

ABOUT THE AUTHOR

Matthew Griffin, an award winning futurist and author of the Codex of the Future series, is described as "The Adviser behind the Advisers" and a "Young Kurzweil." Matthew is the Founder of the 311 Institute, a global Futures and Deep Futures advisory, as well as the World Futures Forum and XPotential University, two philanthropic organisations whose mission it is to solve global inequality and the world's greatest challenges.

Regularly featured in the global media, including AP, BBC, CNBC, Discovery, Forbes, Netflix, RT, ViacomCBS, and WIRED, Matthew's ability to identify, track, and explain the impacts of hundreds of exponential emerging technologies and trends on global business, culture, and society, is unparalleled.

Recognised as one of the world's foremost futurists, innovation, and strategy experts Matthew is an international advisor and speaker who helps many of the world's most respected brands, governments, investors, and NGO's explore, envision, build, and shape the future of global business, culture, and society.

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A LETTER FROM OUR FOUNDER

MATTHEW GRIFFIN

WE LIVE in extraordinary times, in a world where individuals, organisations, and technology can impact the lives of billions of people and change the world at a speed and scale that would have been unimaginable just twenty years ago.

We also live in a world full of challenges, and a world where all too often negative news gets amplified at the expense of good news, and where tales of hope, inspiration, and positivity get drowned out and lost in the noise. It's no wonder therefore that today more people are more anxious about the future than ever before. And, arguably, a society which believes it's marching towards the darkness, rather than the light, has a poorer future than one that doesn't. Hope, however, is all around us and it's our purpose to light the way so all of us, people and planet, can prosper.

EXTRAORDINARY!

Peter K., EMEA Managing DirectorAccenture



T E S TIM ONI ALS **THANK YOU EVERYONE! #FUTURENOW**

AMAZING!

Abdessamad K., Head of Derivatives Bloomberg

SIMPLY GREAT!

Isaac H., Country Manager Google

ESSENTIAL!

INSPIRING!

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OUR MISSION is to be a driving force to help solve the world's greatest challenges, help organisations build sustainable and lasting legacies, and democratise access to the future so everyone everywhere, irrespective of their ability or background, can benefit from it.

We do this by surfacing essential future-focused insights and open sourcing our content, by amplifying inspiring stories and voices, and by bringing people together.

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Our **philanthropic university** working with academia, governments, and regulators to create and deliver accessible future focused curricula and educational content for business executives and students from around the world.

"THE FUTURE IS AN OPEN BOOK ... "

- Matthew Griffin, Founder

311 Institute World Futures Forum XPotential University

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Explore the future of insurance, and the dangers of a future where global risk becomes systemic.



THE FUTURE OF SMARTPHONES

Explore the future of smartphones and smartphone formats, and discover what's around the corner.



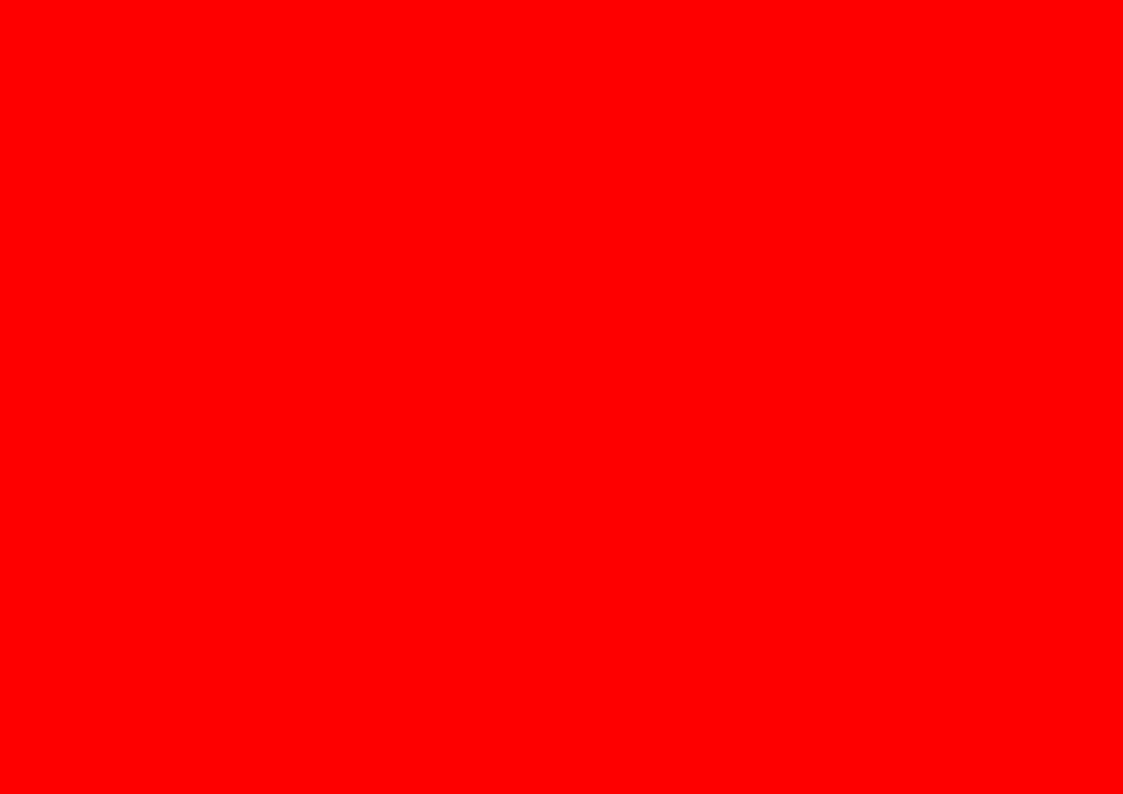
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Explore the technologies and trends revolutionisning how content is made and consumed.



