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International Market & Competitive Intelligence

Focus on Technology

Technical Information

About us

IMCI Magazine is a bi-monthly trade publication focusing on a variety of Market & Competitive Intelligence topics.

This is an international magazine, so we seek to bring a plurality of voices and perspectives into the debate.

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KEY HIGHLIGHTS

- Actionable foresight into CIO, CTO's strategies in terms of digital transformation and cloud journey.
- How to maximize the value of investments (ROI) using MI and CI?
- How are different companies changing and how competitors are adapting to a new covid-post covid world?
- How cloud vendors promote a multi-cloud strategy?
- How companies are enhancing and maximizing their relationships, loyalty and lifetime value with their clients using Market intelligence?
- Discussing use cases to understand the strength of customers: how are competitors accessing the data, what kind of data are they buying?

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Letter from the editor

This issue is about technology - We will visit how technology changes all we do - from drones to Virtual Reality, from CI research methodologies to Foresight, and from "technology-addicted" Millennials to targets of neuromarketing.
Indeed technology is all around us, and it will continue to evolve, but it changes faster than our societies can adapt, so there is this sense of abuse/misuse - lots of articles call upon ethics to help us re-think the appropriate uses of technology.

In keeping with our mission to bring diverse perspectives, we will hear voices from Israel, Africa, South America, along with thinkers from Europe and North America.
I hope you enjoy this issue.

Rom Gayoso, Ph.D

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Sketchplanations

By Editorial Team

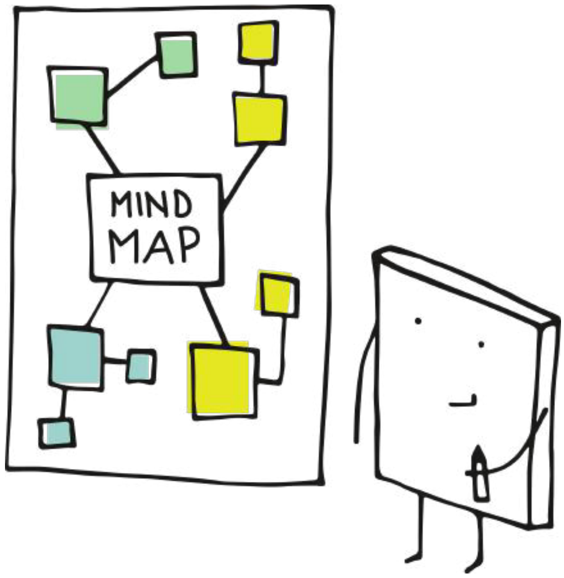
A Sketchplanation is a data visualization approach created to function as an aid to our communications. A sketch is an elegant approach to describe even very complex subjects in a way that most can relate to.

Introduction

In the world of intelligence, even more so when we are addressing senior managers, it is important to be brief, succinct, and to the point. If a 15-minute presentation seems challenging, as we move up the food chain it is often the case one can have not 3, but rather just one slide and just 5 minutes to present a thesis, make an argument and ask for something – usually corporate resources. How can one deliver a winning presentation under so many constraints? It is not easy – but it is doable.
Enter data visualizations. Simply put, this is a body of knowledge dedicated to presenting data in a visual way. It is known we swim in an ocean of data, and the advent of the Internet just exacerbated the problem – analysts need to go through a vast amount of data, isolate the key nuggets, explain what they are talking about, show how it relates to the corporation, and in the process – they turn raw data into actionable information.

It is often the case one already deals with a great variety of visual tools – most presentation software has a good amount of graphs, pie, and bar charts, along with other visuals used to convey information about counts.
Business analysts use maps – which combine count with location – and they are excellent ways to represent, for example, the number of units sold in given geographies.
If one is working with statistical information, then graphs with lines are a good way to represent how data changes over time, as it is in the case of time series or trends, and how data relates to each other – one can see how two lines travel over time and visually recognize a correlation or a pattern.
There are other ways to represent ideas and concepts – such as mind mapping. Mind maps are useful to represent ideas and how they relate to each other.
Say one is planning a trip, then a mind map would be an easy way to organize ideas – and quickly communicate them.

Methods



Why Data Visualization is Important?

Edward Tufte (2001) said, "(Often) the most effective way to describe, explore, and summarize a set of numbers – even a very large set – is to look at pictures of those numbers." In other words, images do a great job at helping one make sense of information – our brain quickly processes visual stimuli - so the data is presented in a coherent way.
However, data visualization is not just an illustration, but also a representation of data in a way that generates ideas, facilitates discovery, and in a way that not only describes the data but also allows for the exploration of other concepts.
Bownlee (2020) explains visualization is not just a way to decompose and aggregate data, but rather it helps us see data and extract insights – and those help us better tell the story – or make the business case.
Nowadays the issue is not finding data, but rather processing it and communicating key ideas in a way that is easy to understand. This way we can go from data point to information to insight in no time – this is the power of visualization.
So...what to do when one needs to communicate a more complex idea or an intellectual construct?

"The most effective way to describe a set of numbers is to look at pictures of those numbers"

E. TUFTE

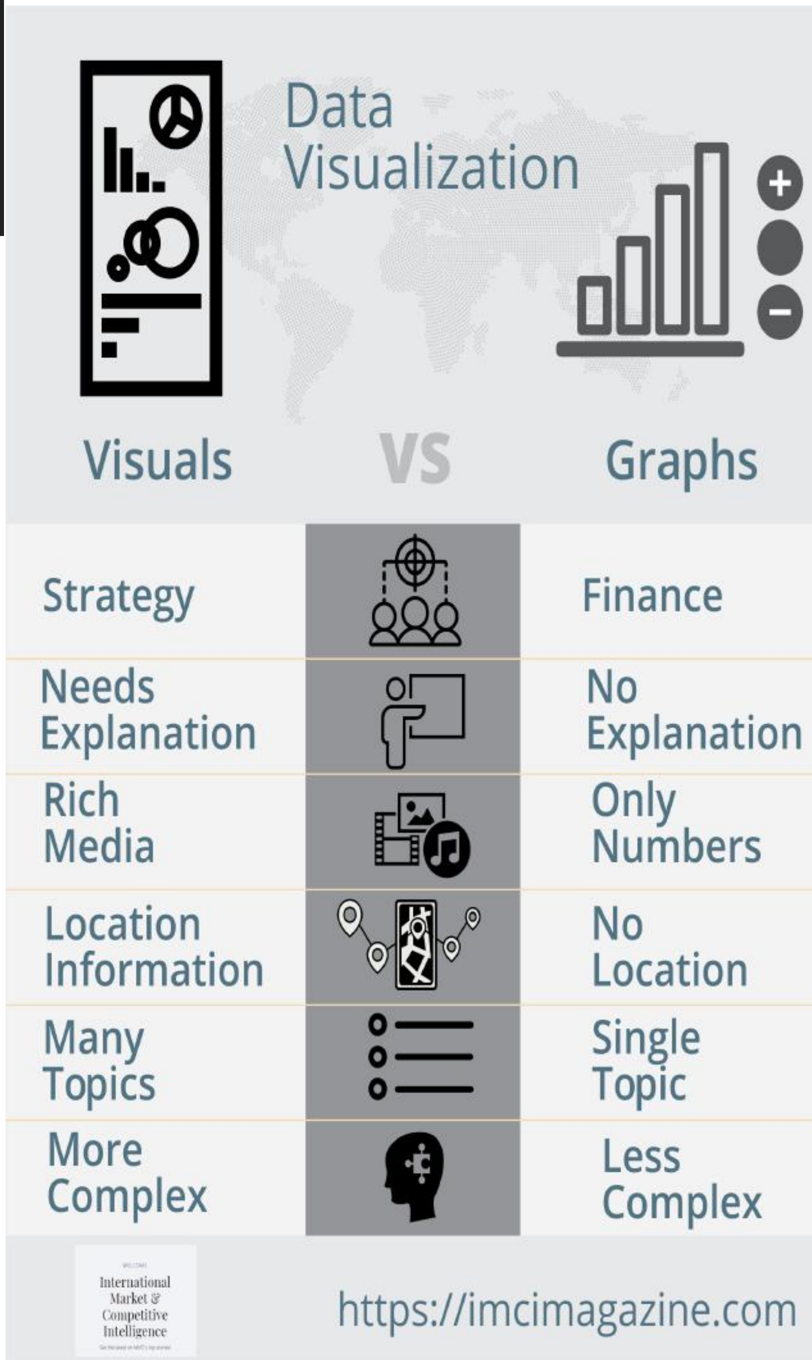
Visualization through Mind Maps

One way to think about complex ideas is to turn to some very special ways to display information, namely mind maps. The main idea of a mind map can be compared to the image of a tree – one main trunk and several branches stemming from it. In a mind map, the key idea is written in a box at the center of the map, then other subsidiary ideas are linked to it.
Of course, one cannot think of Mind Maps without Tony Buzan – his pioneering work remains with us – and the Tony Buzan site still offers free downloads of the Mind Sports, Mind Mapping, and The Brain eBook. Check it out – all of the content is graciously shared by those who continue Tony's work.
If one goes through Tony Buzan's material it is easy to understand his work: One image at the center, branches irradiating from it, the use of colors as instruments to help us tell things apart... all combines into a wonderful method to organize and display ideas within context, also in a way that stimulates more thoughts and ideas – which in turn fuel a never-ending cascade of sub-branches.
In other words, mind maps are a very good option to display complex information because – like the brain – it goes in many directions at the same time, so we can go back and forth from one concept or idea to the next – without compromising logic in the process.

Methods

Visuals or Graphs?

Figure 1: Data Visualization selection



Do remember - graphs and other types of visualization methods exist to help you better convey an idea or a thought. Always think of your audience - and what they want to learn from your visualization.

The CFO will most certainly want to see numbers, a graph, some tables showing this period versus the same period last year, etc. A properly labeled graph does not require much in terms of explanations - Q1 Sales versus Q2 or YoY (year over year) labels are self-explanatory.

The strategic planners will gladly look at tables/charts, but they may expect richer imagery - for example, a heat map to display the results of an ad campaign run during the Tokyo Olympic event.

How about the latest voice of the user survey results? How about different usage models for your product? Those complex concepts cannot be properly conveyed using simple graphs.

Say consumers are purchasing inexpensive tablets to be placed in the kitchen - with the goal to watch YouTube videos featuring favorite recipes, or watching the latest episode of Paris Hilton's Celebrity cooking show. In this case, a picture of the gadget strategically positioned on the kitchen countertop or laying on top of a small pedestal is your best visualization alternative. The picture on the left is an elegant - yet simple - solution.

However, one may ask...Are there other ways to creatively present complex thoughts and ideas?

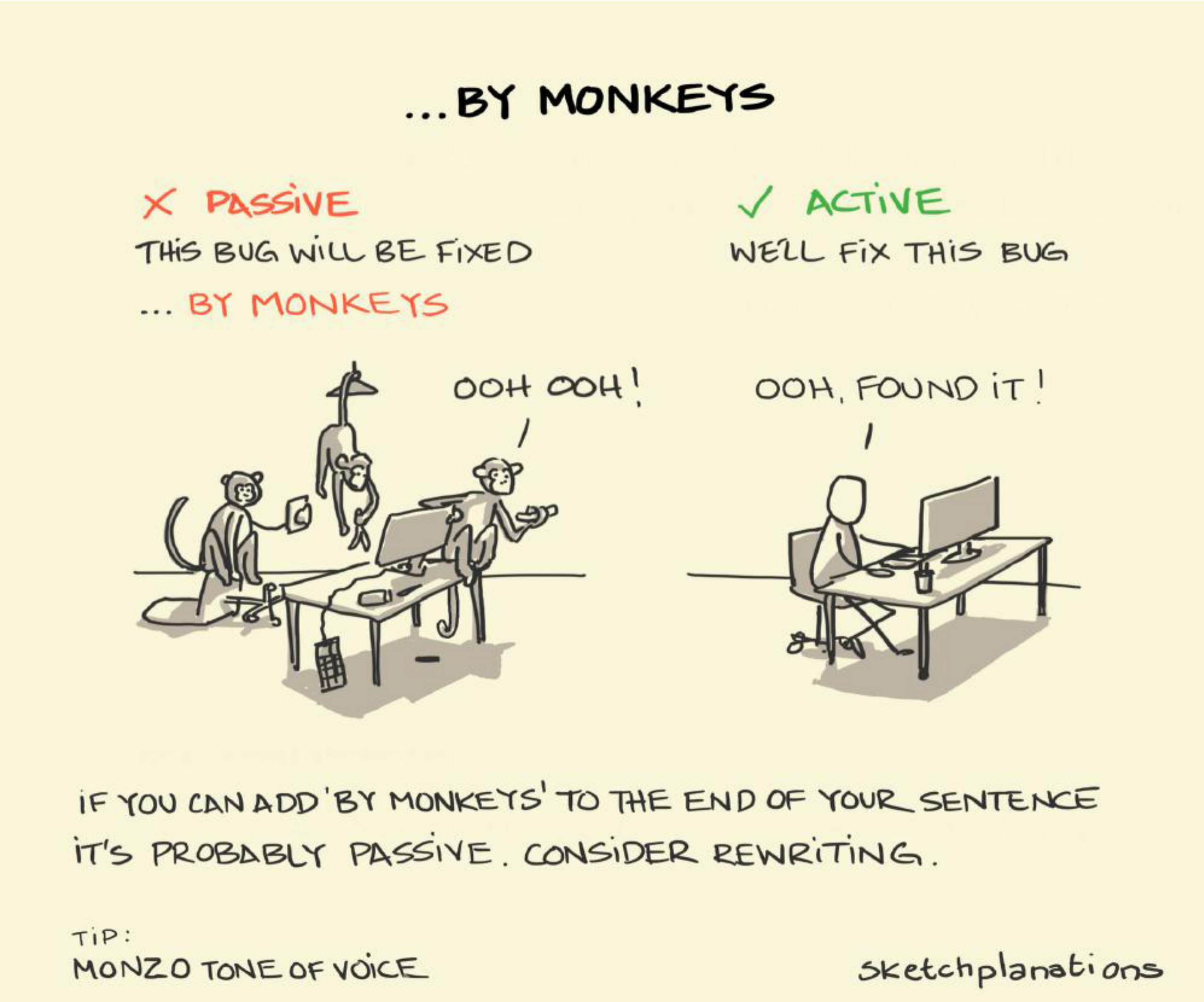
Methods

Sketchplanations - 1

One may ask – what in the world is a sketchplanation? Well, simply put it is an explanation of a concept or idea through the use of a sketch or a drawing. Sketchplanations are the creation of Jono Hey – he explains in 2012 his sister gave him a sketchbook – and he proceeded to create a sketch for every day of the year. Before he realized it, he had a book filled with a great variety of sketches, covering many different topics.

Over time, Jono Hey migrated from the traditional pen and paper model into software – namely Sketchbook Pro – which is used on an iPad Pro. No matter the media, as one goes through Hey's work, it is clear he is not afraid to use his skills to address important, even contested topics – in an elegant, artsy way he can convey complex ideas through the power of image creation. Case in point – the monkeys! See below.
This sketch is elegant, catchy, and conveys lots of ideas. On one level we are indeed talking about the use of passive versus active voice in a sentence. However, this is not just about good grammar practices, Jono Hey reminds us adding "...by monkeys" to the end of a sentence operates as an instrument to remove accountability, ownership, and responsibility. In this example, the IT technician on the example of the left is leaving the action of fixing the bug to some unidentified third person, whereas the tech on the right is assuming ownership of "fixing the bug," whatever that entails.

Figure 2: "...by monkeys" example



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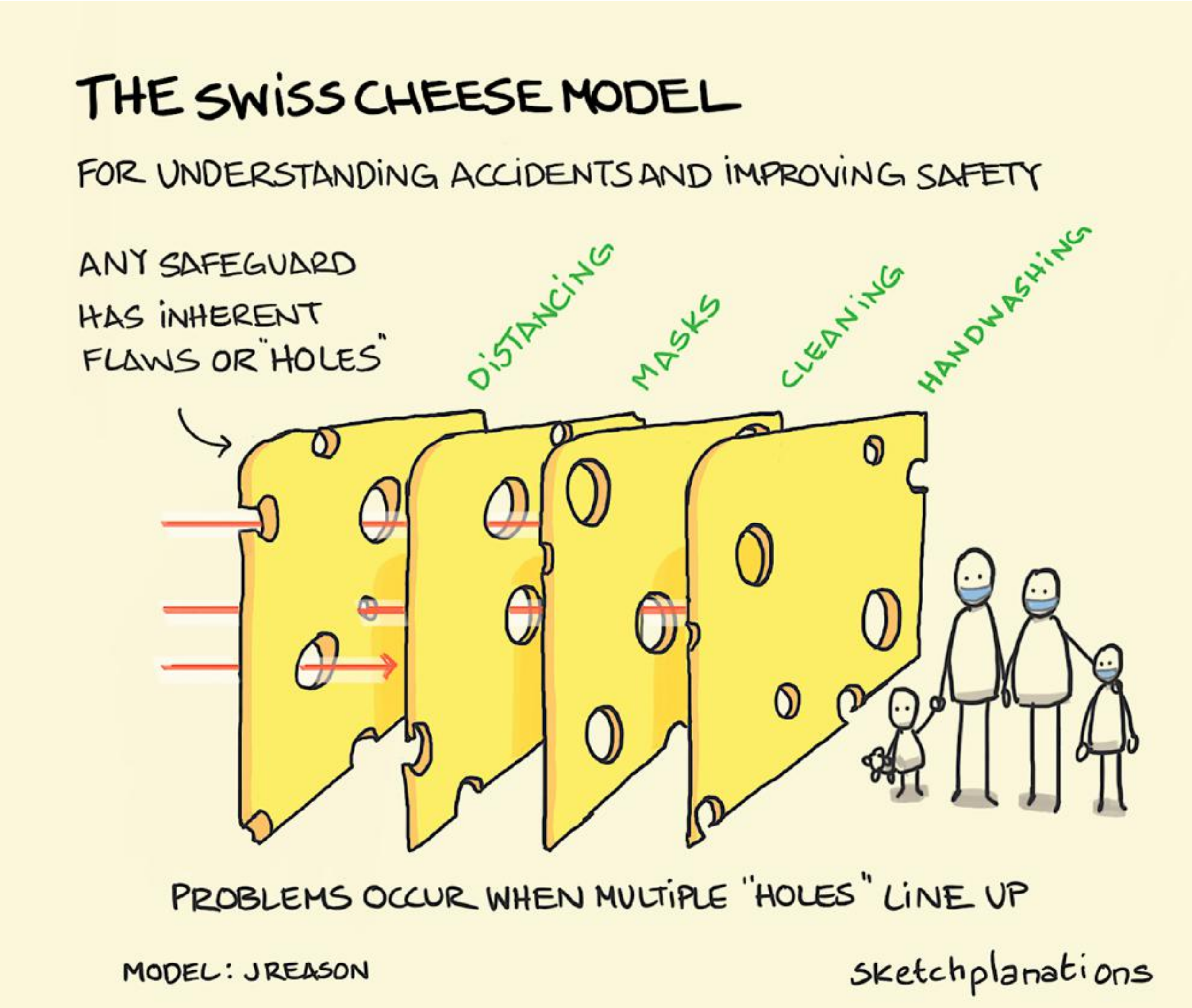
Methods

Sketchplanations - 2

Another interesting example is Jono Hey's take on the "Swiss Cheese" model – see below.
In this sketch Jono Hey is explaining in order for large events or an accident to take place, it is important to realize such catastrophic events happen not because of a single failure, but rather because of a combination of failures lined up.

Another way to think about the Swiss Cheese case is to look on the positive side – perhaps individually and in isolation - the safeguards named are not sufficient to stop the spread of disease, but taken jointly, they amount to more than just the sum of the parts. Of course, it takes a lot more words to explain the Swiss Cheese, than the single image presented in this sketchplanation.

Figure 3: "Swiss cheese" example



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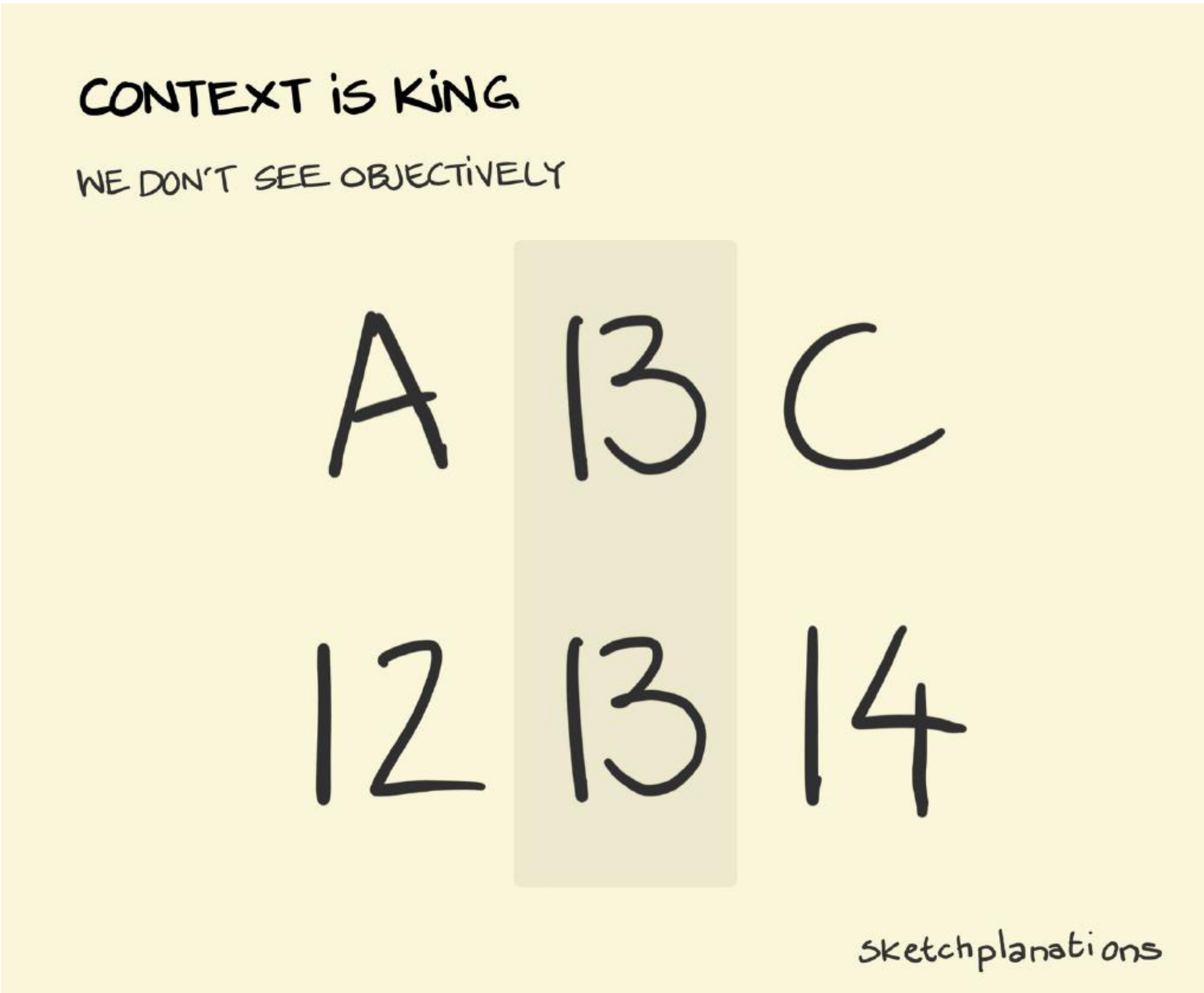
Methods

Sketchplanations - 3

Jono Hey takes on a great number of intellectual constructs – and simplifies them for easy consumption. If the monkeys and the Swiss Cheese were not sufficient to convince you, then perhaps this even simpler sketch will demonstrate how easily sketchplanations convey complex ideas with simple images. How about numbers and letters?

