



Blending
Art &
Science
to Create
More Effective
Ideas

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SCIENCE x ART = MORE EFFECTIVE IDEAS.

When James Dyson invented the bagless vacuum cleaner that was to make him world famous, his eureka moment did not come overnight. In fact it took James 15 years and 5,127 prototypes to create the winning idea. Success came by combining art and science in the development process: his creativity drove the innovation and user experience whilst the prototype data enabled him to make the necessary adaptations. Not only was it a well-designed product, it delivered on its promise to become a commercial success. That mix of art (great design, front-end user experience, communication) and science (engineering, data, prototyping) created a great product that game-changed the vacuum cleaning industry.

And you need to think like Dyson—blending art and science—if you're in the business of coming up with ideas.

The Art is pretty obvious: ideas that wow, genius creative treatments, great stories, words and pictures. The Science provides the data, metrics and analytics to back up our creativity. End users may still get excited by the shiny stuff, but the science is what makes our ideas sticky. In the world of advertising, our reputations are staked on how effective a campaign is at launching a new product; how will it resonate with the target audience; how many new customers we'll deliver. The art creates the message that will engage with the audience; the science gives us tools to

track, measure and evaluate campaign effectiveness. And this discovery has implications beyond the ad industry. It's relevant for every business, institution, organization or individual engaged in ideas creation. By drawing on the principles of another discipline, you may come up with alternative and unexpected solutions.

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WHY DO WE NEED SCIENCE? Science—the ability to explore data patterns—is more than just a spreadsheet of user feedback, it's a huge avenue, an opportunity like never before to access and interrogate user analytics. Measurement data is often much misunderstood as a cold dehumanised commodity. But by using data to better understand user behaviour and insight, it can revolutionize the ideas business. By blending data and creative, we can combine the best of creativity with the most intelligent analytics to produce even better results. Indeed, the management consultancy McKinsey recently reported that analysing large data sets—so called big data—will become a key basis of competition, underpinning new waves of productivity growth and innovation.

Tracking behaviour via science means we know what an audience wants, so we don't need to guess anymore. If you're a mobile app developer who's got a great idea for an app, you can launch in beta, track and adapt to user feedback as you go. All that is made possible with digital tools and the availability of user data and customer genetics. Use this data correctly and you can have the insight to better tailor your idea to engage with your audience. And what's more you don't even need a R&D budget to access that insight. Data provides consumer insight so that it not only inspires marketing strategy but also informs messaging and creative execution.

But in this data-enabled world, there still needs to be a place for great, inspiring, edgy ideas. We can't always play it safe. In a world where we strive to measure everything, is that permitted anymore? Mike Teasdale, Planning Director of the UK marketing agency Harvest Digital gave a presentation at SXSW Interactive 2009 called "Is Too Much Math Killing Marketing?" There he argued that too much science is a problem when:

1. We start with the data, not with a problem;
2. We only focus on things that are easy to measure;
3. It stops us from taking giant leaps.

And that is the compromise. Science should be an enabler, not a restricter. At the intersection of art and science, both the left and right brain are required. It is not a case of either/or. It is not an option to think just like an artist anymore, but it's also foolish to allow data alone to govern how things look and feel.

WHY DO WE NEED ART? Think of art as the bridge between the idea and the user. For Leonardo Da Vinci, the canvas was his method of translating the idea into a language that could be understood by the viewer. Without that communication and relationship with the end user, the idea remains just that—an idea. With poor communication, or execution, the relationship with the end user is lost. If the end product isn't beautiful or elegant or emotive on some level, then the user won't engage with it. And that is why bad design fails too—something can be immensely practical, but if it is perceived as ugly, the end user won't go for it. Dyson got it right with his vacuum cleaner because, not only is it a superior engineering product, it has the design credentials too. That's why we need art.

So we don't just need art to shape our idea generation, we need art to help visualise our idea so people get it. Consumers don't get complexity, and art makes complex science understandable. Look at the rise of visual representations of complex data—infographics are gettable, elegant, user friendly and shareable.

But, of course, effective art requires emotion as well as clear and simple communication. We shouldn't lose sight of the need to emotionally resonate with an audience, so that we don't just sum up a proposition in words but also tonally, focusing on how it makes the audience feel. Look at the great speech-makers of our time for inspiration. From Churchill to Obama, all the great orators knew how to look at a deeply complex situation and identify the thread that connected the audience with the issue. Moreover, they knew how to nail that proposition in an emotionally charged, articulate piece of persuasion. It's exactly the same if you want your idea to succeed.

So when we create ideas, targeting the right audience may take science, but content takes the art—getting the concept, visuals, messaging and positioning right. Simply put, marketing needs art, and art needs emotion if it is going to resonate.

LESSONS FROM LEONARDO. Perhaps Leonardo Da Vinci is the most well known blender of art and science. He was designer, innovator, architect and technician: his technical drawings on the possibility of human flight formed the basis of helicopter design today. Da Vinci considered himself primarily an artist, yet all his work was underpinned by scientific knowledge, and this knowledge formed the very essence of his concept of the world. He could communicate his technical and scientific know-how clearly through his art.

Take a look at his painting of the Mona Lisa. The enigmatic facial expression is borne out of Da Vinci's understanding not only of technical processes, but also of psychological introspection, enabling him to express a smile barely glimpsed, and one that conveys so much. Continually exploring the relationship between art and reality gives a depth to the work, making his paintings much more than simply an artistic depiction of a subject, adding layers and subtly adding a new dimension to the user experience.

