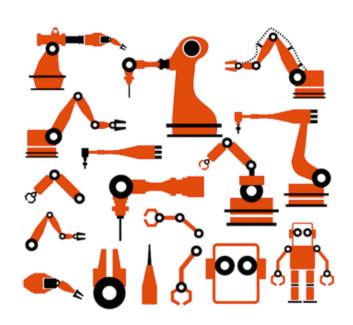
Automation and Market Research: A journey, not a destination

Reviewing the impact of automation in market research with Ray Poynter (NewMR) and Lenny Murphy (GreenBook)

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Executive Summary

- Automation in market research will continue to evolve and accelerate.
- Automation makes things faster, cheaper, and sometimes better.
- Clients, not suppliers, determine quality but suppliers need to ensure buyers can readily assess the quality of services.
- Automation will result in more research being conducted, and a growth in evidence-based decision making, at a lower cost per project.
- Automation will continue to generate winners and losers. Be an automation winner lead by example and adopt innovation.
- Clients often value speed above cost savings, as shown in interviews with Valspar and T-Mobile.
- Most people agree that the benefits of automation include doing more with less, doing it faster, doing it consistently, and sometimes achieving superior quality.
- People's fears surrounding automation are less focused, though it is generally accepted that more automation is inevitable.
- I predict 40-60% of existing market research jobs will disappear over the next five to ten years. Roughly 20-30% new research jobs will be created.
- Artificial Intelligence will have a major impact on market research over the next five to ten years, impacting areas like qualitative research, research with images/video, and creativity.
- Increased automation will result in more business decisions benefiting from research.

This report is written by Ray Poynter, drawing on a wide range of views, contributions and interviews. The project is sponsored by ZappiStore.

Why Automation?

A good example of the benefits of automation is glass blowing. The first commercial automated glass blowing system was introduced in 1905, credited to Michael Owens in the USA. Automation meant that the number of bottles produced per person increased by about 600%, and the price of bottles fell to about 8% of the previous cost. Bottles no longer required skilled blowers of glass – which meant it was quicker and easier to recruit additional workers. The improved consistency and reduced cost of the bottles helped create a wider range of uses in food and drink. Thousands more people were employed by the glass industry. Food, drink and medicines also became safer, cheaper and more available.

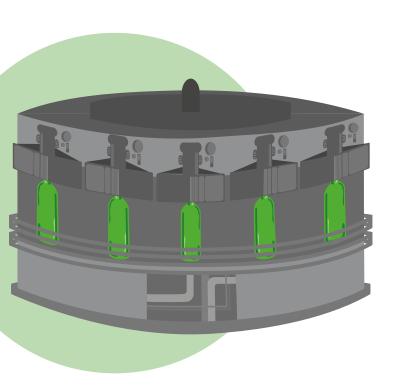
Glass blowing highlights the advantages of automation, such as:

- Reducing in the costs of production
- Increasing output per person
- Increasing quality/consistency of products and services
- · Removing the need for special skills
- Increasing wealth, both in a narrow financial sense, and in the broader sense – for example, food, accommodation, safe water, education, and the arts can be provided and afforded.



However, automation usually creates losers as well as winners. In the glass blowing example, skilled glass blowers lost their special position and competing companies struggled. The automation of glass blowing created wealth, employment, and helped advance society, but it also meant some people earned less, lost their jobs, and lost status. Some of those engaged in traditional glass blowing were able shift to niche applications, combining lower volumes with higher prices.

This report looks at automation from a market research and insights perspective. It draws on lessons from beyond these areas where relevant, with the aim of creating a clearer picture of automation's impact on market research, insight, the people who benefit from research, and those who work within the sector.



From Brawn to Brain

Automation initially impacted unskilled manual labour such as agricultural workers using power from horses and flowing water. Later, particularly through the industrial revolution and into the 20th Century, automation affected skilled-labour, (e.g. glass blowers, spinners and weavers, and the makers of machines).

From the 1950s onwards automation started to tackle repetitive white-collar jobs (e.g. banking and finance). Costs decreased, consistency increased, the range of services increased, and during the first 40 to 50 years of automation the total headcount increased (because automation facilitated growth). Within that total growth there were also plenty of losers, such as the staff of smaller branch offices, and into the 2000s total headcounts started to fall.

Henry Ford to Post-Ford

Another powerful example of automation is the car industry. The earliest cars were made by hand, but the automation processes of industry innovators such as Henry Ford made cars cheaper, more reliable, and easier to maintain. Consequently, the car industry experienced massive growth, employed millions, created wealth, and changed society. Over the last 30 years, however, the continued growth of automation has massively reduced the number of people working in the car industry. The growth of the sector can no longer outpace the efficiency and growth of automation.

