Hard Facts

How the workplace is pioneering the use of data in organisations

BW WORKPLACE EXPERTS

BUILT WITH: PERSONALITY

Insight *Briefing*

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Foreword

In 2017, a content creator called Oobah Butler *decided that he wanted to do something with the experience he'd gained writing fake positive restaurant reviews on TripAdvisor[1].*

What if, he wondered, he set up an entirely fictitious restaurant based in the shed in his garden and then started to manipulate TripAdvisor ratings?

What happened surpassed his wildest expectations. In just six months The Shed at Dulwich became the top-rated restaurant in London, even though nobody had ever actually eaten there, based solely on fake reviews, fake pictures and the word of mouth created by a complete inability for anybody to book a table.

It's a tale that tells us an awful lot about the way we live now. Not least, the way in which we rely on rating systems and the Internet to tell us what we should think and do.

We routinely check TripAdvisor for our meals and hotel stays, IMDb to tell us which movies to watch and even crave the dopamine kick we get when somebody likes something we share on social media[2].

This is just one part of a wider issue rooted in the increasing convergence of the digital and physical world and its ability to generate a huge amount of useful information. This process is so pervasive and based on so many data points, that it has even generated its own terminology and a number of new jobs and disciplines. Data Scientist has now been identified as the 'best job in America' for three years running.[3]

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Its creeping definition now incorporates a wide range of fields such as business analytics, the application of data, and good old-fashioned statistics.

In a workplace context it can range from the sort of Big Data organisations generate through the use of building sensors through to HR Analytics and the use of ratings in the supply chain.

This kind of information is obviously extremely valuable for a business. But its usefulness will depend on context and objectives. There is also a temptation to complicate issues that may be best judged with a simple binary decision between two possible outcomes.

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These are all issues that are considered in detail in this white paper which looks at both the general issues surrounding data gathering and analytics and how these might be applied in the context of the creation or redesign of a workplace. It will look at how we must never take the individual out of decision making and goal setting and remain focused on people, with all their unquantifiable preferences and behaviours.

Hard Facts

A measured approach

One of the most commonly talked about issues amongst workplace professionals over the past few years has been the ability of data to transform the way we think about, plan, design and create workplaces.

Much of this debate is centred on major technological issues such as Big Data and the Internet of Things and the increasingly sophisticated approach to existing technologies such as smart building systems, booking systems and workplace sensors.

Similar trends are unfolding in the overlapping field of HR. Although HR departments have traditionally collected key information on issues such as turnover and absenteeism, the increasing convergence of the digital, physical and cultural workspace means they are more and more involved in the gathering and analysis of wider forms of data related to performance, productivity and wellbeing.

So, it's no surprise that they are increasingly important decision makers and influencers in workplace strategy.

Increasingly the use of analytics in a workplace context has focussed on people. A recent report from the Institute for Corporate Productivity (i4cp) called The Promising State of Human Capital Analytics[4], suggests that nearly 70 percent of organisations are using people-based data to drive their businesses in some way.

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"Successful companies tend to be those that purposefully use data to anticipate and prepare rather than to react to daily problems," the authors say. "The future focus of professionals in the human capital analytics field will increasingly be on using analytics to guide strategic decisions and affect organizational performance."

Dealing with uncertainty

This embedding of technology in the physical world gives us unprecedented access to detailed information. The terms we use to describe the quantities of data are almost meaningless in their vastness. Can anybody envisage the difference between an exabyte and a yottabyte?

Our actions and interactions with physical space generate data in such quantities that we are developing new roles and professions to make sense of it all. Data science is the filter that allows us to distil information into wisdom.

The challenges we face now are massively augmented iterations of a pair of problems that we have known about for a long time, namely what to measure and what to do with the measurements we produce.

It's important to get this right. In a business context, most people will be aware of Peter Drucker's

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famous dictum that 'what gets measured gets managed' but maybe less so with his idea that 'there is nothing quite so useless as doing with great efficiency something that should not be done at all.'

There is an added complication in that we can change something merely by observing it. In quantum theory this is described as the Heisenberg Uncertainty Principle, but a similar idea is at play in working environments.