In this simple example – again just numbers or letters – Jono Hey visually demonstrates the eye can fool us into believing something is a letter or a number – based on the context or the surroundings. In isolation the brain will “fill in the blanks”... between “A” and “C” there must be “B”.

Figure 4: "Context is King" example



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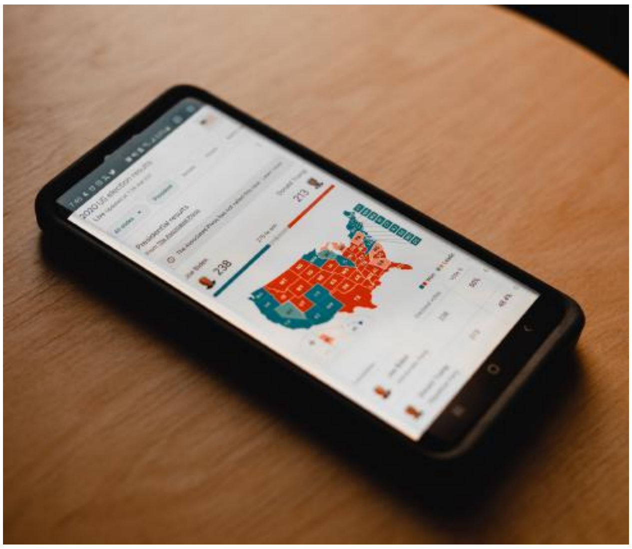
Methods

Application

Though there are many ways an analyst can visually represent data - software-generated graphs, heatmaps, or other embedded objects – these can go a long way to condense a lot of information into a single representation.
A pie chart can tell proportions, a line can represent a time series, and a heat map can represent tri-dimensional data – for example, a heat map of the election results with red/blue for the major political parties.



Now, when one is trying to convey more complex ideas, on for situations when no one is available to sit next to the proverbial slide to offer an explanation, then perhaps a mind map or a sketchplanation will be a better solution, for it can summarize complex concepts in an easy to understand model. Of course, the parsimony principle still stands – it is best to use simpler designs than complex ones – for there are fewer moving parts and fewer things to understand.

Another way to think about this is to present to the VP of Marketing the findings of recent sales – the "Context is King" is a safe bet to use when the message is customers could not tell the difference between products "A" and "B."
This is impersonal and appeals to the use of logic. The alternative is for the analyst to tell the VP of Marketing – who created the differentiation strategy - his strategy did not work.
Did you ever hear one should not shoot the messenger? Unfortunately, in the world of big business where corporate politics are at play, it is often the case the messenger is shot – for someone (other than the VP, of course) - needs to take the blame for the failed marketing pitch.
If you want something simple, elegant, and to the point – then the sketchplanations are a safe bet. It is possible one of the already many sketches will be an off-the-shelf solution.
Please do check Jono Hey's site for the entire collection. Alternatively, one can always contact the artist and have something made to order.
Here one needs to think about the advantages and disadvantages of using secondary versus primary research. Secondary research is already made, and it is cheaper to acquire, but it might not exactly be what one needs.
Jono Hey is very responsive and is available – it is just an email away. When you have the opportunity, do check his site – you will be very pleasantly surprised with the collection...and in case no one has noticed, a picture tells a thousand words. Next time, go with one picture.
You can find Jono's entire collection on the website, here is a link.

Competitive Intelligence

Cross-Cultural Marketing Strategy

By: Jamila Cornali

Understanding other cultures may come at a cost - but it also presents itself as an opportunity to portray your brand in a more favorable light in the eyes of your intended audience - consider it an investment in your brand.

You are faced with the task to develop a market positioning strategy, and you are asking yourself – is there a way to improve my communication? Will they understand the message? Communicating with someone else is not easy – we are always having to breach many cultural layers to deliver a message.

There is the person's group culture, the corporate culture, and the national identity – and each one of those layers is loaded with values, biases, and speech patterns.

Now – on top of that – you need to communicate your message to people of another culture; so on top of the cultural layers, we just described, now your message is going across an altogether different culture and in a foreign language.

We have the three original cultural layers, plus the three new layers to identify the receiver of the intended message is someone abroad – speaking and thinking in a different language, with dissimilar uses and costumes.

That is indeed a lot of layers... we risk our communication gets lost in translation – and those precious resources spent on the marketing strategy are just wasted.

Worse, we could accidentally be delivering the wrong message to the wrong audience. What a mess. We really need to find a way to bridge this communications gap – and pronto!

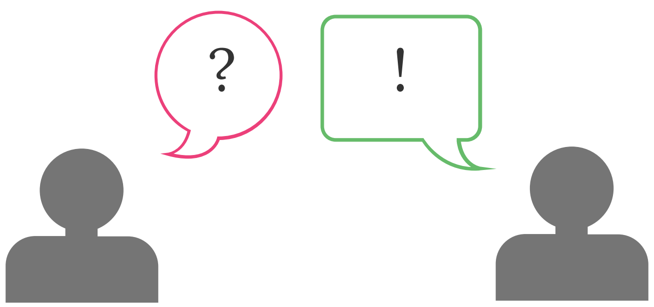
Competitive Intelligence

Know thyself, know the other

Here is the key issue: If you do not know the state of mind, values, culture, and communication styles of the target audience- then there is no way your marketing message can stand out from that of your competitors. There is yet another layer of complexity here – if you are marketing a product or a service, not having a deeper understanding of the local culture/language will make it harder for you to anticipate their choice, and much less have a shot at influencing their purchasing decision.

If we put our competitive intelligence hats on, then the mission becomes a lot easier! CI is the perfect conduit for the marketing message abroad exactly because we specialize in getting to know the other – this is what we do best. Of course, as we get to know the other, we get to know ourselves in the process- this is a win-win.

There are many benefits of knowing a foreign language and understanding the thought process and cultural context is a starting point. If the goal is to understand how the competition operates abroad, then we need to locate, process, and understand all the information shared in the target market. It is important to understand often not all the materials are translated to English (or to another lingua franca) – translators do cost money; therefore, it is an investment many a company is not willing to make.



On top of not translating all the materials, some, or key pieces of someone else's may be omitted – in purpose. Why should the competitor make all its communication available to you at no cost and in your own language? It just does not make any sense they would. In fact, in addition to omitting information, they might even plant misinformation – so that you are confused and uncertain of what is indeed going on in the target market.

Why would a competitor share this information with you, to begin with? The key idea here – you will be a lot more efficient at gathering information about the target market if the intelligence effort is conduct in the local language and with cultural awareness of local costumes. You may find yourself in a meeting with a key customer or watching a competitor's webinar – or perhaps a person of interest sits next to you during the chamber of commerce luncheon. It would be nice to develop an understanding of what these people are saying – or better yet – what exactly they are thinking.

One thing is certain – as you grow to understand the nuances of their thought process, their desires and aspirations, you will – in the process – learn how to better position your offering. Perhaps a weakness you spot in this target market is a weakness in your own home market, but you just did not think or see it that way. Perhaps a new-found strength in this market can be translated into a competitive advantage elsewhere?

Cross Cultural Communications – revisited

So far we discussed the importance of acquiring cross-cultural communications skills as a way to better gather intelligence and as a way to better position your product (or service). However, it is also true those same skills will come very handy when it is time for you to communicate internally – that is to your own employees who are working in the target market.

Remember the layers of group communication, corporate culture, and national identity continue to operate – those employees of yours working in the local market also have their set/layers of culture!

Competitive Intelligence

As your employees see your goodwill and effort to understand their culture, their view of your entity will certainly improve; and not only that, you will develop an improved ability to understand each other. Who knew? Cross-cultural communication applied to your employees abroad will improve knowledge sharing, and it will raise their commitment to your mission / corporate objectives.

The better you understand each other, the more engaged they will be, and as competitive intelligence is actually a collective effort, you will also see improvement in your intelligence collection. This better engagement, stronger commitment, and deeper awareness of your strategy will translate into a stronger competitive position. Now just imagine – what if you are going through the effort of promoting cross-cultural awareness, but your competitor is not. The locals will certainly realize your firm is more committed to them and their market, whereas the others are not.

Cross-cultural awareness will not only affect people's perception of your firm but will certainly boost your negotiations strategy. A state of heightened awareness will operate in your favor because it will reduce language barriers, diminish tensions, and you will develop this "sixth sense" that will enable you to distinguish when it is appropriate to push for something, or when you need to compromise a little in order to reach a final agreement that is suitable for both parties and will operate to solidify your business relationship with the locals.

The ability to speak a foreign language and awareness of norms will also help you avoid unnecessary accidents, and even prevent damage to your brand. Several marketing messages actually turned into full-blown blunders, and a few come to mind. You might recall "Chevrolet Nova" – in Spanish means "no go," and who will want to buy a car that is a "no go?"

It is important to note we are not only talking about "big things" or communication blunders, but actually small gestures can make or break a relationship – and you cannot afford to damage the relationship with a potential customer because you appeared indecisive, or you were seen as "too pushy."

Unspoken Rules

In addition to managing how you behave in front of others; it is also important to consider what kind of perception they will develop – every moment you invest in front of your customer / audience is an opportunity to make an impression. Cross-communication awareness is a tool in your toolbox, and it will show others you are making your best effort in the relationship.

On top of your effort to speak the local language, cultural awareness will also assist in creating a good impression of your brand because it will help you manage non-verbal communication as well. You certainly put a lot of energy into learning the local language, and on top of that, when that important someone entered the room – the person was greeted politely, and warmly, with simple and appropriate hand gestures, accompanied by a polite bow. The person felt welcomed and those important first 30 seconds when you first met became… a success! The person's perception of you will improve significantly… and all of that because of a subtle smile and a polite bow. It is really not too much to ask.

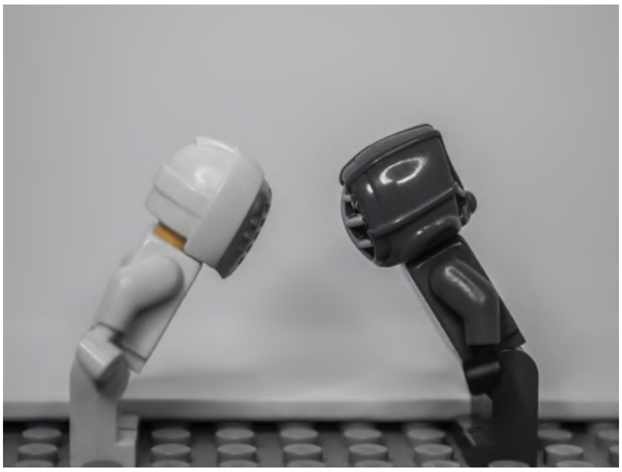
It really does not take a genius to learn a few appropriate hand gestures, but it is also helpful when you should really avoid some gestures to other cultures; and most important of all, you can tell the difference! Hint: Do not extend your hand facing others to show the number five… in Greece it is offensive! Why should you care? Well in Greece, do like the Greeks, in Rome, do like the Romans, etc.

Competitive Intelligence

Awareness Development

So far we talked about learning the local language, understanding norms, values, and behaviors…so you should be on your way to make a good first impression. Language acquisition, the understanding of the culture, and non-verbal communication are certainly good first steps – but you don't just want to make a good first impression, rather you want to achieve a lasting good impression. In addition to the dictionary and etiquette learning, there are other tools that will come in handy, and you should consider them as an essential tool.

When you communicate with the local market what in fact is going on is you are seeking the best way to convey information about your product/service in a way that is believable – in other words, you communicated in a way that generated buy-in. People in the target market understood your message, believed it, and adopted your solution or bought your product. If you come to think about it, you are telling them a story about your product – in a way they can understand, relate to, and empathize.



Picture Credits: Flipsnapck

One powerful tool you will find handy is precisely storytelling. Stories are interesting tools because, in order to tell them, one must first develop context and cultural awareness, one must think about images, visualizations, and metaphors to be able to generate a viable intellectual construct. In other words, storytelling requires you to package all of the issues mentioned in this article - together. One quick example - often when marketers are entering our homes they portray a "familiar environment" in a cozy place…say a meal in the kitchen. We can all relate to that – it is indeed a warm environment, and we will pay attention to the story the brand is trying to tell.

One caveat – the steak and eggs served on a platter might resonate well with the US market, but in West Africa, a nice fufu flour meal would do a better job. Again, familiarity and context are cultural experiences. You may not know what fufu flour is, but in the process of creating a story to position your brand in West Africa, you would certainly come to know it.

Storytelling or the process of building a story that conveys the brand message in a way locals will understand and empathize with your message does require some effort, but once you can construct this vision for your public, the story will give newfound life to your brand, and it will spread. People tend to relate better to stories because they carry meaning, are positioned within the context, and are easier to understand. If you come to think about it the famous Super Bowl ads, the most successful ones, are mini-stories! We like them, we relate to them, and we repeat them.

Next time you are seeking to position your brand in a foreign country, do think about storytelling as a best practice. This will require foreign language skills, cultural awareness, cross-cultural communications, the ability to transfer concepts and ideas within context – and so much more.

I hope my advice will help you create your next successful campaign!

Competitive Intelligence

SENSE
A shaman
Is a messenger
Of invisible letters
That it transmits
By talking
Into symbols

A shaman is a sense
Intense and penetrating

A shaman
A shaman is a passage

Jamila Cornali

About the author

The author was born in Senegal, of French and Arab origins. She has lived in Senegal, Congo, Mauritania, Russia, and Belarus. She traveled extensively in Morocco, and in Europe. In addition to French, she speaks Chinese, Spanish, and Russian.
Jamila Cornali is a behavior analyst and a communications specialist. She has deep understanding of foreign cultures – and she is a poet.

Video Announcement of this article on YouTube channel

Competitive Intelligence

A Data-Informed Approach to Targeted Engagement with Universities

By Jamie Burns & Karen Walker

Universities are rich resources for basic research, innovation, and workforce. Companies can advance their research goals by applying competitive intelligence (CI) practices to choose the best academic partners for engagement

Ask yourself: Why are you collaborating with certain institutions? What do you hope to get out of the engagement? This article will explore how a data-informed approach can lead to strategic university partnerships that advance a company's aims. Approaching university partnership with a data-informed mindset can lead to more robust engagement that is better aligned with a company's needs.

Why should I work with universities?

University partnership offers companies numerous benefits including a steady workforce pipeline, access to faculty, and a variety of research strengths. For example, in Fall 2020 Arizona State University (ASU) has 127,500 students enrolled as well as almost 5,000 faculty.

Additionally, ASU offers its partners research expertise across multiple disciplines such as social science, engineering, computer science, and more.

In an increasingly digital world, companies are not beholden to local universities and are able to leverage the strengths and offerings of universities across the globe.

How do partnerships happen?

Oftentimes when we hear about an opportunity for partnering between a university and a company, the partnership arises from a serendipitous meeting. For example, it may be that an industry representative was sitting next to a vice president from a university on a flight and they decide that their organizations should work together. And while these kinds of chance encounters can lead to great partnerships, they don't leave a lot of room for determining exactly what a university can offer an industry partner and if it's really a good match. With these types of encounters, there is not a lot of time to really hone in on what the industry partner needs and where the university can support their needs. Chance encounters are not set up to lead to robust, strategic partnerships.

Competitive Intelligence

How should partnerships happen?

By utilizing CI techniques, the best university partners for a company's specific needs can be identified so that partnerships aren't a blind date – they're really based on prior knowledge and understanding of what each party can offer. When we talk about finding the right partner, this can also be seen as technology scanning.
The Technological Forecasting and Social Change Journal has noted that "strategic technology scanning is needed to strengthen the link between technology and corporate strategy." (1)
By conducting CI due diligence and finding the right university partner who is developing or able to develop the technologies that your company needs, you can strengthen the link between technology and corporate strategy.

How do I implement this best practice?

To start off, a company must first conduct an internal needs assessment to determine what their gaps are. Conducting a SWOT analysis, talking to internal research & development staff, and defining strategic goals of the partnership are key to determining areas where a university could complement existing internal skill sets. Understanding what will benefit your company is crucial to engagement. Once needs are determined, companies should develop keywords and concepts that clearly define their needs. The company that understands their needs and does some initial work will be more successful in their university partnerships.

Once needs are defined, companies can begin comparing universities to determine top performers. Using benchmarking tools such as SciVal or Dimensions, companies can look across the external landscape to determine who would be the best partner.
It is best practice to use multiple databases as there is not a single database that offers a holistic view of all university aspects. Instead, you'll want to use multiple databases to examine - for example, a university's publication and award metrics.
Ideally, the partner you chose will have a consistent presence across multiple databases, indicating strength in a research area.
After you have identified those universities that frequently appear as leading institutions in the research area your company is most interested in, you'll want to dig a little deeper and look at their university websites to figure out who exactly can do the unique research your company might need. It is also important here to conduct human intelligence.
Questions to consider include: Does anyone at your company have a contact at these exemplar universities? Are there any alumni in your company? Has anyone from your R&D team met anyone at a conference that works at this university?
Conducting human intelligence is important as this kind of qualitative intelligence can supplement the quantitative data found via database searches.
However, don't rely on human intelligence alone. Reliance on human intelligence can lead to non-strategic partnerships that are based on relationships, rather than on data and complementary skills.

Competitive Intelligence

How do I actually engage a university?

The best way to engage a university is to talk to their corporate engagement office. Most universities have a corporate liaison or a full corporate engagement office that can help you with the mechanics of collaboration.
It is the best practice to engage a university via its corporate engagement function as if you engage a specific faculty member, they may leave the university.
Additionally, a single faculty member will know their research, but may not necessarily be aware of all the research offerings available to a company across the university. By contacting a corporate engagement office you'll be able to develop a holistic partnership that can span across the entire university instead of just one point of contact.

Tying it all together

Partnership with universities that is based upon qualitative and quantitative data and underlined by CI best practices results in the possibility for robust university-industry collaborations.

Reference
(1) Van Wyk, R. J. (1997). Strategic technology scanning. Technological Forecasting and Social Change, 55(1), 21–38. https://doi.org/10.1016/s0040-1625(97)83077-6

About the authors

Jamie Burns is a Senior Strategic Intelligence Analyst on the Strategic Intelligence (SI) team within Research Development at Arizona State University (ASU). In this role, she's increased the diversity, capacity, and sophistication of the SI work at the university level.
This work has contributed to improving strategic and actionable insights to assess institutional performance, defining and refining the competitive landscape in key areas, and growing research dollars via proposals to federal sponsors.
Jamie is certified in SI/CI from the Strategic and Competitive Intelligence Professional (SCIP) Organization, serves on the steering committee for the national academic-CI Working, and has presented SI/CI findings and techniques on over 30 occasions. Jamie earned her Master's in Public Administration from Columbia University in 2017.

Karen Walker is the Associate Director of Research Development within Knowledge Enterprise (KE) at ASU. Research Development (RD) works with research faculty, staff, and leaders to improve funding success.
The office functions currently include strategic intelligence, proposal management, limited submissions, internal funding opportunities management, graphic design, and research-related events, including workshops and faculty development opportunities.
Karen originated the competitive intelligence function within RD and is the founder of the National Competitive Intelligence Working Group, which brings together academic professionals to develop intelligence best practices.
She is certified by the Strategic and Competitive Intelligence Professionals (SCIP). Prior to coming to ASU in 2008, she had over 15 years of experience in research and development in the biotech industry.