In the early days of automation, one stumbling block was a reduction in choice: 'Any colour you want as long as it's black,' for example. As automation in auto-manufacturing became more sophisticated, choice expanded and continues to expand to this day.

Automation Today

Automation continues to develop, and it is in the process of becoming far smarter. In some industries (such as steel making, automobiles, and banking) the result recently has been a dramatic cut to headcounts. In other areas such as programming, data visualisation, and the sharing economy, automation has expanded employment.

From robots in our factories, drones carrying out a growing range of tasks, automated testing of blood and DNA, and smartphone assistants such as Siri, automation continues to shape and reshape the workplace, the economy, and our society. Automation is a journey – not a destination.

Automation and Quality

Successful automation always reduces costs, increases speed, and usually increases consistency – but its impact on quality is varied. With computers, contact lenses, and engine parts, automation generally produces a superior product. Where high fashion, music, and meals are concerned, automation generally produces products at a lower quality to humans.

When the quality of products or services produced by automation is inferior it is usually because of one or more of the following:

- The automation is not yet mature, so it can only produce an inferior product
- The market has decided that it is willing to buy a cheaper inferior product

In the end, it is clients who should and do determine whether a solution is good enough for a particular purpose. It is not the role of vendors to tell clients what they should buy.

However, if automation is going to deliver quality, and if buyers are going to drive quality up, it is essential that people can assess the quality of services. This transparency can be achieved in a number of ways – for example, by leveraging brand names such as Millward Brown's Link Test or the TNS ConversionModel, or by providing benchmarking and offering insights into the process.

In some situations, the consistency often associated with automation can be seen negatively (e.g. identical houses, clothing, or ceramics). In other fields, the consistency is seen as a key attribute (e.g. computer chips, banking services, and pharmaceuticals).

In many cases, a product or service provided by the very best humans in their field remains superior to that which machines can offer. However, the price difference between these premium products and those that are automated is usually too large. In recent years, there has been a growth in products described as 'artisan', produced by skilled craftspeople (e.g. bread, cheese, and beer). These products are typically more expensive and a lot less consistent in quality.

DIY and the Impact of Automation

Another disruption caused by automation is the creation and growth of Do It Yourself options (DIY). For example, the introduction of Automated Telling Machines (ATMs) means we can collect cash without bank tellers, and word-processors mean white-collar workers do their own typing. More recently, this trend has led to self-service tills in shops.

The impact of DIY automation is often referred to as disintermediation (the removal of intermediaries). Familiar examples of roles impacted by this disintermediation are travel agents, insurance salesmen, and bank tellers.

DIY platforms such as travel websites, eBay, Airbnb, and higher-end functions such as automated trading, journalism, and programmatic advertising are further disrupting the landscape. The 'gig economy' (e.g. drivers working for Uber) is a another notable extension of this automation process.

These changes reduce costs, increase the availability of services, and put people more directly in charge of their lives.

Market Research's Long Acquaintance with Automation

Market research has a long history of using automation, but it also has a long history of beating itself up about not being innovative – something I believe is more grounded in attitude than fact.

Market research's use of automation extends from punch cards and print rooms for paper questionnaires, to optical scanning, computer-aided telephone interviews, internet data collection, and the use of smartphones. Each of these examples created both winners and losers, and quality did not always improve (think of the on-going concerns surrounding online panels).

Opinion Leaders Crowdsourced Views

Automation is all around us. Here, I draw upon the views of opinion leaders from within the research industry and around the world. The key findings are set out below.

Automation is impacting the whole organisation

Our crowdsourced team highlighted that automation impacts all aspects of an organisation – people cited salary payment, e-payment, e-booking, and leave approval. A good example of automation in business is sales, where tools like Salesforce automate many of the processes, increasing both effectiveness and management's ability to oversee the process.

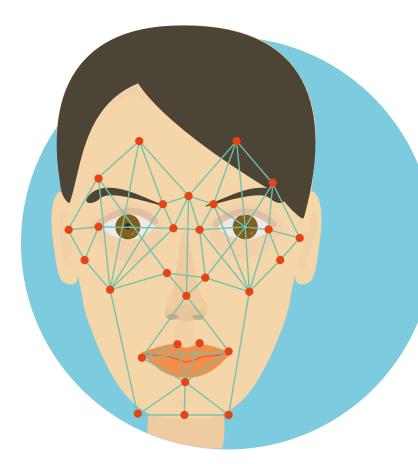
Key recent impacts of automation on MR

Key recent impacts include digital-based data collection tools (fewer roles for interviewers), new approaches such as automated facial coding, MROC management, social media listening, and the use of apps with smartphone-based research.

