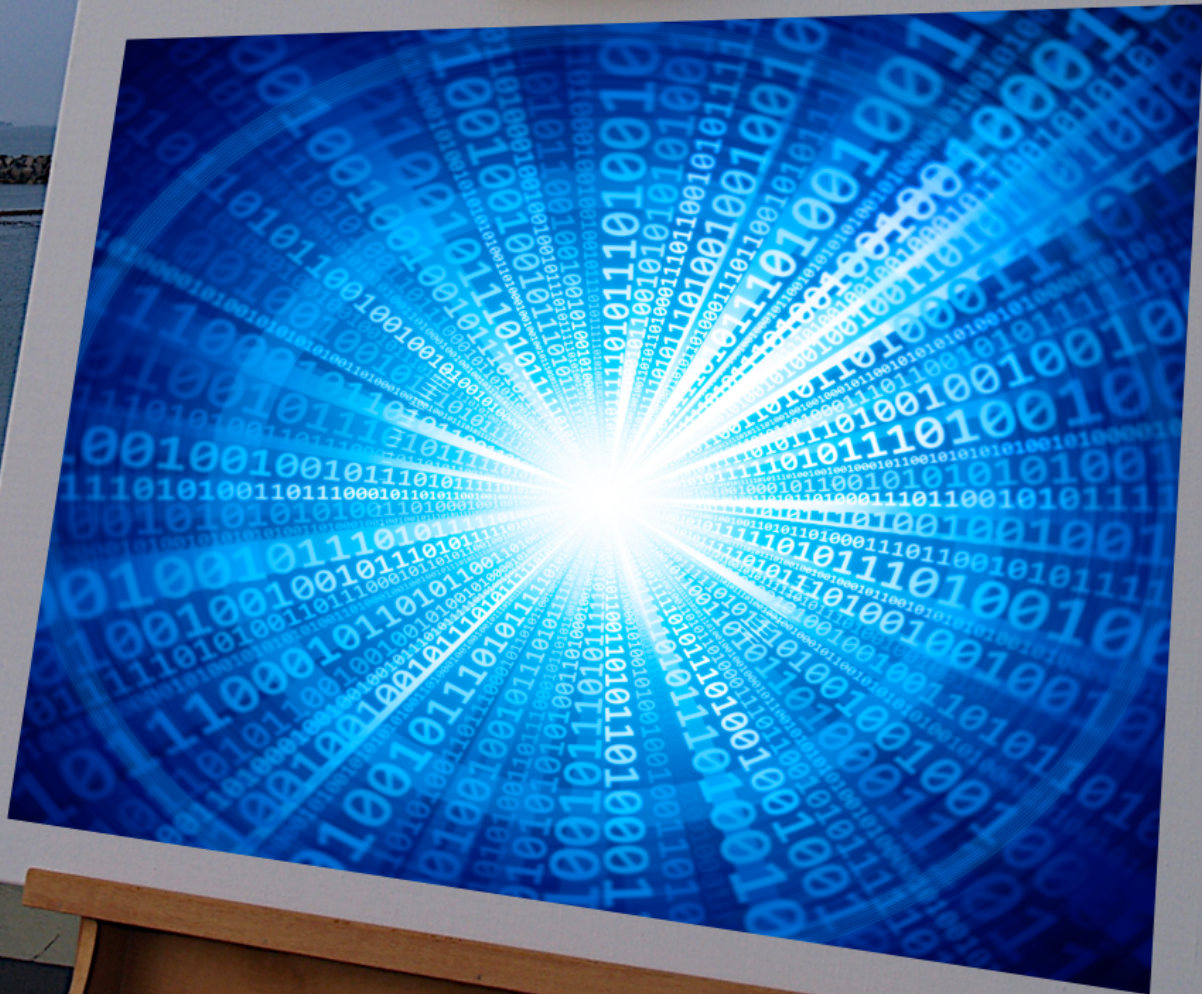


Creative Analytics

The missing expertise no one is talking about and how to get it

by David Savlowitz



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Everywhere you look, everyone is talking about big data, predictive analytics, mobile dashboards, data visualization, unstructured data, blending databases, etcetera, etcetera, blah, blah, blah. And yes, each of these topics is important for an organization to consider, develop, and integrate within their operations. However, there is one vital ingredient no one is talking about . . . and arguably, without this ingredient, all the aforementioned topics are rendered meaningless. This ingredient is what I call *Creative Analytics*, defined as the innate expertise and intuitive skill needed to transform raw data, decipher complex relationships, develop innovative algorithms, design meaningful visualizations, and ultimately, deliver actionable intelligence so that decision makers can truly make faster and better decisions in order to drive and sustain competitive advantage.

In essence, the Creative Analyst (perhaps we can call him or her an “innovative data scientist”) delivers meaningful contextual knowledge from the abstract. Creative Analysts are part scientist and part artiste. They decipher what is seemingly indecipherable, unearth needles from the proverbial petabyte-size data haystacks, and develop easy-to-read and beautifully designed canvasses of interactive knowledge. Words of caution: Creative Analysts’ expertise is not easy to replicate. Albeit vital ingredients, the combined investment in software, hardware, data, IT staff, analysts, and training programs are not enough . . . and simply do not correlate to Creative Analysts delivering creative analytics. So how do you know if you have Creative Analysts in-house or need to outsource for this very special talent? Here are four attributes you should look for:

1. Nonlinear Cognitive Skills
2. Nonreplicable Expertise
3. Competitive-Collaborative Paradox
4. Dual Brain Integration

1. Nonlinear Cognitive Skills

It is paramount to understand that creative analytics is a skill well beyond the boundaries of linear thinking. Today’s ubiquitous market research analyst and IT staff almost entirely relies upon what C.G. Jung¹ described as the judgmental (and very linear) thinking function. However, Jung discovered almost a century ago that humans have three additional core psychological functions. Although the thinking