CODEX

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WELCOME FROM THE AUTHOR

PEOPLE. PLANET. PURPOSE

THE SKELETON COAST . NAMIBIA . 19.9873° S, 13.2605° E

I chose this striking image to represent this section because in many ways it's representitive of many of today's realities: The Skeleton Coast is complex and unpredictable, but home to an amazingly adaptable ecosystem, yet it's also representitive of the stark contrast between the have and have nots, those with water and other resources and those without, our increasingly polarised society, and even the contrast between our habitable blue planet and the desolation of space. The desert and the sea are also relentless, just like the human spirit, and given the right conditions they can overcome everything in their path, just as humanity can when we work together for the benefit of everyone to create a brighter future for all of us.

THE FUTURE is ours to create and while we all have the responsibility to help create a utopian, rather than dystopian, future its benefits must be accessible to all of us. For many of us though reaping the benefits of this future, whether those are cultural, economic, or social, is little more than a pipe dream. Therefore at the 311 Institute it's our mission to democratise access to the future and support and amplify the voices of people who create and promote change for good, which then brings me to the reason why this codex exists - to help each of you unlock your own potential and play your role in creating this fair future.

In this case if the only thing you are interested in is trying to figure out how you use strategic foresight to your advantage and turn it into corporate strategy then guess what ... this is the codex for you. And like many of my codexes it's a literal A to Z, a one stop shop of awesomeness.

Also, don't forget if you do need data and insights for your scenarios, whether it's technology and trends, or anything else, then I have an entire series for you of complimentary codexes for you and whole library of great leading edge content for you to explore.

Creating this future though takes not one set of skills but many, not one set of insights but many, and this is just one of the reasons why as part of trying to help democratise access to the future there are now so many books in the 311 Institute's **Codex of the Future Series** - all of which you can view in the previous section.

Sometimes though you don't want to have to sift through everything to find the nuggets of information or the methodologies you're interested in which is just one of the reasons why while I've created a huge amount of so called anchor content I've decided to break some of this out into what I'm going to call mini codexes - like this one.



STRATEGIC - EODECIGIT PROGRAM

. FROM BLANK SHEET TO DONE.

"VUCA" world - Volatile, Uncertain, Complex, and Ambiguous - and this makes it harder than ever before for organisations everywhere to predict and minimise the effects of disruption on their business and capitalise on new opportunities.

Strategic foresight acts as a counter balance to this world by providing stakeholders with the opportunity to envision the future, develop scenarios, and explore how they could all benefit or harm their organisations within in a safe environment.

It also provides them with the critical thinking and valuable insights they need to discuss how the organisation can react to these futures, make better faster decisions, and design resilient business strategies and visions that maximise the upsides, minimise the downsides, and stand the test of time.

This, and more, is what I'll be covering in this program.

THE VALUE OF STRATEGIC FORESIGHT

Over simplifying the issue the vast majority of organisations care about three things: Decreasing costs and risks, and increasing revenues, so love it or not like any business activity futures thinking and strategic foresight programs all have to be able to demonstrate either a tangible or intangible Return on Investment (ROI) - depending on your organisations goals.

Fortunately though, as surveys conducted by Deloitte and Aarhus School of Business and Social Sciences have shown organisations with dedicated corporate foresight teams realise a 200% higher market cap on average than their peers, and organisations who are "Future Prepared" are on average 33% more profitable. So, as you can see the rewards are there to be realised.

However, while an organisation can hire the best experts and foresight teams its ability to turn strategic foresight into business value ultimately relies on its ability to use the insights to its strategic advantage. And doing this is much more complicated than most stakeholders imagine, which is perhaps why many organisations stop once their programs have completed the Scenarios Stage and fail to use the results to design and inform their future business strategies.

Hollywood, for example, provides us with plenty of time travelling heroes who travel back to the past - with perfect

knowledge of their timeline's own history and other people's futures - to change and manipulate the future for their own gain.

In some cases these characters, like Biff in Back to the Future, use this perfect knowledge to amass huge fortunes by betting on the right stocks. In Minority Report Tom Cruise uses the precogs to catch future criminals. And then in the Terminator and X-Men franchises the characters try to save humanity with varying degrees of success, and innumerable complications.

And the lesson is this - even with perfect knowledge of the future sometimes these characters win and sometimes they loose in dramatic fashion which then goes to show us one thing - trying to manipulate and shape the future to your advantage is difficult even under the best circumstances and with the best insights.

Putting this in business terms, once you have information about the future you trust, and when it comes to using it to your advantage, execution is everything, and for the organisations that get it right the rewards as we can see today can be game changing, and in some cases world changing.

FROM FORESIGHT TO ACTION

Without over complicating things there are four stages you can step through to take your organisation from a blank sheet of paper all the way through to designing a future fit business strategy that you can implement organisation wide.

In the following sections I'll be going into these stages in detail and will provide you with the thinking and tools you need to run your own successful foresight programs. The four stages are:

1. FRAMING

The first and arguably most crucial stage of your entire program the ability to clearly frame and communicate the objectives and scope of your strategic foresight program can determine whether it succeeds or fails.

2. RESEARCH

From framing to research. The next stage in your quest to envision and explore the Plausible, Possible, Preferable, Preposterous, and Probable short, medium, and deep futures, is to collate lots of relevant qualitative and

quantitative information - which can include almost any kind of information from any source - that you can analyse and use to craft your futures scenarios.