Foresight

Unsupervised Drones & the Future of Warfare

By Rom Gayoso, Ph.D

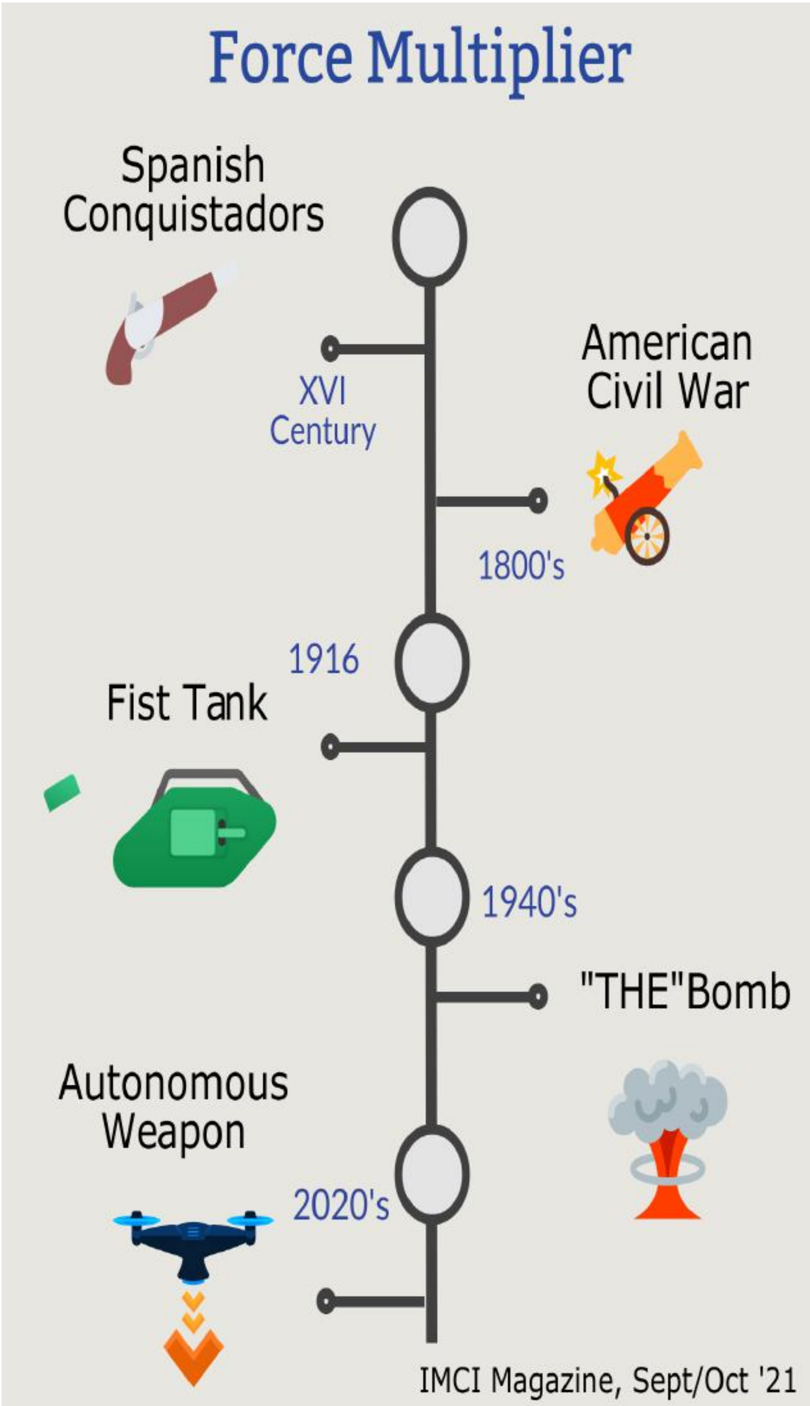
As a member of the Association of Professional Futurists (APF) I delivered a talk on the use of Unsupervised Drones, and it was featured in the Future of War Series' discussion. This article is a synthesis of that discussion.

Introduction

As we think about the future of warfare, it forcibly needs to go through the lens of technology – if we come to think about it, it was precisely the advent of technology that made warfare so much more destructive. In terms of weaponry, some of it played decisive roles in conflict.
The Aztecs had no body armor and no gunpowder to face the Spanish Conquistadors, the Gatling gun was used in the American Civil War, the British Mark 1 first appeared in 1916, and of course, J. Robert Oppenheimer himself offered some thoughts about "I become death," in reference to the use of nuclear weapons in Hiroshima and Nagasaki.
One thing is certain – technology operates as a force multiplier – since it causes significant shifts in the way we use weapons: The machinegun superseded the rifle, the tank replaced the horse, and the ultimate weapon allowed for destruction on a scale not seen before.

In the 2020's we are talking about Unpiloted Aerial Vehicles (UAVs) - a/k/a/ drones that can be piloted from a military base and used to deliver deadly force thousands of miles away from home - or virtually on the other side of the globe.
Nowadays we are facing yet another wave of technology change – this time we are not talking about scaling up the potency of the weapon, rather a proposal to put someone else, or should I say something else, on the driver's seat.

Figure 1: Technology as a Force Multiplier



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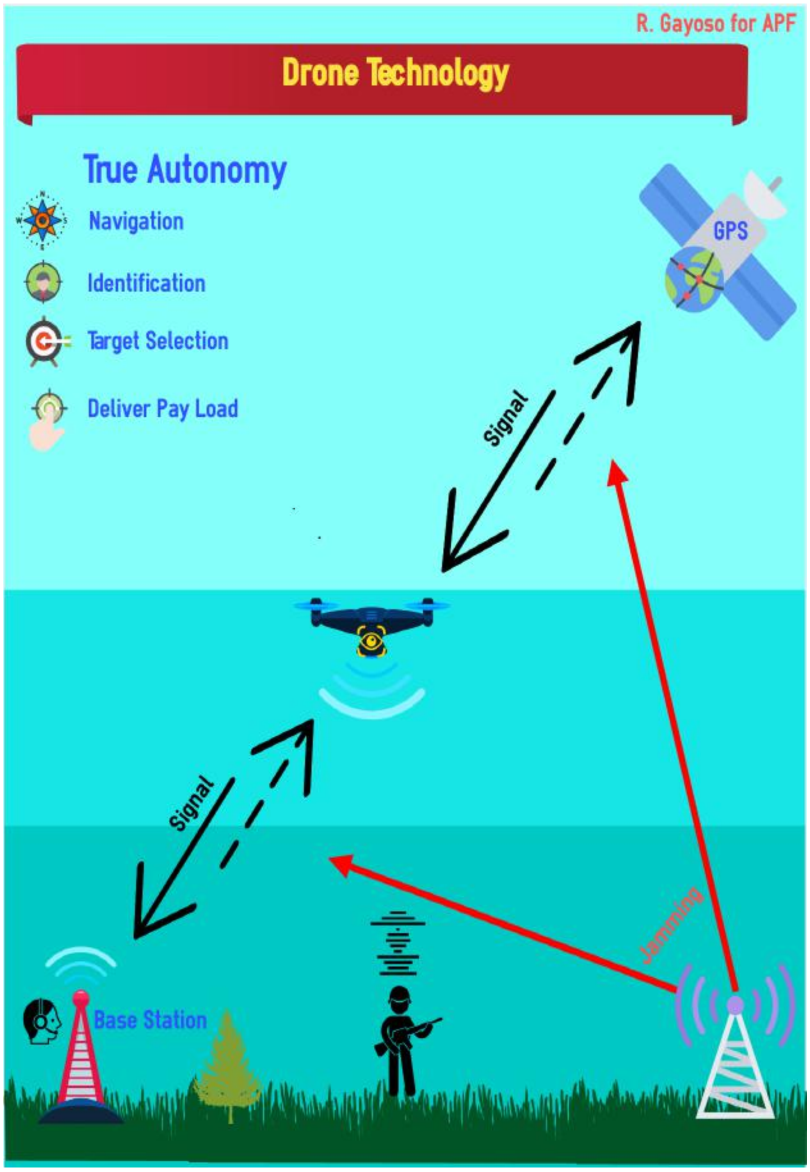
Drone Warfare Technology

Let us talk about drones, not the one used to deliver pizza or the book you ordered online – we are talking about drones with military capability – i.e. something that can cause bodily harm and ultimately kill.
If you come to think about it, drones are somewhat straightforward – see this simplified schematic on the right – at the center of the figure you see a drone flying around, overhead there is a satellite, and below the horizon, there is an antenna, very much like the Cell Phone towers we see on the road.
The Global Positioning Satellite (GPS) flying overhead provides geophysical guidance – it operates very much like any satellite-based mapping app – it knows where you are coming from, where you want to go, and how to get there.
The antenna at the base station is the place where the drone operator sits – the operator is basically pushing buttons in a joystick and sending the drone sets of instructions (i.e. go higher/lower, etc).
So if one wants to mess with this setup, there are a couple of options. If you look at the right-hand corner, a wave signal can be sent to target the communication between the drone and the satellite – if the communication is disrupted, then the drone no longer knows where it is – and therefore is less operational.
If we target the communication between the base station and the drone, then it no longer receives commands – and no longer knows what to do, so it becomes a "dummy." Alternatively, we can shoot microwaves at the drone – analogous to the microwave oven we have in our kitchens – but this one is shooting microwaves in the open air, with the goal to "fry" the drone's circuits, and therefore make it useless.

"True" Autonomy

Now enter technological change – what if the AI uploaded into the drone actually contains a geophysical map, which coupled with the onboard camera allows the drone to recognize its surroundings, and therefore know where it is? How about we add an infra-red high-resolution camera that allows for facial and objects recognition? How about training by Artificial Neural Network to teach the drone to tell the difference between a person and a tank? How about we let the AI decide which precise moment it will pull the trigger and therefore deliver deadly force?
This is not science fiction, rather it took place first in Libya, according to the United Nations, and was documented in the media. Libyan militants used an STM Kargu-2 – A turkish-made drone to target the opposing forces, with deadly results.

Figure 2: Drone Technology primer



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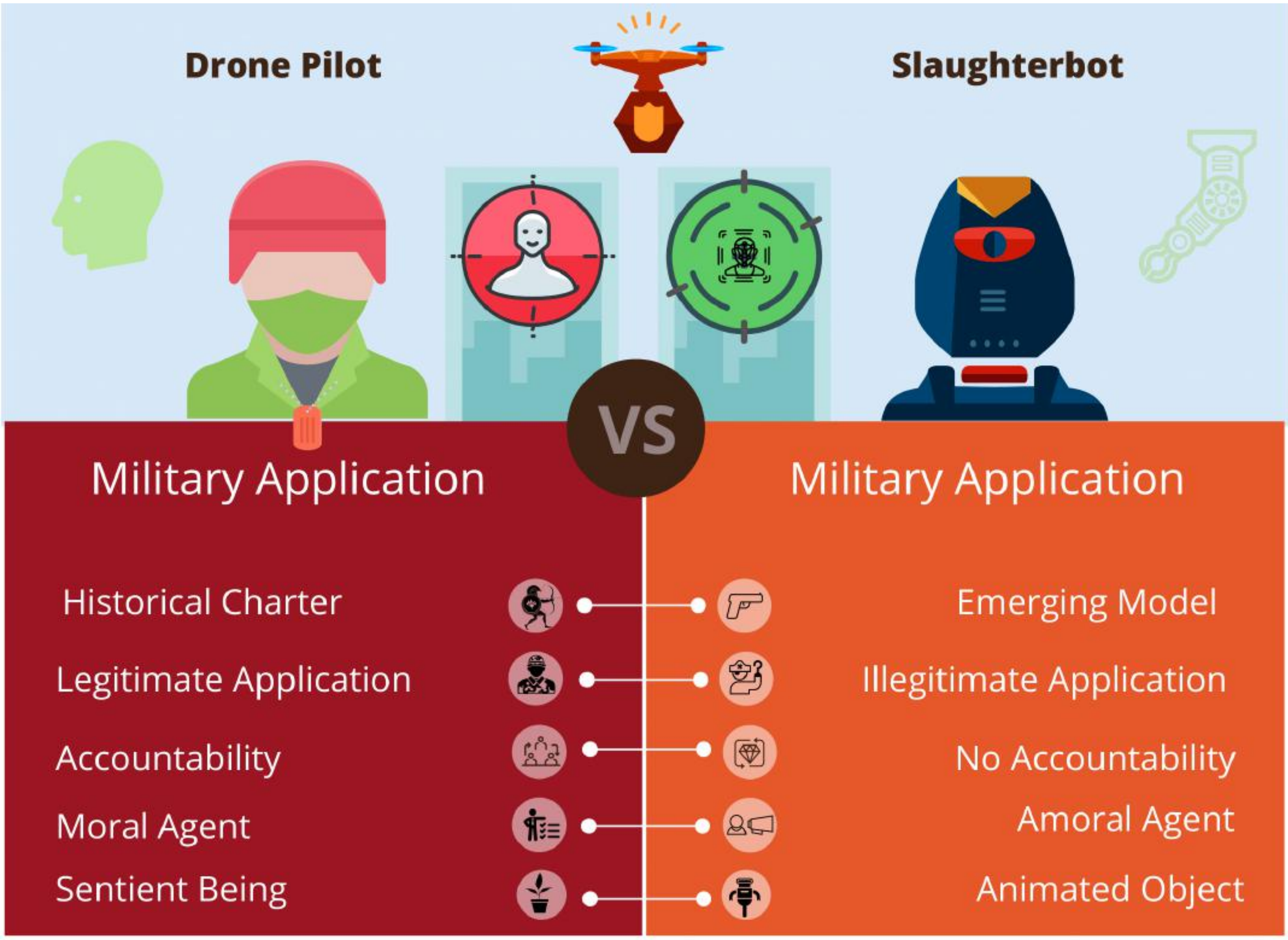
Evaluating the use of technology

In order to evaluate how this technology is currently managed, and the emerging usage model, the article proposes we use five different frames or lenses. Each one of them represents a core value and there are two potential users on the proverbial driver's seat: We could have a military pilot located at the base station performing the command function, or we could have the AI in the "True Autonomy" model actually calling the shots.
We are still talking about a military drone – so the end result is the same – a military drone piloted by a pilot and one run by AI – both have the ability to kill.
The term "slaughterbot" exists on the Internet, and it was coined to describe a robot that kills. In this case, it is a piece of software, but in order to present two alternatives in our dichotomy exercise, I needed to give it a face – so the "faceless" AI gets the "robot" face – at least in the figure below.

Figure 3: 5-Frames / dichotomies



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Frame 1: Charter.

Charter refers to the extent to which is socially acceptable to take one's life. In many a society, the authorization to terminate a human life is most often associated with the organized armed forces or the standing army. To some extent, modern societies also accept life-taking can be done by the police force, but that is only acceptable in extreme conditions where the officer feels herself in a life-or-death situation – then the use of lethal force is considered "acceptable use," though it is often questioned.

The Hammurabi Code from circa 1750 B.C. outlined the death penalty in very specific circumstances and only those prescribed by law were deemed acceptable. Even harsh punishment was prescribed but administered by an officer of the court, according to tradition. The Code itself refers to Hammurabi – the titled ruler – who by a grant of the Creator "sought to bring about righteousness in the land, to destroy the wicked and the evil-doers; so that the strong should not harm the weak" – according to the preamble of the Code.

The accounts of the Old Testament (Exodus 14) describe the Pharaoh's army, and how it persecuted the Jews. Similarly, Nebuchadnezzar's army fought pharaoh Necho of Egypt, invaded and destroyed Jerusalem in 587 B.C.

Alexander of Makedonia and Darius II of Persia's armies clashed on numerous occasions. The ascension of Rome is associated with the defeat of Carthage – but that too was called for by Cato (Delenda est Carthago) – legitimately – as he was an orator at the Roman Senate. Note – Cato himself did not fight in the war – he was part of the institution that commanded the Roman military to terminate Carthage – seen at that time as Rome's main rival.

Figure 4: The Hammurabi Code

In essence, since we have recorded history, ownership of the life-taking charter has been established and its charter has been granted to the military. Hence, the performance of a life-taking act perpetrated by a military operator is considered acceptable as the agent does so according to its historical charter. **Please note no one is claiming justification or rightfulness** – rather just noting practice according to tradition.

Life taking by an autonomous machine does not have historical precedence, rather the first cases of memory took place in England during the Industrial Revolution and were considered accidents. Of course – the steam engine had no intent to kill or dismember anyone.

Frame 2: Legitimacy of Application.
A military drone pilot seating in a base near Las Vegas (Nevada, USA), does so as a member of the standing armed forces of a nation-state under the command of a democratically elected executive. The military is a constitutional branch of the government, and they act according to the laws of the land. Most modern democracies have standing armies – except for Costa Rica – and therefore the life-taking activity executed by the military is an act legitimately executed.
The unsupervised drone attacks perpetrated in Libya were performed under orders of local warlords who were fighting for the control of the country, and therefore not endorsed by the Libyan government proper. Since the equipment was commissioned and used by a force seeking to overthrow the government and install itself as mandates, this use is labeled as an illegitimate application.

Frame 3: Accountability.
A military drone pilot is a career officer and operates under a strict military code and under the hierarchical military structure. Each military pilot is known and individually identified by the organization, she has a platoon commander, a superior officer, and a chain of command all the way to the base commander – and beyond. In addition to the chain of command, there are intelligence liaison officers – who are ready to assist – so there is an entire infrastructure and a decision support system at that pilot's disposal. She is never truly alone, and the targets are not of her choosing, rather they were handed down by the establishment – who after careful consideration considered a certain target had to be terminated. Each act can be traced to a specific individual – who can be questioned if need be. In essence, there is a long list of people, military code of conduct, best practices, and accepted uses she needs to abide by.

In the case of the unsupervised drone, accountability is harder to determine. To some extent, we can trace accountability if we follow the money trail. The warlord who bought the drone from the Turkish manufacturers is accountable but did not himself program the drone. The guerrilla fighters launched the weapon, someone in Turkey programmed it and those who manufactured the equipment have some responsibility – much the same way the United States finds gun manufacturers partially responsible, and all major US gun producers were hit with one form or another of a class-action suit – on behalf of the collective.
When the unsupervised drone takes a life, unlike in the case of the military drone pilot, we do not have anyone specific we could point to or ascribe accountability. No one actually pulled the trigger – the drone did it itself. In the case of the military drone pilot – she chose the weapon, controlled the targeting, intentionally pulled the trigger at a certain moment, and waited for confirmation the target had been terminated. In other words, there has been a conscious choice every step of the way. If an act was performed with intent and with the perpetrator's awareness, then there is accountability.
In the case of the unsupervised drone either the accountability belongs to the object proper or is associated with those who commissioned and paid for the drone.

Follow the money trail!

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Frame 4: Morality
The military drone pilot is a moral agent. She belongs to an institution, belongs to a family unit, and probably to a worship group. The military questions orders – even more so those that involve taking a life – such orders need to be given legally. Historically societies have questioned the military when they obeyed orders deemed illegal.
It is generally accepted military personnel need to question the legitimacy of life-taking commands. Not to say everything is perfect – we are all aware of the My Lai massacre, where 500 Vietnamese civilians were summarily executed – we know, however, the officer who issued the order faced a military tribunal. More recently we had the cases of US soldiers who raped and killed Iraqi women – those too faced a military tribunal.
Typically, we can say those in the military who abuse their power are aware of their transgressions – they can tell right from wrong – but chose to do wrong.
Since the military drone pilot has awareness, wrongdoing goes against the set of acceptable practices – Abrahamic religions have “Thou shall not kill” guidelines written on all of the textbooks – we can say this agent is moral or has a set of moral guidelines.
The unsupervised drone does not possess a set of generally accepted guidelines – it only obeys commands written in a line code – thus it acts mechanically. Since the drone has no awareness of wrongdoing and it lacks moral principles, it is labeled as amoral. The unsupervised drone is not an immoral agent, rather it has no morals and lacks scruples.
The Editor of Unmanned Aviation Journal – Mr. Fedutinov, said many countries have the technology/capability - but intentionally strip drones and robots of the strike decision-making function.

"Even operator-controlled drones triggered a considerable share of civilian losses. Thousands of people were killed and wounded by drones. The absence of an operator can considerably increase the number of erroneous strikes," he said.

Frame 5: Essence
In essence, the military drone pilot is a sentient being – when she pulls the trigger and instructs the machinery to deliver an ordinance to a target, she is aware of the pain and suffering that act will cause. Perhaps you and I have been blessed not to see anyone blown to pieces, but if you talk to US veterans, they can offer a vivid description of what it looks like.
That drone pilot has awareness, a set of moral guidelines, and acts – to the best of her knowledge - according to a set of principles.
The unsupervised drone is nothing but an animated object – it has no conscience, no morality, no awareness, does not feel pain, does not question directives, and it is indifferent to human suffering. The object merely executes a function written in a line of code.

Final Thoughts

Of course, the debate is just starting – the historically / generally accepted approach is now challenged by this new emerging usage model. The question is straightforward – who can legitimately take a life – the military-trained pilot or the AI-enabled drone?
In future discussions – similarly to the work presented during the APF discussions – we will focus on the consequences of this new usage model – i.e. the impact of “True Autonomy” – and their implications in the contemporary world we live in. In other words, our volatile, uncertain, and complex reality now needs to decide what to do with this new capability.
It is also important we debate the issue of governance, which implies accountability, and responsibility. In future writings, we will also visit some similar situations and evaluate how others before us settled the responsibility debate. Perhaps we can learn from the mistakes of the past so that our future can be brighter.

Foresight

A Futures Masterclass for Philantropists

By Dr. Katindi Sivi

The LongView Futures Foundation and the East Africa Philanthropy are working together to expand futurism and futures studies formation in Africa. This effort is a catalyst for change & innovation - it will bring about a new group of thinkers - ready to tackle any challenge. This article is about that experience, and the new possibilities it brings.

Introduction

As the world transitions to the fourth industrial revolution, it has acutely disrupted the way we live and work. This unprecedented, tumultuous rate of change has resulted in uncertain socio-economic consequences. The effects are much deeper for continents like Africa which are still catching up with the past industrial revolutions.

However, all is not lost. This moment presents the best opportunity for the continent to move away from the development models of the 20th century that are quickly losing their relevance, and to innovate new realities as it endeavors to resolve its many challenges. Part of what will help with the successful navigation of this world is the empowerment to be futures conscious and futures smart.

A quick scan of the publicly available information however shows that Africa is among the continents with the least number of futurists or foresight research, planning, or strategic output.

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It is for this reason that Dr. Katindi Sivi, founder of Kenya's first fully-fledged strategic foresight firms – LongView Consult and LongView Futures Foundation - decided to get involved.
As a practicing futurist for 20 years, she saw herself as a catalyst - to grow the number of young futurists on the continent; to nurture foresight literacy among professionals and among individual change-makers; and to mainstream foresight thinking as the operating system in institutions, organizational departments, and government entities.
The foresight lab which operates under the foundation offers three main E-Futures training programs.