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Our brain has two distinct hemispheres for processing information: the left brain for verbal and rational ability, and the right side non-verbal and intuitive. Da Vinci's genius was a result of his talent in using elements from both to enhance the overall picture. One side comprehends the details; the other sees the whole picture. Understanding the science and combining it with the art improves above and beyond what could be communicated by one without the other. Both used so imaginatively together adds up to much more than the sum of its parts. Leonardo da Vinci used art for the communication, science for the innovation. If Western culture is going to rethink ideas creation, it could learn some lessons from Leonardo.

THE PROBLEM WITH EDUCATION. So why do we struggle with the notion of mixing art and science? Why does it sometimes feel so alien to put these two disciplines in the same sentence, let alone in the same project? Sometimes an initiative takes science, and sometimes it takes art—right? But as we've seen, when the two come together, beautiful things are possible. Our struggle with the concept of combining art and science is rooted in the way we are taught at school. From an early age we take lessons that are either Sciences or Humanities/Arts. In the majority of learning systems the world over, there is little cross over between these areas of learning. We are forced to make either/or, black and white choices during our education, to specialise in disciplines rather than mix them up. The educationalist Sir Ken Robinson, writes in *The Element* that “The truth is [these subjects] have much in common. There is great skill and objectivity in the arts, just as there is passion and intuition at the heart of science. The idea of separate subjects that have nothing in common offends the principle of dynamism.” Sir Ken informs us of some schools around the world where they do mix up the disciplines, for instance at schools in Oklahoma where “dance movements make essential points about science”. Changing the way education is structured and institutionalised has the potential to change the way our children learn; how they can become creative; and how in time they may be able to use their learnt creativity in new and unusual ways. And the problems the world are now facing sure could take some new thinking to solve.

MIXING HEAD-IN-THE-CLOUDS IDEAS WITH FEET-ON-THE-GROUND KNOW-HOW. So what does all this mean for the ideas industry? As our organisations and institutions increasingly become ideas factories, it's going to take a new paradigm to produce better ideas. Effective ideas cannot just be left to the artists any more.

Organisations typically work in silos. Full of process and systems, roles are clearly segmented. You're either a creative or you're a suit. Either an artist or an engineer. A web developer or a planner. The creatives are tasked with coming up with light bulb moments whilst the suits the guys who understand the client and the brand.

That model is broken.

In a recent presentation John Willshire, Chief Innovation Officer at PHD, cited Adam Smith's *The Wealth of Nations*, in particular the first book on The Division of Labor, where he saw some interesting parallels between marketing and agriculture. John suggests the agency process is failed, that "The sell is industrial but the work is agricultural."

So we need to re-engineer our organisations accordingly. In the ideas economy, we are all producers. And ideas producers cannot afford to be one thing or the other. A genius idea that does not take into account customer genetics, market trends or the competition will never be a genius

idea. On the other hand an idea made by committee, informed solely by customer metrics and box ticking, will be flawed.

We've seen how the productivity of ideas and results increases when you throw people together. New roles are emerging where previously segmented roles are being mashed up. Roles like Creative Technologists at the intersection of creativity and technology where art and science collide. Edward Boches, Chief Innovation Officer at ad agency Mullen, said in his post "The Most Important Job In Advertising" that the mashed-up role where creativity meets technology will be where the power lies: "A creative technologist can teach people about digital tools and platforms and how to create with them. Good ones can inspire writers, designers and even creative directors with possibilities they may never have imagined. A few of the best might even be able to transform a company, affecting the work, the teams, and the processes necessary to keep up with all the change and the opportunities that technology constantly presents". It's what Sean Corcoran at Forrester has billed the need to balance "head-in-the-cloud ideas with feet-on-the-ground know-how." So you might not need to be an engineer to come up with ideas, but it helps when you understand what works and why.

THE MULTIPLIER EFFECT. Blending art and science is about collaborating in ideas generation—the inter-relationship is critical, you can't have one thing without the other. A bunch of code or data is just a bunch of numbers without the art.

Science can enable us to be more creative, and creativity allows us to get the most out of our data. But consider “the multiplier effect.” If either the data or creative are bad, the idea will fail. It's not one or the other that we need, it's both. It's not science plus art equals results, it's science multiplied by art, so that a zero for either means failure.

That is where the interesting ideas are—at that intersection. The future is all about ideas connecting. Those who can bridge art and science will be in demand, will be powerful.

So if our ideas are going to change hearts and minds, let's blend them together. 📖

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10 WAYS TO MIX ART & SCIENCE

- 1** Use art to make the user-experience elegant.
- 2** Use art to communicate your idea.
- 3** Use science to prototype.
- 4** Use science to know your audience and how to reach them.
- 5** Break down the department silos and merge thinking.
- 6** Have roles like creative technologists that bridge disciplines.
- 7** Instinct still rules. Do not replace human decision making with an algorithm.
- 8** Remember, you cannot measure everything!
- 9** Remember the multiplier effect, and invest value at both ends.
- 10** Give it some emotion. That's what will engage.

Info

ABOUT THE AUTHOR | James Trezona is Managing Director of [Mason Zimpler](#), the European integrated marketing agency that works with technology clients worldwide. With a background in planning and strategy, James now heads up a team of 50 people across two sites in the UK, working closely with other Harte-Hanks business units globally. James lives in Somerset, England and— whenever he gets the chance to go “unplugged”—he loves the countryside, the arts and sport. James blogs at [Pressing Pause](#) and he’s on Twitter at [@j_trezona](#).

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