Among the providers of research services, quotation protocols and sampling/quota management are highly automated, as is survey creation and data processing. Projects increasingly use automation to enable participants to move from one aspect of a study to another without manual intervention.

Repeat tasks are being automated. For example, the fielding of Millward Brown's Link test is now almost completely automated, saving enormous amounts of time – and subsiquently money.

In some cases, automation has increased engagement. For example, in real-time tracking it has enabled the data gathering to become seamless (and painless) for the participants, leading to enhanced engagement.



Automation Strengths

Interestingly, 'the benefits of automation' is a short list, but it contains some very important items nonetheless. The most widely agreed element is 'doing more, faster, with less' (fewer people and/or less money).

Other benefits include increased productivity of analysts, reduction in errors, more thinking time, less process. In addition, people mentioned improved dissemination and sharing, standardising (allowing mix and match).

Automation Weaknesses and Challenges

Some mentioned standardising as a benefit, whereas others mentioned it as a negative – sometimes using the pejorative 'cookie cutter', particularly when it pushes out better solutions or makes them more expensive (because there are fewer people who can offer them).

Some automation is 'black box', which means the quality is harder to assess and making the right choice involves more risk. Indeed the speed of automation means that making the wrong choice is becoming a bigger problem (as is not making a choice at all).

If reporting is automated, but the data entry on the frontline is manual, the system can look more useful than it really is, leading to faulty decisions. Automation needs to be quality checked – data visualisation can fall short for non-standard projects.

Automation in Use	%
Analysis of survey data	42%
Charting and infographics	41%
Analysis of social media	35%
Analysis of text data	35%
Sampling	33%
Survey design	29%
Online focus group/IDI moderation	24%
Report writing	22%
Analysis of image and video data	20%
Project design	19%
Attribution analytics	13%
Matching suppliers and buyers	11%
Analysis of biometric/non-conscious data	10%
Matching contract "talent" to projects	8%

Base: 924

Where is Automation Heading?

The crowd shared their short to medium-term aspirations for automation. Key opportunities were:

- Integrating a picture of the customer, with data coming from many sources, being stored in an accessible format, and interrogated with automated tools.
- Increasing the ability of skilled staff to conduct more research and spend more time on insight they will spend less time on admin, repetition, and error checking.
- Allowing MR companies to be more competitive, including with non-MR companies.
- An expansion of MR among small and medium-sized businesses as research solutions become more cost effective without the need for skilled teams.
- Developing MR approaches that connect to tech-driven changes in consumers' lives (e.g. app-based approaches).
- Creating 'lite' versions of products with a low price or subscription model.
- Allowing analysts to work on more projects and spend more time on analysis less on design and logistics.
- Allowing researchers to handle much larger quantities of data, utilising standardisation, automation, and processing power.

Automation Threats

Key threats include:

- Automation means change, and not everybody likes to change.
- Artificial Intelligence (AI) may overtake large parts of current automation, making it redundant.
- · Automation may tend to report the simple truths, not the key ones.
- If research buyers are replaced by AI systems, then the human element in the supply of MR may be less relevant.
- The 'cost reduction' mentality may spill over to tasks that can't (yet) be automated taking some good solutions off the table.
- Potential for a dominant supplier to appear and distort the market (like Google in online advertising).
- The life cycle of some new tools may be too short to make money.
- Risk of annoying customers (i.e. the customers of the research clients) and customer backlash.

Acknowledgements

Thanks to the MR people who have helped crowdsource this section: Dangjaithawin (Orm) Anantachai (Intage, Thailand), Pravin Shekar (krea, India), Jon Puleston (Lightspeed GMI, UK), Fiona Blades (MESH Experience, USA), Greg Dunbar (Cint, UK), Lisa Horwich (Pallas Research Associates, USA), Jeffrey Henning (Researchscape, USA), Christian Super (ORC International, USA), Darren Mark Noyce (SKOPOS, UK), Jeffrey Resnick (Stakeholder Advisory Services, USA), Saul Dobney (dobney.com market research, UK), and Sankar Nagarajan (TEXTIENT Analytics, India).

A younger perspective on automation was eloquently set out in an <u>ESOMAR blog post by</u> Helene Protopapas from Nielsen. Helene disputes the notion that it is good for a younger researcher to spend hours checking data as part of the learning process, arguing for a 'different and high-intelligence starting point'.

The GRIT Report

The latest wave of the <u>GreenBook GRIT</u> study included a section on Automation in market research. The GRIT report confirmed that automation is in action all around us, with many organisations already using automation platforms.

The table shows the percentage of GRIT participants who are already using automation platforms to conduct a variety of tasks. The table is ranked from most popular to least popular.