3. SCENARIOS

From research to scenarios. The development of different futures scenarios and the ability to visualise them so different stakeholders can empathise, explore, and experience them and their many intricate implications and trajectories is a crucial part of the program whose importance should not be underestimated.

4. FUTURE DESIGN

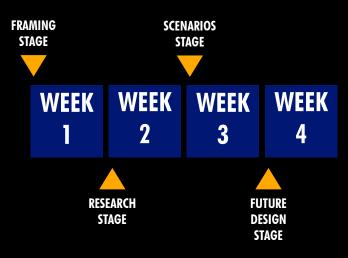
From scenarios to strategy. Last but not least in this the final stage of your program your mission is to select one of the scenarios from the previous stage that you'd like to see come to pass and translate it into an actionable strategy that your organisation can execute.

STRATEGIC FORESIGHT PROGRAM TIMINGS

During the course of this program you will learn how to frame and create futures scenarios that align with your organisations core mission and future objectives then translate them into actionable strategies and visions.

SCHEDULE

You have FOUR WEEKS to complete this program. However, if you need more time or less then that's your call.





BEFORE YOU even think about beginning your foresight program you first have to clearly define and communicate your objectives and scope, and your conduct and performance during this stage can determine the success or failure of your entire program.

While there are many methods you can use to frame your program in my opinion this one I'll walk you through is the simplest and yields the best results for organisations who want to create compelling futures scenarios that can be converted into real world actionable strategies and visions.

Framing, which includes both the creation of a single clear "Mission Sentence" that will become your program's North Star, as well as planning the details of how you're going to run your program is made up of three distinct components: **Domain Description**, **Assessment**, and **Logistics**, and I'll get to those in a moment.

CRAFTING A MISSION SENTENCE

Your first objective during this stage is to craft your all important mission sentence which involves conducting as many interviews as possible with all manner of different stakeholders - both within

and external to your organisation - with the aim of gathering together all the information described in the following domain description section.

While your final sentence can arguably have any structure and contain all manner of "things of interest" such as activities, behaviours, industries, target groups, time horizons, topics, and many others I'd strongly encourage you to be wary of crafting sentences that are too broad or too detailed since both these could impact your teams ability to discover meaningful insights and affect the overall value of your program.

Some Examples

While there are no limits on the final sentence you construct there are obviously good examples and bad ones so here are two good ones to get you off to a flying start.

The first way is to craft a straight forwards "Future of [Something] in [Year]" sentence that you can explore with an example of being "The future of Mobility in 2040" which, unsurprisingly, means that the futures scenarios you create in the next stage will explore the future of mobility in the year 2040.

SOME EXAMPLES.

- "OUR FUTURES SCENARIOS WILL EXPLORE THE ...
- ... FUTURE OF ENERGY IN 2040."
- ... FUTURE OF ENERGY BUYING IN 2040."
- ... FUTURE OF ENERGY BUYING IN JAPAN IN 2040."
- ... IMPACT OF RENEWABLES ON OUR ENERGY PORTFOLIO IN 2040."
- ... AND MANY MORE."

SO MANY EXAMPLES. SO MANY POSSIBILITIES.

The second way is to structure your sentence as a question such as "How will [Target Community] [Do Something] in [Year] and how will that affect [Something]?" with a simple example being "How will families buy electricity in 2040 and how will that affect our future product development?"

As you can see when it comes to crafting your own sentence it's not particularly hard to do, but that said it's absolutely crucial that you fully understand your organisations objectives, misunderstand them or get them wrong and your entire program will be focusing on the wrong goal and end up failing to deliver the expected value.

It's also important to note that the sentence you craft invites open ended responses rather than Yes No ones which help to reinforce your programs objectives - namely to create futures scenarios and not predictions.

Finally, the sentence type you choose should be dictated by your organisations operational concerns and objectives, which is something you can determine as you conduct your pre-program interviews.

DOMAIN DESCRIPTION

Now I've walked you through the basics of a good mission sentence it's time to gather together all the information you'll need to create it, and this is where the domain description component comes into play.

The first component of framing, domain description, involves deciding what kind of future scenarios you want to create and focus on so, unsurprisingly, it forms the bulk of this stage.

It has four steps: Focal Issue, Geographies, Time Horizon, and Stakeholders, and working through each of these steps will help you zero in on the things that matter most to your organisation so you can craft that perfect sentence.

Focal Issue

This step describes the central issue - the focal issue - that your organisation wants to explore, and determining this will arguably be your greatest challenge as all the stakeholders you interview during this step will likely all have their own politically skewed objectives and competing agendas. It is important, therefore, that you have a plan, remain unbiased, and that your program is led and supported by people who are

able to see the big picture and render all these agendas and objectives into a format you can use.

Geographies

In this step you constrain your programs geographical boundaries because, let's face it, when it comes to researching your focal issue there will be some countries or territories you'll be interested in and some it won't, so it's important that your team knows what these boundaries are.

For instance, on the one hand futures scenarios with the focal issue "The future of Mobility in 2040" might well prefer to take a global viewpoint, while on the other scenarios such as "How will [People] in [Territory] buy [Products] in [Year]?" could take more of a local viewpoint.

Needless to say adding these geographic constraints into your mission sentence will have a significant impact on your entire program and its outcomes.

Time Horizon

In this step you must decide how many years into the future the scenarios your teams create are going to cover. For most organisations the bare minimum is five years, below which a forecasting rather than foresight approach would probably be best, but needless to say futures scenarios can go as far into the future as you like and, for example, we have plenty of clients who want to be able to celebrate their hundredth year in business so look ahead fifty years or more.