1) How to think like a futurist! is a course tailored for individuals who would like to invest in understanding the academic foundations of foresight thinking and work.

2) Action learning and foresight practice! is a course tailormade for groups in similar professions, or organizational departments, seeking to understand both the basics of futures thinking in their industry but also innovating futures solutions to increase resilience, enhance productivity, and secure future competitive advantage in their organizations.

3) Growing future change makers! is offered through partnerships with youth-serving organizations to train young social innovators. The Africa Foresight Lab in giving back to society also offers one free training annually to a maximum of 30 young people from 30 countries in Sub-Sahara Africa to design change projects in their communities.

A futures masterclass for Philanthropists!

In June 2021, the East Africa Philanthropy Network (EAPN) - a voluntary membership association that brings together Family Trusts, Community Foundations, Corporate Foundations, and other grantmaking and non-grantmaking organizations interested in promoting local philanthropy in East Africa - undertook four online sessions on foresight development.
As an organization mandated with strengthening its members' capacity to be effective contributors in the philanthropy and development sectors, their main interest was to build the leader's abilities in foresight thinking and to enable them to reposition themselves while being more impactful in the philanthropy sector.
The short training course is focused on how the learners navigate uncertainty while providing structure around making key strategic decisions during the time of disruptive change. It specifically introduced foresight as defined in the field of Futures Studies and foresight methodologies such as causal layered analysis, trends mapping, and how to think in systems with a practical application session at the end.
The group was enabled to consider past events and key learnings, the deep structures of the past, and what their implications have been and continue to be, as well as identifying what in the past, gets in the way to resist change.

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A historical analysis of Official Development Assistance, for example, did show several paradigm shifts that most organizations had not actively considered: The impact of the policy shift from aid to trade and its impact on the philanthropy sector; declining donor funding due to low economic growth rates or long-term structural issues like aging populations hence more resources going to healthcare and welfare as well as allocations increasingly influenced by public opinion and political pressure in giving countries.

The new models of giving shifted giving away from the civil society organizations only method, and went to include private and public partnerships as well as a sustainable development agenda that considers linkages between sustainability and development.

In the course of discussing emerging trends, the group acknowledged that some of the giving avenues were not properly explored. For example, there were new actors, new aid mechanisms, new modalities such as other official flows arising from the growth in South-South cooperation, innovative financing, solidarity initiatives such as human rights, or the availability of pooled funds, such as those earmarked for climate change initiatives. In addition to that, the group noted rising expectations for cost-effectiveness, transparency & 'value for money,' which implied greater scrutiny, harder access to funds, and demand to demonstrate results.

In all this new set of expectations added yet another layer of complexity to already challenging circumstances.

The practical application!

The group acknowledged that philanthropy was at a crossroads. Continued reliance on the traditional models of accessing resources was no longer sustainable. The values that anchored philanthropy had also shifted from empathy to value propositions and value for money. It, therefore, became imperative for the sector to socially re-engineer itself. Some suggestions included:

- A move towards responsible businesses and social enterprises.
- Plugging into and aligning their program work with the sustainability and development linkages
- Engaging with emerging technologies to facilitate new ways of doing things such as community mobilization and crowdsourcing of resources.
- Reawakening culture-specific practices like Kenya's Harambee spirit (based on communal mobilization and giving) to discourage community dependency and hence promote effective local giving mechanisms, and those go beyond money, to include other desirable social aspects, such as value contributions.
- At a structural and policy levels, work at influencing the increase of household incomes through productive rather than consuming economic models as a way of increasing peoples ability to give
- Teaching children the value of giving in order to grow future philanthropists
- The nexus between trade and philanthropy needs to be explored deeply for the sector to understand the opportunities it needs to pursue.
- Philanthropy organizations to create strong institutions which includes having long-term investments to be able to have more sustainable ways of giving

In Conclusion

In the end, we all agreed that foresight / futures thinking and acting is never going to be a quick fix to anything. It only becomes successful when organizations make the continuous effort to mainstream the culture of collective learning and acting on emergent insights within the organization to adequately understand systemic change, anticipate change and become agile enough to seize the opportunities as they creatively navigate threats.

About the author

Dr. Katindi Sivi is among Africa's top six female futurists. She is the founder of Kenya's premier strategic foresight organizations, LongView Consult and LongView Futures Foundation that facilitate futures research, policy analysis, foresight strategies, and training. She is also the principle trainer at the Africa Foresight Lab, set up to foster foresight literacy among young people in Africa.
Dr. Sivi has successfully integrated foresight methodologies to facilitate policy debates and futures strategies including working with the Government of Kenya's Vision 2030. Her work so far, which includes published books and book chapters, is in the areas of: governance and elections; socio-economic inequalities; citizen civic engagement; civil society organizations; youth demographics; youth employment; women and gender budgeting; health - mainly health governance and sexual reproductive health; extractives (minerals); humanitarian aid; and livelihoods, all in Kenya and in the African context.

Foresight

The Exciting (and Frightening) Implications of Virtualizing Realities

By Martin Schwirn

The future - we hear - is uncertain. We do know, however, many of those future paths we will trail will involve some combination of technology applied to visualization techniques. In this article, we will explore some of those possibilities. Some outcomes may seem exciting, whereas others may appear frightening - just remember - the future is what we make of it. Let's explore!

Introduction

Augmented and virtual realities (AR and VR) have become notorious examples of how markets can see an entire industry only one product or service away from becoming the next commercial mother lode.

Google introduced its AR glasses in 2014 to much fanfare only to see its users being ridiculed because of geeky appearances and pretentious behavior.

Magic Leap managed to become a multi-billion-dollar company by 2017 because of high expectations that it would break wide open the industry, only to see its fortune turn when its product introduction met with ho-hum reactions, if not a downright disappointment.

But below the surface, AR and VR are gathering steam inside venues that many observers miss.

In fact, the technology and its potential are already reaching a point where concerns emerge and future problem areas enter the visible horizon.

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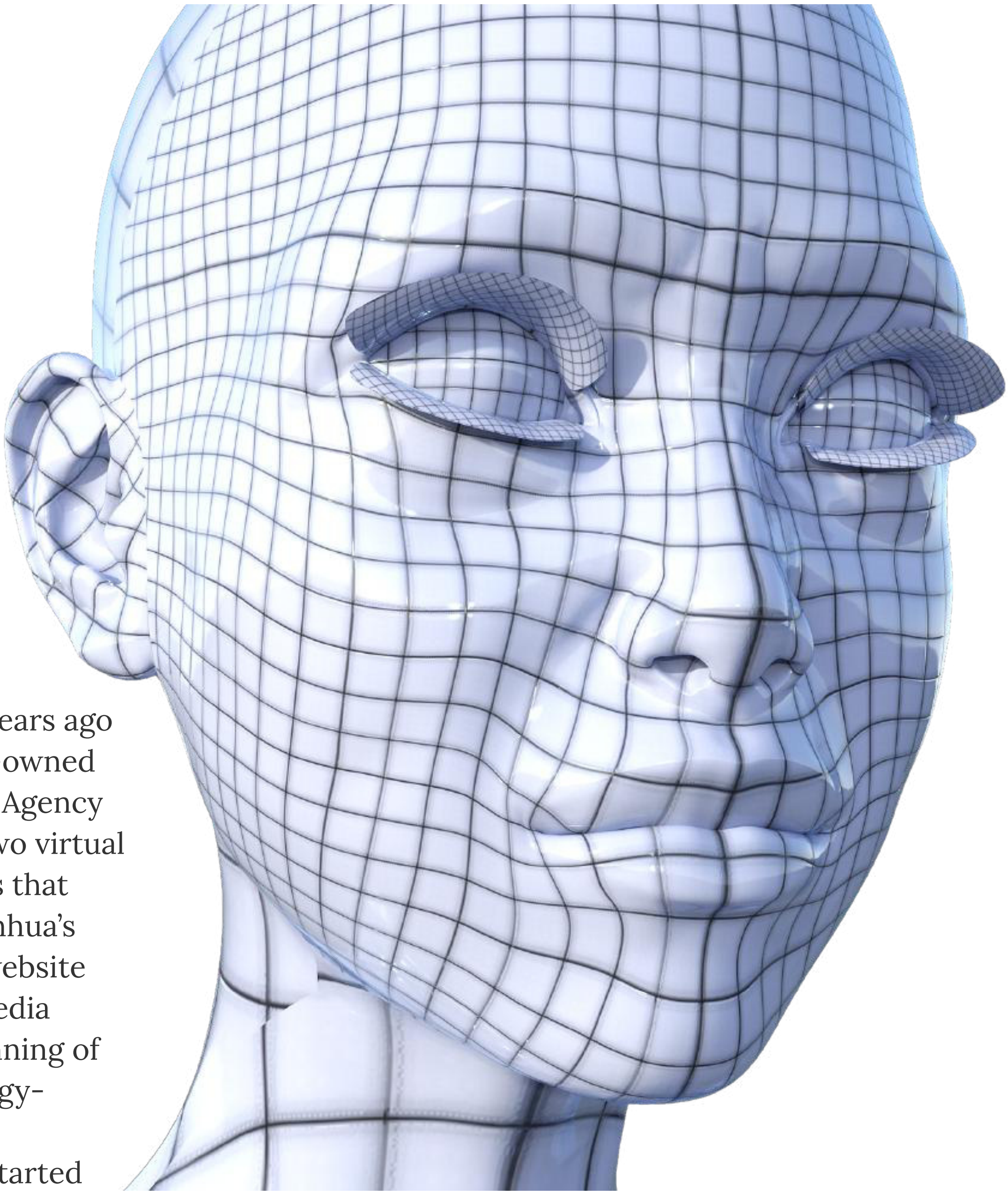
Trends

Virtual worlds have become their own realities in many users' minds. Virtual elements are merging with consumers' real experiences in many surprising ways. Perhaps the real world is becoming more and more virtual itself?
One thing is for sure, virtual aspects are becoming common elements of real-world interactions.

Clear signals of such a development emerged over a decade ago. Then holographic representation Hatsune Miku—a virtual singer that employs sound-synthesizing technology—performed live with a human band in front of thousands of fans.
The same year Eguchi Aimi became the newest member of Japanese performance group AKB48—the excitement turned into astonishment when it became known that Eguchi was in fact a computer-generated composite of the other band members' facial features. In the following years, the late rapper Tupac Shakur and late pop musician Whitney Houston saw use in virtual-concert appearances.
The use of the likes of real, but deceased, artists raised intellectual property issues, but also already pointed to emerging ethical concerns.

Hybrid realities are emerging. Also, in early 2021, South Korean broadcasting introduced a new cover of the 2002 ballad "I Miss You" by Kim Bum-soo's with the twist that Kim Kwang-seok performed the song—Kim is still a well-known South Korean folk-rock singer but died in the 1990s. Developers had trained AI with Kim's songs so that the software can now render any song the way Kim would have interpreted them. If he really would have done so in this fashion obviously is up for debate, again raising questions if it is permissible to make assumptions on late artists' behalf.



Then, three years ago China's state-owned Xinhua News Agency introduced two virtual news anchors that presented Xinhua's news on its website and social-media outlets. Beginning of 2021, genealogy-service firm MyHeritage started offering a digital tool to animate the photos of customers' deceased family members—the effect is as intriguing as it is creepy. Ethical considerations now have become a concern for everybody.

Real or Virtual? Real or Fake? Augmented or What?

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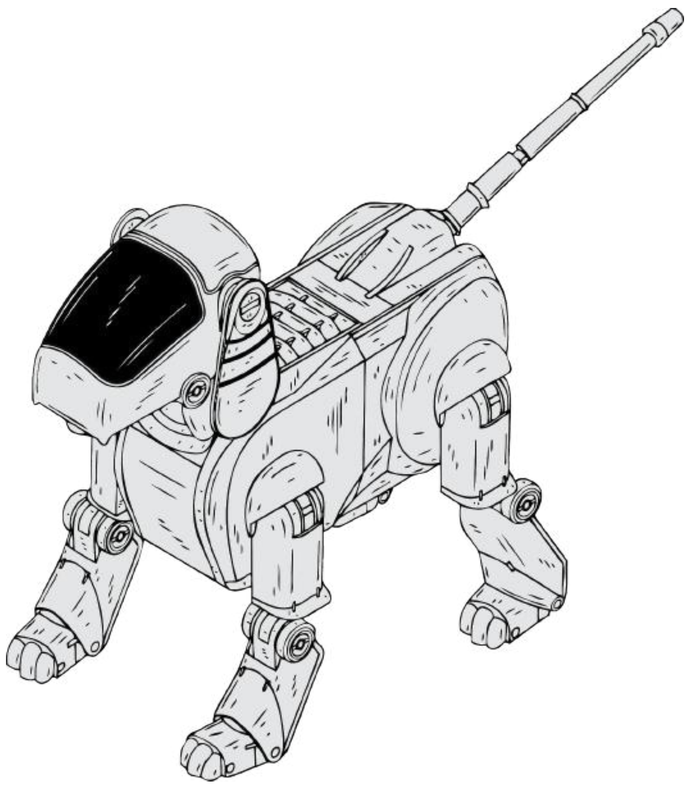
Marketability of VR-Enhanced Goods

Over the past years, the fashion industry has also seen experimentation with virtual models. Computer-generated icons Shudu Gram and Miquela Sousa have become popular on social media and are increasingly sought-after models.
Miquela Sousa has garnered views on YouTube with her song “Not Mine.” The models are virtual, but they are increasingly competing with human models.
For instance, Shudu Gram was used in a campaign for singer Rhianna’s beauty brand Fenty Beauty.
Meanwhile, male virtual model Blawko has promoted the fashion brand Adidas Yeezy. An entire industry is emerging that aims to cater to the developing market of virtual models and influencers. In fact, ModelingCafe’s website promotes the company as a “CG company that specializes in modeling.”
Virtual objects also are becoming increasingly marketable services outside of gaming platforms and virtual environments. In 2019, Sony introduced virtual foods for Aibo, the robotic dog the company introduced a couple of decades ago.
Dog owners can download the “food” to a digital app to then transfer the food to a physical bowl that the robotic dog will interact with, including making movements that indicate chewing.
The virtual product serves to enhance the physical product’s features and entertainment value.

Virtual and physical enter a mutually beneficial marriage.

RTFKT is designing and selling virtual fashion items such as footwear and jackets to then sell the rights for exclusive use by the buyer. In fact, just recently the market of non-fungible tokens has seen exploding interest.
A non-fungible token (NFT) is essentially a ledger that enables owners to certify the uniqueness and authenticity of a digital asset.
Artist Beeple’s virtual image collage “Everydays — The First 5000 Days” sold for almost $70 million at an auction by Christie’s in March 2021.

Virtual elements and objects are increasingly treated the way real-world objects are valued and used.



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Implications

Virtual and physical worlds not only exist side by side but interact with and reinforce each other. Nowhere is such a relationship more apparent, genuinely beneficial, and frighteningly disturbing as in the quickly expanding space of augmented reality. Uses of AR for military, industrial, and enterprise applications have been a growth market for some time.

In March 2021, Microsoft offered a glimpse into the future potential of the market. The US Army entered an agreement to spend more than $20 billion on the company's HoloLens AR headset and related software and services.

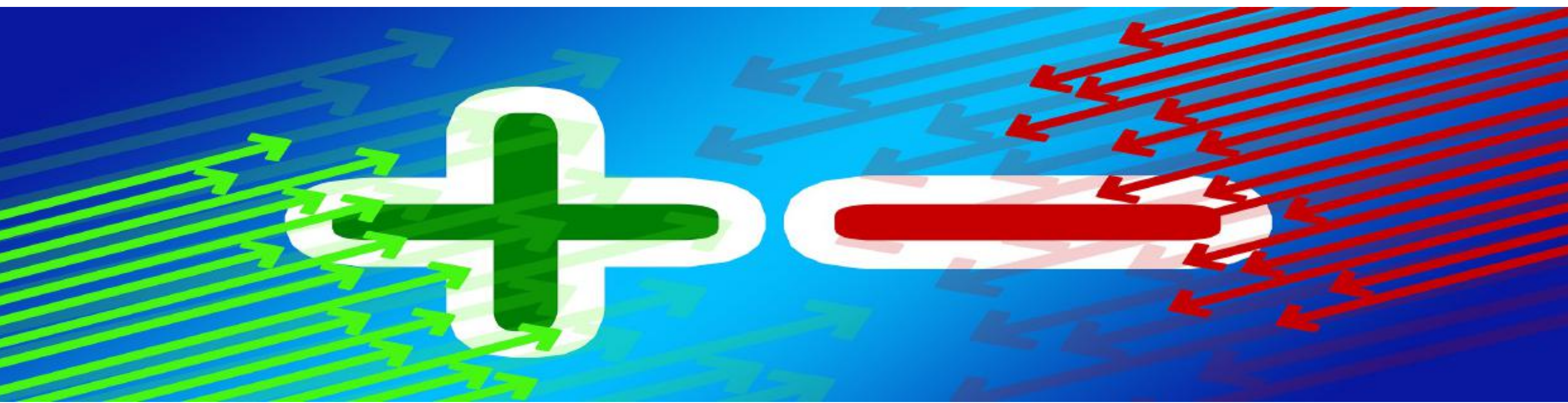
Unfortunately, AR's potential not only includes beneficial applications and entertaining environments but also truly worrisome implications. AR will create variable interactions in the real world, and thereby establish very different worlds for users of different applications and services. Polarization of society might become an issue also in the way what realities individuals might be able to see and interact with.

Tom Davenport, professor of IT and management at Babson College, highlights AR's promising use in knowledge management. Knowledge-management systems have struggled with cumbersome interfaces, problematic approaches to enter information into such systems, and difficult-to-find knowledge on-demand and in real-time—essentially the way workers would require such information to be useful.

AR offers the potential to capture, transfer, and provide information in efficient and effective ways though. Workers in the field instantly can pull up information on components as the need arises—in fact, the virtual information can overlay on physical machinery in intuitive ways. Repair and maintenance crew can easily add knowledge they acquire on construction sites to make it available to other crews for future use.

Meanwhile, author Mark Pesce foresees a world of constant surveillance by an increasing number of AR devices. AR systems annotate the real world that users are looking at with digital information. In order to do so in usable ways, the system has to be in constant interaction with the users and their environments. Therefore, the system not only requires identification of the location but also the extraction of the context a user is in. Providers of AR-enabled systems will be able to compile very rich and personal information that is currently out of reach for web and social media applications. Transparency of individuals' behavior and even intentions will reach deep into real-world interactions and experiences.

Pesce illustrates his concern by highlighting Facebook's attempts to develop AR glasses. He cautions that such a device if worn by millions of users could map the world—people and pets, objects and devices, and more—in such a detailed way as it has been previously impossible.



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The question then becomes who will be able to leverage, exploit, and potentially misuse such information. Combining web-based interactions and locations with real-world behavior and places would allow creating data representations of individual consumers to a granularity that is downright frightening.

Pesce paints the potential for a very dystopian world, but more banal considerations exist that nevertheless establish puzzling implications. Two issues stand out.

First, who will be allowed to add information to real-world locations and objects, and who will be allowed to monetize such information.

The considerations could become contentious. More than a decade ago—after the accident of BP's oil rig Deepwater Horizon—artist Mark Skwarek created an app that changed the appearance of the company's logo to an image of an oil-pipe leak.

Also, what kind of private information could be attached to unaware people's homes.

Second, as more and more companies, services, and applications annotate the real world with layers of information for a wide range of use cases, individuals will experience very different worlds as they access their preferred services.

Which layers will users of competing services see—a restaurant's menu, the restaurant's real-estate value, or the restaurant owner's criminal record?

Distinct services would create distinct worlds that users would interact with. Free applications will provide basic information; premium, pay-for applications will provide more detailed data. Levels of financial resources would create very different real-world perspectives and opportunities.

Is there any hope?

Other applications offer a brighter aspect of future uses of AR. Artist Kaws creates virtual artwork that he uses to populate real-world spaces such as cartoonish animals that hover over public places.

Also, owners of AR artwork could allow the public to see it depending on the time of day or change the art depending on the season.

Urban environments could become more exciting, educational, and flexible. Commercial applications abound but societal and cause-driven uses exist as well.

In the end, VR and AR will establish environments and a future that will unfold on a spectrum ranging from entertaining, potentially educational, to exploitative, even criminal.

Policymakers likely will react only after the most egregious uses of such technologies will lead to public outcry. The potential of such applications—for better or for worse—will remain difficult to envision for quite some time. But a very different future is currently in the making.

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Martin Schwirn is a Senior Advisor, Strategic Foresight at Business Finland and the author of Small Data, Big Disruptions: How to Spot Signals of Change and Manage Uncertainty (ISBN 9781632651921).

Foresight

Reclaim our future

Dreamable realities, realizable dreams

By Itai Talmi

The future is uncertain - Born Partners' Itai Talmi reminds us – a human-centric futures approach is the best way to help us prepare for possible futures and the brave new world.

The future is not truly known, but that does not excuse us from imagining what it can be; and since it is not known, nothing is more dangerous than believing one chosen outcome will materialize. We tend to call this the “official” future – or the version of the future people chose to believe in.

The main problem of the “official” future is it builds on our selective attention and bias – people tend to look for justification for their statements on the outside world – and then people are “surprised” by a completely different and unexpected outcome. In this situation we can bet whatever the corporate strategy was, it just did not work.

Instead of becoming a victim of the “official” future, why not use a method to evaluate and consider some possibilities, so that surprises are minimized?

Enter the Futures Spectrum model – a hands-on workshop model designed to help us become more open-minded and think strategically about the future.

Foresight

Certainly, we think in about time in a linear fashion – but there are many ways to improve on the linear definition. For example, we can indeed look at the past for ideas, but we can also look at the present and perform a back casting exercise – we only need to ask ourselves how we got here. What were the key drivers or trends of interest?
We can also look at likelihood – probable and possible futures are handy – but we also need to think about wild cards and consider potential futures. In order to do that we need to look into the potentiality field, then put our creative minds together to envision a completely new reality, which many call creating an immersive reality, also called "world-building."