The finding that over 40% of respondents are already using automation for analysis of survey data and for charting/infographics might seem surprising – but most survey platforms now offer a variety of automated options to produce results and output standard sets of charts. Indeed, automation is less of a binary divide and more of a continuum. The number of people using automation will grow – so will the breadth and depth of what the automation can deliver.

The bottom end of the GRIT table, matching 'talent to projects' and 'analysing biometric/nonconscious data' is partly (or largely) driven by the fact that most respondents are not involved in this sort of work.

The Client-side Perspective

In addition to the crowdsourced feedback and the GRIT review, I conducted interviews with two users of ZappiStore's automation offering (Brian Ley at Valspar and Don DiForio at T-Mobile both based in the USA) to gain another perspective. Here is a summary:

They are both using automated tools from ZappiStore to test ideas, concepts, and advertising for their research needs. These tests are characterised by high speed, low cost, and standardisation.

The main benefit, according to Brian and Don, is the ability to respond to and welcome requests from stakeholders who want quick research and consumer feedback in order to support a business decision.

I asked Don and Brian about whether the highly standardised nature of these automated tools was a problem. They agreed – the standardised test format was an advantage. A stakeholder might want to do the test and change some of the questions; normally this might lead to a discussion about the merits of the idea and cause a delay while these changes are made. With standardised tools, the options for the stakeholder are simple: A) use the test as is, B) don't test, C) pay more and take longer to get a tailored solution.

I pressed Brian and Don about the money they saved and the speed of the service. They both replied that financial savings were important and appreciated, but in most cases, it was the increased speed that was the key benefit.

When asked about the sorts of situations where these automated tools were less applicable, Brian and Don suggested qualitative research – wherever a bespoke strategic study was needed, where advanced techniques were wanted, and where access to background data was important (such as Link benchmarks).

Both expect more automation options to become available, with more linkage to integrated data, fewer long surveys, and a more customer-centric way of gathering information.

Automation And A Wider Context

In this section, I look at a number of topics related to automation and introduce issues surrounding AI (Artificial Intelligence).

Automation, Standardisation, and Agility

Before 1841, through the main part of the Industrial Revolution, there was no standard size of nuts, screws or bolts. Each blacksmith, company, and factory used their own range of sizes which severely limited the ability for machines to interact and made maintenance harder. However, in 1841, Joseph Whitworth introduced a standard that went on to become BSW (British Standard Whitworth).

Equipped with this standard, parts for machines could be built by different companies and assembled elsewhere; repairs could take place where a breakdown occurred – not where manufacture happened. Manufacturing started to shift to an agile model, where parts were made as needed.

Good automation requires standardisation. It is the standardisation and adoption of TCP/IP that makes the internet work, and the standardisation and adoption of HTML that makes the World Wide Web function. While market research has generally been good at adopting automation, it is has failed to create the necessary standardisations. There is no agreed standard for machine interpretable survey definitions and there is no agreed format for output. Indeed, a large amount of market research outputs are locked away in PDF, Excel, PowerPoint, Word, and proprietary platforms.

If market research is to maximise the benefits of automation and AI, it needs to adopt standardisation.

The Paradox of Automation and Increased Employment

In Western society, concerns about automation causing job losses and social disruption date back to the early 19th Century and the Industrial Revolution. But, it is because of the Industrial Revolution that more people were employed, better fed. housed, and clothed.

The economy won, many people won, but some people lost.

The history of automation shows that there are usually winners and losers. The losers are often easier to identify, as they are the people who lose their jobs or resources. The winners are those who most-effectively deploy the new technologies, those who are employed by them, and those who use the services and products. If we look at the early 20th Century and car building in North America, the losers were those who built cars on a small scale or focused on horse-drawn vehicles. The winners were companies like Ford and Chrysler, and the hundreds of thousands who found employment in the Detroit area building cars, supplying the auto industry – and of course the millions of people who were able to buy a car.

Automation initially tackled manual tasks (such as building cars and harvesting fields). Its second wave tackled repetitive tasks (such as giving cash to the customers of banks), or tasks where people could serve themselves (such as booking holidays and travel).

The current wave of automation is tackling more complex jobs, including many that were thought to be 'creative', such as:

- Media buying replaced by programmatic advertising.
- Journalism replaced by AI and crowdsourcing.
- Retail focus shifted online, from shops to warehouses.
- Hotels and taxis shifted model to self-employed (Airbnb and Uber).
- Market research replaced by DIY platforms like SurveyMonkey and pre-packaged solutions like those from ZappiStore.