function is the most prevalent skill in today’s digital information age and the super-tonic for every analyst and IT person, creativity and innovation do not stem from the thinking function. Consequently, analytical innovation requires all four psychological functions. And what is often missing from the analyst and IT staff are these other three functions (i.e. feeling, intuition, and sensate functions) - which are most

¹ C.G. Jung proposed four main functions of consciousness: Two perceiving functions: Sensation and Intuition and two judging functions: Thinking and Feeling. Jung’s structure is the foundation for The Myers-Briggs Type Indicator (MBTI) assessment.

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prevalently found in the archetypal artist, inventor, and entrepreneur. Thus, Creative Analysts are rare individuals that leverage all four functions. Creative Analysts ("CA's") not only have a command of deductive reasoning, logic, applied mathematics, statistics, and economics (i.e. thinking function), but also use their perceptive powers to: A) run tests on data few would *think* of conducting (i.e intuition); B) develop innovative analytical hypotheses based on their real, imagined, and extrapolated experiences (i.e. feelings); and C) trust that their physical environment provides precious clues that drive their innovative analytical insight (i.e. sensate). I call these three *non-thinking functions* Nonlinear Cognitive Skills since thinking in straight lines will very seldom yield innovative results. The Creative Analyst not only thinks like a fine-tuned logician, but also is an excellent lateral thinker - a skill that empowers the Creative Analyst to literally think not just out of the box, but literally think-up "new boxes" no one else can see!

Ask your analysts and IT personnel WHAT innovative and creative tools they developed over the prior 12 months. How they answer this question should tell you immediately if you have Creative Analysts or not.

2. Nonreplicable Expertise

Secondly, creative analytics can not be purchased at Amazon.com, memorized by registering for a webinar, or gleaned from a software manual. Becoming innovative and creative does not just "happen." In many experts opinion, you either have "it" or you don't. Others say you can learn creativity, and if that's the case, it would take a tremendous amount of time, sweat, and tears to become truly creative and innovative . . . perhaps the rule of 10,000 or 20,000 hours² would be involved?