If we tell people we are measuring them by the hours they are at their desk, they will behave in one way. If we tell them instead they are to be measured on their output, they'll behave in another.

Drucker always made a related distinction between efficiency and effectiveness and it's apparent that data by itself tells us little or nothing. The siren call of Big Data can sometimes lead people to pursue the wrong goals. A 2015 study by PwC points to an alarming failure rate for Big Data projects (5). It found that three quarters of organisations lack the skills and technology to use their data to gain an edge on competitors.

The study exemplifies the problems that arise from poor data management and a lack of skills in organisations to set objectives and apply data intelligently and with an eye on the future.

There are lessons here for occupiers in our data rich age. Technology and data by themselves are not enough. Organisations must acquire the skills to filter and analyse data and use it to meet the right objectives and ask the right questions about what they want from their facilities, employees and working culture.

An investment in producing Big Data about a workplace must be set in the context of a wider strategy about performance goals, metrics and continuous feedback. Occupiers should work closely with their clients, suppliers and internal IT, HR and property professionals to identify the performance measures that best support the enterprise's business goals and strategies.

Peer-to-peer reviews

We also have unprecedented access to the experience of our peers. Most of us commonly experience this in our day to day lives when making decisions about products and services but it's a commonplace practice in B2B purchasing decisions too.

According to a report from online marketing firm Podium, reviews impact purchasing decisions for 93 percent of buyers, 82 percent of people now read reviews before making purchase decisions, 60 percent look at reviews on a weekly basis and if the reviews make them confident in a product or service then 68 percent of them are then willing to pay up to 15 percent more than a standard price.

Google, Trustpilot, Feefo and Bazaarvoice are all commonly used B2B review sites, although Google claims an extra degree of impartiality because it does not make money directly from its reviews. Glassdoor is also important to prospective customers because they will often make a judgement about the the way a firm treats its employees as a guide to its general approach to business.

Of course there is an issue here of how reviews can also distort perceptions. A 2016 report from Pew[6] backed up the results of the Podium study in the prevalence of the use of online reviews.

But it also found that people could be circumspect about the information available to them. Only half of the people surveyed said they felt that reviews give a generally accurate picture of a product or service.

This is as it should be. Reviews – and especially rankings – tend to cluster around extremes.

So people are far more likely to submit a review if they've had notably good or bad service.

The Pew study reflects how people can use their experience to gauge the validity of reviews and how applicable they are for their own needs.

The use of peer to peer reviews is best seen as part of a wider attempt by organisations to use analytics as a way of developing a better understanding of what their customers want. A 2018 report from MIT[7] shows not only how firms are getting better at judging how to use data to gain insights, but also how they are applying it to better engage with customers and provide better services.

Even so, senior executives still have a propensity to filter the data they receive through their own experiences and perceptions. A 2017 study from data analytics firm Alteryx[8] found that managers will often fall back on gut instinct when it comes to final decisions, regardless of the amount of data they have and how much time and effort they have spent acquiring it.

There are clearly a number of factors we take into account when making decisions and that is perhaps exactly as it should be.

Procurement, trust and the delayering of supply chains

The experience people have of buying products in their personal lives has had an understandable influence on their behaviours and expectations in B2B purchasing. This sets a high bar when you consider how seamlessly efficient organisations such as Amazon are in creating satisfied customers. Nevertheless, it's a challenge that has to be accepted and it's important to understand what lessons can be learned from B2C providers.

One of the key drivers of satisfaction lies in interactions with technology. This isn't just about the use of specific technologies such as eProcurement platforms but also a more generalised approach to how firms interact with clients and technology. People want technology that is easy to use and intuitive. This includes the ability to learn about products and services.

There are some aspects of organisational procurement that are unique however. For example, there are logistical and compliance issues that must be taken into account, especially for sophisticated and multi-layered purchasing decisions. There is no reason why B2B transactions can't aspire to the same levels of excellence as those in the B2C market, but they are often far more complex. In complex business transactions, there is often almost as much focus on the journey as the destination.

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While an Amazon customer will be happy to order a book and have it delivered the next day, there is no interpersonal relationship involved beyond the technological interface and no need to delayer the supply chain; for example by ordering the book from Amazon and then having it delivered by a courier of your choice because you don't trust the one Amazon uses or you think you have a better option.