When thinking about what your ideal time horizon is it's also advisable to consider the impact that various Social, Technological, Economic, Environmental, and Political (STEEP) trends, as well as others such as industry and market specific ones, could have on your focal issue and align with them appropriately.

These trends can literally include anything and everything but ones such as the rate of technological change as well as the social and political trends at play within your geographies and markets of interest should always be at the forefront of your mind.

For example, I when it comes to technological change it should be fairly easy for you to figure out which technologies you should be paying attention to by looking at your focal issue and determining which technologies are embedded into it. Then, the faster the

rate of change of such technologies, as I've discussed elsewhere many times before, the shorter your time horizon should be.

For instance, scenarios with a focal issue that includes "DeepFakes" or even more broadly "Entertainment" could have a relatively short time horizon, while scenarios with a focal issue that includes "Climate Change" could have a much longer one. Fundamentally this difference is because of the different rates of technological change embedded within those focal issues and the ones you care about.

Meanwhile, when it comes to political and social trends you might more closely align your time horizon with election cycles or important social issues of the time.

As you should be able to tell from just these few examples selecting the right time horizon for your program can be trickier than you might at first think, but nonetheless it's important everyone agrees on it and makes an informed choice.

Stakeholders

This final step refers to all the different

stakeholders of interest to you - both external and internal to the organisation - who can add value to your program and who could be directly or indirectly impacted by your focal issue and your futures scenarios.

Stakeholders can literally include anyone who you think will be relevant including but not limited to advisors, customers, executives, experts, partners, and even competitors, as well as advocacy groups, communities of interest, policy makers, and many others.

If there's a key take away here then it's leave no stone unturned, and making sure you include and interview everyone you need to, while maintaining cultural and political neutrality, will be crucial when it comes to helping you craft and explore your future scenarios and their impact on each of the different stakeholder communities you care about.

ASSESSMENT

Now you have completed the first component assessment involves deciding the purpose of your futures scenarios. For instance, what are they going to be used for.

Unlike domain description which focuses

simply on your organisations objectives for the program this component focuses more on the desired overall outcomes for your program and how they will all be measured. It has two steps: Expected Outcomes and Measurement.

Expected Outcomes

These are your organisations desired outcomes for the program, and they can be tangible and non-tangible.

They can also have an impact at the organisational level, for example to influence future investments and inform innovation, recruiting, and training initiatives, as well as at the individual level, such as building awareness, creativity, and engagement.

Once you've chosen the outcomes that matter to you and that you want to realise then you'll then need a way to measure them.

Measurement

This step refers to all the different methods and tools you have at your disposal to assess at the end of the program whether or not it's achieved your expected outcomes. While this step can include simple activities such as conducting interviews and surveys it can also include more advanced methods such as Case Study Analysis, Grounded Theory Analysis, Regression Analysis, and many other methods. Ultimately, the method you choose will be based on your own organisations goals and objectives and the level of resources you have at your disposal.

LOGISTICS

Finally, the third and last component of this stage, logistics, involves planning all of the technical particulars of the program itself, and needless to say there's a lot to think about and do during this component to make sure you have everything and everyone you need to give the program the best chance of success.

From selecting your program's Scenario Team, facilitators, and other necessary stakeholders, to determining the duration of the program and the right location and facilities, as well as ensuring you have all the resources and support you need there's a whole host of things you need to be on top of.

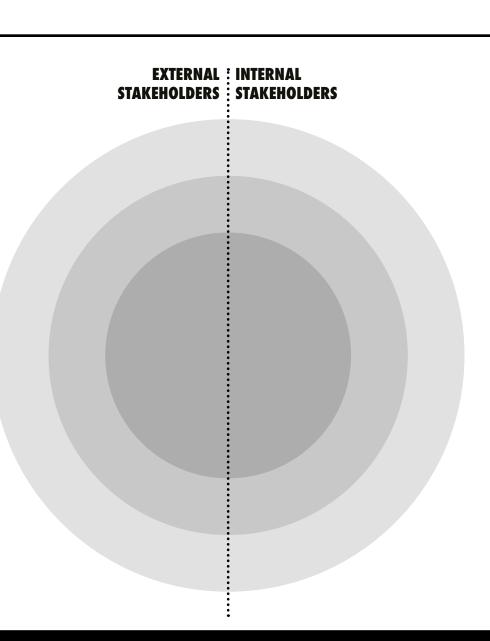
"YOU CANNOT DISCOVER NEW OCEANS IF YOU ARE AFRAID TO LOOSE SIGHT OF THE SHORE."

STAKEHOLDER MAP 311 INSTITUTE: 311 TRENDS CODEX: FRAMING STAGE



Use this sheet to map out the external and internal stakeholders who are most relevant to your program and its objectives. Place the more relevant ones nearer to the center of the circle and the less relevant ones towards the edges, and remember to include senior stakeholders.

TEAM NAME AND NOTES:







HEN IT comes to trying to craft futures scenarios or decode, envision, and predict the future the "'What' [happens next?]" is equally as important as the "How?" and "When?" it, whatever it is, happens.

However, in order to answer these and other pertinent questions, and to find what we call the "Driving Forces" of change that will shape the future, you'll need to be disciplined about how you conduct your futures research, and focus on its breadth, depth, and quality.

BEWARE THE FUTURE PARADOX

Ironically, when it comes to forecasting the future one of the odd things you'll need to get your head around is that there's a paradox to contend with that if left unmentioned could lead to teams being over confident in the accuracy of their predictions and have unintended consequences down the line.

