How to Buy Eye Tracking for Market Research

December 2010

Overview

Eye tracking today suffers from a commoditised status within market research and its true value can be overlooked or diminished due to poor practices or the wrong approach. Misconceptions of high cost also plague it and consequently it's infrequently applied to mainstream research beyond the more advanced instances of retail research. In this article readers will discover the reasons why eye tracking may have disappointed in the past, the probable reason why this was, and how to avoid these common pitfalls for meaningful results. Part discussion, part purchase guide, readers will be armed with all the 'must ask' questions when commissioning an agency and 'must know' arguments when selling eye tracking into their business. Above all readers will learn why eye tracking, used correctly, still rightfully deserves the enthusiasm the industry showed it when it first entered the methodological toolbox.

Don't Miss: The accompanying factsheet to this article, available here.

How to Buy Eye Tracking for Market Research

Hasn't Eye Tracking been 'done'?

Eye tracking in market research has a chequered history. Like many methods that have made it into the researchers' toolkit it followed considerable hype. However eye tracking has proven a particularly difficult labour of acceptance, largely through no fault of its own. The tools, techniques and surrounding methodology have grown up considerably of late and the eye tracking industry has come a long way in a few short years. Today eye tracking is frequently applied in the field of web design and usability testing yet remains relatively under used in market research.

We recognise that early adopters of eye tracking, done badly, may have been burned and that this had bred a hesitance to engage. This article is intended to re-familiarise the research buyer and agency researcher alike with the initial enthusiasm for the method and to help them **rediscover the meaningful insight and opportunities eye tracking can provide**. This article covers the basic uses of eye-tracking, what to consider when buying it and, crucially, how the range of ways eye tracking can be conducted and analysed contribute greatly to its quality and potential value to a business.

Remind me again what eye tracking is?

In case you're still wondering (or you've forgotten), eye tracking uses near-infrared technology and complex mathematical algorithms to track pupils, allowing a researcher to **capture exactly what someone is looking at on a screen or in a store**. Added to this is the ability to instantly playback session footage and discuss with the participant their thoughts and feelings in response to specific events or stimuli (called a retrospective methodology). This has obvious benefits to the investigation of anything from retail environments, to websites to print or TV advertising.

Modern eye tracking sessions are easy to set up, unobtrusive and provide an extremely natural experience for the participant. Long gone are the scary head mounts and rigid seating arrangements of the early days. In a lab environment participants sit at a regular monitor with no invasive attachments. Recent developments have improved the in-store experience too, shoppers need only wear lightweight glasses and carry a small digital recording pack that fits easily onto a belt or in a handbag. Either from testing in the lab or in-store, the resulting data can be quickly processed to produce visualisations, such as heatmaps, gaze plots, etc. for analysis.

> *"Eye tracking remains the cheapest, most flexible and least intrusive neuro-technique"*

How can it inform Market Research?

The attraction of eye tracking to the average market researcher or insight buyer is clear. The prospect of seeing the world through your customers' eyes, literally, as opposed to relying on self-reported measures, is exciting. As much as 95% of buyer behaviour is formed in the subconscious, and eye movements are also largely independent of conscious control. Eye tracking, therefore, is a clear step towards objectively understanding what really drives the shopping experience and purchase decisions, at a subconscious level, as they happen.

Researchers will find eye tracking particularly useful in retail environments as applied to;

- Store layout
- Fixture planning
- Categorization
- Packaging and promotion.

Uses outside the store include;

- Website optimisation,
- TV & print advertising
- (and increasingly) Mobile applications

In traditional measures, such as focus groups, depth interviews or survey based questioning, participants are often asked to comment on motivations and impulses that are rarely reflected upon, or even accessible to introspection at all. They also often occur remotely from the context of the behaviour of interest e.g. point of purchase.

Attitudes and stated intentions (such as those gathered in surveys or groups) rarely correlate with actual behaviour, this is the 'say/do' gap that is known, but often underestimated by the research industry. Observation and ethnography start to go some way to addressing these shortcomings but require inference on the part of the researcher to understand what the participant was trying to achieve.

Eye tracking makes this job simpler and more accurate. In a retrospective methodology, as used by SimpleUsability, the researcher starts with a behaviour (captured as a participants' eye tracking footage during a task or shop). This then acts as a powerful cue to show back to the participant whilst probing intentions and motivations present at the time of the behaviour. It elicits a far more accurate account of what happened, direct from the horse's mouth. Inference on the part of the researcher is removed and the eye tracking provides irrefutable evidence of what really happened.

Eye tracking is also often misunderstood solely as a replacement quantitative tool, which can make it appear expensive, when in fact, much of its intrinsic value is demonstrated in a qualitative approach. Such value can be easily extracted by adding a small number of retrospective interviews onto a quantitative project.

There has been a palpable appetite of late for emerging neuroscientific techniques in market research (e.g, biometric measures, EEG, fMRI), yet many commentators overlook the 'original neuro-technique' that is eye-tracking. Eye tracking has had longer to be commercially developed and have its associated methodology fine-tuned, not to mention the fact it remains the cheapest, most flexible and least intrusive measure of the subconscious consumer experience. After all, most EEG studies require supportive eye tracking, demonstrating the close relationship between what each of these techniques is measuring. Where budgets cannot allow more advanced techniques, eye tracking certainly shouldn't be viewed as the poor man's option.