So, it makes sense that when a new idea or innovative approach originates outside the organization, many in-house analysts and IT staff have a propensity to fake their lack of creative analytics by convincing their C-Suite with four simple words: "I can do that!" We call this intentional subterfuge "ICDT Syndrome" which is often driven by fear and jealousy. And because data and analytics have never been described as having a creative and innovative dimension, they can get a way with that. "Hey, it's just a bunch of numbers in a fancy table . . . we already have something like that." But this is simply wrongheaded because if the analysts and IT staff were that innovative, they would have developed the innovation already. Stated another way: if they could have, they would have, but they haven't, so they wont. Period.

Moreover, you simply can not replicate what we call "practiced innovation" or "experienced innovation." Although in hindsight the end product and added value of creative analytics may

² Outliers by Malcolm Gladwell mentions the "10,000-Hour Rule", claiming that the key to success in any field is, to a large extent, a matter of practicing a specific task for a minimum of 10,000 hours. Robert Greene states 20,000 hours may be a more accurate investment of time.

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seem simple and easy to replicate (i.e. Monday Morning Quarterbacking), it must be understood that this practiced innovation took years of experimenting, honing, and a combining a unique set of expertise and psychological functions. Unfortunately, analysts and IT staff believe they can simply replicate a truly unique analytical solution based on what they see. Analogously, the analyst hears John Coltrane play saxophone and their solution is to simply go out and buy a Selmer saxophone, buy some sheet music, and start blowing.

Perhaps the most famous story of discounting and discrediting creativity, talent, and nonreplicable expertise resonates here:

Picasso was sitting in a Paris café when an admirer approached and asked if he would do a quick sketch on a paper napkin. Picasso politely agreed, swiftly executed the work, and handed back the napkin — but not before asking for a rather significant amount of money. The admirer was shocked: “How can you ask for so much? It took you a minute to draw this!” Picasso replied: “No! It took me 40 years.” Here the admirer (IT and analytical staff) thinks that artistic innovation should be easy to replicate and inexpensive. We firmly believe the opposite.

Ask your analysts and IT personnel HOW they plan to develop their innovative and creative solution. How they answer this question should tell you immediately if you have *Creative Analysts* or not.

3. Competitive-Collaborative Paradox

Nothing stokes the plume of fear and indignation than having your livelihood threatened or questioned. And that is exactly what we have discovered when dealing with some (thankfully, not all) in-house analytical staff. When presented with innovative and creative analytical solutions, the C-Suite immediately “gets it” and quickly envisions potential benefits. Yet these visions quickly get squashed by their IT and/or analytical staff.

How? Why? Upton Sinclair explains it best: “It is difficult to get a man to understand something, when his salary depends on his not understanding it.” Thus, the C-Suite begins to hear a bevy of objections camouflaged with technical fear mongering, sophistry, non-sequiturs, and downright lies: “outsourcing will create high risks regarding data security”, “their approach is not being used by anyone else”, “We already do this, it just looks different”, and our favorite, “I can do that.” Unfortunately, these subterfuges apparently work more often than not, and thus, innovation and creative analytics dies at the hand of the fearful, unimaginative, and status quo. Conversely, forward thinking organizations (“FTOs”) are often characterized by a culture that embraces new competitive ideas. Essentially, in-house analysts and IT staff within FTOs naturally embrace a perpetual flow of new methods and approaches, and thus, use external competitive influences as an agent provocateur (i.e. “collaborative catalyst”) for perpetual organizational improvement.

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An excellent example of fostering a Competitive-Collaborative Paradox (i.e. finding Creative Analysts that imbue this quality) is an academic paper called: "Creativity and Competition: The Beatles" by Greg Clydesdale. The paper claims that behind The Beatles' creative process were two dominant forces. First was the importance of rivalry as a contributor to *creative enhancement*. Second was the nature of the working team that possessed high levels of exchange and complimentary blends of expertise and thinking styles. Paul McCartney explains how his rivalry with John Lennon affected their creative output:

He'd write "Strawberry Fields." I'd go away and write "Penny Lane." If I'd write "I'm Down," he'd go away and write something similar to that ... you know, to compete with each other. But it wasn't. ... it was very friendly competition because we were both going to share in the rewards anyway. But, it was real, it was this (Paul with his hands indicates gradually progressive steps). It really helped step ... so we were getting better and better and better all the time (The Making of Sergeant Pepper, 1992).