On the one hand we are often regularly told even by many Futurists - just explore YouTube or your favourite information source - that you can't predict the future. But, on the other all of us know with certainty that in the future Artificial Intelligence (AI) will be more capable and powerful, battery

and computer storage densities will be greater, cameras and imaging systems will be higher resolution, computers and networks will be faster, and that cars will be autonomous and electric - just for example.

Which then leads us to wonder how is it that almost anyone - even Joe public off the street - can know any of these things with any kind of certainty? And the answer is simple. It's because we can all see these things happening with our own eyes, and analyse, assess, and extrapolate out thousands of complimentary data points and indicators.

For example, in the case of Electric Vehicles (EV) we can - dare I say - be certain that future vehicles will be battery based - vehicles that people refer to as Battery Electric Vehicles or "BEV" for short.

The reason for this is because we can see them in the showrooms and on our roads, we can see sticker prices falling and numbers and ranges increasing, we can see more investments being made and more infrastructure being built, and we can read about the new government policies which ban the sale of internal combustion engines from 2035 onwards.

Gather together these and lots of other relatively easily observable data points and it doesn't take a highly paid professional foresight team to figure out that the future of vehicles, and ergo mobility and transportation in general, will be electric and battery based.

Making a "prediction" like this is only possible because in some cases we have enough experience, expertise, and insights, to let us see beyond the horizon with almost abject unabated confidence. Yet, even though at times it seems like we can be absolutely certain with our predictions there are always "Wild Cards" that can creep in and change things.

I call this the future paradox, and sometimes these wild cards might mean we have to modify our predictions mid flight, and in others they can quickly render what seem even our most confident predictions obsolete.

In the case of BEV's for example these wild cards can include the sudden reversal of government policies and favourable tax incentives - as we saw happen with the Trump administration in the early 20's. Then there's also the potential emergence of new breakthrough innovations and technologies, such as the ability to

distribute Hydrogen through the existing gas networks, and the development of fuel cells - the combination of which could suddenly make Hydrogen Fuel Cell Electric Vehicles (FCEV) an increasingly viable alternative, and many other examples.

It's for these and other reasons therefore why we must always prepare our forecasts and futures scenarios carefully, be able to adapt them quickly, and only ever present the future in terms of Plausible, Possible, Probable, Preferable, and even Preposterous futures - setting the right expectations is everything.

RESEARCH AREAS

When it comes to crafting and exploring all these potential futures and researching information that is pertinent to your program there are many sources of information you can explore to gather together the information and insights you'll need to create and inform your futures scenarios in the next stage. Below are just a few.

Alternative Industries

The vast majority of organisations all too often limit their research to what

their competitors and peers in the space are doing, but as organisations become increasingly digital and global, and as the boundaries between many previously distinct and siloed industries continue to erode the things and trends that could influence and shape your own future are just as likely to come from another alternative industry as from your own.

Disruptive Startups And Upstarts

Today starting a business is cheaper and easier than ever before and with net new company registrations soaring above 100 million in just the past few years there are more entrepreneurs than ever before looking for chinks in established industry value chains and developing new products and services that help them craft the future in the image of their choosing rather than cow towing to the status quo. As a consequence while there is a huge amount of noise in this space there are also many inspirational things and trends for you to discover and explore.

Explore Far And Wide

Many people often limit their foresight programs to the confines of their own country, industry, or language, but by exploring wider and further than these artificial boundaries you will be amazed at the sheer volume and variety of new insights you'll discover.

Exponential Investors

The global investment community is often an area that most people overlook when it comes to researching new things and trends, but they like you are trying to predict and shape the future for their own advantage so in some ways they're your kindred spirits in this program - all of which makes them and their portfolios good candidates to research.

Exponential Problem Hunters

There are a great number of mass market exponential problems worth solving and exploring, so take time to research the challenges the world is facing and take time to explore the things and trends that they're fuelling.

Exponential Technologies

As I detail in my complimentary

Exponential Technologies: The Next

50 Years Codex while exponential
technologies are just blank slates waiting
for explorers like you to discover they are

also often the driving force behind many of the new products and services, as well as things and trends we see, so your aim should be to explore as many of them as possible in order to understand how they could influence and shape the future.

Trend Hunters

As detailed in this Codex there are always a great number and variety of different trends you can explore and research, all of which in their own way will influence and shape the future. Furthermore, you'll quickly discover that many of them influence many of the research areas I've highlighted here.

"THE BEST WAY TO PREDICT THE FUTURE IS TO CREATE IT."

- Abraham Lincoln, 16th US President

DRIVING FORCE PROFILE 311 INSTITUTE: 311 TRENDS CODEX: RESEARCH STAGE



Use this sheet to dive into a particular driving force - an insight, technology, or trend - in more detail, examine its potential applications within your business, and then plot the overall market impact and ease of adoption of those applications.

TEAM NAME AND NOTES:

DRIVING FORCE DESCRIPTION

Describe this driving force in detail including its origin and estimated future trajectory.

DRIVING FORCE IMPACT
What impact will this driving force have on our business and the markets we care about?

POTENTIAL APPLICATIONS

Provide examples or illustrations of its potential applications in your business and then plot their Market Impact and Ease of Adoption on the adjacent chart.

HIGH - EASY HIGH - HARD + **APPLICATIONS MARKET IMPACT LOW - EASY LOW - HARD EASE OF ADOPTION**



IT2 IMPACT MATRIX



Use this sheet to categorise all the insights, technologies, and trends (IT2) you identified during your research according to their likely impact on your organisation and your programs scope.