By contrast, the procurement of a workplace typically involves a complex supply chain, a long decision-making process, careful selection of suppliers or a primary supplier, the choice of procurement model and so on.

Of course, the simplest route for procurement is the selection of a single trusted supplier who then manages all of the sub-contractors and suppliers and shoulders most of any risk. Ideally this will be a transparent relationship, especially when it comes to issues such as the environmental standards of everybody in the supply chain or compliance with legislation, so the important thing is to develop trust and a mutually beneficial relationship.

However, sometimes the demands can appear contradictory. End users may want to strike the right balance between short term value and long term return on investment. They want to work with a trusted partner, who they also want to carry most or all of the risk of the project. And they want to maintain, long-term relationships with a trusted group of suppliers while maintaining freedom to choose another procurement route.

These are not insurmountable issues and they can be overcome primarily by the development of long term relationships and a focus on long term goals. Expediency may encourage organisations to take on more risk by delayering the supply chain, and that may be the right decision in the right circumstances.

Data plays an important role in decision making about the supply chain. A 2015 study from Deloitte called Business Ecosystems Come of Age (9) identifies the ways in which complex supplier networks that focus on knowledge sharing and collaboration add more value than simple transactions. The data sharing of everybody involved in a relationship creates new insights and allows the partnership to develop for the benefit of all parties.

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Blockchain and the trust economy

In any business domain right now, it's impossible not to have at least a word about blockchain and the trust economy.

Blockchain is a much talked about but little understood shared -ledger technology that until recently was most closely associated with similarly discussed cryptocurrencies such as Bitcoin, but is now seen increasingly as the key factor in the emerging 'trust economy'.

So, the traditional, dry methods of gauging trustworthiness and reliability such as credit ratings and legal instruments are supplanted by the codification of reputation in the peer to peer systems we've already looked at.

Blockchain looks set to take this approach to the next level. For individuals, the factors that determine their trustworthiness may include financial or professional histories, tax information, medical information and so on. Similarly, companies could use blockchain to establish their trustworthiness as a business partner.

Blockchain also makes it possible to share information with others to exchange information safely and efficiently. This could transform reputation into a manageable attribute.

Getting back to basics in measurements of success

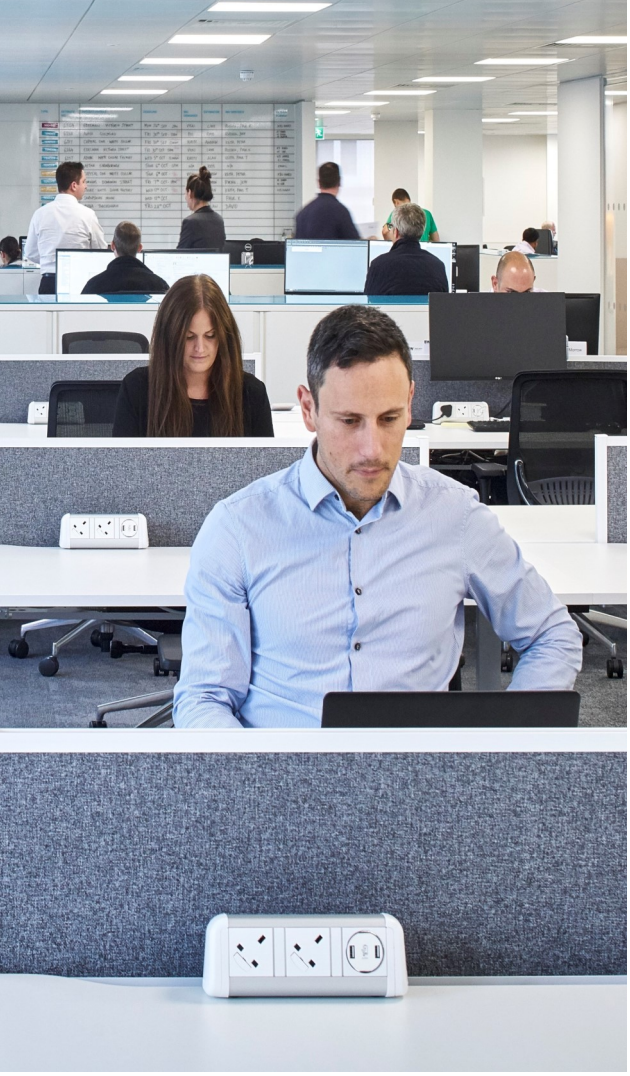
In a world with masses of sophisticated data, we can forget that on certain measures, success can be defined in purely binary terms. At the very outset of an office fit-out we can provide yes or no answers to the most fundamental questions of whether the project was completed on time, to budget and with no defects.