In contrast to the competitive-collaborative paradox that Lennon-McCartney enjoyed, all too often in-house analysts see outside consultants as pure rivals - threatening their jobs, stature, and ego. It is the Creative Analyst that embraces fellow Creative Analysts that empower him or her to perpetually evolve, produce, and deliver innovative analytics.

Ask your analysts and IT personnel WHICH products, techniques, and solutions (that have recently been developed or currently being developed outside their organization) would they consider innovative and creative solutions. How they answer this question should tell you immediately if you have *Creative Analysts* or not.

4. Dual Brain Integration

Are you a left brain or right-brain person? This bi-hemispherical mapping of our brains is quite valuable in profiling the Creative Analyst. Let's apply a baseball metaphor to explain. Anyone that follows professional sports has heard of Moneyball, the story of how the Oakland Athletics baseball club leveraged the power of data and analytics to maximize performance (i.e. number of wins) while minimizing payroll. The book and major motion picture do a wonderful job illustrating how the super-geek with tremendous left-brain analytical expertise becomes the hero that saves the day.

Moneyball, coming off the heels of Sabermetrics³, ushered in the stampede toward sports analytics. In fact, nearly every professional sports team is now leveraging big data and

³ Sabermetrics was developed by Bill James as the search for objective knowledge about baseball via the application of statistical analysis to baseball records, especially in order to evaluate and compare the performance of individual players and teams.

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advanced analytics. And sports teams, businesses, and governments that ignore analytics are at a significant disadvantage, and as the movie describes aptly, seen metaphorically as dinosaurs. In the movie, Jonah Hill plays Peter Brand, Assistant to General Manager for the Oakland A's (the fictional doppelgänger of the real life Paul DePodesta), and decries the quintessential Moneyball philosophy: "It's about getting things down to one number, using stats the way we read them, we'll find value nobody else can see."

But the backlash was inevitable. Clint Eastwood disliked the premise of Moneyball so much, he hired a writer to write the anti-Moneyball movie, called "Trouble with the Curve." This fictional movie is about Gus Lobel, a grizzled veteran baseball scout for the Atlanta Braves (played by Eastwood himself) who has an abundance of experience, knowledge, and intuition . . . and strongly feels he is far more effective evaluating talent than anyone sitting behind a computer running algorithms. Gus exclaimed: "Anybody who uses computers doesn't know a damn thing about this game . . . a computer can't tell if a kid's got instincts."

Although analytics has proven its tremendous power and value, controversy about analytics versus instincts abounds. Clint Eastwood is joined by the likes of Charles Barkley who claim:

"Analytics don't work at all. It's just some crap some people who are really smart made up to try to get in the game because they had no talent . . . All these guys who run these organizations who talk about analytics, they have one thing in common. They're a bunch of guys who ain't never played the game, and they never got the girls in high school, and they just want to get in the game."⁴

Personally, I've never met a business executive who expressed their opinion about analytics in such an ignorant way, yet it's what more than a handful of business leaders don't say that screams of their deep skepticism and incredulity - harboring a pragmatic hesitancy toward big data and advanced analytics. And based on the track record of big data and analytics projects, they have a right to feel skittish: The majority of big data and analytics projects go over schedule, go over budget, and fail to deliver any meaningful, usable, and actionable output. This is perilous for anyone trying to pitch BI software and/or analytics services to the C-Suite, because inside the C-Suite's mind they're pondering this: "Why should I invest 6 or 7 figures on these geeks (think Peter Brand) when I can hire an experienced consultant (think Gus Lobel) for a fraction of the dollars to tell me what to do? Or confirm what I already know!

One primary reason for C-Suite's justified trepidation has been the usurping of the analytics function by the IT department. IT guys are great at installing hardware and software, connecting cloud services, integrating databases, writing code, understanding programming languages, fixing your computer, and conducting a myriad of other vital technological functions. However, IT guys are not economists, market analysts, and business strategists . . .