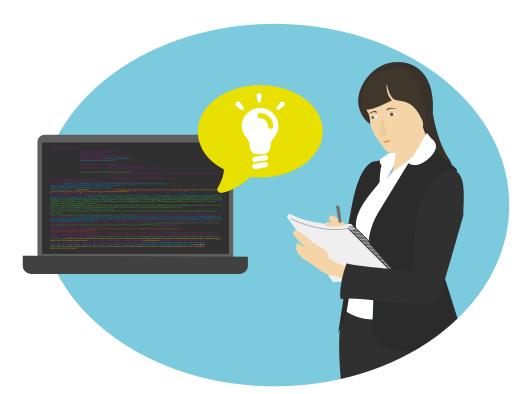
A recent McKinsey report, Where machines could replace humans—and where they can't (yet), looked at which tasks are most and least likely to be replaced by automation. They divided tasks into three categories, from 'highly susceptible to be replaced' to 'least susceptible'. The most susceptible tasks were predictable physical tasks, data processing, and data collection. It is interesting to note that two of these three relate to the market research industry (data processing and collection). The less susceptible group involved unpredictable physical work and stakeholder interactions. The least susceptible? Applying expertise and managing others.

Other sectors that look likely to be massively impacted include solicitors, accountants, HR professionals, middle-managers, and designers. Another interesting prediction, and an indication of the impact on creative industries, is that the rise of automation, computer animation, and AI could massively impact the movie business – including the roles actors play. In the future, Brad Pitt and Kate Winslet could find themselves increasingly competing for work with AI versions of Humphrey Bogart and Lauren Bacall.

Artificial Intelligence

Your smartphone and computer are likely to be using Siri, Cortana, or Google Now. These are personal AI assistants that interpret what you are saying and provide solutions. Other applications of AI that surround us are search engines, image recognition (e.g. Google Goggles), spam filters, online help bots, telephone bots, and online ad targeting.

At the high profile end of the spectrum there are also examples like Google's Driverless Cars, and the recent Gocompetition between Korean Grandmaster Lee Sedol and Google's AlphaGo (won by the bot). There are some interesting developments in AsiaPacific too – advertising giant McCann has hired an Al bot to be a creative director in its Tokyo office. Hong Kong venture capital firm, Deep Knowledge Ventures, also appointed a bot to its board in 2014.



Self-driving cars are already on the roads of California, at limited speeds and with occasional bumps, but this is a technology already in place. The impact, once cheap and competent, is likely to spell the end of taxis and perhaps even private car ownership for most of us. One aspect of self-driving cars that is already in widespread use is of course satellite navigation (or SatNav).

Self-driving cars and Uber provide an interesting perspective on how automation can work. Uber itself is a disruptive innovation based on automation; drivers become self-employed 'partners' using an app, disintermediating the traditional taxi companies by providing a service that out-competes traditional alternatives. In many cases it has increased the total number of people employed to drive people around. <u>Uber has forecast</u>, however, that all its cars will be driverless in the future.

Automated Journalism

AP (Associated Press) has been using automation to increase capacity and reduce costs. According to <u>Journalism.co.uk</u>, AP's business reporters were producing about 300 stories per quarter on topics such as net income and sales. Since automation, the volume of stories has increased to 3,700 per quarter. AP has been able to use this automation to move their skilled resources away from churning out earnings reports and towards hunting for stories that go beyond the bare numbers.

AP's use of automation provides some interesting insight into timelines. They started testing automation in 2012, but it was not until 2014 that they used automation for semi-live testing. The first step was to let automation produce the earnings reports, with the journalists fine-tuning copy before publication. By October 2014, AP moved beyond this double-check system and increased productivity.

AP are hoping to reach 4,700 reports per quarter, and beyond that be able to use their automation journalism on any topic that uses structured data.

Innovations and New Money for Al

The pace of change in AI is dazzling, as the highlights below illustrate. The speed of innovation and the large sums of money being invested in it dictates that change is happening – and it could be much faster and more profound than might have been expected.

Celonis, <u>as reported by Bloomberg</u>, recently received \$27million for an AI application that seeks to compete with the consultancy services offered by the likes of McKinsey and Bain. Celonis works by taking in a wide range of operational and transactional data, identifying opportunities to improve corporate performance.

Perhaps the best indicator of the buzz around AI is the interest shown by hot tech companies such as Apple, Google, and Facebook. Back in April, <u>Techworl</u>d highlighted investments in AI by ten of the leading tech giants.

