

Rise of the insight alchemist

How the data explosion has created a new breed of insights professional

MRS Delphi Group



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About MRS Delphi Group

The Group is led by a coalition of respected thinkers in the marketing and research sectors. The Group delivers valuable insight across a range of important business, social and political issues.

The Steering Board includes: Colin Strong, Ipsos (chair), Gemma Proctor, Sparkler; Dr. Parves Khan, INTO University Partnerships; Dr. Nick Baker, Savanta; Tatenda Musesengwa, YouthSight; Kevin Evans, Pepsico; Zoe Ruffels, GSK; Jake Steadman, Access Intelligence; Rhea Fox, Paperchase; Robert Kitching, Unilever; Gerry Power, M&C Saatchi World Services; Jane Frost, CEO of MRS.

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Rise of the insight alchemist MRS Delphi Group

Foreword Jane Frost, Chief Executive, MRS



As an industry we have talked a lot about the impact that the data explosion has had on market research and insight. 'Opportunity or existential threat?' sums up much of the dialogue of the 2010s.

The debate has largely been driven by the fact that what we refer to as 'data' has been large continuous data sets derived from operational, sales or, increasingly the internet; not areas that have been under the traditional customer research and insight umbrella. Worrying about data as a completely separate entity has partly been driven by a pre-occupation with input methodologies, rather than outcome impacts.

This debate has driven a perception in some spheres that research and insight is not about data and, more damagingly, that data is not this sector's area of expertise.

There is, however, in this report a noticeable change in tone. The Covid-19 pandemic has caused a collective shock to the system, with many budget holders now aware that in these febrile times their investment in customer understanding is insufficient. More insight teams have been brought much nearer to the C-Suite. Organisations are now asking themselves if a stronger understanding of the customer can be achieved by closer integration of all the customer data streams held by the company, with the sources being generated through the insight function.

Some organisations interviewed here have figured out an elegant solution in the form of balanced skills, structure and ethos. The disconnect between different parts of the business have been rounded off; insight is being disseminated, understood and acted upon across many divisions.

In these businesses there is no debate about what is and isn't data, and about how to use it. It's all data, they say – regardless of whether it's derived from social media or sales, questionnaires or focus groups.

In these companies automation is not something to be suspicious of – the limitations are recognised and mitigated against – and the value and role of human insight has been elevated. As Dr Khan says in her prediction piece, we've moved from striving to be data driven five years ago, to being insight driven today.

But not everyone enjoys this position. We are all at different stages on the continuum. Some companies haven't made the investment in technology or skills that is required to support their transformation. For many it's on the horizon, but horizons have a horrible way of being a lot further away than they first appear.

What this report does is give us a landmark to keep in our sights. If we follow this path, says the report, we can stop worrying that traditional research is being eclipsed by data. The role of the insight leader – or alchemist – is clearly articulated as the essential human ingredient (or should it be 'magic ingredient') in an increasingly automated process.

The insight alchemist is an agent of transformation, drawing on human ingenuity and science. As the report's lead author – Ipsos' Colin Strong – neatly sums up in his conclusion:

"The alchemy that is apparent in leading insights teams today is less focused on the 'molecular composition' of the data ingredients, and more focused on what the outcomes are of intelligently using and combining the wide variety of assets they have."

I hope you find this report useful and as ever I look forward to hearing your feedback.

Thank you to the many experts who so readily agreed to be interviewed for this report, including several members of the MRS Client Council, and to Colin Strong and the MRS Delphi Group for exploring this critical topic which will continue to define the research industry in the years to come.

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Jane Frost CBE,

Chief Executive, MRS

Introduction



Colin Strong, lead author of this report, Head of Behavioural Science, Ipsos, and Chair of the MRS Delphi Group

The world we are living in has changed. A combination of Covid-19, climate change and technology disruption has meant that we operate in highly uncertain environments. Sociologist Zygmunt Bauman suggested we live in 'liquid times' where our environment is increasingly subject to a state of change and operating without fixed, solid patterns.¹ This means that we must learn to 'walk on quicksand' – be flexible and constantly adapt to rapid change.

¹Bauman, Zygmunt (2007) Liquid Times: Living in an Age of Uncertainty

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At the same time, it seems we live in a time where we have more information than ever. We continue to have the tools of collecting information (or data as we may wish to call it) from asking people questions in the form of surveys and topic guides. Previously, the majority of data that we collected was provided by people selfreflecting on their own attitudes, behaviours, values, opinions and so on. The nature of the response provided we can call 'self-report'. This has been hugely democratised with a much wider range of people than ever before designing and collecting this type of data.

Alongside asking people questions, we live in a world where technology means we now have unparalleled access to data about more or less anything we decide we need. We have always attempted to represent the world through data - think mapping, scientific experiments, weather forecasting, censuses. But what has changed is the degree to which technology has today facilitated this process. Digital technology has fundamentally altered our ability to quantify the world both through the way in which phenomena are now effectively transformed into data, but also via our ability to store and then make sense of that information. As technology has become an ever-greater part of our lives, we are increasingly using this to track human behaviour - typically known as 'behavioural data'.

This raises questions of how to derive insights from the different sources now available. Does one source have primacy, offering greater insight and understanding than the other? Do some data sources offer us an underlying untarnished truth, or are we destined to forever be trapped in a world of bias and inaccuracy? Does the sheer volume of behavioural data available now mean we can dispense with self-report and should we be fundamentally rethinking how we understand people?

Does the sheer volume of behavioural data available now mean we can dispense with self-report?

So the challenge for consumer insights teams is less about collecting or accessing data, but how to make sense of this data. Similarly to the alchemists of old, how do we make gold from a wide array of what can seem, at first glance, unpromising materials? How do we derive knowledge from the raw ingredients?

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To this end we have spoken to a range of people operating at the top of their game in the research industry, aiming to build a picture of the characteristics of the modern 'Insight Alchemist'.