The same approach can be extended to the outcomes of the workplace design itself because it is extremely likely that it will have been created with a series of clear objectives in mind. These are likely to include the fostering of collaborative work, wellbeing and productivity, accessibility, the user experience and the integration of technology.

At the root of all these issues is how well they create a productive environment for people, and so we are fortunate that we have a range of metrics in which to assess the performance of the workplace in this regard.

As we have seen, HR analytics and post occupancy surveys can play an important role, but so too can the availability of utilisation data for spaces. It is increasingly likely that this data will be generated organically in an environment with a choice of settings in which people can work as part of the process whereby they move around and book space through apps and smart building systems.

A report from the Worktech Academy[10] into the use of utilisation data cites research from Gartner that by 2020 Internet of Things technology will be embedded in 95 per cent of electronics for new product designs. This represents a near universal convergence of the digital and physical worlds and it



offers up the chance to have almost complete knowledge of how people interact with their surroundings.

We also have the possibility to check our own data and outcomes against those of everybody else in similar workplaces. Over the past few years, firms like Leesman and Hatch Analytics have sprung up to create huge databases with which we can benchmark our outcomes against peers.

This can be essential when we know that workplaces are a source of competitive advantage. We can gauge success much more objectively when we know from Leesman's analysis of over 2,000 workplaces and 276,000 people that just 57 percent of employees agree that their workplace enables them to work productively or that just a third of new workplaces are seen to be delivering exceptional results.

Measuring success

Understand your objectives and the questions you need to answer

This may seem obvious, but it remains the most common reason data analysis fails. Defining the question will determine the complexity of the answer you need. Don't be afraid to ask a question that demands a simple answer, even when you know the data exists to make it more complex. The inverse is also true. You should also establish whether you need to ask the question again in future and how frequently.

A recent report from Harvard Business School[12] identifies the issues that can arise when organisations set the wrong goals and ask the wrong questions.

Identify the data and resources you need in order to measure success

A range of data will be available within any organisation ranging from financial and HR analytics to building systems, interviews and surveys. These can be supplemented very easily with a range of tools and devices to provide greater information on key issues. The challenge is to establish the key metrics and methods of analysis, including acquiring skills in data science, if necessary.

Benchmark and establish baseline measures

Baseline measures establish a reference point against which you can assess the success of changes made to the workplace over time. It's worthwhile to benchmark results against other organisations, especially if one of the key objectives is to establish competitive advantage over them. Data without context can become meaningless or encourage firms to set the wrong goals.