What kind of world will you imagine?

The Future is Not Linear!

Instead of thinking about the future in a linear – oh so boring fashion – we can rather see it as the future triangle.
Instead of thinking about a sequence of ordered steps where one thing invariably leads to another, we could think about the future as branches of a tree – some go up, others go down, some go sideways...some are thick, others are thin, and they have many shades of color.
We can certainly use language to help guide us in this process.
James Cascio, the prolific Futurer, offers a simple way to start thinking about possible futures, that can easily get us in the flow as "expectations":

. The future is what I expect.
. The future is better than I expect.
. The future is worse than I expect.
. The future is weirder than I expect.

The first three are relatively quite self-explanatory, but the last one might lead us to a surprise. A Wicked one as we like to say in our yet seems odd profession. The goal with the fourth archetype is to be open to possibilities that can be Topsy turvy.
We can use our future perceived knowledge and collected data to ask ourselves what might happen, and then openly imagine few possible futures.
We can use our current knowledge to ask ourselves what could happen, then we can imagine some potential futures. It is OK to have a preferred or chosen path, signaled by the desired future.

Foresight

The Narrative

The stories that we can create will start to immerse you in the new world. We canvas the narratives that had to change to create this future. The goal is to get you out of your analytical boxing and start diving into imagination.

. Think in ecosystems: What does that world look like?
. Think sensorial: how does it taste, smell, feel?
. Think like you're in a movie: What do you see when you look around? What are you noticing?

Document these notes. Share them with your team. Prototype them out any way you like.
Start guiding yourself into the narrative. Use your initial notes to start creating new futures.

Who made these stories suddenly possible?

Who was needed to ingenue you to change to this narrative?

What resources and technologies were needed?

What policies need to change to make these stories more feasible?

Try to backcast into the **Now** and start round forward again with the future narrative you chose.
We can look at those trends we found in the backcasting exercise to speculate what is likely to happen, and then build a set of probable futures.
We can also ask ourselves the what-if questions involving a variety of extreme events, or any event that could bring about some major impact or change the direction/shape/color of those tree branches we have been talking about.

Foresight

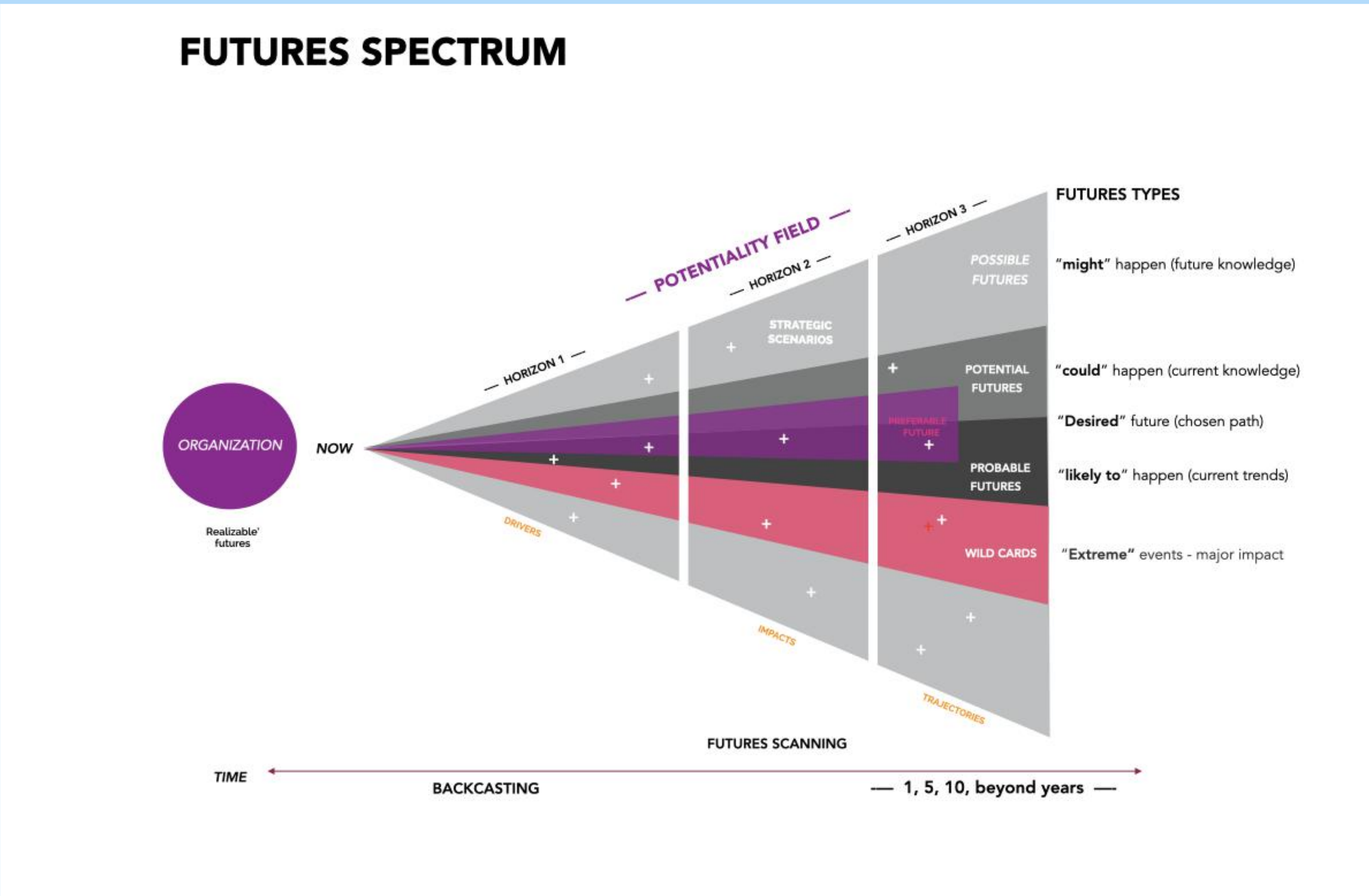
Futures Spectrum

When we are thinking about the future it is desirable to order our thoughts in time increments. For example, are we talking about the immediate future – say a year from now- or are we talking about some near-term situation (5 years from now) or something we expect will take place beyond 5 years? Whatever time period you decide to investigate, it is a good idea to think about them in terms of horizons, and for the sake of simplicity I will just label them "Horizon 1," "Horizon 2," and "Horizon 3." Remember, what matters is **YOUR** definition of horizon, not mine. So, think about what timeframe you want to look into and stick with that. See Futures Spectrum below.

As we investigate those drivers we discovered in the backcasting exercise, we can ask ourselves what is going on and how will those drivers alter the reality we live in. As those drivers materialize and evolve, they certainly impact or bring about some change on your horizons down the road.

As we move from immediate future to near future, to distant future, we also must consider the impact of those changes in the key drivers might be so intense, the entire trajectory of the trends may be modified or somehow altered. If you think about it, the LP existed for an exceptionally long time – the CD came along and instead of buying music imprinted on vinyl, we bought a disk printed on different material. Then online music came along and nowadays the LP is a collectors' item – and CDs are relatively few. In Other words, drivers in adjacent markets and technology drivers brought about such an impact, the whole trajectory of that industry changed.

When the Walkman first appeared, it was the result of a prototype or the result of a speculative design. Engineers were trying to find ways to make listening to music more portable, more convenient – so they ended up making a new device.



Picture Source: Born Partners

Foresight

It also helps our cause if we can speculate about the future the same ways those engineers did. We can ask those important what-if questions to arrive at speculative designs, and those, in turn, can help us look at the potentiality of many futures.
One can go one step further – beyond potential futures – and for that, we need to use strategic imagination. You may have heard about storytelling as a futures tool, and indeed it is. However, it has its limitations.
A story narrated is a story told, but with nowadays' technology, we can do better than that. World Building or an exercise on creating immersive worlds is a powerful tool because it places the object of our interest in an altogether enriched reality.
Think about the difference between a painting or a picture – the picture is more credible because it is more realistic. Then we add motion and sound to create a moving picture, also known as a movie – and that is better.
Now imagine the immersive world VR glasses offer – that is even more interesting because it involves many more senses, beyond just visual perception.

Senses, what senses?

When we are thinking about that all-important prototype we are building, we need to ask which human senses do we actually design for. In Other words, how exactly will the prototype interact with people? Perhaps in the old days, we could go about product design thinking about touch, sight, hearing, smell, and taste.

Nowadays we know more – at any point in time, a person may be perceiving reality – and our products – using somewhere between 9 and 33 different senses. Say you created a hickory-smoked, maple-flavored vegan-based sausage that happens to be Kosher. The package is shiny, the text elicits exotic flavors and smells..so the offering is overall very appealing to the senses we usually talk about.
However, the person's artery-vein blood glucose difference is not out of line (i.e. the person is not hungry), rather the plasma osmotic pressure is indeed off (i.e. the person feels thirsty) – then your visually appealing guilt-free sausage product went from "very appealing" to "no way." Those internal body senses are called interoceptors – and yes, they matter.
There are other senses, such as mechanoreception, which explain linear acceleration, rotation acceleration, and balance. The list goes on... but the key question here is why do they matter, to begin with.

Sense measurement

Picture Source: Born Partners

Foresight

If you come to think about it, the beauty of prototyping or speculative designing is – as the name says – to help us speculate about the future.

If we limit ourselves to those 5 original senses, it is difficult to speculate. However, if we start to gravitate towards those other senses, then we become open-minded enough to explore altogether different ideas or to travel to distant, unknown lands.

If you come to think about it, in the 1960s when Gene Roddenberry (creator of Star Trek) placed a small hand-held communications device in the hands of Enterprise's crew...little did he know nowadays literally billions of people carry them around – we call them **Cell Phones**.

He is not around, so we cannot ask him what exactly he was thinking...but what is important is not why rather what did he imagine.

So, next time you are thinking about an interesting prototype, do consider other potential uses, if you do not know where to start, use the augmented list of senses as a starting point.

Foresight

Trip to the zoo

There are other ways to excite our imagination and help us speculate about the future. One interesting approach, and one that is very handy, is to think about those drivers and their trajectory according to a classification based on our awareness factors. One way to explain this concept is by relating those concepts to animals we know.
Pink Flamingos may be exotic to some, but we all know they do exist. Perhaps you are lucky enough to see a live one, or perhaps you saw the plastic version stuck in someone's lawn, or better yet, you saw it in a documentary. Those represent the known-knows – we all know about those.
Black Swans became popular because we thought they did not exist, but they did. Not only did they exist, but also, they were adapted to living in saltwater. Well, we thought swans were white and lived in enclosed bodies of freshwater – surprise! You may have heard the expression "it happens once in 100 years" or so...but in reality, we are facing a great variety of crises that were only supposed to happen once in a very long time. Great and all-consuming fires in Australia, Turkey, and in the United States; terrible floods in Germany and in China, the pandemic, etc.
Koalas represent the unknown knows – or the things we did not pay enough attention to or the things we do not know we know. We know koalas exist, we just don't know how many or exactly where. We are not really certain, but with a bit of effort, we could know a bit more about it. Here it helps to think about bias – our perception of reality may be affected by our values and assumptions, so it helps to make a list of those biases and think about ways to deal with them.

Not everything is a known known!

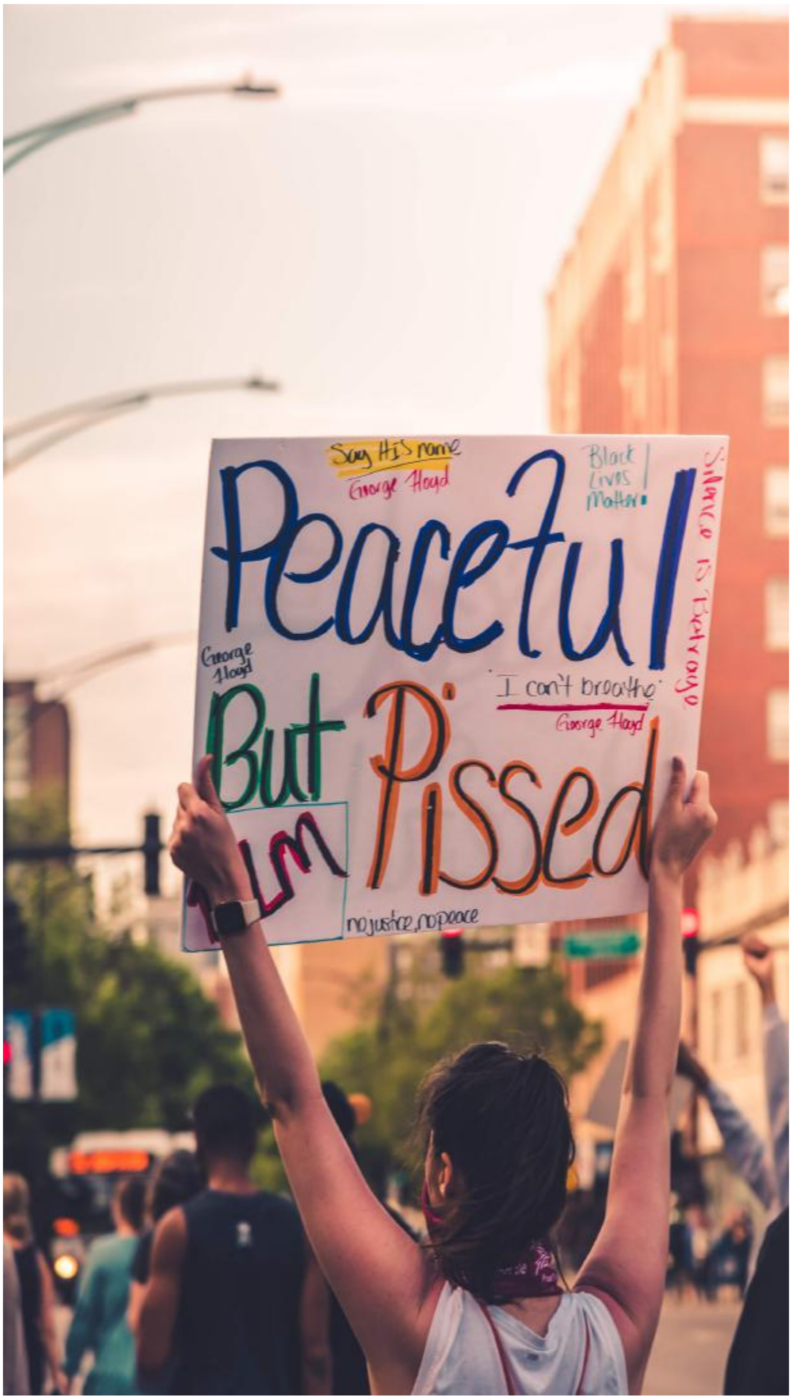
Not all things are completely unknown – for example, there are a few things we know we do not know – the so-called known unknowns - and those we call grey swans. We know we do not know much about it, but again, with some effort and dedication we can find out some more. We know the soil composition of Mars is different, and so is the atmosphere in Venus. We sent probes to both places, so when they return with samples, we can learn more, beyond the initial findings.
One caveat here – not everything is a pink flamingo – so let us not assume things are known to everybody. It helps our case to classify those drivers and trends into their categories, but it is also a good idea to go over them in great detail, so not to create any confusion.
In talking about confusion...

Foresight

We live in a VUCA X CHANGE world

We live in interesting times – no pun intended. One way to explain our current situation is to consider the world is at a chaotic point – so many inequalities coming together are causing a great deal of social unrest and upheaval.
Another way to think about our situation is to think these are transitional times, that is, we are in-between stories, the world of the “old” is being replaced by the world of the “new,” and that cannot take place without some tension.
Yet another way to think about the context we live in as times marked by volatility, uncertainty, complexity, and ambiguity. This is the so-called VUCA world – where those forces collide, creating a perfect storm. The term was originally coined by the American military to explain the situation right after the collapse of the Soviet Union.
The situation is **volatile** – meaning it is changing constantly or the rate of change is picking up pace. If that is the case, then we need to watch those drivers...are we envisioning a world where those drivers are constantly morphing into something else, or do we see them as static objects?
Our prototyping and future speculation will probably not go very far if we think about drivers in a static way. Remember – in that backcasting exercise we thought about the drivers and **HOW** they change...so we should not assume they stopped changing at all.
The situation is **uncertain** – meaning there are parallel realities going on – all powered by fake news. People are no longer sure what is real, what is propaganda, and what is altogether fake.

This lack of clarity adds another layer of complexity, but it can be used as a positive force of change. If we embrace uncertainty, then our speculation will go very far, for we immediately abandon the concept we “know for sure this version of the future will materialize,” and we replace it with “it might.”
The beauty of using conditionals is it opens the door to “might” or “might not.” In any event, we force ourselves to continuously question our assumptions – and that is healthy from the strategic perspective.
In the end, uncertainty can be translated into unpredictability – and if we know we are not very good at predicting something, we will be more adept at looking at alternative interpretations.



Foresight

The situation is **complex** – meaning the simplistic explanation of reality will no longer work, for there are far too many other factors for us to consider. Case in point, let us revisit those 5 senses discussion we just had – the augmented list of senses adds complexity to the prototype design, but also helps us think about more facets, different perceptions of the product, and different interpretations of those drivers and their respective trajectories.
Let us revisit the branches of the tree – many factors influence the shape, inclination, color, and formation of each one of the branches. In fact, if we look carefully, the tree is geometrically designed, but not one single branch is exactly equal to the other – they are indeed different, or at least slightly from each other.

The world is **ambiguous** – meaning we are not sure in which direction those drivers are evolving. We just said the world is tainted by volatility, uncertainty, and complexity – all happening at the same time. This is indeed why we perceive reality to be so confusing, and why we say the future is blurry or we have a great degree of difficulty telling what is what. That is okay, though... we need to think about ways to use ambiguity as a success factor. Again, if we are aware of this great degree of ambiguity in the world around us, then we will make an even greater effort to think about potential outcomes and we will look at those drivers and their trajectories with a lot more flexibility.

Final Thoughts

Yes, we can safely say we are living in a world that is at a chaos point, or Chaordic, as to call it (science insists there's order in every chaos) it seems our reality – when we are sure of it – is VUCA on steroids, we live in a world plagued by social entropy – where people are feeling increasingly frustrated, which leads to social upheaval and uprising – and on top of that, we see great social inequality. Yes, it is all true.

Nevertheless, as we lift our heads from this dust of confusion and seek to envision a better world, then it is perhaps time for us to shift away from the paradigms of old – B2B and B2C – into H2H, which stands for Human to Human. Instead of placing emphasis on the Internet of Things (IoT), why don't we think about ways to turn it into the Internet of People (IoP)? Our obsession with how things will talk to each other trampled the original ways of the past – the Internet is an instrument to help us communicate better and help us solve the challenges we encounter.

So next time you are working on those important challenges, or trying to make sense of the world we will be living on, or trying to think about the future using speculative designs or creating the next immersive world – do it with a dash of environmental empathy (trying to fix what is wrong around the spaces we live in), a dash of dataism (envisioning ways where our privacy is not at risk), and a big table spoon of brutal transparency. If we work together, with an open mind, and a strong ability to speculate about tomorrow, I am sure we will be able to reclaim our future.

Remember – no amount of VUCA, no matter how great the differences of opinion, and how "bad" things are, can stand a chance, if we work together as a community, where we seek the good for all.

Always seek for goosebumps! In everything you touch, and you'll be fine. Good luck with your new futures.

About the Author

Itai Talmi is the Founder of Born Partners – a human-centric futures research & development firm that specializes in helping us prepare for possible futures and the new world. Itai Talmi helps individuals, teams, and organizations discover and prototype futures worth aspiring for.

Market Intelligence

Insecurity in Millennials: Turning Flaws into Advantages

By Cory Schröder

Millenials are often criticized - for a variety of reasons. In this article we will consider those frames and offer a different point of view. We can only stand to gain as we increase awareness - beyond stereotypes - and promote better understanding across generations.

In recent years, Millennials have been touted as the most insecure generation.
Why? Well, according to the internet, they spend too much time behind their screens hiding from real human interaction, they cannot deal with criticism, and they display far more mental health issues than previous generations.
The list goes on.
Now, we cannot say that all of these claims are untrue. Some of them do have merit. However, christening Millennials a generation of insecure, socially inept pseudo-children is simply unfair.
There is far more nuance to be explored — as insecurity is often born of external factors. Could it be the rise of social media and the constant pressure to be the best and most successful? Or maybe it is the multiple economic crises they have lived through?
Either way, this article will take a look at how Millennials seem to have earned this title, why it is (in many ways) unwarranted, and how they can turn this perceived flaw into real advantages in order to grow their careers.
Are you ready? Let's dig in.

Won't the pizza get cold?

Why Have Millennials Been Deemed So Socially Insecure?

This idea of Millennials being the most insecure generation has been floating around the internet for a few years now. With countless articles written in both support and opposition of the concept, there is plenty of content to explore.
In an article for Elite Daily, writer Ben Dutka claims that Millennials suffer from poor self-image, are closed off to new experiences, and "retreat into the safety of their shells" when faced with conflict — ignoring the fact that this behavior only makes the situation worse.

He extrapolates, saying:

"Perhaps this is part of the reason why the up-and-coming generation [...] appears to be frighteningly insecure, and more fragile than any generation before. They seem more anxious to know what others think."
In some ways, he is right. Millennials are more open about their struggles with self-image and confidence in this increasingly interconnected (and comparative) digital world.

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However, it is not completely accurate to claim that just because we see these attitudes more often displayed by Millennials, that must mean they are the only generation who have suffered from them.

In an article on the blog Psychology Behind, they hit the nail on the head by asking: “Is social media making more people insecure? Or are people already insecure and social media just exposing the latent reality?”

While this is a bit of a grey area, it is clear that social media fosters more insecurity in younger generations. With the ability to compare oneself to the smartest, most attractive people around, it is no surprise many Millennials feel they do not measure up.

For example, instead of comparing yourself to Jim, your moderately successful neighbor down the street who just purchased a new Volvo, your new point of reference is James — a mega-millionaire divorce lawyer turned influencer with two boats, a private jet, and at least three girlfriends.