As Elaine Rodrigo Chief Insights & Analytics Officer at Reckitt suggests, the skills involved are not only technical but require a strength of character.

"The role of the client-side CMI / Insights & Analytics professional has dramatically shifted in recent years. In what I believe is a very positive way, even if it can be a little 'scary' at times," says Rodrigo. "What our business partners desire is our point of view of what they should do, NOT just reporting back what a database showed, or what the agencies presented. Most responses to business questions raised today cannot be answered by one piece of research or one source of data. Therefore, the ability to seamlessly connect different sources of data, and tell the organisation the two or three things they need to do to solve their business question this is what companies want from insights and analytics professionals."

Most responses to business questions raised today cannot be answered by one piece of research or one source of data.

The ability to acknowledge that data sources are imperfect yet still use them, as best we can, is a feature of confidence and maturity of the industry which has deftly moved from a singular focus on self-report data to a much wider range of data sources.

Mike Bowen, Principal Researcher at Spotify says, "We as market researchers need to embrace this new world in which data is everywhere and people who were perhaps historically market research practitioners are now more broadly insights practitioners, have highly diverse skill sets (very much including data science), and permeate many more facets of organisations."

Drawing on interviews with leading practitioners alongside the academic literature, we set out here a manifesto for the industry on best practice for ways to manage the torrent of data that is now available and create knowledge that will best address the social, environmental and commercial challenges we face.

What does good look like?

There are many ways in which the activity of collating data and extracting knowledge from it can take place. The insight professionals that we interviewed were able to articulate a vision of what this looks like.

First and foremost is the role that deep expertise plays. This expertise is borne of experience in handling data, understanding consumers, grappling with the business challenges, all of which creates a deep intuition that our experts are able to apply effectively and with impact.

Good practitioners are also data source agnostic, combining the 'ingredients' with ease.

As Naomi Kasolowsky, Group Insight & Foresight Director at Tesco, says of the different data assets:

"If you add disciplines together, you get a one plus one equals four scenario. And that just means stepping into each other's shoes for a while and understanding what each side can bring. Just embrace it – I think it's great."

This sentiment is echoed by Sydney Stanback, Global Advertiser Research, Brand Research, at Pinterest.

"All forms of data are considered credible because they're used in very purposeful ways," says Stanback. "For example, when we want to understand our audience scale, usage behavior and trend patterns, we lean into our platform data. But if we want to understand audience psychographics or more attitudinal data, we lean into survey or market research data."

There was a strong sense of competent teams of insights professional embracing the opportunities of ground zero empiricism and the uncertainty that fuels both the questions being asked and the data sources available.

Here's Kasolowsky again: "I find the world these days is much more fluid – it's not so cut and dry. There's usually one anchor method, and then you bring the other disciplines in to deepen the insight. We need to use approaches in quite a dynamic way, alongside each other to make sure that you make good decisions."

The playing field of the data sources has become much more level. Survey or behavioural – it is all considered 'data', with our insights professionals typically agnostic about the source. The value is found in adding new feeds to derive the knowledge that is needed to support the business questions.

"What has not changed today is the importance of consumer-centricity," says Elaine Rodrigo.
"What has changed is how we get these insights. Data and tech-enabled insights are now allowing brands to develop a deeper level of insight in a much more agile way. Social listening, search data, and other sources of data fuelling analytical tools which become increasingly predictive, these can all help gain deep and fast insights and foresights.

"I am often asked if we should do survey research or use such new techniques that leverage actual behavioural data. My answer is AND not OR. The new data-driven and behavioural approaches complement the data and insights that we have historically obtained from survey research. The power lies in connecting the different sources of data to provide a holistic approach in answering business questions."

Tesco's data-insight layers

A shared infrastructure enables different levels of automated and human data analysis, says Naomi Kasolowsky, Group Insight & Foresight Director, Tesco.

"We use behavioural data and our analytic capabilities to understand our performance and operations. This generates extremely good insights about where problems lie. It surfaces the territories and the lens through which we need to understand the business. Researchers can then go and dig into that, do the problem solving, and the critical thinking inquiry.

The way we think about it is that a lot of data analytics can be built into processes, dashboards and models that are operationalised in the business. That's not necessarily an insight job, however. The insight team use these insights and add the layers on top of, or off to the side, to give you a complete picture. That's how we've approached the difference between data science, data analytics, and insight.

We all share a need for a very strong data foundation. And we partner really closely with our colleagues in data science and analytics to establish that data fabric.

We think about it as different layers of interpretation or domain specific insights. At the basic stage some of the data analytics will land in processes and they'll be fully automated. And then some of them will land in processes that create reports or dashboards, and will need to be transformed and added to with a layer of research interpretation that's more human. That's when you're in the insight world."

The limitations of data and survey tools

One of the ways in which insights professionals can operate with confidence, and fully deploy their expertise, is by not only knowing the strengths of the different types of data, but also the limitations.

"If the right approach is applied to the respective question or objective, no one type is more important or credible," says Mike Bowen from Spotify. "It's much more about knowing the limitations of a given data type and methodology, and knowing when and how to apply them.

"What's vital is to understand the bias of each data to support and appropriately manage the foresights they generate."

Alex Owens, VP, Global Head of People Data Centres, Unilever

This is harder than it may first appear as we are tempted to assume that the data we collect can offer us straightforward and even irrefutable facts. While we may disagree about policy or strategy, the data we use is expected to offer an objective description that we can all agree on, of the world we inhabit. However, the provenance of the data we use will inevitably be contested. So a data source may appear to offer us facts and truth, the reality is often less certain.

The recording of the physical world has a long history of scientific instrumentation from radars and sextants to hydrometers and altimeters – there is no shortage of measurement devices available. When it comes to people, the tools have historically been more limited. As such, the market research industry developed in an era where the main body of data about people was only self-report.

