflect what is going on in different ways. The card drawn would help to shape thoughts and give direction. Not shaped by others or some powerful deity, but much more from their own, inner reflection.

If you have your own TechnoVision card deck, why not be a modern technology business shaman and develop your own version of Tarot? Use the TechnoVision trends to reflect what they potentially could mean for you and your business. Not by the exact meaning of the card, but more from the interpretation and self-reflection of the person who draws the card.

Play TechnoVision Tarot using the following set-up of cards:

South: Here we have your Limitations. Draw a card and see how this trend could help you overcome some of the limitations you currently face in reaching your objectives. This might be through the technology in the trend but may also be the interpretation on what you need to solve.

West: Your Role. What is the role that you are going to play in the transformation of your organization? For instance, if you turned over our trend, 'Ops, AI Did It Again', it can be used for many different interpretations: Are you

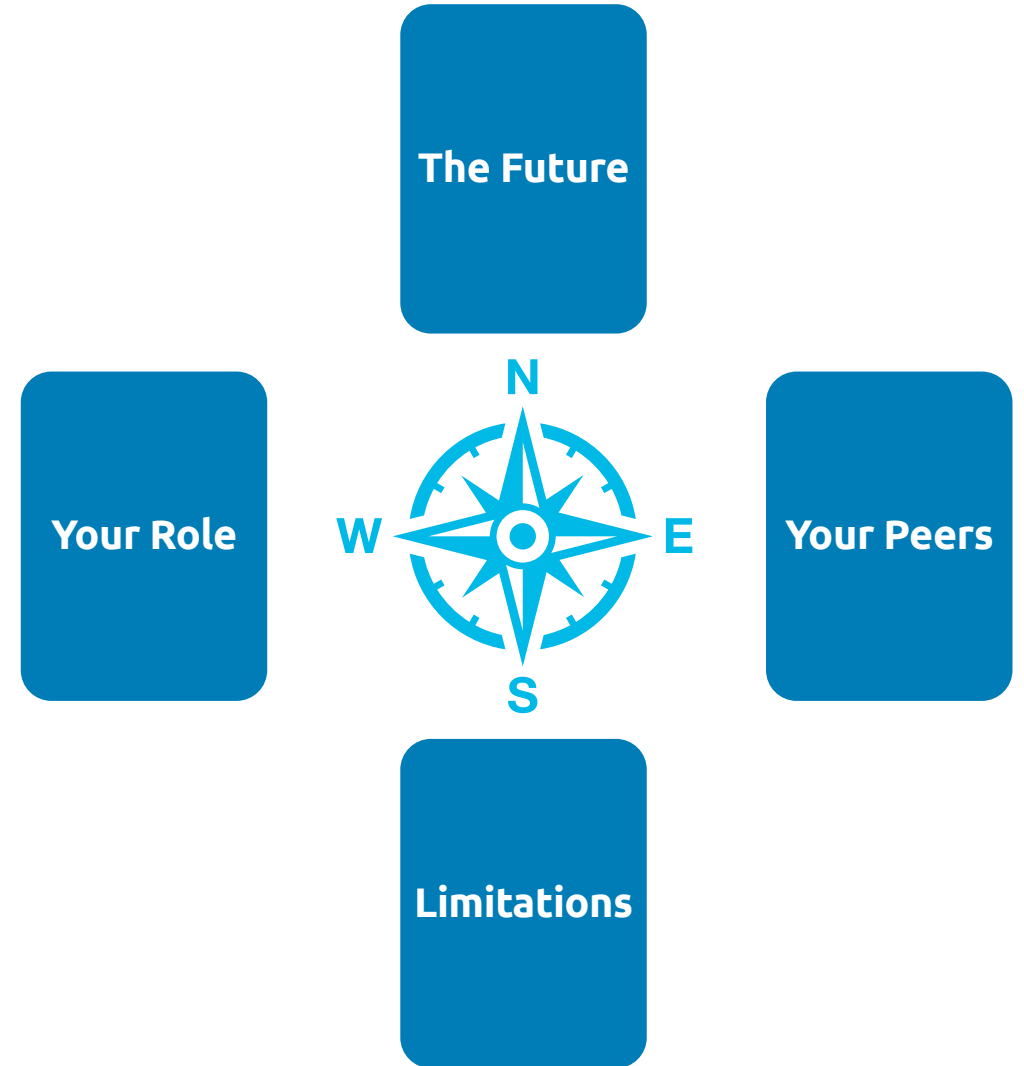
going to be the one that drives automation in your firm, or to really take AI to an enterprise level? Or, as one of our Tarot participants once said: "Yes, this is my role. I am the one who always pushes boundaries, sometimes with success and sometimes with failure. In other words, Ops, AI did it again."