How to buy eye tracking – some questions to ask your supplier

At this point you might ask 'you track where participants' eyes are looking using technology, what's left to vary?' A lot, in fact. Here are a few things to look out for and guard against when commissioning an eye tracking supplier;

How long have you been doing eye tracking?

- You'd scrutinise the methodology of any other research technique used in your agency so why not eye tracking? The research processes around participation are just as

crucial, if not more so in eye tracking because the outputs are so truthful to participant motivation. Eye tracking comes with a particularly unique set of considerations when setting up and testing and these are only learnt with experience.

Do users talk during the tasks?

- Some techniques, such as accompanied shops, ask participants to verbalise their thoughts as they go about a task. This is fundamentally incompatible with eye tracking research as it alters behaviour and interrupts natural eye movements, affecting results.

How is the analysis conducted?

- You should be aware that some eye tracking solutions mean that no interview is conducted with the participant (see the factsheet accompanying this article for further information about remote testing) and analysis is based on statistical outputs or visualisations (like heatmaps) alone. The danger in this is that findings are **inferred** by the researcher and not verified against the participant's subjective experience. Used in this way heatmaps may give false findings and do not correlate with **why** the product or feature was attracting attention.

What deliverables do I get?

- The researcher conducting the testing is in a unique position to provide key insights into your customers' behaviour that cut past methodological artefacts and inference. You want to be sure you or your agency is using that resource for maximum value for money. It is not uncommon for researchers to be handed a deck of heatmaps as an output. This grossly under-represents the wealth of data that is gathered in a typical eye tracking project, effectively short changing you.

Generally question…

the testing environment used, the participant experience, the session structure, reporting process. You want to be satisfied that;

- Recruitment is as representative of your end customer and their motivations as possible.
- The research environment is as naturalistic as possible
- Tasks are realistic, easy to understand and tied to the objectives
- Analysis is tied to footage **and** feedback, not solely inferred from heatmaps
- Outputs are comprehensive and squeeze out maximum value

I want to use eye tracking, how do I get started?

Once you've decided you want to use eye tracking a good supplier will be able guide you through the set up stages but there are a few things that are good to know before making contact with a supplier and some internal considerations to make before going ahead.

Timescales

When do the project outputs need to be delivered by and do these feed in or out of any adjoining research phases? Meaningful top-line findings can be turned around in as little as 48 hours after testing, but as with all

research, recruitment and testing setup times can vary widely depending on the complexity of testing (in lab or in store) and the number and nature of participant segments, be sure to include your supplier on key conversations at an early stage of the research proposals.

Audience

It may be that you have a clear idea of who your audience is demographically, but have you thought about shared behaviours? We have found that some traditional segmentation tools often crumble when it comes to recruiting against them. The most important thing is that a shared motivation or common behavioural trait is identified for each of your segments of interest. If you're not sure who you should be targeting then quiz the supplier, they should have a good idea where to start and help you define your audience.

Scope

How big is the 'reach' of your project? Are there any other parallel research projects on-going that your supplier should be aware of? Where might duplication occur and how can past research inform this new project? Being as open as possible allows your supplier to focus on delivering new insights, and not just covering old ground or stepping on toes.

Objectives

What are your 'must have's' from this research in order to satisfy the sponsors? And in contrast, what might classify as a 'nice to know'? It can be useful to have these distinctions in mind when drafting an initial brief to focus minds.

Budget

Having a clear picture of what budget is available allows your external supplier to provide a solution (or several) against what you are trying to achieve whilst still being realistic about spend. Eye tracking can also be less expensive than you might think, have a look at our pricing calculator to help plan your costs.

> *"You might be surprised to learn that a day of eye tracking testing can cost less than an evening of focus groups"*

Isn't eye tracking expensive?

Eye tracking can be more affordable than you might think. You might be surprised to learn that an average day of eye tracking with depth interviewing can cost less than an evening of focus groups. The resulting data can easily stand-alone as a piece of research with no need for additional participants. When you understand the richness of data generated by such research it's immediately obvious how much value is being generated. The sheer wealth of insights just a day of research produces always surprises our customers and will often keep their internal clients busy working on the findings for several weeks.

Where eye tracking has been perceived as expensive it's typically resulted from it having been sold and bought in the wrong context. It's quite important to stress that eye tracking, done properly, shouldn't just be a 'bolt-on' option to spice up a project. It stands alone as a powerful methodology for uncovering a range of insights, both qualitatively and quantitatively. Where this has been misunderstood, it can appear expensive. Therefore potential buyers should view eye tracking not as just an add-on but as a potential core approach to their research.

I've used eye tracking before and wasn't convinced – what's new?

Unfortunately you probably bought eye tracking that suffered from one of the following weaknesses;

Bolt on

- As outlined earlier, it may be that both seller and buyer approached the project as a 'bolt-on' addition to an existing project and consequently the attention to methodological detail was weaker or less well informed than it should have been.