With the explosion of a range of other data assets, our attention has been taken away from these tools, but there are perhaps consequences because these are tools which themselves require expertise to 'operate'.

As one participant put it, "Individuals often don't have skills in survey design, and surveys are sometimes not that well designed, but they just accept it given it saves money doing it in-house."

Tesco's Naomi Kasolowsky adds, "There is a risk of suboptimal research into things that customers just don't know and cannot tell us about, such as what they're going to do in X,Y and Z circumstances."

But simply because there are examples of poor quality survey design does not mean that the principle of the approach should be called into question. Instead, we need to ensure that the data is expertly collected and also that those designing the data collection tools and those working with the outputs properly understand the strengths and weaknesses, opportunities and limitations of different types of data.

"People often say that self-reporting has a bias in it, and I say of course it does," says Alex Owens, VP, Global Head of People Data Centres, Unilever. "Any data has bias. No data source in isolation to other data will ever give you the answer. What's vital is to understand the bias of each data to support and appropriately manage the foresights they generate."

The limitations of data and survey tools

The limitations of behavioural data are well understood by those we spoke to.

"There are limitations with passively tracked data. While it's great for understanding behaviours, it can't get to the "why" behind the behaviour," says Sydney Stanback, from Pinterest.

"There are blind spots in the data," agrees
Professor Andrew Smith, Director and Chair
in Consumer Behaviour at Nottingham
University's N/LAB. "Take, for example, retail
data. Yes, you've got very rich data into
someone's behaviour. But if they are shopping
elsewhere, not all of their consumption is
going to be visible."

It was clear that our interviewees understood that forms of data do not speak for themselves – they all need some form of interpretation, regardless of the 'face validity' of appearing to tell a common-sense story.

Prof. Smith continues, "There's the household issue: I buy all sorts of things for my daughters through Amazon and that reflects more about them, than me. Someone could be buying lots of cakes from a supermarket on a weekly basis, and perhaps they run a nursery. Similarly, just because a person buys single portions, we can never be 100% certain theirs is a single occupancy household."

"There are limitations with passively tracked data. While it's great for understanding behaviours, it can't get to the "why" behind the behaviour."

 $Sydney\,Stanback,\,Global\,Advertiser\,Research,\,Brand\,Research,\,Pinterest$

Data can't speak for itself

The key challenge with behavioural data is that the human hand in the process is not always very clear.

Nevertheless, data analytics involves making decisions: about which data to look at, what composite variables to generate, what constitutes an outlier, and so on. These decisions involve human judgement, often well intentioned, but guided by assumptions or hypotheses concerning what is important and why. The way we look at data is always framed, even if the process is automated. Someone has to write the algorithm in the first place and as such the framework is simply embedded within the algorithm, rather than being made explicit. Patterns in data can generate random correlations and as such interpreting them can lead to spurious conclusions.

The point is that the data does not speak for itself. As the author and statistician Nate Silver writes in 'The Signal and the Noise: Why Most Predictions Fail – but Some Don't', "We speak for them. We imbue them with meaning."

Another consideration of data is what it will actually reveal. As Matthew Salganik of Princeton University points out in 'Bit by Bit: Social Research in the Digital Age', "Researchers who study dolphins can't ask them questions. So, dolphin researchers are forced to study behaviour. Researchers who study humans, on the other hand, should take advantage of the fact that our participants can talk." He goes on to point out that some of the most important social outcomes and predictors are internal states, such as emotions, knowledge, expectations, and opinions. Internal states exist only inside people's heads, and sometimes the only way to learn about internal states is to ask.

We might be able to eventually derive that a customer was unhappy about their recent experience by observing the way in which they stop spending money and take their business elsewhere. But it may be quicker, easier and more profitable to simply ask them. We will not get there by observation alone.

So we need to tackle data analytics with a series of questions or hypotheses rather than assuming the stories will tell themselves. This is consistent with academic best practice as outlined by Prof. Smith.

"In social science you might run knowledge building surveys, but you would typically have a more deductive approach. So you have some ideas about what you're trying to find out, but you don't with behavioural data – it's quite a different process."

A related but slightly broader consideration about data sources is what type of knowledge they give us. We got a sense of this from Tesco's Kasolowsky who deftly captured the challenge we have when trying to use data we have collected in the past (or even in the present) to try and understand the fast moving and uncertain future.

"We can predict – based on history and scenarios – what we think something's going to be in future. But if Covid has taught us anything, it's that if there is any kind of deep disruption to the variables, the predictions are very likely to be wrong!"

"If Covid has taught us anything, it's that if there is any kind of deep disruption to the variables, the predictions are very likely to be wrong!"

Naomi Kasolowsky, Group Insight & Foresight Director, Tesco

Managing the limitations of data

While these sorts of limitations and considerations may seem obvious to many working in our industry, the challenge is that as access to data about human behaviour comes into the purview of a broader range of people, then these may not be quite as well understood. More specifically, the technical means that are used to collect the data may mean that the same technologists are then processing and presenting that data.

As one of our participants made clear: "Engineers are heavily fixated on 'managing' the data and they can be focused on coming up with fantastic ways to organise and store the data. But they aren't always as connected to the final output, which can lead to missed opportunities and expectations."

As such, we need to think carefully about skill sets. Given training and experience, the technical teams may well make effective consumer insights professionals, but the capabilities and competences required for this need to be understood as very different.

"The most powerful insights in my view come from my joining behavioral data with survey responses to paint a holistic picture."

Mike Bowen, Principal Researcher, Spotify

Blending

Alongside the readiness to acknowledge the limitations of different data sets, it is clear that leading insights professions are confident that they can mitigate these weaknesses by blending different data sources.

"The most powerful insights in my view come from my joining behavioral data with survey responses to paint a holistic picture of users and non-users," says Mike Bowen from Spotify.