Al and Market Research

All has been relatively slow to take off in Market Research due to the lack of relevant tools. However, I think there are signs that this is about to change. We will see several All incursions into market research over the next five years:

- Text analytics. This has been improving for years and we are now at the tipping point. With text analytics in place, the balance between open and closed questions (and between qual and quant) will shift. We know that openended questions are usually richer, but closed questions (e.g. a 5-point) scale are easier to process. When we can process the open-ends, we will encourage the use of them, rather than avoid them. We are already seeing Al-driven platforms like Remesh emerge these use Al to analyse thousands of verbatim responses in real time, delivering new research approaches.
- Image analytics. When researchers ask participants to take pictures, we normally only ask a few of them, and when we ask them to take a video we limit them to 30-40 seconds. This is because it takes so long to process images and video using humans. But now, the tools to process images and video with bots are arriving, which will change the tasks that researchers ask participants to do.
- Project design. This is likely to be achieved by creating a Q&A system with users that suggests research routes. Once
 a route is agreed, the bot will create the survey, commission the research, and interpret the results. This is close to
 what some existing products do (including many from ZappiStore), but it goes to the next step. Current systems have
 a limited range of options and the approach is relatively formulaic. The next step is to widen the choices and to make
 the interpretation more intelligent, utilising open-ended responses.
- Complex Analytics. Data sets are getting larger and more complex. Data sets for things like customer satisfaction and brand tracking are also becoming more fragmented as people seek to shorten surveys, add Big Data, and interrogate social media. This sort of complexity needs AI to make it practical and cost effective.

ModeratorBots. Most online discussions and online communities are limited in size because of the need for humans
as moderators. This is changing and <u>chatbots are becoming more common</u>. Chatbots, based on text recognition
and AI will create a range of new options for online discussions and communities. This shift, like others above,
will encourage the collection of more data which in the past has only been processed qualitatively – it can now be
addressed by AI.

Automation Today, Three Big Trends

The three big trends in automation are:

- 1. Robots devices that work without a person being there. For example, driverless cars and trains, automated hotel check-ins, drones, and robots in factories.
- 2. Platforms apps and software that are disintermediating tasks and markets. For example, Expedia, ZappiStore, and Lift.
- 3.AI automation that tackles tasks such as analysis and creativity will mine data to avoid fraud, design research, and suggest business strategies.

The Next Five Years

Here, leading voices in the market research and insights industry were asked to tell us in very short form their predictions for automation over the next five years.

Stan Sthanunathan, Executive Vice President, Consumer & Market Insights, Unilever

Automation is the inevitability that we are facing. All is emerging and it's showing a lot of promise and potential. But, there will always be a premium for human intelligence. The journey the researcher is on today needs to move from "the what?" to "the so what?" and "the now what?". This will be enabled by automation and Al, but will humans ever be replaced for these two? This is where people have to develop skills going forward – if we want a thriving career in this profession.

Sue York, Author, The Handbook of Mobile Market Research

I think we are only just beginning to understand the likely impact of automation on market research practices. In the short term, people will be hoping to see speed and efficiency improvements, leading to cost savings. In the longer term, automation will lead to a change in the skills needed for the research industry. A further complication here could be that we need to rethink how we develop talent, as the old model of transitioning researchers through tasks of different levels of complexity may not apply – the simpler tasks will be automated and will not serve as part of the learning curve.

Adriana Rocha, Co-founder & CEO, eCGlobal Solutions

Although we've seen an increasing number of applications/platforms offering automation of data collection, analysis, interpretation, and reporting, I believe we're still in very early stages of its effective usage in Market Research. Nowadays, the key benefits of automation are faster and cheaper market research projects – in the future, automation will play a key role in data quality and knowledge generation never imagined before. Disciplines such as AI, machine learning, deep learning, and data science will become part of the basic market research tool kit.

Lenny Murphy, industry thought leader & editor of GreenBook Blog.

We are also seeing the rapid introduction of platforms that are "app stores" where IP-driven tools aligned to specific business issues (such as concept testing or brand tracking) are being automated to deliver templated solutions for clients. In addition, new automation platforms that deliver online sample in real-time enable "mass qualitative" via AI and the streamlining of questionnaires now available and gaining significant traction. Indeed, the old saying that "what can be automated will be automated" is a truism in research today.

Kelsy Saulsbury, Manager, Consumer Insight & Analytics, Schwan's Shared Services, LLC

The adoption of automation and AI tools will increase more rapidly once they become more intuitive to use with shorter learning curves, trialled with smaller risk. Many of today's tools have start-up costs in terms of money and time (like installing a new production line for blowing glass or producing cars – the benefits don't kick in until you are trained, up and running, and work out the kinks) whereas the future will hold more low risk options for entry and trial (like ordering Uber once just to see if it works for you).

Stan Knoops, Global Head of Insight at IFF, International Flavors and Fragrances

I think everybody today understands the need for automation and believes it is the way to go. However, there are many (agency-side and client-side) who started with automation but could not meet expectations, or found later in the process that it is extremely difficult to implement. In most cases, there is a lack of knowledge about how to do it well. Or, more accurately, a lack of setting realistic goals. Rather than have everything automated, look at the real pain areas – automation can target these easily.