TEAM NAME AND NOTES:

CRITICAL **IMPACT** MAJOR MINOR **REMOTE POSSIBLE LIKELY** +

LIKELIHOOD





Scenarios, WHERE we create futures scenarios, is the stage that gives organisations the prime opportunity to combat the bias, misguided confidence, and tunnel vision that all too often affects and paralyses day to day business decision making by first identifying trends and uncertainties and then using them, along with other futures research, to create futures scenarios that stakeholders can debate, discuss, and explore – all of which can then be used to enrich and inform your organisations near, mid, and long term strategies, thinking, and visions.

Among other things good futures scenarios not only help organisations create compelling shared visions of their preferred futures, but they also help foresight teams and stakeholders compensate for two common errors in futures related decision making and forecasting - namely the under prediction and over prediction of future change.

While most organisations are guilty of making the first error, even though it's evident for everyone to see that the global rate of change and disruption is accelerating, ironically many futurists – even the likes of Isaac Asimov and Alvin Toffler – are guilty of making the second error. All of which, if not properly addressed, could leave your organisation

in a quandary, because on the one hand you could have a group of stakeholders who are predisposed to under predict the future and on the other you could have others who might over predict it and expect levels of science fiction like change that, in the case of Asimov and Toffler, for example, many decades later still haven't materialised, such as Artificial Intelligence (AI) where robots don't yet outsmart us, medicine where we are still losing the war against Cancer, and space travel where we are still mostly Earth bound.

This stage is therefore a critical part of your program that allows you to chart a middle ground between these two opposing groups and create views of the future that are more reasonable and more likely to happen.

As an additional benefit the scenarios you craft can also be used to enhance the robustness of your organisations strategic thinking by helping you identify and challenge stakeholders underlying assumptions, as well as its conventional or established wisdom. It can do this in several ways. For example, by helping improve stakeholders awareness of change by shedding light on the complex interplay of underlying trends and uncertainties, by enhancing your organisations sensitivity to early and

weak signals of the changes that lie ahead and, most importantly, by giving everyone an open platform that lets them think through possible futures and explore and rehearse appropriate responses to them with impunity.

FUTURES SCENARIOS BASIC PRIMER

Now I've detailed the benefits of creating futures scenarios let's level set quickly and walk through what futures scenarios actually are.

Scenarios are an important forecasting technique that organisations can use to create narratives about the future that they can use to debate, discuss, explore, and visualise that future.

While there is no creative limit on the methods or tools you can use to create your scenarios or how you present them to stakeholders there are obviously some that are more popular than others.

For instance, you can present your final scenarios to other stakeholders using imagery, story boards, videos, or even role play. You can even, if you choose to as some organisations are now doing, choose to present them as Virtual Reality (VR) constructs. Unsurprisingly though the format you choose to use

will depend on the time and resources you have available so it shouldn't come as much of a surprise that the majority of organisations choose to create text based narratives that can take the form of everything from news articles to short form stories.

Irrespective of the format you choose to use though your futures scenarios must be able to clearly convey to your stakeholders the behaviours and impacts they will have on your organisations objectives as well as, if desired, business, culture, and society.

CREATING YOUR SCENARIOS

When it comes to the methods you can use to develop your futures scenarios there are, again unsurprisingly, more than you can shake a stick at so I've chosen the two that in my estimation are the easiest to follow and yield the best results.

The 6 Future Archetypes

This, the first method, helps you understand the characteristics of all the different driving forces you identified in the Research stage of this program which will all, in one way or another, influence

and help shape your futures scenarios. It has three steps.

First, explore your driving forces behaviours and categorise them according to the following six archetypes namely Baseline, Chaos, Collapse, Expansion, Regression, and Transformation - each of which describe their overall expected future behaviour.

Diving into what each of these terms mean Baseline is the continuation of the present status quo as it exists today that, importantly, doesn't change at all in the future. In short you can also think of this archetype as being a never changing "Stable State" hence the term Baseline.

Chaos is just as it sounds, where patterns and trajectories are no longer identifiable and everything becomes chaotic and unpredictable. It's also important to note here that you should not confuse unpredictable for uncertain as these are two very different terminologies.

Collapse is the worst case scenario and represents a future where the driving force or forces you're interested in reach their limits and collapse. In other words they cease to be.

Expansion is the continuation and enhancement of the current trajectory

of a driving force. In other words an expansion, or cautiously an evolution, of the present. While this might at first appear similar to the Baseline archetype it's important to note that they are indeed different since this is a continuation of the presents trajectory rather than an unchanging continuation of its current status quo.

Regression is when a present day driving force reverses and returns to a previous state - whether that state is recent or in the deep past.

Transformation represents a radical departure from the present due to a disruptive or transformative event and represents a time of new normals.

Now, having categorised all of your driving forces, secondly you need to give them all weightings according to their overall expected impact on your programs pre-determined objectives within the time horizon you care about.

Thirdly, it's now time to create your futures scenarios using the above categorisations to guide your thinking, and it's important to note that they can't be completely produced by your imagination - you'll need to able to support each of your narratives with quantitative and qualitative information.

When we create scenarios using this method there are, however, a couple of things you need to pay attention to.

First, you need to take into account all the driving forces you identified in your Research stage, even if their behaviour is counter-intuitive, stretch your imagination to think of alternative counter intuitive futures, and then support such arguments with references. Needless to say though this can be a quite laborious research task.

Secondly, you must remember that the scenario archetypes are generic. They're not necessarily positive or negative, good or bad, so they should be interpreted in both ways, and ideally include both positive and negative elements in order to make your futures scenario more plausible. Indeed, reality is never either completely Utopian or Dystopian it's a mix of both, and the same applies to scenarios.