It's a sentiment echoed by Tesco's Naomi Kasolowsky, "We blend – we have research and analytics all combined within the team because the disciplines have distinct uses and roles. It is a very rare thing for my team to produce work that is purely one thing or another – there's always a mix."

However, this is not something that is universal as one of our participants pointed out, saying that even in UX and marketing analytic teams, people don't always appreciate some of the issues in research design, such as how to avoid asking leading questions.

The limitations of survey tools

One of the challenges that survey tools have faced is the notion that people are either not able or are unwilling to disclose the information that is requested of them. This notion is popularised by books such as 'Everybody Lies', by ex-Google data scientist, Seth Stephens-Davidowitz. The book outlines the way in which new sources of insight can be captured as a result of the way in which technology is present in ever more intimate aspects of our lives, quietly recording our innermost thoughts (in this case) care of our Google searches. There is a presumption thoughout the book that 'everybody lies' and that surveys are therefore pointless. He makes it very clear at different points that he is 'skeptical of survey data'.

Is he right to be sceptical? There are a number of points that are often made in this context – there follows two of the most commonly held challenges.

The limitations of data and survey tools

Lack of access to our inner selves

The notion that self-reporting could be misleading was presented 30 years ago in a highly influential paper 'Telling more than we can know: Verbal reports on mental processes' by Nisbett and Wilson (1977) who argued that people have "little or no introspective access" to their cognitive processes. Their case was based on a wide-ranging review of evidence indicating that people cannot correctly report on the cognitive processes underlying complex behaviours such as judgement, choice, inference, and problem solving.

However, as many philosophers and social scientists point out (for example Julian Baggini in 'Freedom Regained: The Possibility of Free Will'), our everyday personal experience tells us that this is simply not true. There is significant experiential, philosophical and empirical evidence that our inner lives shapes our behaviour and that we are able to self-report this. We just need to be clear what the conditions and boundaries are to this. Indeed, market researchers have long been aware of this, using data analytics (eg, regression) and data collection tools (eg, conjoint) due to a recognition of where the limits are to self-report.

So with self- report, we know that asking people to determine the relative weight of different considerations behind their decision is unlikely to result in an accurate answer. As John Cacioppo et al pointed out in 'The neuroscience of persuasion', humans are able to self-report on mental states but not on their cognitive processes.

Unwilling to share our inner lives

There are undoubtedly limitations to surveys with regard to sensitive topics - this is well documented and understood by survey practitioners. However, there is a significant evidence base on the actions that can be taken to manage the way in which survey participants misreport their behaviours on sensitive topics. These may include the use of self-completion methodologies (for example mail, web, interactive voice response, text messaging) to create a private means for responding, 'forgiving' introductions (for example "Some people use erotic or pornographic material often, while others do this rarely or never") or asking the question presupposing the behaviour (for example 'How many cigarettes do you smoke a day?').

These and many other approaches are used to mitigate the impacts of social desirability as much as possible. It should be noted, however, that the topics that are vulnerable to this do not represent the vast majority of the activity of most surveys.

This is not to say that there are no limitations to surveys. But the industry is in a position where these are well-documented, understood and mitigating action can (and should) be taken. Simply because there are examples of poorquality survey design that fails to adhere to best practice principles does not mean that the data collection method itself is problematic.

This is not to say that there are no limitations to surveys. But the industry is in a position where these are well-documented, understood and mitigating action can (and should) be taken.

The what and the why

There is no doubt in the minds of our insights professionals that the whole is greater than the sum of the parts when it comes to different types of data.

Here's Spotify's Mike Bowen, "While our first party data is a powerful asset, there isn't any one type of data that matters most in a vacuum. Rather, it's about the best data or methodology to address a given objective."

Anna-Lee Bridgstock, Director of Data at LADbible, goes even further to say: "Reliance on one source of data may not always tell the full story and if analysed in isolation – it could lead to a false story."

We can find interesting 'why' from the data that might be hard from direct questioning.

In terms of what types of questions different sorts of data could be used to answer, many of those we spoke to suggest that behavioural data offers the 'what' are people doing while self-response gives us the 'why'.

It is easy to understand why this is the case – behavioural data will give us the detail of a person's grocery shopping over the course of a year offering us a granular 'what' in a way that we could never hope to achieve by self-response. And while that data may be used to infer interesting and useful things about why they are doing this, we are, in all likelihood, needing to ask someone questions to get to the 'why'.

"I think the behavioural led data is what gives you the what. It's self reported data that gives you the why," says Alex Owens from Unilever. "So both have a clear role – even if market research data can be skewed by consumer aspiration vs what they do in reality. But isn't that in itself an interesting insight – the say vs do gap?"

On the other hand, we may be able to glean interesting insights about the persons' behaviour that they themselves may not be fully cognisant of. Perhaps they have started to buy more plant-based foods and are choosing other more sustainable products in their regular shopping. We might discover that this person has become increasingly mindful of the environment and the part they play in it, and we can assess the way in which this has changed in a very nuanced way over the course of the year. So, we can find interesting 'why' from the data that might be hard from direct questioning (e.g. requiring longitudinal research, capturing and comparing data points).

Of course, there is social media data which sits somewhere between where people self-report but in an unstructured way (no specific question was asked). But we can still derive insights by examining this data on a collective basis.

Using social media data to measure collective emotion

In a 2019 paper 'Collective Emotions and Social Resilience in the Digital Traces After a Terrorist Attack', Bernard Rimé and David Garcia analysed a set of data collected from 62,114 Twitter users after the Paris terrorist attacks of November 2015. They found that in the months after the attack, Twitter users who had greater participation in social sharing subsequently expressed higher rates of prosocial behaviour, and there was a positive affect in their social-media activity on Twitter.