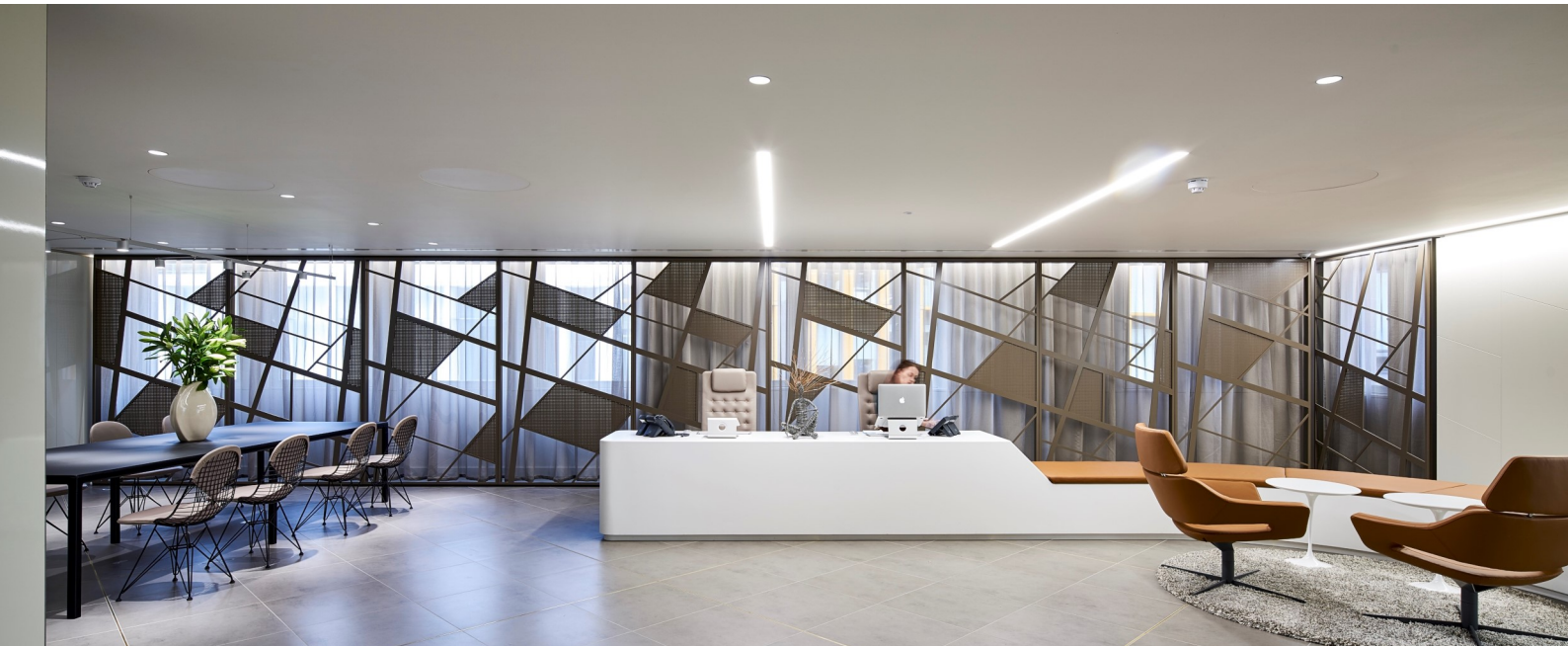
Repeat and start an ongoing conversation

There should be constant feedback of information and a consequent dialogue to ensure that the workplace remains aligned with objectives and strategy. A workplace is never complete.

Remember it's all about people

References

1. *https://www.vice.com/en_uk/article/434gqw/i-made-my-shed-the-top-rated-restaurant-on-tripadvisor*
2. *https://www.ama.org/publications/MarketingNews/Pages/feeding-the-addiction.aspx*
3. *https://www.forbes.com/sites/louiscolumbus/2018/01/29/data-scientist-is-the-best-job-in-america-according-glassdoors-2018-rankings/#1f0b159c5535*
4. *https://www.i4cp.com/productivity-blog/2016/06/29/infographic-the-promising-state-of-human-capital-analytics*
5. *http://www.ironmountain.com/Knowledge-Center/Reference-Library/View-by-Document-Type/Landing-Pages/P/PWC.aspx*
6. *http://www.pewinternet.org/2016/12/19/online-reviews/*
7. *https://sloanreview.mit.edu/projects/using-analytics-to-improve-customer-engagement/?utm_medium=email&utm_source=newsletter&utm_campaign=darpt2018*
8. *https://www.dataiq.co.uk/article/gut-we-trust-alteryx-finds-data-distrust-behind-instinctive-decisions*
9. *https://www2.deloitte.com/content/dam/Deloitte/co/Documents/strategy/Business%20Transformation.pdf*
10. *http://www.worktechacademy.com/utilisation-technology/*
11. *http://www.leesmanindex.com/250k/*
12. *https://hbswk.hbs.edu/item/when-goal-setting-goes-bad*



About BW Workplace Experts

BW is a London based fit out and refurbishment expert. It works with occupiers, asset managers and consultants to deliver workplaces with a personal touch.

In collaboration with clients and consultants, it continually strives to create a process that is shaped not only by outcomes, but also by the journey.

With 17 years in the game, it is still as passionate today about making a difference as it was at the beginning.

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