So, while Millennials may in many ways seem like the most insecure generation, it comes down to a much larger pool for comparison and the tendency to share and document these feelings via public forums.

Vroom Vroom Vroom

Yummy!

Why Have Millennials Been Deemed So Financially Insecure?

But enough about feelings, what about finances? According to Annie Lowrey of The New York Times, for Millennials, the American Dream is dead.

Why? Because they are “entering adulthood with less financial security than their parents or grandparents had, and the economic crisis of recent years has hit them disproportionately hard.” With higher unemployment rates and a much lower net worth than their parents, Millennials have a “deeply ingrained financial insecurity”.

Therefore, painting Millennials as avocado-addicted and financially inept is a bit unfair — as they are dealing with far different circumstances than previous generations.

True, the last two years have not been easy for any of us. But with many Millennials having just entered the workforce, they do not have the “capital or assets that older generations have been able to acquire” — meaning they are in far more precarious positions.

But here is a question: Why do these perceived flaws have to be labeled as “disadvantages”? Why not turn them into the things that will help Millennials grow and advance their careers?

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How You Can Turn "Flaws" Into Advantages

As J. Maureen Henderson explains so well, one of the biggest issues Millennials face is "a culture of on-demand comparison [and] an inability to critically interrogate advice for the applicability of its relevance to your own aspirations".

This applies to almost all walks of life — from your social life to your career. Sure, Millennials may not possess the same levels of confidence as previous generations. But this does not mean that they have to just accept the cards they have been dealt.

Instead, let us discuss ways in which this perceived "insecurity" can actually be turned into a positive.

1. You Say Insecure, We Say Open to Outside Help

Too much insecurity can be detrimental, there is no disputing this claim.

However, to be successful in almost any career, you need to possess a certain level of insecurity — in so much that you are open to other's opinions and expertise.

We have all dealt with a boss or colleague at one time or another that felt they could do no wrong.

They did not need your assistance, and they certainly did not require your opinion. While confidence is often helpful when advancing your career, if there is no room for outside opinions or suggestions, it will only hinder you.

For example, let us consider a scenario and how two very different brand managers would react when faced with the same problem.

The Scenario: After a tough H2, a CMO wants to overhaul their company's marketing strategy — which includes the brand strategy. Therefore, they need their resident Brand Manager to present a new growth strategy for the next four quarters.

1) Brand Manager A: They are extremely confident in their abilities, experience, and opinions. They have been working in the industry for almost 15 years and know their stuff. When coming up with a new brand strategy, they decide to keep their traditional brand tracking solution and only make a few small tweaks to the overall strategy. Their approach? Stick to the tried-and-true methods they are confident will perform well. After all, you do not always need a shiny, new tool to be successful.

2) Brand Manager B: They are a bit younger and fresher on the scene with only three years of experience. And they are (gasp) a Millennial. Now, while they may not be as confident as Brand Manager A, they do possess a small edge — their slight insecurity in their role means they are more open to new ideas.

Their approach? Look for new ways to gather accurate brand data and identify new target audiences — such as advanced brand tracking software. They're willing to take a chance and trust an expert other than themselves to help their brand grow.

Now, we are not saying that one approach is always better than the other — or that older generations aren't open to outside help. But what we are saying is that what has been touted as a huge flaw can actually serve as an advantage.

2. You Say Insecure, We Say Interested In Self-Improvement

Insecurity can be debilitating if it is allowed to dictate your every choice. However, with determination and hard work, what has been labeled "insecurity" can be turned into adaptability and self-improvement.

Jim Preston, Vice President of EMEA Sales at Showpad, makes an excellent point, saying that "to their credit, many Millennials have learned to adapt, constantly focusing on bettering themselves through learning at a distance and picking up new skills, with the drive to emerge from this crisis stronger and more resilient than ever."

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> *Many Millenials have learned to adapt - focusing on bettering themselves.*

Jim Preston

And even before the Covid-19 crisis, Millennials have been focused on self-improvement and acquiring new skills for years. As one of the most educated generations ever — with 39% possessing a Bachelor's degree or higher — they have been working hard to earn their qualifications.

Thrown into an age of economic and financial uncertainty, Millennials have reason to feel insecure. According to a survey by CareerBuilder, 32% of employers have bumped up educational requirements for new hires.

Master's Degrees are the new Bachelor's Degrees — and a good deal more is required of Millennials seeking gainful employment. But instead of bowing to this pressure, more people than ever are adapting — earning both a BA and an MA.

According to Pew Research, 43% of Millennial women and 36% of Millenial men have at least a BA. While this is partly due to external requirements, it is also a sign that Millennials are dedicated to their own self-improvement.

From earning advanced degrees to collecting LinkedIn qualification certificates, Millennials can take what has been labeled insecurity and refashion it into an advantage: an interest in self-improvement and adaptability.

3. You Say Insecure, We Say Social Media & Tech-Savvy

Another common complaint about Millennials is that they are too focused on other peoples' opinions — constantly active on social media platforms like Instagram and Twitter.

How does this play into the idea of insecurity? Well, many think that if they were more secure in themselves, they would not need to use social media platforms to gain approval.

Again, this concept has merit. Too much time on social media has been proven to be detrimental to one's mental health and self-confidence. However, it does not have to be seen as a flaw or disadvantage in today's workplace.

Looking to get a job as a Social Media Manager? Your knowledge of the ins and outs of hashtags and Twitter threads will definitely come in handy. In a world where brands are required to be active on social media to succeed, companies need employees who possess a deep understanding of such platforms.

For pretty much any job on a marketing team, being tech-savvy and experienced with various types of social media is a real advantage and should be considered as such. So, instead of letting these perceived insecurities affect your confidence or ability to get the job you want, turn them on their head.

When you are willing to see the positive side of insecurity, you will be amazed at how far you can go.

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Final Thoughts

The moral of the story? As a Millennial, a certain level of insecurity means you are open to outside help, interested in self-improvement, and probably quite tech-savvy.
And in a world as ever-changing as our own, these skills will only become more important.
So, next time someone calls you an “insecure Millennial”, think back to this article and remember — just because you are not 100% confident in everything you do, it does not have to be a flaw.
Adapt, improve, and use every skill you have gained — and you will go far.

About the author

Cory is a Content Marketing Manager at Latana who enjoys exploring and writing about all things brand. With a background in content creation and management, SEO, and copywriting, Cory brings half a decade of experience to her role at Latana. You can find her on LinkedIn.

Market Intelligence

Neuromarketing & Ethics

By Alessandra Guimarães Saraiva

In this article we will investigate neuromarketing – understand its mechanisms, desired usefulness, disadvantages and limitations; and with that in mind, we can consider it either a by-product of technological advancement resulting in a strategic tool designed to help us better understand consumer behavior, or think of it as a dangerous instrument created to manipulate the very consumers it claims it seeks to understand. In the back of our minds the question remains – is neuromarketing being used in an ethical way?

Introduction

Neuromarketing is a new discipline – it is the result of the intersection of neuroscience, psychology, and marketing – so it is beneficial for us to look at this body of knowledge to consider its potential benefits, as well as potential disadvantages.

One thing is for sure – society is in a state of constant evolution and, as such, it is imperative firms invest the necessary resources to understand consumer behavior, preferences, and ultimately find a way for their products (or services) to be THE preferred choice or option consumers select when it comes to purchasing decisions.

Since marketing is a body of knowledge associated with how entities go about meeting consumers' needs and wants, it is very natural to look into neuroscience to understand how the brain reacts to marketing messages/stimuli, and to look into neuroeconomics to understand buying behavior.

Let us investigate further.

Neuroeconomics

Economic theory was forever transformed when it embraced neurosciences and psychology, thus giving berth to neuroeconomics. We can look back at Kahneman & Tversky (1979) seminal work to understand the root of neuroeconomics – the thought understanding human behavior is a necessary first step in the understanding of buying behavior.

It is important to note neuroscience advances allowed both economics and marketing to acquire detailed understanding of people's internal choice mechanisms – for example, when we expose someone to a marketing message, we can map which regions of the brain were excited/used the most, understand which emotions arise, and even consider how hormones play a role in the decision-making process.

There is a reason why we say one should not go shopping for food when one is hungry, and since supermarkets know that, it is not uncommon for them to use a combination of sights and smells – i.e. smell of baking bread, or rotisserie chicken in plain view – to trigger our brain into producing a response (buy me!) We all know that – the extra step neurosciences provided was to use a combination of techniques to help us better understand, and ultimately map unconscious decisions.

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Neuromarketing

It is precisely this mapping of the cerebral images used to document how we react to a marketing message that ultimately allows the firm to arrive at a better understanding of our wants, and how we make purchasing decisions.
We tend to associate the origins of the term neuromarketing with Jerry Zaltman and, in essence, all we are doing is to use computerized tomography equipment to measure brain activity when someone is exposed to a specific message. If we understand which stimulus precisely affects each area of the brain, it is just natural to pick the stimuli according to the area of the brain we actually want to get in touch with.

Brain mapping is just one of the methods utilized to understand consumers' response to stimuli – there is a variety of other biometric pieces of information that also come into play. For example, heartbeat, sweating, facial expressions, body movements, etc.
Lent (2010) explained neurons store a chemical component called dopamine, which is a neurotransmitter responsible for the motivation and the sensation of feeling good. So, if we see someone acquiring a product considered a status symbol, then we seek to imitate the behavior (buying the product), and in the process we "feel good" about it.

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Neurobranding

This concept is deeply connected with the essence of the brand – we tend to think of "successful brands" as those that establish a strong emotional connection with the consumer. Neurobranding is precisely this mechanism firms use to establish the emotional connection between the brand and the consumer. This connection translates into a form of brand passion that exists both in the conscious and in the unconscious levels. In order to establish this "deep connection," brands need to operate in seven different dimensions (Alpert,2008).

1) Form – is associated with logos, icons, designs, and fonts.
2) Function – the product's implicit and explicit functionality.
3) Feelings – could be associated with the place or occasion the product is used, the act of preparation to use the product, the use of the product, the satisfaction of using the product, could be associated with the role the product plays in the cultural context, or the role it plays in the lifecycle.
4) Values – how the product associates with personal, spiritual, or moral values; how it relates to common uses, traditions, culture, or the environment surrounding the consumer.
5) Benefits – how the product increases one's beauty perception, attractiveness, pride, power, or perception of success.
6) Metaphors – how the product's elements such as messaging or packaging reinforce perceived values.
7) Extensions – how the product can be used in combination with others, how its combination improves the functionality or pleasure derived from the consumption of another product; the example of caviar and champagne comes to mind.

Neuroethics

Neuromarketing is a reality – so we need to give it some thought if the goal is to understand potential risks or prevent intrinsic damage to consumers. Here comes neuroethics to the rescue – the combination of ethics applied to neuroscience allows us to borrow from psychology, philosophy, and other fields to help us determine some usage boundaries.
From the technological perspective, a few questions come to mind. Could the application of this science/technology result in physical or environmental damage? Could this application result in psychological damage? Will the use of this approach result in unintended consequences? What kind of risk should be disclosed?
There are philosophical questions we must also ask – what is the intended goal of this application? Is it to better understand behavior or is the goal to manipulate or elicit some desired result? We can ask if the application is overall beneficial to our kind (i.e. human-centric design). How will the use of this application impact the environment, or even if this application will result in greater inequality?
Neuroethics also forces us to think about privacy issues. If someone is using a brain scanner to "read" our mind, do we have the right to decide which thoughts we are willing to reveal, and which ones are to remain private? Will the information produced by the scans be used in a way that subgroups or entire groups of people will be taken advantage of? If we are playing with the unconscious mind – isn't it subliminal advertising – which we as a society decided is not an acceptable use of advertising? Since there is an absence of specific regulation, then we are left with open questions.

Final Thoughts

The jury is still out! It is perhaps too early for us to label neuromarketing as a "benefit" to society – we need to leverage ethics in order to develop a better understanding of the acceptable uses of neuromarketing applications.
It is clear those applications provide new & useful information, they help us understand consumer preferences, and can be used in a way that helps firms better meet consumers' needs & wants. Consumer satisfaction, even more so satisfying an increasingly more demanding consumer, is a net positive social benefit. We can also think of neuromarketing as a strategy – it can guide production, distribution and lead to a more precise marketing message.
It is also important to note we need some form of a regulatory body to help us determine if this application can be conducted in a way that protects individual privacy, outlines best practices, and establishes proper disclosure procedures. Ultimately, it is the consumer who we need to serve and protect.
Since we have so many open questions, it is important this dialogue continues in the open forum, so we can collectively determine how the use of neuromarketing applications brings about a net positive impact on society.

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About the author

Alessandra Saraiva is a researcher in education and neuroscience. She specializes in neuroeducation and clinical neuropedagogy. Her post-graduate work is in Applied Behavior Analysis – she currently works with those experiencing learning disabilities.

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Market Intelligence

Wine Entrepreneurs put Mexico in the Map

By Rosa Loya Marroquin

In this article we will learn about the issues, challenges & opportunities entrepreneurs face as they work to establish themselves - and their brand - in the highly competitive world of wines.

Introduction

Wine is big business – there is no question about that! Well, when in doubt, just ask the International Organization of Vine and Wine (OIV) The intergovernmental organization is the "go-to" place to find information about the industry. In fact, the Statistics section of OIV contains detailed information about vineyards, surface area, types of grapes, production, trade, and other technical data for all member countries, as well as for the world. If you have that cup of Merlot handy, now would be the time to learn all about that grape variety!

As it so happens, the 43rd World Congress of Vine and Wine 2022 will take place in Ensenada (Baja California – Mexico), where 1,500 of the world's top wine experts, academics, and producers will meet to discuss, taste, and be part in the international wine competition.

Wine is also big business in Mexico – according to the Mexican Wine & Vineyards Council (CMV) production, domestic consumption of wine, and exports have been growing in Mexico for the last few years. In fact, Mexico already has 6 known wine routes – in Coahuila, Aguascalientes, Queretaro, Guanajuato, and two in Baja California.

Baja California's role in the Mexican Wine Market

According to the CMV, the Baja California state (Northwest Mexico, South of California - USA), and more precisely the municipality of Ensenada – with its four valleys (Guadalupe, San Vicente, Ojos Negros, and Santo Tomas) concentrates about 75% of the entire Mexican wine production and is home to the largest wine producers in the country. Located 20 kilometers east of Ensenada, the Valle de Guadalupe is THE proverbial place to be – best micro-climate, perfect soil, industry concentration, proximity to dedicated enology education centers, industry concentration, and availability of specialized workforce. The Valle de Guadalupe region also houses several wine events, fairs, and activities throughout the year. No wonder the largest Mexican producers are located right there. Since wine is big business, and often associated with those who can amass large landholdings, and have the liquidity to invest Millions of Dollars in brand-building, this article instead will focus on the wine entrepreneurs – small businesses run by mostly a husband-and-wife team – who struggle to compete with the blockbusters and work hard to conquer a place under the sun.

Market Intelligence

Irene Barberena & Mario Garcia.
Picture source: Musu Wines

Issues

Any start-up business will face a variety of common issues – often the owners are operators, and are also responsible for cleaning, storing, purchasing, selling, legal, marketing, delivery driver, inventory manager, errand-runner, accounting, problem solver, financier… well you get the picture. Of particular importance – any crop needs to worry about diseases – and anyone in the wine industry knows those can be devastating – as it was in the case of Phylloxera. In addition to the run-of-the-mill issues, wine can be regulated as a food item, and since it is alcohol – the inspecting, licensing, certification, and labeling requirements are even more strict.

It is also important to pay close attention to the particular nature of wine – it is all about the taste! We can think about the product in "experience" terms, but it is also important to consider product positioning – how similar (or dissimilar) is the wine you make in respect to the others? Consumers expect wine made out of certain grapes to have a specific taste, and the particulars of the region/soil/climate – in combination with the processing / storing - will dictate the product's final flavor. It is also true our taste buds are mostly accustomed to the flavor encountered in the dominant brand's products. In addition to that, major wine-producing regions can ship in great volume, and receive subsidies from major economic blocks – which allows those wines to arrive on local stores very reasonably priced. On top of that, Mexico is not traditionally seen as one of the major wine-producing regions – a lot of people are working to change that - among them Irene Barberena and Mario Garcia.

The Making of Vinos Musu

Musu Wines has been around for 10 years – the fruit of hard work and dedication from the owners - Irene Barberena and Mario Garcia – the business had very humble beginnings. In fact, the couple had long experience working in the industry – Mario is a trained enologist; after a long career at a large producer, the couple decided to venture on its own, so they borrowed just enough to get the basics going.

In keeping with their romantic dreams, the couple tried a few name ideas when they were searching the Mexican Institute of Intellectual Property (OMPI) – for they wanted to use the word for "kiss." Since Irene's father was also a winemaker in Spain from Basque origins, they adopted "muxu," which stands for "kiss" in Basque. They decided to adopt a Spanish version of the word, and settled with "Musu." One of their friends - a graphic designer – created a logo depicting two doves kissing, and voila – the logo for Musu Wines was born.

Market Intelligence

A lot of care went into creating Musu's signature wines, and not just from the enologist's perspective – don't be fooled by the complicated lab tests – they taste good! Also, each unique recipe got its own brand, and a beautiful logo design to match. Here is the lineup:

Cuspide: Translates into "summit" or mountaintop – the key metaphor is it stands above all others. i.e. it is a premium product.

Caricia: Translates into "caress" – the Rose wine got its name after their Romantic theme.

Nubil: Translates into "cloud" – the white table wine evokes the image of someone at marrying age.

Entremares: "In between two seas" wine is a mix of Cabernet Sauvignon and Tempranillo – an allegory to the Baja California Peninsula, a stretch of land that sits in between the Pacific and the Sea of Cortez.

Extravagante: "Extravagant" wine is a mix of Sangiovese, Tempranillo, Nebbiolo, and Grenache – evokes the complex flavor, but also an image of fun.

Musu Partnership Strategy

Irene and Mario know they can't get everything done all by themselves, so their solution was to seek strategic alliances with other entrepreneurs in the sector. The first order of business was to connect with another partner who had space for the product to be prepared, fermented and stored – wines require some time for fermentation. In time they were able to join forces with others who were also seeking partners – the goal was to secure all factors of production. One partner had land, another had equipment, another already had a producing vineyard, and of course, Mario and Irene bring the science of winemaking to the deal. The entrepreneurs complemented each other, and the alliance allowed all of them to move forward with their own brands. This partnership model – entrepreneurs complimenting each other is indeed a success story.

Market Niche

Musu knows it is not a good idea to go after quantity, for it would be difficult to compete against the large landowners in volume alone, thus their strategy is to go after quality. Instead of investing in automation, the owners are proud to inform every single bottle they sell has a human touch. They have personally inspected each and every bottle and will stand behind them. Their approach is wine as a craft, and not as an industrial product. Though their production is limited, even small if compared to the large-scale producers, their goal is to offer a product with a distinct flavor that will be pleasing to a discriminating wine connoisseur.

Musu Wine's cava. Picture source: Musu Wines musu

VINO QUE SABE A BESO

Musu's product portfolio

Perhaps you feel you are on the top of the mountain, looking into the clouds, in between the Sea of Cortez and the Pacific, wanting something more extravagant... or perhaps wanting the gentle caress of a suave Rose wine,

Market Intelligence

Marketing Strategy

Musu Wines operates both at the physical, as well as digital levels. They invest a lot of time organizing wine tasting events – they believe when wine tasters can flavor their product in contrast with those of other established brands, they quickly realize Musu wines are not only unique but also a good option. They sponsor wine competitions, blind taste tests, and actually participate in other competitive wine events – again with the same goal to present their product in respect to others. In line with the new times, they also offer virtual wine tasting events – basically, people buy the wines, Musu ships them and they get together at a certain time to not only have a sommelier present, but also the enologist and the winemaker – so no question goes unanswered. Musu Wines is a believer of the new normal – they are present on FaceBook, Instagram, and on the web – with the goal to reach out to the customer base.

Key Challenges

Musu Wines is aware Mexican wines are relatively new entrants in the international wine tasting arena and compared to other European designations, their origin is less known, but they quickly point out to the pointing system, and when offered in a blind taste test, the Mexican products actually compare fairly well against wines in the international market. They believe the upcoming 43rd Vine & Wine 2022 event is a great opportunity for Mexicans to highlight their product to a panel of renowned experts – who will happen to be in town next October.

Musu Wines points out Mexico needs to dedicate more resources to research & development, establishing an enology school/career, and financing for infrastructure. They point out a lot of the science is received from Spain, France, the USA, and from Australia, but they believe it is in Mexico's interest to develop its own knowledge base and dedicated body of experts most familiar with their micro-climate, soil characteristics, and who can best help the Mexican wine industry flourish. So next time you are out for some Mexican food, why not try a Mexican wine? Or better yet, they can certainly recommend that hand-made, crafted Musu wine that will be just perfect for the occasion. Irene & Mario hope to see you soon in the Valle de Guadalupe, or if you feel like attending, 43rd Vine & Wine 202 is also a perfect occasion to visit Ensenada – not that you need an excuse to try some good wine!

Craft wine should not disappear, it brings people together and creates beautiful experiences.

IRENE BARBERENA

About the Author

Rosa Marroquin works at Universidad Nacional Autónoma de México (UNAM) - Ensenada.
She researches and writes about a variety of business topics, including Human Resources, Marketing, and Finance.
She is very passionate about economic development and continuously looks for ways to work with local companies to help them achieve their business goals and to help them better position their products/offerings in the international market.