It seems that by engaging in collective emotions through social media, users were able to synchronize their thoughts and emotions, facilitating feelings of social belonging and shared beliefs. Based on our conversations, insights professionals were able to clearly see that there are many different ways to explore an issue. Rather than getting too absorbed by measurement tools, we can think in terms of 'modes of explanation'. If we look at a vase, we could look at it in terms of its physical properties (height, weight etc.), its monetary value, its aesthetic qualities and so on. Each of these are perfectly valid but have quite different measures for the different questions that we are asking.

In many walks of life this is intuitively accepted and understood, but somehow when it comes to understanding humans this can start to be less well considered. One person we spoke to feels their UX and marketing analytic people are the ones who conduct surveys to delve into the why, but the data engineers and some analysts don't readily consider surveys – they often think of surveys as 'qualitative' research or the more 'touchy feely' stuff.

Certainly, it seems a mark of more impactful and successful teams is that they are able to appreciate and blend the different sorts of data together, leveraging their strengths, but at the same time being cognisant of the limitations.

One person felt that the data engineers and some analysts don't readily consider surveys – they often think of surveys as the more 'touchy feely' stuff.

The cultural value of different forms of data

The choices of the tools that are used do not take place in a value-free vacuum: some forms of data and insights have historically held greater weight than others. This is not to say that we live in an entirely relativist world but we do need to understand that certain data sets and tools are held to have greater value than others and as such this can influence the way in which decisions are made.

For example, having an AI element to a data collection or analysis tool will often create more buzz and excitement regardless of the veracity of the claims concerning the AI capabilities. This may well translate into the notion that certain approaches have greater explanatory power, are less subjective or susceptible to bias, and are more reliable or valid. As one of our participants suggested, "What data is used and considered most valuable depends on the client brief, but it's nearly always 'hard' data."

The work of the researcher is to provide an 'honest broker' approach to these conversations, being clear about the value of the tools that are used and what insights they can deliver, but also clear about the limitations. The challenge we have, of course, is that we do not live in a world where people are necessarily motivated or sufficiently knowledgeable to provide a clear-eyed assessment of these things.

Mike Bowen, Spotify, says, "Executives and senior leaders probably don't care – nor should they, that's why they hire experts in this space. But senior insights practitioners must understand the key strengths and limitations across data types and methodologies."

The commercial imperative can mean that tools are promoted on the basis of the way in which they do not fall foul of the problems of other tools; so it is not uncommon to promote behavioural data nor indeed a wide variety of other data collection tools by challenging the value of self-report. In these cases there is a need for 'buyer-beware' – if the allegedly poor performance of a competing tool is really at the heart of the sales pitch then this should surely sound alarm bells.

But what is top of mind, gets attention, and this can become a self-supporting cycle.

One of our participants felt some of her clients don't usually think about talking to end users or customers as it's simply not top of mind.

Importantly, our 'insight alchemists' were much more confident in combining different data sets without feeling the weight of the wider cultural narratives around data and their relative values. They felt free to pick and choose in a confident manner to get to whatever would meet their insights needs.

"What data is used and considered most valuable depends on the client brief, but it's nearly always 'hard' data."

Anonymous

Making the magic happen

We have talked about the use of different data to draw insights, but this is inevitably tangled up with the different means we have to look at the data. As we highlighted earlier, the expertise of the consumer insight professional is critical here, but can this expertise somehow be encoded and digitised so we are not so reliant on individuals?

To this end, one area that is receiving considerable attention is the use of AI to pull out key findings from the data that has been gathered (whether self-report or behavioural data). Surely, the argument goes, given humans are so subjective in their interpretation and analysis, then we can use AI to offer us an objective assessment of the data.

Some of our participants could definitely see a time when machine learning tools become so smart that it will be much easier to capture and analyse data, and the need to ask consumers to discover or validate something becomes redundant or less important.

But how realistic is this? All researchers tend to take an engineering led, contextless view of problems, which is perfectly fine if we assume that knowledge and problem solving is seen as a purely individualistic, mental activity.

What we fail to see is the way in which AI will often lean on human behaviour to develop a solution.

This is what is known as the frame problem: when presented with an unfamiliar subject, a machine does not 'know' what information of that subject is important and what is irrelevant. A certain amount of knowledge about a subject is necessary to make that determination, and without that information in their database, a computer cannot make the distinction. Humans are therefore needed and are inevitably an intimate part of Al solutions, albeit this is often not explicitly stated or even recognised.

Of course, if our problem is purely in the physical world then we can see how this makes sense (although even here it is not without controversy as quantum physicists are finding). But so much of our human world is about context. To borrow a popular phrase: shared meaning is a feature, not a bug. The context in which we operate is everything (see next page).

This example, alongside many others, are cautionary tales that it is easy to assume a machine knows best in comparison to the apparently poor grade materials between our ears. But as we see in the sexual orientation study that follows, AI was picking up differences without being able to identify why. It seems there was a failure to understand the shared meanings that we have in our culture relating to sexual orientation. A straightforward process of asking people a number of simple questions revealed what the machine could never understand: that lifestyle and culture is how we communicate a huge amount about ourselves, including sexual orientation.

The reality is that we continue to require humans to understand humans – we necessarily need to be part of the rich, complex, multi-faceted layers of meaning that make up human life.

Putting our trust in Al

A paper 'Deep Neural Networks Are More Accurate Than Humans at Detecting Sexual Orientation From Facial Images' published by Michal Kosinski and Yilun Wang in 2018, reported that a machine-learning system they had designed was able to differentiate between photos of gay and straight people, with an apparently high degree of accuracy. Over thirty-five thousand photographs from dating websites were used along with what was described as facial-recognition software.