Automation is not a silver bullet that can resolve all of your pain areas – you will have to target wisely – and it is not easy. It requires on-going maintenance and attention, not just a one and done. People are key to the process. There will be new roles for people, and people need to develop skills in these new areas to make it work for them.

Two Senior Directors at a Global Automotive Manufacturer

As market researchers, automation (in its broadest sense) will create an opportunity for researchers to deliver better, faster, and richer insights. Within automation lies the promise of taking away the mechanics of research, helping analysts focus on the "really fun" activity of generating insights. It could also help gather data from time-starved respondents who might otherwise drop out or be overlooked. There are also types of research which are growing in importance where automation's role will be more of a partnership. Deep ethnography, for example. Automation could help to make ethnographic studies of behaviour deeper and more textured. Or, automation could form a marriage between big data and ethnography to give both a "bird's eye" and a "ground level" view of a research question.

The Case for Optimism

This is a contribution from Joan Lewis who makes the case for optimism in terms of Automation, Al and market research.

"The research industry is changing and expanding swiftly, creating disruption to both the kind of jobs that exist and the number of them available. Technology and automation have combined to form a major force behind this change. As others have pointed out, there are parts of the research world that can and will be credibly replaced by automated solutions; the process began decades ago".

"These changes are seen by some as a threat to not only jobs, but to the industry as a whole. However, I would argue the opposite – the changes coming from technology, automation, and emerging sciences are creating the most dynamic collection of opportunities in insights and analytics in a generation. This is the most exciting time for our field in at least the last 30 years. Researchers should be excited, and people considering their career choices should be attracted to this dynamic field. Users of research, corporate researchers, and the suppliers of research all have before them brilliant opportunities".

"Let me highlight three key reasons for optimism":

"First, the field is expanding to encompass new and interesting specialties – researchers can now work in, or be drawn from, data science, neuroscience, psychology, coding, ethnography, cognitive science, economics, automation, etc. The opportunity to make business contributions from traditionally academic or "backroom" disciplines is exciting for individuals from these expanding areas. The ability for researchers to work with and learn from these fields is unprecedented. We can learn and synthesize across these resources and bring better insights to our businesses".

"Second, automation and technology are giving us access to a vast array of behavioral data previously unavailable. Technology has long been a driver of cheaper and faster data - which is important - but now these new tools are opening new worlds: social data, text analytics, data from the internet-of-things, personal tracking data, advertising response data, etc. Suppliers and corporate researchers can now observe reality through data and append that data to information about individuals or attitudes. They can go deeper with surveys and deep qualitative research to create a more complete, more insightful, consumer story on which to drive business growth".

"Third, automation and technology are close to helping us solve the intransigent problem of how to drive insight to application. Al will help us tell more compelling stories, and interactive systems will help guide users to the information they need, as opposed to being overwhelmed by "dashboards"".

"However, this optimistic view of the future only applies to those willing to grasp opportunities. The people and companies who move toward automation, technology, and emerging sciences with confidence will harness their potential and create a future of their own, benefitting from a more dynamic world. However – those who approach automation, technology, and emerging sciences with trepidation will find themselves in our industry's rear view mirror for the next decade".

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Automation In MR, A Journey Not A Destination

Pulling together the threads in this report I think we can see that automation has been happening for years, is happening now, and will continue happen in the future. The question is not whether automation is a good thing, but how we can make good things happen through the process of automation.

The following points show the different ways in which automation can, and is, being used to deliver better outcomes.

- More research. The reduction in costs and the increase in speed brought about by MR automation has resulted in more research being conducted. The growth in DIY tools like SurveyMonkey and research communities illustrate what happens when the marginal cost of research is reduced and the speed of execution is increased. This trend will continue as automation becomes ever smarter and more widely available.
- Improved Consistency. During the interviews I conducted for this report, it became clear that many people wanted the stages before and after their involvement to be automated. They wanted their inputs to be more reliable and consistent, and they wanted to know that their outputs would reach their intended recipients without being distorted or corrupted. This highlights one of the key benefits that automation can provide, namely consistency. With consistency it becomes easier to assemble different components in order to to create a better total.
- The Agile Research Paradigm. It will benefit from further automation. This process is based on more tests being
 carried out, feeding back into the business process, and allowing the business to adapt and optimise the outcome.
 For example, during concept development, market entry, or customer centricity programmes, an agile research
 approach would be testing ideas and feeding information back to those designing and running the project. This
 research paradigm is very different from the traditional big project approach and it is a better fit with the way many
 organisations are working.
- Improving Productivity of Consultants and Analysts. There seems to be two things that the users of research really want: faster/cheaper research and more consultancy/advice. At first glance, these two look contradictory, but automation (including AI) can help provide this combination. With automation taking care of the details and logistics, analysts and consultants (qual and quant) can focus on the client, the business problem, the interpretation, and advice. As we move forward, system commands along the lines of 'chart that', 'verify that', 'compare these' and 'find exceptions to this' will increasingly reduce the need for consultants and analysts. This will free them up to focus on their key tasks.