Opinion

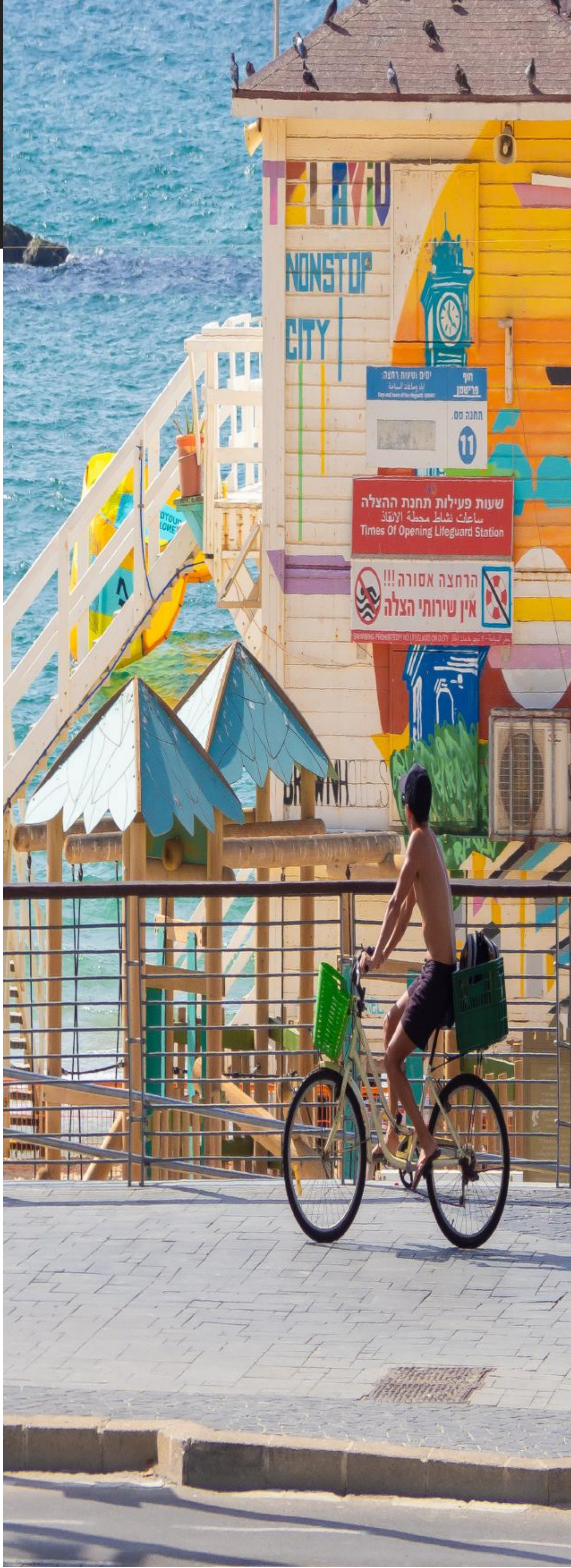
Personal observations on CI and training

By Dr. Avner Barnea

Almost 20 years ago I was at a turning point – I have just left my service with the Israeli government after many years of service. I have made two decisions: one was not to work in positions where I have to manage other people and second – to explore the possibilities of getting involved with Competitive Intelligence. CI was at the time in its beginning but has already gained influence and position. In Israel, it was in its early stage.

I have met a few friends who have been already involved with CI and wonder what I can do in CI. I was proposed to run a small CI function in a large local corporation, and I accepted to do it for two years, just to get the sense of CI activity in a corporation. After two years which were very intensive, I have already made my mind that I would like to mentor CI directors and become a consultant on competition to senior management. I have started to read intensively about CI and business strategy, in addition, to learn academically business administration, which basically had a lot of similarities with my previous career in the Israeli Intelligence Community.

I have noticed that CI directors are quite lonely – they have to work hard to be accepted and to be invited to relevant internal forums. They have a major challenge to reach out to real influence on the decision-making process. Unfortunately, they were simply too often too far from the C Suite. I became aware that internally there is so much information about changes in the external environment which mostly is not used as employees were keeping it in their heads and not sharing (we often call it tacit knowledge). Sometimes, it is quality intelligence.



Opinion

From there my direction was clear – I have looked into my strengths and found that I have good tutorship skills, gained a deep understanding of the business world, and strong capabilities with in-person abilities. I thought that I could help CI directors to upgrade their performance and also to work together with them on building a close relationship with the senior management. This was just the beginning.

This was the time that I have come across SCIP (Strategic and Competitive Intelligence Professionals) which helped me during all my career with involvement and guidance.

However, the challenge was still ahead.

As I have decided that I would like to work along with CI directors and to help them to become more relevant and to increase their rate of success – I have asked myself how I will do it?

It took me a few years before I have built my reputation, and I was approached by senior executives who basically told me – “we have a CI unit in the organization, but know what to do so it will really deliver?” Other kinds of approaches were when corporations have thought that they need CI activity but did not know how to do it, and they asked for guidance. I have to admit that in my early days in CI, I was not approached by CI directors. I believe the reason was that they were afraid that I will criticize them during my time as a tutor. It took me quite a long time to show them that I can help them to be more successful. And it is their success.

So – my consulting is not in conventional CI activities like gathering and analysis but by making CI to develop themselves to become successful in their job. Obviously, when working with CI directors and often with the senior management, I make sure also that they will cooperate with the right outsourcing providers, and I’m also highly involved with building CI dedicated IT systems, which have a tremendous value for CI activity.

Opinion

During my days as a CI consultant, I have written more than 100 articles (in English and in Hebrew) about CI, some of them based on the experience I gained from my consultancy but always kept being discrete. This is necessary if one aims to succeed in that kind of work. I have started to write for Competitive Intelligence Magazine (CIM) of SCIP as I always believe that it is essential to share one's knowledge. Later, and up to now I'm writing also to more academic magazines, especially after I have got my Ph.D. a few years ago.

Final Note: My idea of being a CI consultant is built on three pillars – working closely with CI directors and their staff, sharing my knowledge through publications of articles, and teaching CI and Strategy in various MBA programs in Israel. Just now, my new book has been published in the US and will be shortly in the shops - We Never Expected That: A Comparative Study of Failures in National and Business Intelligence. It is based on long research that I have done for years.

About the Author

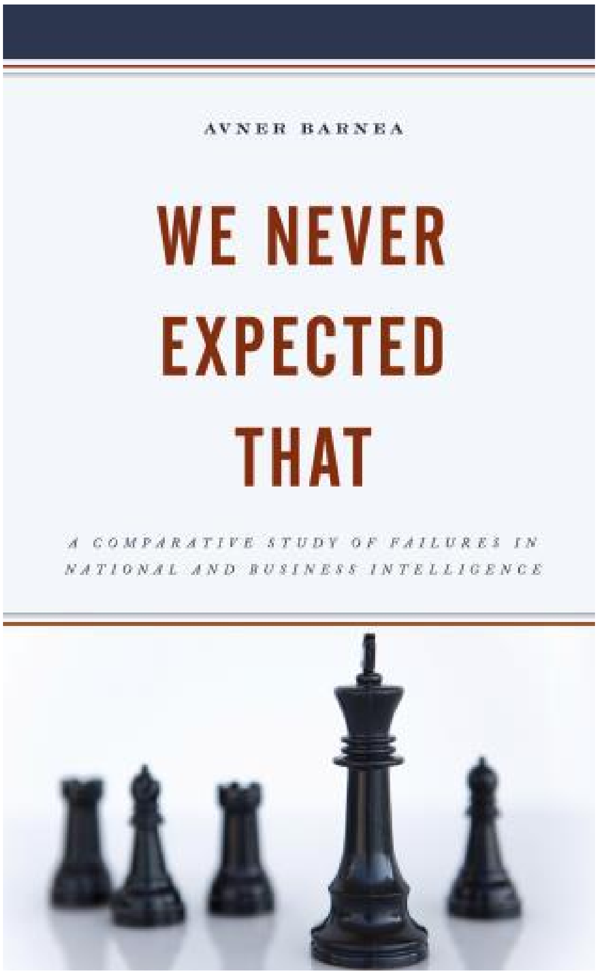
Dr. Avner Barnea (Ph.D.), is a senior competitive intelligence strategic consultant and also teaches strategic Competitive Intelligence in various MBA academic programs in Israel. He is currently Chairman of the Israel CI Forum (FIMAT); he is also a member of SCIP (Strategic and Competitive Intelligence Professionals) Board of Directors and distinguished member – Academia, of SCIP. Dr. Barnea is publishing research articles about CI in various academic journals. You can reach him using this email: avnerpro@netvision.net.il

NEW

We Never Expected That

A Comparative Study of Failures in National and Business Intelligence

Dr. Avner Barnea's new book!



The disciplines of strategic intelligence at the governmental level and competitive business intelligence constitute accepted methods of decision-supporting to prevent mistakes and strategic surprise. This research discovered that many researchers in the intelligence field feel that intelligence methodology in both contexts has reached a "glass ceiling." Thus far, research has focused separately on national intelligence and intelligence in business, without any attempt to benchmark from one field to the other. This book shows that it is possible to use the experience gained in the business field to improve intelligence practices in national security, and vice versa through mutual learning. The book's main innovation is its proposition that mutual learning can be employed in the context of a model that distinguishes between concentrated and diffused surprises to provide a breakthrough in the intelligence field, thereby facilitating better prediction of the surprise development.

We Never Expected That: A Comparative Study of Failures in National and Business Intelligence focuses on a comparison between how states, through their intelligence organizations, cope with strategic surprises and how business organizations deal with unexpected movements in their field. Based on this comparison, the author proposes a new model which can better address the challenge of avoiding strategic surprises. This book can contribute significantly to the study of intelligence, which will become more influential in the coming years.

Barnea's book bridges the analytical gap between national and business intelligence by comparing intelligence failures of states and major corporations and their causes. Barnea convincingly shows how the corporate world could greatly benefit from a better understanding of national intelligence, its means, and its analytical and forecast tools. This book is essential reading not only for intelligence scholars and students but also for managers who seek to gain an advantage over the competition by better use of intelligence.

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Opinion

Are you interested in leveling up your CI practice?

By Cam Makey

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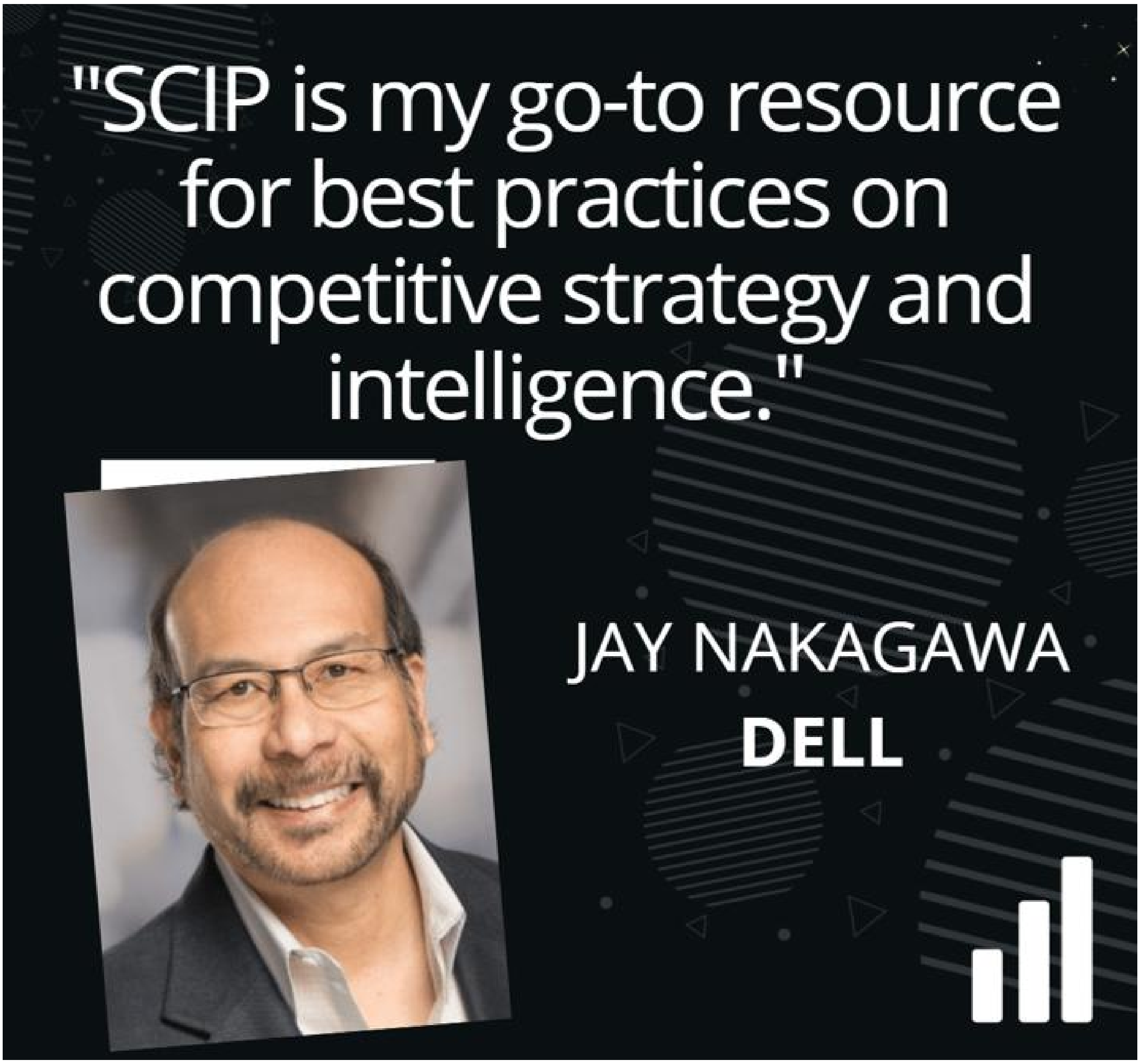

Upcoming Events

2nd Edition MarketsandMarkets

MarketsandMarkets Competitive and Market Intelligence Virtual Excellence Series - USA enters its 2nd edition bringing a fantastic lineup of speakers.

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Explore new business strategies to gain a competitive edge at 2nd Edition MarketsandMarkets Competitive and Market Intelligence Virtual Excellence Series-EU, scheduled to be held on 7th - 8th October 2021.
Join us for a two-day virtual conference to discuss challenges, opportunities to create effective and efficient business practices.

Save the date: 21st - 22nd September 2021

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ICI's Autumn Conference

The 10-week interactive journey continues!

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In this session, CI/MI will practitioners introduce their favorite software tools!

Sep 15 - Conference Day: 9 presentations, 2 tracks, ICI-Talks

Sep 29 - Barcamp: Hit the Ground Running - Getting Serious with CI/MI
In a barcamp (or unconference), participants – i.e. you – set the agenda and drive the meeting. In facilitated yet in-depth discussions, you'll engage with peers.

Oct 05 - Analytical Case Challenge: Market Volume Predictions Under Uncertainty
A case study will bring you up to speed with the background of EU passengers flights and prediction approaches.

Oct 20 - Final Recap - best speaker award

Video announcement - check it out!

Feature

European Patent Office

Contact: Link

By: Editorial Team

CI professionals need a lot of data in order to perform our tasks, and one laborious task is precisely technology mapping. In order to evaluate where a certain technology has been, and where it is going next, articles - and article databases - do go a long way.
Nevertheless, articles alone are not sufficient to guide us in the discovery process. In order to map technologies, we need access to patent data.
There are a few data providers who actually do a very good job at compiling information from various databases, written in several different languages, and allowing us to query literally millions of entries so that we can find what we are looking for.
In my experience, Derwent Data Analyzer, and its online companion - Derwent Innovation - are essential instruments for technology mapping. In addition to the queries , Derwent heatmaps are a wonderful data visualization tool.
I often hear the question - is there any place where we can find patent information for free?
Well, one option is to use any internet search, but to be honest, if you are looking into IBM - an entity with in excess of 1.5 million patents, then using an internet search engine is really not a practical solution, though it is free. Oh yes, before I forget, that IBM patent on 3D printing software appears on page 100,001. See? It is free, but it is not a good idea.
There is an alternative, though. The European Patent Office (EPO) offers access to a lot of information, training, resources, consultation, and even a database.
So far so good - databases are indeed useful. However, the EPO has outdone itself with the new service called the Statistics and Trends Center.
The graphical user interface is very user-friendly, and it is mostly a point-and-click solution.
The Center publishes some standardized country dashboards - which convey a lot of information about patent applications and grants for member-states according to certain key technology fields. For example, if you click on "France," then the database displays a time series for the grants and applications filed each year, and a pie chart showing the number of applications per technology field. In addition to that, there is a list of top applicants for the last exercise year.
We can quickly notice France does well in "Transport," "Medical Technology," and "Electrical Machinery," but how does it compare to the others?
The "Customize your Charts" tab is also very easy to use - you can pick a chart type, choose patents or grants, pick a country (or multiple countries using the CTRL key), select a field of knowledge, and the years in the range display. For example, if I select "Applications," only the member-countries, "Biotechnology" as the field, and "2011 to 2020" I can see 2665 for 2011 and 3464 for 2020, along with each year's data point and a trend.
We have the option to download the data, download just the chart, or copy the URL for sharing - all of it is presentation-ready. The EPO allows you to use the data and display the information, according to the Terms and Conditions of Use - provided you cite the source, and if any alteration to the original data is made, that you clearly indicate what was changed from the original data.
The EPO already offered a lot of educational resources, training, and support - but the Statistics and Trends Center is of great value-add to any CI effort.
Please, make sure you check the EPO for more information.
Thank you, EPO!

Futures – Open to Variety

is the easy-to-read manual for the wise use of the later-than-now. It will boost your appetite for futures work and provides many concrete suggestions for what you can do in your context. Selected futures methods are presented for practical use. The author shares personal encounters and deep insights from the many futures processes he conducted or advised. Meaningful illustrations facilitate your journey towards higher futures literacy.

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THE AUTHOR:

Dr. Stefan Bergheim strengthens futures literacy in politics, business, academia, and civil society with processes on quality of life. He was an advisor to the German government's national wellbeing strategy and led the processes "Positive Futures - Forum for Frankfurt" and "Quality of life in the digital age". As a member of the UNESCO Futures Literacy Network, he helped curate the 2019 Design Forum and the 2020 High-Level Summit.

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Q&A

OSINT vs SOCMINT vs HUMINT: Which is more important - especially in the post-Covid World - a debate

By Arthur Weiss

I have with me three CI experts: Mr Osint, Ms Socmint and Mr Humint. Each specialises in one particular type of competitive intelligence collection. I've asked each to say why their favoured approach is best for competitive intelligence. I, as the adjudicator, will then sum up so that you can decide. First I've asked Mr Humint to sell his approach.

Mr Humint – please tell readers why Human Intelligence is the best CI collection approach.

Oh – that's easy. If you want up-to-date intelligence and the latest information you have to do human intelligence – and elicit information from those in the know. I agree that Open Source Intelligence has become more important but it depends on published information and so is never going to be as recent as actually speaking to somebody with first-hand knowledge. Also, most of what you find in the first 10 or 20 links on Google are going to be pure sales propaganda and so really not worth considering. Whenever I search for anything, I rarely find anything of real value to clients that they couldn't google themselves.

Three Champions of CI

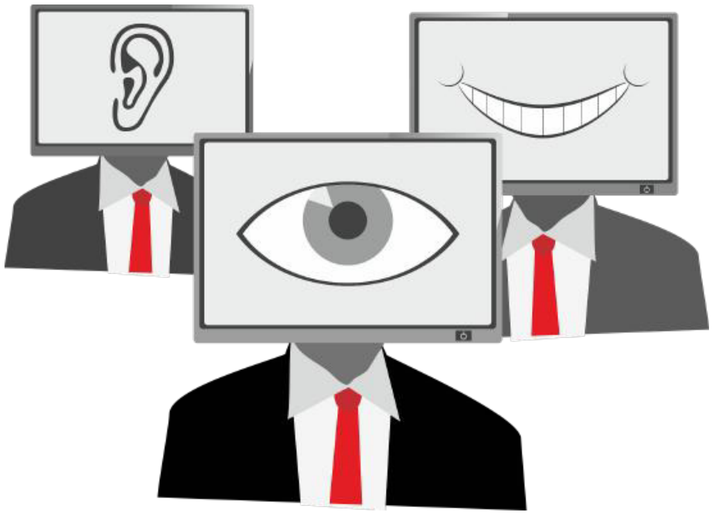
Q&A

As for using social media for intelligence – do you seriously trust what people say on Facebook or Twitter. Most of what's there is rubbish and not worth considering. It's also highly biased and contrary so can't be trusted. There are also real ethical problems in using social media – especially if posing questions or commenting. Ethical competitive intelligence means you never misrepresent yourself and so if I'm speaking to a contact, I'll always say who I am and indicate what I'm interested in. However, on social media, it's too easy to hide your company identity. Who asks a question and says "Hi, my name is … and I'm working for ….". Most people don't even check profiles, and these are generally edited to say how great the person is, so really aren't a good source.

I do use sites such as LinkedIn to find names of people to speak with but that's pretty trivial and not that different to what was done 20 or so years ago where we had lists of names of conference attendees and similar. I don't actually believe what people say – I'm interested in their job title and company and that's about it. And when it comes to things like trade show intelligence, only Humint cuts any mustard. Trade show intelligence is one of the best ways of gathering CI and even if there are now some virtual conferences you can't really go round and see what competitors are offering or gather the sorts of things you can discover in person. Yes – of course, Covid put a stop to these, but they'll return and business will get back to usual. Organizations need to trade and so exhibitions and conferences will also return – and become a key way of gathering intelligence. Already companies are encouraging people to return to the office and so Humint will retain its prominence as the premier way to gather premium intelligence.

Thank you Mr Humint. So in summary, you are saying that Human Intelligence gathering is the gold standard for CI – and that some things can only be found by speaking to people in person or on the phone. That it's more immediate and you get the firsthand story – and for trade shows and conferences can't be replaced.

Yes – that's about it.



OK – your turn Mr Osint . Why do you think OSINT is the best approach for CI? I'm assuming you disagree with Mr Humint.