When given two pictures – one of a gay person, the other straight – the algorithm was able to successfully distinguish the two in 81% of cases involving photos of men and 74% of images of women. Human judges, by contrast, were only able to correctly classify the straight and gay people in 61% and 54% of cases, respectively. Following this, Kosinski, went on to make bold claims: that such Al will soon be able to measure the intelligence, political orientation, and criminal inclinations of people from their facial images alone.

Does this mean that AI can tell us things that we ourselves struggle with? As we saw earlier, does AI mean that we are so hopelessly flawed that we will need to rely on AI to give us a clearer sense of ourselves? A vocal critic was found in the shape of Princeton professor Alexander Todorov, a leading authority on faces and psychology (see this article by Blaise Aguera y Arcas). Along with his collaborators he argued Kosinski's approach was flawed: the algorithms could have been identifying patterns in cosmetics usage, facial hair, eye wear and even the angle they held the camera. Self-posted photos on dating websites, Todorov points out, contain a range of information not relating to the physiology of the face itself.

Todorov, along with researchers from Google tested this using a survey of 8,000 Americans. They asked a wide range of questions including "Do you wear eyeshadow?", "Do you wear glasses?", and "Do you have a beard?", as well as questions about gender and sexual orientation. The study showed that lesbians use eyeshadow less than straight women do, gay men and women wear glasses more, and young opposite-sex-attracted males are much more likely to have prominent facial hair than their gay peers.

Todorov and his colleagues convincingly showed how these obvious differences between lesbian or gay and straight faces in selfies relate to differences in culture, not in facial structure. Using a simple calculation using a small number of questions about appearance did almost as well in guessing orientation as the facial recognition AI.

Beyond the questionable motives behind using facial recognition to try to identify sexual orientation, this example shows us that regardless of outcome, the rationale behind why an AI makes the decisions it does can be obscured or misunderstood by its human counterparts. In other words, sometimes we just don't understand the machines we are creating – so should we trust them to make decisions for us? This could have important ethical and legal ramifications depending on the application of AI and the tasks given to it.

Tapping into the brain

We are, some argue, moving from a position where we are collecting data about human behaviours to one where we could derive insights more directly via electronic brain-computer interfaces. For example, Elon Musk claimed recently that the electronic brain-computer interfaces made by his company Neuralink will bring about a range of benefits including communicating with loved ones, searching the internet, and even replacing your television – streaming content straight into your brain.

With just a cursory glance at the web it is possible to find many examples of ways in which technology is reportedly offering us a new lens into the human condition. This may be technology which appears to be human like, or which claims to grant access to the inner workings of our minds.

Scientific consensus is that we are a very long way off from being able to do this, or indeed whether this is possible at all. Neuroscience does seem to have had some success in identifying the neural correlates to different types of thoughts and emotions, but the notion that we are either close or would ever be able to use this sort of technology to derive insights into other people's inner lives has huge philosophical and scientific challenges.

Our insights professionals were sanguine about these possibilities and even if they were possible there are many barriers, says Spotify's Mike Bowen.

"I expect there to be quite a number of barriers to passive data collection on the regulatory front (rightfully so, in my opinion). You mentioned Neuralink before – I expect that kind of data will be highly guarded and regulated. And the tech itself could still be decades away."

So while there is a media buzz about these possibilities, this rightly does not seem to be occupying the minds of insights professionals right now.

The notion that we would ever be able to use this sort of technology to derive insights into other people's inner lives has huge philosophical and scientific challenges.

The 10 ingredients of insights alchemy

The manner in which knowledge is being produced from the increasingly diverse and complex data sets available is a huge feat. There is an intuitive creativity and nuanced understanding that underpins this flourishing area of expertise. Here are the top ten recommendations gleaned from this report that will help build a team that is at the leading edge of customer insight delivery.

1

Develop a strategy for data collection and aggregation

This calls for a clear-headed view of what it will be used for and why. As Unilever's Alex Owens points out:

"The rise of data sources has led organisations to go into bit frenzy – 'I must have it all and put it together under a single roof' – without taking a step back and asking ourselves what are we trying to do? What do I have today and what can I get tomorrow? What can't I get that I would like to? At least then you understand the types of data that you need in order to answer the overarching use case."

2

Accept that all data is imperfect

As Owens says, we need to be bold and adapt to an imperfect situation:

"Stop being so worried about precision. People are still too busy working out the statistical significance of the sample to make sure there's representation. Those days have gone. Make the data as clean as possible and as accurate as possible, understand its biases, and understand what questions you want to ask of your data.

3

Understand the limitations of the data

We have said throughout this report that it is important to avoid the pitfall of assuming that one type of data is more robust and more efficacious than another, without giving due consideration. This was certainly supported by Prof. Smith from N/Lab:

"I think you do have to be very cautious with behavioral data, as you do with self report data; each comes with a different sets of problems. I would never want to promote the idea that behavioural data is entirely robust or entirely reliable. If you want a full picture, you do have to do both."

4

Recognise that insights about humans need humans to deliver them

One of our participants, Tesco's Naomi Kasolowsky, coined the term 'humanly thoughtful':

"I think progressive insight teams have a degree of creativity about them and they're very optimistic. They think about scenarios and the different ways in which things might play out. They're thoughtful, but also they're humanly thoughtful. You need that in your agency. You need that in your team. You still need the instinct and the creativity of people to come up with brilliant insights into why things are the way they are, and how we should respond to them."

5

Adopt a test and learn attitude

Just as data will never be perfect, so the same applies to the way in which we build knowledge from the data. There is an understanding that these will be informed judgements – hypotheses – rather than absolute facts, and as such, the actions taken as a result of this are ideally more tentative in nature. We learn as much from applying the knowledge we derive from the data, using a test and learn style approach, as we did from the data itself:

Here's Kasolowsky again, "A critical part of how we make our decisions is through test and learn. So you can say, well, we did that and it didn't work, or that bit worked, and this is why it worked, and then we need to do more of that. It just allows you to be much more robust and agile."