Being An Automation Winner, Not An Automation Loser

In drawing up this report I have arrived at several conclusions:

- 1. Automation is an accelerating trend within market research and wider society. Most automated solutions to current problems will only have a short lifespan before being replaced perhaps three years from adoption to replacement in many cases.
- 2. Automation will displace large numbers of jobs within the market research industry, and many of these jobs will be professional, skilled jobs. As I have said <u>elsewhere</u> (Poynter, 2016), my estimate is that over the next five to ten years 40%-60% of existing market research jobs will disappear, but I also expect 20%-30% new research jobs being created.
- 3. Business choices about how to use research will increasingly be shaped by the possibilities offered by automation. This will lead to faster projects and more 'test and learn' (or agile, or trail and error depending on your preferences).
- 4. More people will be conducting research most parts of an organisation want to connect with and hear from their customers. The start of this trend was through DIY platforms like SurveyMonkey, but these still require people to be able to design and analyse surveys. The next step will be fully-finished, shrink-wrapped solutions that people in NPD, Sales, Operations, HR, and Finance can deploy without having to study market research.
- 5. Geography will continue to decline as a key factor a trend greatly accelerated by the adoption of online surveys and the use of international panels.
- 6. Automation will produce more standardised research. AI will produce smarter research, and automation will favour well-organised companies. AI will favour smarter companies.

Given these observations, this my advice for companies and individuals who want to be automation winners, rather than automation losers:

Advice For Clients

Focus on what the real blockers are, not on the technology. Do your key stakeholders need faster results, better results, deeper results? Another element to consider is how much time you can save. Using a standardised tool can reduce the amount of time you have to spend liaising with internal clients and suppliers, giving you longer to address issues like strategy and insight.

Research is becoming more democratised. More departments are conducting their own research, often using DIY tools. Automation can help, allowing to focus more on colleagues and advice – less on the logistics of research.

But, you need to stay ahead of the game. You need to know more about the research tools available than your non-research colleagues. This means attending more of conferences, webinars, supplier events, and reading more magazines, blogs, and books. Two handy resources for keeping up-to-date with trends are NewMR and the GreenBookBlog.

Advice For Suppliers

My first piece of advice is that unless you love high risk/high reward strategies, do not take any big bets. Most profits over the next few years will be related to technology and automation. However, most of the changes that happen will fail – the rate of attrition will be high.

My second piece of advice is to avoid biting off more than you can chew. Take tasks one, or two, at a time. Implement automation and move on to the next tasks. When choosing what to automate, try to get it to pay some positive ROI in the first year. Many of the automation changes are only going to last two to four years before needing to be changed again – you don't want to keep a system just because you haven't finished paying for it.

Expect to grow the size of your tech/IT team. As we go forward, you will probably need more people in the tech/IT area. This seems odd since outsourced, SaaS (software as a service) is the big trend, but it always seems to end up needing more tech/IT people.

Advice For Individuals

Some jobs will be more at risk from automation – for example, working on repetitive projects such as tracking and customer satisfaction, and working on repetitive tasks like scripting surveys and coding open-ended responses.

The key roles I think will benefit from automation are:

- Those involved in installing, training, and promoting automation platforms.
- People focusing on other people. For example, client success managers, account managers, ethnographers, and sales teams.
- Those who are increasingly being referred to as 'talent'. For example, great presenters, good leaders, out-of-the box thinkers, designers, video editors and so on.
- People who can create non-linear solutions to problems. Automation and AI will create ever more prescriptive boxes, but the people who can think outside these restrictions will be of increased value.

Closing Thoughts

Automation is happening. It will continue to happen, and it will change the way you work. Market research automation and AI have the opportunity to expand the role of evidence-based decision making – faster/cheaper research facilitates new ways of working, moving away from the 'big project' approach to an agile, learning approach.

In the past automation has mostly impacted manual or junior staff. In the future it will affect senior and creative staff too. There will be winners and losers – but you want to be one of the winners.

The best place to be is in creating, implanting, or using automation. The worst is in doing the same thing you were five years ago.

References & Resources

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Resources and References

<u>NewMR</u> – NewMR have a vast library of webinars (recordings and slides) on research topics on their 'Play Again' page. They also produce a weekly Newsletter.

<u>GreebBookBlog</u> – the GreenBookBlog is edited by Lenny Murphy and features a cutting edge post every day.

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