The Uncertainty Matrix

The next method I'm going to talk about, which has its roots in the popular 2x2 Matrix, pairs the two driving forces of highest importance and greatest uncertainty that you identified during your Research stage with one another to

help you craft your futures scenarios. It consists of four steps.

First, taking the top driving forces you identified during the Research stage cluster together the ones that have a high mutual impact on each other. And what I mean by impact, just to be clear, is the degree they alter and influence one another's future behaviours and trajectories.

Second, using a line - a single Y axis - with the labels Plus or Minus determine what the extreme behaviours of these clusters could look like. We call these extreme behaviours "Factors" and once you've come to a conclusion about what these factors could look like give each of them a suitably descriptive name or tag line.

Third, plot these factors against two axes - an X and Y axis - one labelled "Impact" and the other "Uncertainty."

Forth, once you've completed your chart select the level of Impact and Uncertainty you want to base your scenarios on and craft your narratives based on the factors in those areas.

When creating scenarios using this method it's important to remember not to forget all of the other driving forces

you identified during your research but chose not to include in your chart. In other words, for each scenario you craft you'll still have to take into account the behaviour of the factors both inside and outside of your chart.

SCENARIO BUILDER 311 INSTITUTE: 311 TRENDS CODEX: SCENARIOS STAGE



Use this sheet to examine different driving forces and craft futures scenarios that you can discuss and explore in more detail.

TEAM NAME AND NOTES:

	LIST OF DRIVING FORCES List the driving forces you care about ranked by importance below then use the adjacent chart to compare them to one another and develop scenarios.
1	
2 3	
3	
4	
5	
6	
7	
8	

SCENARIO 1 HIGH - LOW Write a description of this scenario

+

DRIVING FORCE HERE

9

WRITE NAME

SCENARIO 2 HIGH - HIGH Write a description of this scenario

SCENARIO 3 LOW - LOW Write a description of this scenario

SCENARIO 4 LOW - HIGH Write a description of this scenario

WRITE NAME OF DRIVING FORCE HERE



SCENARIO IMPACT MATRIX 311 INSTITUTE: 311 TRENDS CODEX: SCENARIOS STAGE



Use this sheet to categorise all the futures scenarios you developed according to their likely probable impact on your organisation and your programs objectives and scope.

TEAM NAME AND NOTES:

CRITICAL **IMPACT** MAJOR MINOR **REMOTE POSSIBLE LIKELY** +

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RANSLATING YOUR futures scenarios from the previous stage into actionable business strategies

- Future Design - is an important but often over looked step. Indeed, a lot of organisational foresight work often stops after the creation of these scenarios while in reality they should always be used to help stakeholders create more robust and resilient future business strategies and visions.

Organisations can find the link between these two stages problematic for all manner of reasons. For example, it can be because of the lack of effective communication between the Scenario Team and other stakeholders, the unexpected withdrawal of funding or resources, time constraints, and many other reasons - most of which you'll find are avoidable with proper program management and planning.

You should also not underestimate the importance of having a structured and rigorous methodology you can use that enables your scenarios to be fruitfully used for decision making, and that ultimately helps you translate them into effective business strategies.

That's what I'll be covering in this section, and as I've mentioned previously while I'm going to walk you through some of

the most effective methods ultimately the ones you choose should be based on your organisations culture, objectives, and resources.

SCENARIO IMMERSION

The first method we'll take a look at is called Scenario Immersion. Developed by Ralston and Wilson of the Stanford Research Institute in their book "Scenario Planning Handbook" this method involves performing structured mindstorming about the implications of a different futures will have on the organisation.

In scenario immersion, the scenarios are presented to as many organisational stakeholders as possible in a workshop format. Then, for each scenario, each individual in the group is asked to identify as many threats and opportunities that that scenario presents for the organisation without any concern for their probability, and to write them down on sticky notes.

This could take several rounds and should be done until saturation, for instance when no new threats or opportunities are found. The facilitators then cluster the sticky notes into similar categories or groupings.

Finally, these stickies are placed where everyone can see them in the workshop room, and every member of the group is asked to act like decision maker and identify strategic responses to those threats and opportunities - these responses will be the basis of a strategic plan.

The strength of this method is that it allows an organisation to deepen the scenarios by quickly generating rich feedback to the scenario planning exercise, and the resulting full spectrum of ideas presented in dozens of sticky notes can be useful for decision making.

The downside of this method is that the strategies contained in those stickies might not be implementable because they're not created by the management, but by organisational members who might not be fully aware of the sunk costs and previous plans that are inherently constraining the organisation.

In other words, a limitation of this method is that it is disconnected to the company's strategic past. This limitation is what may lead us to use the next method.

WIND TUNNELLING

Wind tunnelling which is a form of policy

stress testing takes its name from wind tunnels - the systems that are used in vehicle engineering to test whether or not new vehicle concepts can withstand all manner of different erratic weather conditions.

In the corresponding foresight method, these erratic environmental conditions stand for the different conditions in the external environment presented in each scenario, while the vehicle stands for the pre-existing strategies of the organisation.

Unlike the previous method this one takes into account your organisations pre-existing strategies before a scenario evaluation exercise because it uses a so called wind tunnelling matrix to stress test all of your pre-existing strategies, such as marketing and research strategies, which are listed as rows, along with any others you wish to include, against each of your futures scenario which are listed in the columns.

More precisely, as with actual wind tunnels your organisations pre-existing strategies can then be evaluated against all of the different "strong conditions" of each one of your scenarios. Then, if they can resist them they are robust and can be retained, and if not then they either have to be redesigned or done away with.

The strength of this method is that it allows an organisation to pinpoint which pre-existing strategies are not going to be compatible or viable in the future, and thus, helps focus the executives attention on those strategies that prove robust under all scenarios.