6

Act as an advocate for different sources of data

It is key to embrace the possibilities of all data sources and, in particular, to restate the value of speaking to people to understand them, as highlighted by Kasolowsky:

"I would encourage the industry to not be worried and defensive. There is a very important role [for research] that I think just needs to be rearticulated. To businesses that are maybe investing more in data analytics and less in traditional research, I think it's an opportunity to restate the value of the industry and step forward."

7

Be data agnostic

Spotify's Mike Bowen says:

"Help researchers better triangulate insights across data sources and methodologies so organizations can have more confidence in their insights and recommendations.

They can help insights functions bridge the gaps between 'what' and 'why' to help practitioners paint a holistic picture of current and prospective customers."

8

See the work as a journey

As one of our insights alchemists Reckitt's Elaine Rodrigo points out, the work is never complete:

"The journey to transform an insights and analytics organisation into one that is able to seamlessly connect different sources of data, while also being strategic business partners, can often seem daunting. When we look at the new skillsets that we need upskill ourselves in, like digital, data science, omnichannel or consulting skills, we might ask ourselves 'where do we start first'? My advice to all of you is to 'eat the elephant in chunks'. Do it in bite size pieces. Tackle one thing at a time, start small with something that is achievable, build the muscle and scale."

9

Build a one team vision

Build a customer centric vision across the business to break down silos and create a single purpose. Foster an appreciation of the role of different teams and skills – from the technical to the intuitive – and what they bring to the insight process, and embed a shared objective to bring the customer and the business closer together.

10

Demonstrate leadership and strength of character

Being adaptable and confident, and less risk averse, in spite of change and unpredictability – these are the characteristics that all of today's insight practitioners need in order to thrive. Bridge the gap between technicians and creatives in order to deliver insight that can transform the business – the C Suite is listening, so make sure you're heard.

Conclusions

Based on the interviews undertaken for this report, the industry is in good shape making creative and intelligent use of different data sources. These insights professionals are not overly concerned with ensurinng the data is accurate to a spurious degree. It is taken as read that the technical specialists have done their work and instead the focus is on using this as a springboard for inspired responses to business questions.

The alchemy that is apparent in leading insights teams today is less focused on the 'molecular composition' of the data ingredients, and more focused on what the outcomes are of intelligently using and combining the wide variety of assets available.

The way the term data is used is revealing – no longer is it related solely to behavioural or social media data – but is referencing all forms of data *including* self-report.

But with the opportunity of the new landscape comes challenge. As the world has become more uncertain so the data we have is more expansive and less structured.

The insight alchemist needs courage to hover over the data, using their intuitive expertise and ability as conveners of their teams and stakeholders to collectively weave their magic, pulling out the valuable insights that will be answering the big business questions that organisations are facing today.

The alchemy that is apparent in leading insights teams today is less focused on the 'molecular composition' of the data ingredients, and more focused on what the outcomes are of intelligently using and combining the wide variety of assets available.

Four Imperatives to leverage insight and data

By Dr Gerry Power, Chief Research Officer, M&C Saatchi World Services



Anomaly detection, digital twinning, stance detection – new vocabulary for ways in which data promise to help us understand fundamental questions for market research – how and why people make decisions about everything from consumer purchases to voting to their intimate partner preferences. For the sector to optimise this promise, I believe there are four imperatives that underlie how data and insight must evolve in the future.

1

The talent imperative

We must recruit for, reward, and prioritise the aptitude and ability to see beyond the obvious. If the task is joining the dots, exercising deep intuition and embracing uncertainty, the stereotypic distinction between qual and quant, science and humanities education becomes less relevant. The key attributes become the capacity to blend the rational and the irrational, to simultaneously recognise the logic and the emotion and to have the imaginative nous to be able to fill the gaps. Our ability to test for these aptitudes and mainstream new recruitment protocols will be increasingly important to hire talent who can be data-agnostic in how they evaluate the evidence available to them.

2

The design imperative

We must develop research designs where the convergence of insight and data is central. In this pursuit, we should not abandon the rigour in our methods, our approaches to sampling or our analytical techniques. The robustness of our convergent research designs must stand up to scrutiny. There is a paradox that, even as data becomes ubiquitous in our personal and professional lives, the critical antennae that encourages us to question the veracity of what it is telling us can often falter. With data, interrogation of its origins and assumptions must be the order of the day. As insight is too often sacrificed at the altar of hard data, generated in-house to save money, we must advocate research designs that can accommodate the reality of inconsistent and often contradictory data sources.

3

The culture imperative

We must build and support insight and datacentric organisational cultures that leverage the value of evidence-informed decision-making. These should focus not only on externally facing products and services but also on internal processes and the interface between the two. In practice, this means that we must shift away from organisational structures where data and insight sit in the domain of the marketing or research departments. Rather, data and insights appreciation and understanding should be baked into the DNA of the culture and into all job descriptions. This reorientation for most organisations will bode well for how we navigate the turbulent waters of unpredictable market conditions caused by geo-political shifts, the emerging demands of global movements, future pandemics and the ravages of climate change.

4

The accountability imperative

We must consider opportunities to formalise the role of insight and data in advancing Environment, Social and Corporate Governance (ESG) agendas. These non-financial factors are increasingly important to investors as part of their analysis process to identify material risks and growth opportunities. They align with climate change, diversity, equity and inclusion (DEI) and sustainable investment principles. Currently, ESG metrics rely heavily on secondary market and corporate data, and self-reporting. The convergence of insight and data afford the opportunity to develop more nuanced and forward-looking ways to capture evidence of ESG accountability at the community, national and global levels. Market research should be at the forefront of these ESG evidence building efforts.

For the next five years, our challenge and opportunity as a sector, is to create and contribute to new norms for: industry talent recruitment protocols and development; convergent research design; data-centric organisational cultures and rigorous ESG corporate accountability. May we embrace these four imperatives with vigour.