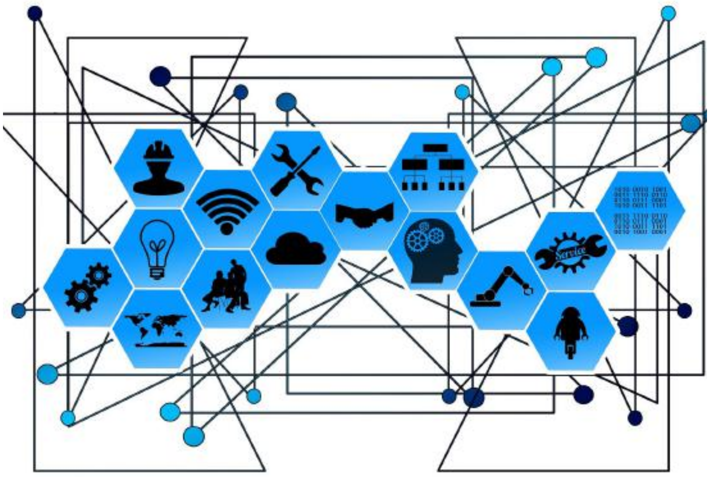
Well not totally. 20 or 25 years ago, OSINT of the type experts carry out today didn't exist and Humint was definitely the best way of gathering most intelligence. To find out what was happening meant you had to speak to people. Even news sources were mostly not online or in print – and so when talking about trade and industry magazines, they were often a week or more out of date.

If a company had a press conference it might take two weeks for the news to appear in the industry journal – by which time it was too old for fast reactions to a change. Trade conferences and exhibitions were ubiquitous – and it was normal to launch a new product at industry events – and so attending such events was crucial to stay up to date.

Q&A

Of course, OSINT has always been important – but until the online information revolution, it was often hard to obtain and sometimes very costly in terms of time.
You had to have subscriptions to pay-to-use services such as D&B to obtain company financials, or to the Derwent World Patent Index for patent data.
Using these services was not something that everybody could access and they were expensive. Even then, some information was never online.
I recall a time when we needed detail on a new factory. We had enough primary intelligence to know that we had to get copies of the plans the competitor had lodged with the local planning offices. That meant a trip to the planning office itself to request the plans.
The problem was where these were. I'm from the UK – these were in Belgium. So, we employed a Belgian data "expert" who understood how to sweet-talk local officials so that we could get a physical copy which was then posted to us.
Today, it would be unusual to have to go through this process as most such material is now available online.
The issue is that even though the world has changed, those viewing Humint as the gold standard haven't. Perhaps the best example of why they are wrong – and what can be found using OSINT approaches is shown by Bellingcat.
Bellingcat depends on OSINT and also SOCMINT to uncover intelligence and use Humint only as a confirmatory tool – and this is occasional. Bellingcat isn't gathering information on companies. They gather intelligence on military regimes and rogue players within those regimes. For example, it was Bellingcat that discovered the identities of the Russian GRU agents involved in the 2018 Novichok poisoning incident in the UK and the similar poison attack on the Russian opposition politician Alexei Navalny.

Such research shows the power of OSINT. The problem is that most people lack real OSINT skills. They don't know how to use Google advanced search operators and many don't even adjust the default settings on Google so only get 10 results per search page instead of the 100 possible. This limits what they find to just the top, search engine optimized results rather than those results hidden much further down the results listing.



The sorts of material that can be found with good search skills are often much better than could ever be found with HUMINT.
As a couple of examples, I was commissioned to do some research looking for partners of a target company. My client said they'd done some research and found very little online on the topic and so this would have to be via HUMINT. In fact, I found much more online than they'd expected – and more than could ever have been gathered using HUMINT, including quotations from the people involved, and details on the sorts of partners being looked at. This was achieved in a much smaller time frame also.
Post-Covid, OSINT is likely to be even more important and will be the gold standard for CI research – especially when also including SOCMINT. It's true that trade shows and conferences will return – but it's questionable whether they will return in the same way as prior to the pandemic.

Q&A

It's likely that many will be hybrid – with international conferences, especially including a virtual element. As such, it will become harder to gather intelligence at such events in person.
Further, many senior managers will continue to work from home some days and so assuming that you can call office switchboards to be put through to named executives is likely to be history.
Often such executives will also only be available via a cell phone so phone numbers won't be given out and owing to fears of spam, neither will company emails. All of these trends mitigate against Humint and so OSINT skills will become crucial.
In fact, there is now so much intelligence available that there can be real ethical questions on what can be used for competitive intelligence.
Extreme examples are the board minutes for a competitor that had been uploaded but were not protected and so one was found via a Google search.
The others were in the same WordPress directory. Another example was a complete supplier list including contact details (2000+ names and addresses) and the amount spent with each supplier over a period of years.
Even companies involved in security don't know the importance of Internet security – there's a company where their customer list was available if you knew how to search. These didn't involve hacking – just advanced Google searching.
The ethical issues are whether such material can be used – it's public but obviously should be confidential. (In fact, the way around the question is either not to use the data or show how it was found with an audit trail).

Wow – that was a passionate description on OSINT. Essentially you are saying that OSINT, when done properly, can provide more intelligence than HUMINT – and that OSINT will be even more important in the post-Covid world. I noticed you sort of implied that SOCMINT is part of OSINT. I wonder if Ms. Socmint would agree with you on this or whether this should be viewed as a separate skill. Ms. Socmint – let's hear your views now.

Well first, I have to say that I view SOCMINT as a bridge between OSINT and HUMINT – in that you can use it to discuss or ask questions with the same sorts of people you could be interviewing through HUMINT, yet it's all online. Although it involves the use of the Internet the search skills that are part of OSINT often won't work for Social Media – and even if you can search for some material you won't find it all using Google. But then any OSINT researcher that only depends on Google is not a good researcher – as there's the deep web that Google hardly touches.
So, you do need to master other database searches and also pay for information using pay-to-use sources – searching news globally on sites such as Factiva, legal information on Lexis-Nexis, and lots more using Dialog – as three examples. Advanced OSINT involves much more than Google searching – I'm surprised that Mr. Osint never mentioned these, but that's not my job to say what OSINT covers. I'm going to say why SOCMINT is also important and even more so in the post-Covid world.

Q&A

The first thing I have to say is that SOCMINT does offer different things to both OSINT and HUMINT. You can't search social media using most search engines, so you have to learn each platform individually and also their strengths for CI research (and weaknesses).

LinkedIn is an exception – you can often find intelligence or the names of people using a good Google research (including the SITE: operator) that you may not find directly on LinkedIn. LinkedIn's own search is poor for posts, for example – although, unlike Google, LinkedIn does obey Boolean rules and includes some sophisticated search options of its own so it's great for finding names of people who currently work at or used to work in target companies and industries. It's one of the best ways to identify (and profile) people for HUMINT interviews.

Social media, however, is much more than LinkedIn. Twitter and Facebook are obvious sources but there are many other social media sources. Each source is different – you need to recognize the sorts of material to look for and what you can expect (or hope) to find. For example, you are unlikely to find industrial information on TikTok but if you are looking for information on consumer areas or topics likely to be of relevance to Gen Z / Millennials then it's always worth looking here or also at Instagram and Pinterest.

Facebook is important for networking groups – some companies even have alumni or colleague groups where people share opinions, and they are used as a "corporate" message board. Such groups may be secret or may not let you join if you aren't known – but some are public, especially with large organizations spread across multiple sites.

Twitter is also important for up-to-the-minute news and will also be a great repository for news on what companies are doing, complaints on companies and sometimes even praise. Individuals may give out information on their activities and much more – and if you use location searches you can see what's being said from a competitor HQ which, even if not obviously relevant, may give clues. (I once saw an individual I was following tweeting from a particular location – and my first thoughts were "what's he doing there". Three weeks later the answer appeared in the news – but I'd already had an inkling that something was going on).

A full SOCMINT research program will also look at sites such as Glassdoor.com where employees and ex-employees post opinions on their employers. Many of these may be biased – from disgruntled ex-employees. However, with enough posts – typical for large businesses, patterns are likely to emerge. Another place to look are Q&A sites such as Quora – and discussion forums like Reddit. This is where SOCMINT gets closest to HUMINT as you can post direct questions – and get answers. You can also use LinkedIn InMail too to contact specific individuals but Quora and Reddit (and similar sites) allow you to generalise questions to anybody who may know and so allow you to look much wider.

Executive Summary

Finally, social media searching also encompasses multi-media searches. This goes beyond just the photo of company management. YouTube and Vimeo include company advertisements and product descriptions and reviews, as well as interviews with senior management where they may give out details that would not be asked in a HUMINT research interview. Podcasts are similar and can be found with search tools such as ListenNotes.com.

There are even tools like Maltego and Netlytic that allow you to visualize links between people and so build up a picture of connections between people, that can give valuable intelligence.

Little of this sort of intelligence will be gathered through either HUMINT or standard OSINT approaches so failure to use SOCMINT approaches in CI will mean you are likely to miss early warnings that would be available just through monitoring what people are saying and thinking on social media.

If I've understood, you are saying that SOCMINT gives that extra "je n'sai quoi" to a research project – and adds to the sorts of material that can be found with OSINT and HUMINT that wouldn't exist elsewhere. That's always useful. But to sum up, competitive intelligence today should use OSINT, HUMINT, and SOCMINT to get a complete picture. Often, you'll be able to gather what's needed through OSINT only or a mix of OSINT and HUMINT. However, any in-depth research should also include SOCMINT.

The difference is that today, depending only or primarily on HUMINT means missing out on a lot of valuable intelligence. Sometimes all you need will come from OSINT – and HUMINT may just be for clarification or confirmation of the information. Other times OSINT is just the start and to get the full answer you need HUMINT. You should always consider SOCMINT to round out the picture – especially prior to any HUMINT interviews where you can profile the individuals you are speaking with.

Post-Covid, HUMINT is likely to be less important – simply because it will be harder to contact people, and more conferences and trade shows will go virtual. This means that OSINT will grow in importance – especially where HUMINT won't be feasible – and so those CI practitioners who depend on HUMINT will either need to learn new skills in OSINT and SOCMINT or risk failing to provide their clients and companies will valuable competitive intelligence. Conversely, OSINT experts should go that extra step and check SOCMINT and also pick up the phone to confirm information or fill in gaps, using HUMINT approaches. Finally, on-going monitoring needs to include some SOCMINT – and part of the skill here is identifying what to monitor and who – whether via YouTube, Twitter, LinkedIn or, indeed, other social media (and that includes emerging platforms too).

About the Author

Arthur Weiss is a regular contributor, published author, and speaker. He is the managing director of AWARE, specializing in marketing & competitive intelligence analysis, research, and training.

Executive Summary

Sketchplanations

Editorial, page 6


Methods

Sketchplanations

By Editorial Team

A Sketchplanation is a data visualization approach created to function as an aid to our communications. A sketch is an elegant approach to describe even very complex subjects in a way that most can relate to.

Introduction

Data visualization is a bit science and a bit art - it takes a good amount of creativity to come up with images that are truly representative of the data.

There are many options for one to represent data - from graphs to pie charts, linear regression, and spreadsheets to Mind Maps and drawings.

A Sketchplanation is a sketch created with a specific goal in mind - to explain some complex idea.

If the concept is complex, consider a sketchplanation - it will do the trick and will considerably improve your communications process.

Cross-Cultural Marketing

J. Cornali, Page 13


Competitive Intelligence

Cross-Cultural Marketing Strategy

Understanding other cultures may come at a cost - but it also presents itself as an opportunity to portray your brand in a more favorable light in the eyes of your intended audience - consider it an investment in your brand.

This article discusses the importance of foreign language and cultural awareness in the context of international business.

The author argues cultural awareness adds value because it allows for your marketing message to be properly presented, while at the same time, ensuring a direct and sophisticated communications channel with your intended audience.

Understanding the nuances of the local culture is a good investment because it facilitates the capture of competitive intelligence in the local market

Executive Summary

Unsupervised Drones and the Future of Warfare

R. Gayoso, page 21

In this article, we discuss how technology operates as a force multiplier - when applied to weaponry.

The use of fully autonomous drones in Libya resulted in human casualties - so this debate is both contemporary as well as it is important.

We discuss five different frames to study the traditional weapon usage approach and contrast it with the emerging model.

We discuss emerging trends and what they might mean for our societies.

The article also discusses technology other than unpiloted aerial vehicles, that is slotted for autonomy integration.

A Futures Masterclass for Philantropists

Dr. Katindi Sivi, pages 27

The LongView Futures Foundation is on a mission - it wants Africa to increase the number of practicing futurists on the continent. How do you do that?

The Foundation has a series of training programs: 1) Teaching people how to think like a futurist, 2) Hands-on foresight practice, and 3) Developing future change-makers - the Foundation sponsors up to 30 young people from 30 different Sub-Saharan countries to receive futurism training.

Executive Summary

Implications of Virtualizing Realities

M. Schwirn, page 31

In the future, we will continue to see the combination of technology and virtualization techniques continue to increase.
In some instances, the results appear to be very exciting, whereas in others the outcome appears frightening.
Of particular concern is VR's capacity to create variable interactions in the real world - so different users may see the world differently, thus increasing polarization.

Reclaim our Future

I. Talmi, page 37

Born Partners' Itai Talmi reminds us nothing is more dangerous than believing in the "official future," which is the result of our bias and what we chose to believe - despite signals one could see in the environment.
The Futures Spectrum model is a methodology created to help us overcome our shortcomings, and use an approach that allows us to embrace the potential futures with an open mind.

Executive Summary

Insecurity in Millennials

C. Schröder, page 47


Market Intelligence

Insecurity in Millennials: Turning Flaws into Advantages

Why Have Millennials Been Deemed So Socially Insecure?

Millennials have, among other criticisms, been labeled the "most insecure" generation ever. Not to mention other labels, such as "avocado-eating," Cell Phone-addicted, or superficial.
One thing is for sure - stereotyping is not only useless, it is also blinding. In this article, we seek to understand Millennials using a different point of view.
As we evaluate Millennials using different frames, we can uncover our bias, and in the process, we can discuss how to turn apparent "flaws" into advantages.

Neuromarketing & Ethics

Alessandra Saraiva, page 52


Market Intelligence

Neuromarketing & Ethics

In this article we will investigate neuromarketing - understand its mechanisms, desired usefulness, disadvantages and limitations; and with that in mind, we can consider it either a by-product of technological advancement resulting in a strategic tool designed to help us better understand consumer behavior, or think of it as a dangerous instrument created to manipulate the very consumers it claims it seeks to understand. In the back of our minds the question remains - is neuromarketing being used in an ethical way?

Introduction

Neuroeconomics

When Economics, Psychology, Neurosciences, and Marketing combine - then we have Neuromarketing.
New, yet invasive, techniques allow for one to dig deep into the brain to understand how people react to a specific stimulus in the environment.
When marketers have that kind of information, then the marketing message can be recrafted so that the company can go about meeting its sales objectives - faster. The question is how much is too much research and if it goes so far, how can one ensure privacy is maintained?

Executive Summary

Targeted Engagement with Universities

Burns & Walker, Page 18

Competitive Intelligence

A Data-Informed Approach to Targeted Engagement with Universities

Why should I work with universities?

How do partnerships happen?

Universities are premier sources of research, innovation, and offer access to a highly-skilled workforce. In this article, we will discuss how the data-informed approach can lead to university partnerships that excel.

We will learn how CI techniques, and more specifically technology scanning, will help you identify which potential partners have the skills you need in the academic environment. Knowing your own technology needs and the research offering will go a long way to create the perfect university-corporation partnership.

Wine Entrepreneurs

R. Marroquin, page 57

Market Intelligence

Wine Entrepreneurs put Mexico in the Map

Introduction

Baja California's role in the Mexican Wine Market

Wine is big business - and it requires a lot of time, effort, and investment. Nevertheless, there is still space for adventurous entrepreneurs to enter this space.

Ensenada (Mexico) will host the 43rd Vine & Wine Wold Conference - so the Mexican wine industry is on the spot.

In this article, we visit two entrepreneurs in the wine business - we will understand their challenges, discuss their strategy and hear the story of Musu Wines.

Executive Summary

Personal Observations on CI and Training

Dr. A. Barnea, page 64


Opinion

Personal observations on CI and training

In this article, we hear from Dr. Barnea. He describes his experience in Competitive Intelligence, explains how CI influenced his thought process, and we hear his perspectives on training/skills development.

Sustainability re-shaping the Technology Ecosystem

A. Weiss, page 72


Q&A

OSINT vs SOCMINT vs HUMINT: Which is more important - especially in the post-Covid World - a debate

Three Champions of CI

OSINT, SOCMINT, and HUMINT - the three Competitive Intelligence champions are compared and contrasted. In this article, we discuss advantages, disadvantages and reinforce why CI professionals need to have a good command of all three.

Let's connect!

Here is a short list of movers & shakers in the industry! Please do reach out, connect & follow!

Rosa Alegria

TedX Speaker, the Brazilian futurist is an expert in foresight.

in Rosa Alegria

Paul Santilli

Strategist at Hewlett Packard Enterprise, is an author, speaker and Chair Emeritus of the SCIP Board.

in Paul Santilli

Monika Bielskyte

Researcher, speaker and futurists, she is the founder of PROTOPIA Futures.

in Monika Bielskyte

Jeanette Jones

Author, researcher and speaker, she is the founder of Cottrill Research.

in Jeanette Jones

Way Chen

Researcher, is the president of the China Institute of Competitive Intelligence.

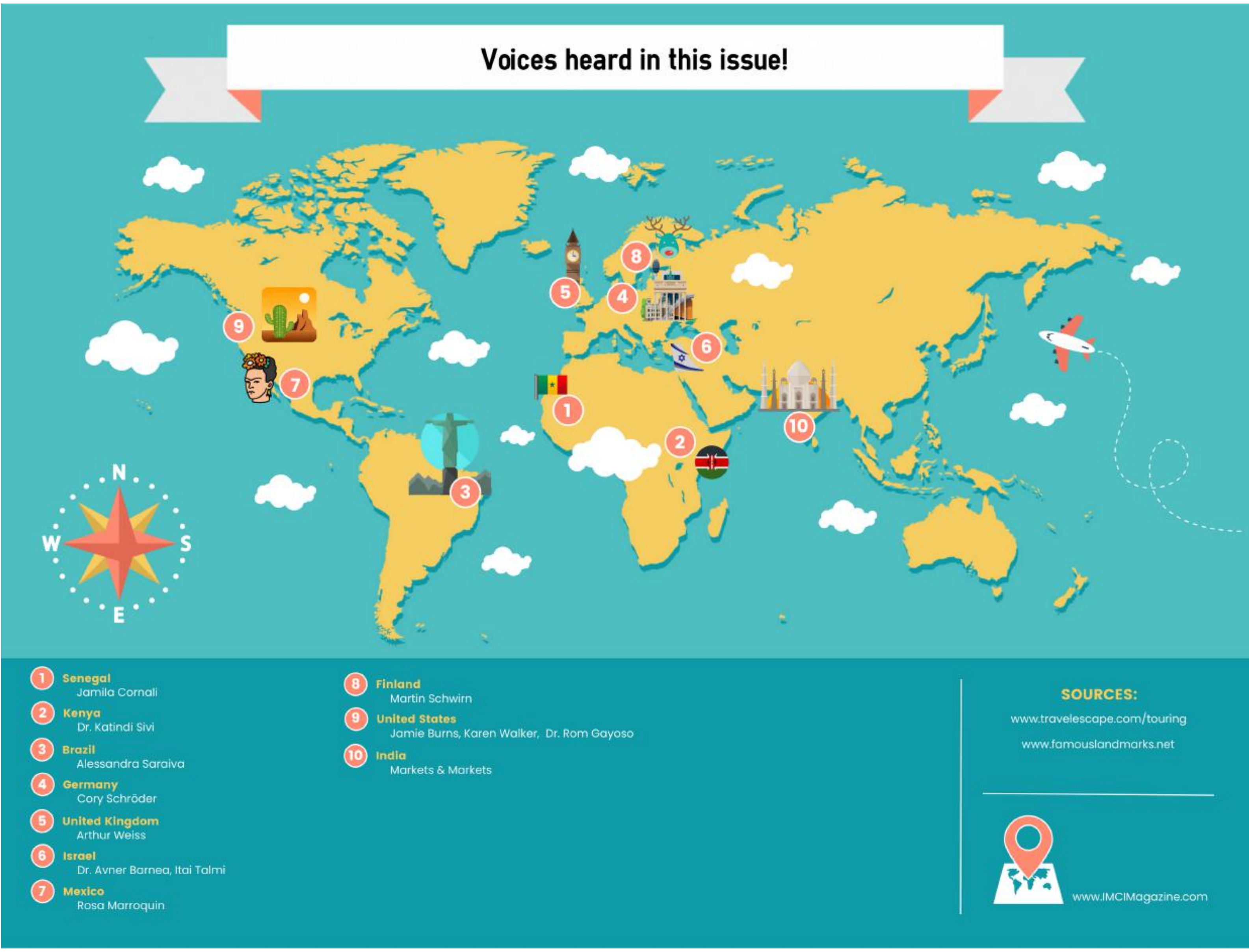
in Way Chen

B. Xausa-Bosak

Business strategist and futurist, she is the Global Community Manager, Association of Professional Futurists.

in Bibi Xausa-Bosak

In this issue...



Do you have a story to tell or want your voice heard?

Email your article proposal to editor@imcimagazine.com

Why Invest in CI Training?

92%

Stakeholders at high-growth companies say CI is critical to success

> "A CI team is worth its weight in gold."

Sanjay Guglani
Chief Strategy Officer

Win rates can increase 50%+ with CI programs like Battlecards

Why Trust SCIP for CI Training?

As a non-profit, our mission isn't enriching our shareholders. It's **advancing the practice of ethical CI** through training, best practices, & building peer connections.

1500+ Professionals trained

35 Years experience

Backed by the SCIP Code of Ethics

Some of Our Training & Certification Offerings

Foundations of Market & Competitive Intelligence

1000+ Graduates from 25+ countries

EXECUTIVE PROGRAM WITH NOVA IMS

Maximizing ROI from CI Technology & Tools

How CI Can Drive Sales & Marketing Enablement

Building a Data-Driven CI Function

> "SCIP's training left me armed with techniques and a network for sharing best practices. It was a wonderful experience and my management is ecstatic."

Caroline Ball
RTI International

Learn more at www.scip.org

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