Moreover, this method is very flexible, as not only can it be used to test an organisation's pre-existing culture and strategies against different scenarios, but it can also be used to investigate your competitors strategies as well as new "theoretical" strategies such as new business concepts and business models, and other core organisational capabilities.

The major limitation of this method is that whenever we are using it to judge whether strategies are robust under future scenarios, the evaluation of their performance is implicitly carried out in view of a set of organisational objectives in an arbitrary manner. For instance, if an organisation is considering more than one alternative strategy and needs to decide which one to keep and which ones to do away with, the evaluation can be approximate and therefore, misleading.

This limitation may lead us to use the variation of this method discussed as

follows.

Wind Tunnelling Variation

In this method, which you can think of as an evolution of the Wind Tunnelling method competing strategies are tested against each of your different futures scenarios against a set of specific organisational objectives inn order to determine the best strategy.

For instance, let's consider a simplified case where an organisation has two scenarios: Scenario 1 and 2; two objectives: Market Share and Customer Satisfaction; and three competing strategies: Differentiate, Expand, and Partner Up. In this example the organisation has to decide which strategy to pursue and which to eliminate.

This method then consists of 3 steps:

In the first step, for each objective we rank each of our strategies against the two scenarios we created from best to worst. This effectively compares, with scores, the performance of each strategy against each scenario.

For instance in our example the "Differentiate" and "Expand" strategies might perform better in Scenario 2 rather

than in Scenario 1, but the "Partner Up" strategy might perform better in Scenario 1.

In the second step, for each objective we rank all of the Strategy-Scenario combinations from best to worst. This effectively compares the performance of all of our strategies across all of our scenarios.

For instance, in our example for the "Market Share" objective "Expand" in Scenario 1 might have the best performance, then the "Partner Up" strategy in Scenario 2 might have the second best. And so on.

Finally, in the third step, for each strategy, we then look at the scores obtained in the previous steps for all of our objectives, and we can even sum them up, to determine which strategy has the greatest chance of succeeding.

By using this quantified method we now have a way to discuss and calculate which strategies are the best ones, and we now have information that we can use to adapt and inform our organisations official future strategies and visions.

A limitation of this method though is that it overlooks the qualitative elements of strategy development, as well as the relative importance of each objective, and while you could arguably assign these qualitative factors numerical weightings ultimately you could end up in somewhat of a confusing tangle.

"FORESIGHT IS LESS ABOUT PREDICTING THE FUTURE AND MORE ABOUT MINIMISING SURPRISE."

Use this sheet to explore the strategic threats and opportunities of the future scenarios you created.

SCENARIO IMMERSION



TEAM NAME AND NOTES:

SCENARIO NAME AND BRIEF DESCRIPTION

This is the name and a brief description of the futures scenario you are going to be exploring.

THREATS

List all the threats that this scenario presents to your business and the markets you care about.

OPPORTUNITIES

List all the opportunities that this scenario presents to your business and the markets you care about.



SCENARIO SUMMARISER 311 INSTITUTE: 311 TRENDS CODEX: FUTURE DESIGN STAGE



Use this sheet to help you explore the futures scenarios you created in more depth, baseline your thinking, and start thinking about what responses you could or should take to them all.

TEAM NAME AND NOTES:

	SCENARIO 1	2 SCENARIO 2	3 SCENARIO 3	SCENARIO 4
IMPACT OF SCENARIO What happens after the scenario occurs?				
UNCERTAINTIES What is unknown about the scenario?				
QUESTIONS What questions might you have about the scenario?				
COMMENTS What comments do you have about the scenario?				
RESPONSES What responses and actions should you take as the scenario occurs?				
ALTERNATIVE RESPONSES What other alternative responses are there if your scenario occurs?				



STRATEGY SUMMARISER



Use this sheet to help you figure out what capabilities you need to develop, and what actions you need to take in order to benefit from the trends you identified.

TEAM NAME AND NOTES:

DISCOVER

What are the opportunities and threats when our scenarios occur? How could these scenarios benefit or jeopardise our business in the future? MINDSTORM

What capabilities do we need to develop, drop, or enhance to profit from these?

CAPABILITY BUILDING

What concrete actions must we take to ensure we have these capabilities? How do our stakeholders understand these scenarios and trends? What are their expectations of us?

STRATEGY DEVELOPMENT

How do our scenarios support or challenge our strategic plans and thinking?



STRATEGY WIND TUNNEL



Use this sheet to evaluate the impact of each of the futures scenarios you created on the strategy of your choosing and then use the output to help you create more robust and resilient future business strategies and visions.

TEAM NAME AND NOTES:

	SCENARIO 1	2 SCENARIO 2	SCENARIO 3	SCENARIO 4
STRATEGY 1				
STRATEGY 2				
STRATEGY 3				
STRATEGY 4				
STRATEGY 5				
5 STRATEGY 6				





PEOPLE SAY change is a constant, but in today's technology fuelled world this simple phrase is a deceiving, and often comforting, misnomer because change isn't constant, it's exponential, and the only boundaries to what we can achieve as individuals and as a global society are the ones that we invent for ourselves.

As researchers and scientists increasingly prove that nothing is impossible, that yesterdays science fiction is simply the future generations status quo, and as we all continue to bear witness to an increasingly rapid rate of change that's affecting and transforming every corner of global business, culture, and society the future belongs to all of us equally, and we should never loose sight of that.

As you race into your own future I wish you well, and never forget you have all the friends and support you need around you as we all voyage through time and space together on this fragile living spacecraft we call Earth.

Explore More

MATTHEW GRIFFIN Founder

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