Afterthought budgets

- The real value of eye tracking might not have been felt because the extra costs associated with a meaningful study were not initially appreciated and so a 'lightweight' solution was all the supplier could propose.

Convergence & Dilution

- Continuing from the 'bolt-on' pitfall, it may have been bought as part of a package of research solutions used by an agency, e.g. the research also included depth interviews, accompanied shops, focus groups etc. Sadly, there may well have been a pressure to make all these methods converge on similar findings (a heatmap can be misused for this end) in order to support a single 'neater' line of recommendation, thus diluting the insights gained.

Overly dependent on heatmap outputs, visualizations and other statistical techniques

- You probably didn't have the benefit of a retrospective (qualitative) methodology to articulate the 'why's' of the research. The above are all valid and useful tools in the process of forming and communicating research findings but they have inherent weaknesses when used to drive findings by themselves. Inference (on the part of the researcher, analyser or user of research) is a particular danger in quantitative eye tracking analysis. Traditional quantitative surveys allow participants the voice to indicate a) their position and b) strength of feeling on an issue. Heatmaps and statistics from eye tracking alone won't give you this information, you cannot presume that any attention to you advert is *good* attention. It might be that the viewer was confused or annoyed, hence the importance of asking 'why' as well as 'what' when interpreting eye tracking findings.

The only way of objectively knowing *why* participants engaged with something (or not) is through retrospective post session interviews. Showing participants back their eye tracking is an extremely powerful cue for recall of past behaviour and reveals far more insight than is possible in a regular depth interview.

How can I convince others?

Commissioning eye tracking research naturally has to be a new venture at some point and it can be a daunting prospect to jump in with a large project. Why not consider asking a supplier to provide a 'taster' demonstration for your team first? Here at SimpleUsability we provide a testing day service where the team can observe a morning of testing followed by an afternoon

workshop to disseminate the process, analysis and likely findings. The aim is to help market research professionals or their clients to observe first-hand quite how flexible an eye tracking methodology can be and how rich the data is. Often, particularly if eye tracking is an entirely new venture, it can be hard for team members to visualise the process and what they would be getting involved with. Showing them examples and samples of eye tracking outputs can help to gain internal buy-in. It will also help the end users of the research accurately position it within their wider research programmes.

Eye tracking is not a 'black box'

Unfortunately, eye tracking suffers from something of a commoditised status within market research at present, and it can be easy to assume all eye tracking is equal and 'off the shelf'. There is a common perception that eye tracking is a high volume production line to produce binary 'that one's better' answers and that analysis is a matter of simply printing out heatmaps.

Sadly eye tracking is not a black box you can plug data into and get a neatly formed, pre-categorised piece of insight. It requires (and should be given) the same, if not more, attention to methodological rigour as any focus group or online survey, in all aspects of the project cycle. If you've invested in eye tracking technology or you've bought eye tracking research it's tempting to expect automation and instant results from your spend. It can often come as a surprise that eye tracking requires not only initial cash investment in technology and equipment but considerable investments in time, personnel, training and methodology development to get to a stage where such speed is possible and produces reliable results.

> *"As the old research adage goes 'Put rubbish in, get rubbish out'"*

Eye tracking is a direct and truthful window into unconscious motivation, so it's crucially important that the surrounding research methodology is carefully considered, otherwise the validity of the research quickly begins to crumble. As the old research adage goes 'Put rubbish* in, get rubbish* out'.

*You may favour other choice adjectives.

To Conclude;

When considering purchasing eye tracking it is important to be mindful of the 'who's', 'where's', 'what's' and 'how's'. The methodology used in eye tracking is often overshadowed in pre-purchase decisions by the novelty of a powerful technology. In this article we have illustrated why it is even more crucial to consider eye tracking as a methodology, not just a bolt-on, and have outlined why eye tracking may have disappointed you in the past. With this knowledge we hope to have rekindled enthusiasm for the method and enabled interested researchers to gain maximum value from their next experience of eye tracking.

About Us

SimpleUsability works with major brands and organisations helping them understand the people who use their products and services through market research and usability. We then help evolve how their products and services might be made easier to use for existing customers and new customers alike.

We use specialist technologies, such as eye tracking, to capture conscious and subconscious behaviours of people interacting with printed material, web, video, packaging and in-store fixtures. Presenting back actionable findings to be used to build a more successful offering, increasing engagement, curtailing drop out, and ensuring ROI.

We are passionate about what we do and about making a positive difference to our customers businesses, don't trust your usability and research needs to anyone else until you've spoken to SimpleUsability.

Web: **www.simpleusability.com**

Email: **info@simpleusability.com**

SimpleUsability Ltd, Round Foundry Media Centre, Foundry Street, Leeds, LS11 5QP

Tel: **0113 350 8155** or **+44 113 350 8155**

SimpleUsability Ltd, 27/31 Clerkenwell Close, London, EC1R 0AT

Tel: **020 3393 0651** or **+44 20 3393 0651**

Registered in England No.: 4260492 Registered Office: Appletree House, Hull Road, Dunnington, York YO19 5LR