East: The role of Your Peers. What is required from your peers to make the technology business transformation a success? What are the trends that really can help them in their strength, or where do you need their support?

North: The Future is our North Star. What trend will help you to shape up your future? What will really help you drive your success? Could it be that the 'No Friction' end-to-end user experience may help the organization to distinguish itself from the rest of the pack, or is it because you really implemented 'I Feel for You'?

As you can see, Tarot is an easy-to-engage and playful way to apply TechnoVision, and reflect as an individual or as a team on how to move the organization on towards the future. It is a phenomenal icebreaker and — supported by some physical props — can make for a memorable workshop experience. You may also wish to repeat your Tarot on a monthly basis with your management team, frequently changing who will draw the cards and who will coach and ask questions. After all, as the shamans knew only too well, real wisdom lies within yourselves.

Credit: Frank Wammes





Card Deck: Techno Hold 'Em

Ever played 'Texas hold 'em'? It's a kind of poker game that works as follows — two cards, known as hole cards, are dealt face down to each player, and then five community cards are dealt face up in three stages. The stages consist of a series of three cards (the flop), later an additional single card (the turn or fourth street), and a final card (the river or fifth street). Each player seeks the best five card poker hand from any combination of the seven cards: the five community cards and their two hole cards.

Why not transform this into a TechnoVision card game, that we'll call 'Techno hold 'em'?

A minimum of two and a maximum of four people, plus a card dealer will be sitting at a table. The facilitator will act as the dealer. The dealer will shuffle the deck and deals each participant two cards.

Optional: If a player does not like the cards she is dealt, she could request two new ones, just one time.

The dealer then places three further cards on the table.

Each of the participants gets some time to create their story — yet again addressing a chosen subject, challenge, or opportunity — with the five cards that are on the table. Each of the stories will be different since each player will have their own two cards, which are the differentiators.

After this initial story, the dealer will then deal 'the turn' to bring in card number six. The participants will then have to choose five of the cards to enhance their story, but focusing

on the sixth card and removing part of the initial story, since one card has changed. They however cannot drop one of their own cards.

After the second story, the dealer will then deal 'the river'. The player will choose the best five cards, either on the table or in their hands, and will then have to adjust the story again.

This fun exercise will make the players think more about the possible connections of trends, and allow their creative brains to flow to the full extent.

Variant

Instead of the dealer dealing the initial two cards, the players choose those cards themselves, based on the ideas that they have, or what fits them best (in a way like the earlier described 'pick a card' activity). This will allow them to form their own story more to start with. The rest of the card game will be the same, where the dealer will deal the other cards in a 3-1-1 fashion to ensure everyone can make their stories.

If time is limited, then the game can be reduced to a five cards total game, where two hold cards are dealt or chosen, and the initial dealing is one card instead of three. This would allow for story creation with three cards, which will then be completed by 'the turn' and 'the river' cards.

Digital Picture

The Digital Picture is a Capgemini methodology used to produce an accurate image of an enterprise's technology business position. It is produced by combining the points of view — expectations compared with reality and experience — of various stakeholders, from top management to customers of the enterprise. The Digital Picture can be usefully completed and detailed with a TechnoVision-based image of the enterprise's position in technology business

Who's it for?

All people with a thorough knowledge of the technical position of the IT department and of other holders of information technology in the enterprise, as well as one or two connoisseurs of TechnoVision.

Preparation

None, except having the pictures or forms needed to capture status.

The format

The work takes the form of a dialogue between the TechnoVision connoisseurs and the people with the digital knowledge of the organizations, as follows:

- The connoisseurs of TechnoVision give a description of a container content, starting with the Balance by Design principles and continuing from left to right along the framework with the content clusters.
- Where applicable they can describe best practices for each container (or trend within the container), possible-tapping into the growing bases of best practices and use cases described in the TechnoVision core document and the sector playbooks.
- After the introduction of each cluster, people knowing the

digital position and capabilities of the organizations rank it for this cluster.

- Collectively, the positioning is completed with the color-coded attributes:
 - **Green:** Adequate knowledge and capabilities, solid actual and planned uses for the container
 - **Orange:** Significant gaps between technology's potential and actual mastery and use for the container
 - **Red:** Technology's potential ignored and therefore not used or envisaged for the container
- The results can be used both as a static picture of where the organization stands in regard to the various digital areas, and also as the basis for a gap analysis and creating a roadmap for improvement and next steps.