⁴ To see Keith Olbermann's response to Charles Barkley's anti-analytics comments please [click here](#).

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and have very little understanding, knowledge, and experience in the fields that are the foundation for making better, faster, and more profitable business decisions: macroeconomics, microeconomics, revenue management, price optimization, cost minimization, demand and supply analytics, business strategy, business cycle analysis, consumer behavior, competitive intelligence, sales and marketing, and finance. Thus, it is not surprising that many big data and advanced analytical initiatives have failed (and will continue to fail if IT holds the reins). In other words, thinking that your IT department can solve business intelligence solutions is like having a data scientist with little to no understanding of playing baseball yet attempting to analyze the game in a deep and meaningful way.

The solution? Company's should recruit and/or team-up with Creative Analysts (in-house and/or outside consultants) that have both strong left and right brains⁵. Ideally, people that are both highly analytical and highly creative (i.e. the hybrid of Peter Brand and Gus Lobel, the thinker and the intuit, respectively). Simply, Creative Analysts allow a company to not just make better and faster decisions, but to explore and decipher profitable strategies and effective tactics that their competitors will not see. Thus, innovative analytical thinking will yield competitive advantages. Contrastingly, if analysts everywhere are using the same software, generating the same charts, and developing the same dashboards, then no true competitive advantage will be realized. Yesterday's innovation is today's status quo and tomorrow's old shoe.

And discovering this talent will not be easy nor inexpensive, because there are three types of analysts: The first type are everywhere - the myriad analysts that are really IT guys and computer software programmers disguised as economists that do not understand business economics and/or could not originate or recognize an innovative idea if the idea itself walked up and punched them in the face. The second type is the pure artist that knows just enough code, software, and processes to fake his way as a data scientist. Although a rare breed, these artists often have the most bizarre and unrealistic ideas in which the technological and/or fiscal hurdles are beyond any practical consideration. The third type? The Creative Analyst. These are the niche analysts that will help drive your organization's vision, mission, and performance objectives via analytical insight your competition simply will not see.

Evaluate if your analysts and consultants are perpetually innovating. Understand their meta-skills and HOW they plan to develop their innovations by traversing up The Robot Curve⁶. How they evolve should tell you if you have *Creative Analysts* or not.

⁵ One strategy of infusing Dual Brain Integration into an organization is the development and deployment of "interactive what-if dashboards" where data visualizations are designed with all the filters, sliders, pull-down menus, radar buttons, and what-if options that decision makers require to answer any question within ten seconds or less.

⁶ The Robot Curve by Marty Neumeier describes four levels of work: 1. Creative work (highest value, original, and unique); 2. Skilled work (creative work that has become so well understood that it can be codified and taught); 3. Rote work (program, process, or operation that can be outsourced or handed over to unskilled workers with a minimum of training); 4. Robotic work (allocated to machines, software, or actual robots).

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In Summary . . .

What boggles us is that the C-Suite perpetually searches for ways to be more innovative so they can differentiate themselves from their competitors - yet when it comes to the best way to stand apart from the crowd through data and analytics, they often are beholden to the people in their organization that are the least imaginative, innovative, and creative. Thus, plans to collaborate with "outside influences" are quickly abandoned based on false fear, oversized egos, and unjustified bravado.

So, how does the C-Suite thrust away from the gravitational pull of the status quo and move toward creative analytics that will yield better, faster, and more profitable decisions? We recommend the following to the C-Suite:

1. stop listening to linear thinking
2. stop listening to analysts with replicatable skills
3. stop listening to analysts that are fearful of healthy competition and collaboration
4. stop listening to analysts that rely on single brain analyses

. . . and start listening to your intuitive and creative side by collaborating with Creative Analysts. And when you find these rare birds, invite them in . . . and watch your analytics-based decisions take flight.

For more information about Creative Analytics, please contact David Savlowitz at dss@competitiveanalytics.com or 714-545-2555.