Dr Gerry Power is a member of the MRS Delphi Group.

Facts can't speak for themselves

By Dr Parves Khan, Vice President of Market Research & Insight, INTO Global



Back in December 2020, I wrote a piece for Research Live where I presented my case that two things are needed in order to the magic of turning data into insight rests on two things: recognising the differences and respective value of data and insight; and getting the skill set right in your team in order to transform numbers into compelling stories.

When my stakeholders ask for a speedy report, I tell them they can have it tomorrow, or they can have it after I've had more time to digest the data and come to some thoughtful conclusions and recommendations. They nearly always choose the second option. My stakeholders value insight, not just the data, because they have plenty of the latter and not enough of the former.

For this white paper, the MRS Delphi Group has explored the relationship between data and insight and what we have found will, I believe, resonate strongly with many of us. Our ability to extract meaningful knowledge from all the diverse data available to us and package that up to support often on-demand business questions, this is giving rise to a new type of market research practitioner – what we have called here the 'insight alchemist'.

No, they're not magicians or scientists, but they are interdisciplinarians who are able to ensure that the deep insights generated through sophisticated analytics in the modern business environment translate into impact at scale.

I have my own personal example of this from a previous role. Our customer data, along with tons of market intelligence and social listening data, suggested a big new business opportunity in a new product line. Eagerly, product designers worked up a prototype for my research team to test and market size. When we tested the appeal of the proposition and willingness to purchase through surveys and focus groups, the results were inconclusive and inconsistent. The proposition bombed in markets where other data suggested it would be strong, and it was challenging to see a clear pattern of likely adoption across some of the other markets. In this situation, it was only through the team working together to apply a blend of foresight and observations of what was happening in each market, along with our own experiences as a customer, that we could identify a new emerging customer segment for this proposition. If we just took the data at face value, we would have got lost in the weeds.

What my stakeholders came to appreciate in that company was that an insight isn't something you find – it has to be crafted. It's taking data points along with your own observations, reflections and qualitative judgement to understand and explain why something is happening the way it is. And what I came to appreciate was that it wasn't enough for my team to present the 'facts'.

As the researchers in the business, we had to speak for the facts, and when you work for a business that is hellbent on improving the bottom line, then that also means having to put on your business head, apply business acumen and wrap up that understanding into commercially framed recommendations that help your company grow. That's the tough part!

I've managed many different types of people in my almost 30 year career and what I know is that to develop that alchemy in your insight team you need to start by re-evaluating the skill set in your team.

- Do you have people in your team who bring experiences from other sectors to challenge current assumptions, identify blind spots, and bring fresh perspectives?
- Do you have analytics translators who bridge the gap in expertise between technical teams - made up of data scientists - data engineers and software developers, and business stakeholders?
- Do you have people who can think outside the box and cut through all the 'noise' created by so much data?

For me getting the skill-set right is going to be the number one priority for insight teams over the next 2–3 years.

Dr Parves Khan is a member of the MRS Delphi Group.

Five insight skills you can see from space

By Rhea Fox, Chief Digital Officer, Paperchase



This fascinating report delves into the concept of 'insight alchemy', a subject very close to my heart. As someone who spent her first 10 years of work in straight research roles before pivoting to broader customer strategy, marketing and trading, it's clear to me that the most accurate, impactful, and lasting insights are only generated from blending disciplines.

Thinking back over when I've seen insight alchemy generate spectacular results, I've come up with five 'see from space' skills and behaviours required from individuals and teams. We'll all need to nurture these skills, quickly.

1

Confidence

One of the things that distinguishes strategic insight from straight data is the context and commerciality of that output. To build out context and commerciality different data sources are required: market data, finance data, behavioural data, competitor data. It's also unlikely that every data point that feeds that model – and generates the strategic direction – is necessarily available to the level of accuracy some of us are comfortable with. Being confident to use 'good enough' inputs when required is key.

2

Breadth of source knowledge

We're all experts in our own disciplines but successful teams have individuals with sufficient knowledge about the generation and application of different methods across the insight landscape. Knowing what data sources can and cannot do is crucial, as is the process for blending them. For example, collecting MOSAIC codes in your survey to augment a segmentation and help generate media buying profiles to activate that segmentation.

3

Storytelling

Storytelling is absolutely critical. Diffusing mass data sets to the absolute essence of the insight and it's application is even more important when bringing together large datasets. It's always easy to see when a data deck and research has been ineffectively smashed together to create a monster document, invariably full of jargon or contradictory numbers. First, step back and work out the big themes, then use the appropriate data point to tell the story. For those who don't believe me, I recommend reading 'The Trusted Advisor' by David Maister, which clearly articulates the message that most of the time senior stakeholders are not in the least interested in seeing your workings or technical detail. Landing the message cleanly is all.

4

Collaboration

Collaboration across business units and teams is essential to insight alchemy, especially in a world where disciplines don't always sit in one team. This can mean there are several entry points to insight across a business (data analytics, customer research, user experience research) which means stakeholders may have a tendency to go to the place they know best / where it's cheapest / where it's fastest / where they have the best relationships. This tends to generate single source insight at best, and at worst it uses completely the wrong tools for the job. Respect for each other's disciplines is important, as is creating forums for evaluating briefs and outputs 'in the round'.

5

The fundamentals

And lastly an oldie but a goodie ... the fundamentals of good research design can't be forgotten. For example, don't ask for behaviours when you can pipe it in from different sources, and if you're assessing the potential market with a headroom type model and it's only based on research or customer data, it's invariably going to be very wrong.

Rhea Fox is a member of the MRS Delphi Group.

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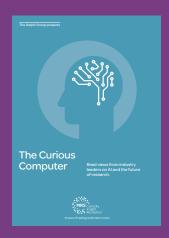
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