This work can, of course, also be done at a lower granularity level, by design principles and trend individually. The exercise becomes even more interesting if it is repeated across multiple groups of stakeholders, not only involving the digital experts and leaders of the organization, but also its businesspeople, its technical experts, and possibly even external customers and partners. The differences between the rankings can provide food for thought and can expose potential areas of friction — paving the way to improvement.



Repositioning

Examine existing development projects, and operational applications, to boost their technology business orientation and role, by first checking if and how they make use of innovative technologies, and secondly, tuning, amending, enhancing, or repositioning these applications to take better advantage of new technologies. As a result, existing and past investments are not wasted on the path to becoming a technology business. They are updated, pruned, and rejuvenated for faster progress. For example, an on-going Customer Relationship Management project will be reoriented towards a series of smartphone applications and bots with a radically different distribution of roles between customers and employees

Who's it for?

Project teams, together with two kinds of challengers — one or two with knowledge of the application field, and one or two with knowledge of the new technologies.

Timing of initial positioning will play a part:

- For developments: Soon enough to make changes with minimum effort.
- For operational applications: After 6 or 12 months of run, depending on estimated rate of change of functionality and technology.
- Repeat after 6 months for developments, 12 months for operational applications.

The format

Depending on complexity, repositioning takes between two hours and two days. The repositioning steps are as follows:

- Walk-through the application in development or as is.

- Comparison of the application with state-of-the-art thinking.
- List potential adjustments with a rough estimate of corresponding efforts; list potential simplifications or eliminations with a rough estimate of corresponding savings.
- Go through the TechnoVision-based checklist and create three categories:
 - Used already,
 - Not used and relevant,
 - Not used and irrelevant.
- Combine functional changes and 'not used and relevant' technologies to create a list of potential repositioning actions.
- Decide on actions based on impact and effort required.
- Plan actions in relation with the original schedule.



Storytelling

Use TechnoVision to tell a technology business story. Of course, TechnoVision is just one of the ingredients of your story, but it adds structure and content. For example, to discuss the accelerations the digital world requires and enables, you can start with the container You Experience. To understand the speed expectations of digital people, move to We Collaborate. If you want to explain the speed components of social networks, Process on the Fly will help show how external speed gets translated internally or make use of real time data availability with the help of Thriving on Data. Or find inspiration in Balance by Design to consider how you can increase the impact and success of your story

Who's it for?

Anybody with the will to tell a technology story. A working knowledge of TechnoVision is needed and can be acquired by practicing the development of stories.

Preparation

A thorough scripting is needed to give the story structure and avoid getting bogged down into anecdotal details.

The Format

Monologue is feasible, but all forms of dialogue and conversation help with the actual understanding through participation.

Using the TechnoVision cards is a proven way to make the content more alluring and tangible.



The TechnoVision 2025 Team

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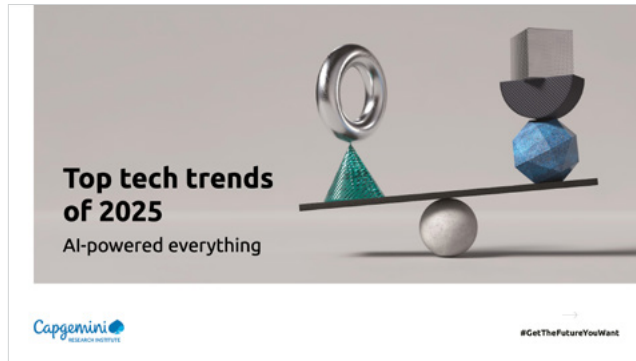
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Additional TechnoVision documents



Top Tech Trends of 2025 :
AI-powered everything



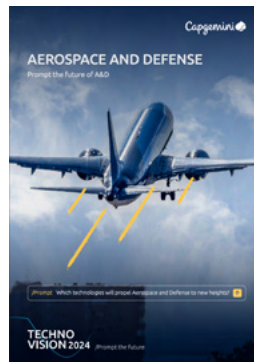
TechnoVision 2025



TechnoVision 2024
Executive Companion



TechnoVision 2024
CTO/CIO Report



TechnoVision 2024
Aerospace and Defense



TechnoVision 2024
Financial Services



TechnoVision 2023
Public Sector



TechnoVision 2022
Automotive Playbook



TechnoVision 2022
Energy and Utilities Playbook

About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2023 global revenues of €22.5 billion.

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