

## HR: when the computer does the recruiting

*By Jessica Agache-Gorse*

**Relying on algorithms to uncover a precious jewel: a secret weapon used by an increasing number of HR departments. At a time when new technology has resulted in an explosion in the number of job applications, new IT applications that can collect and process data quickly may appear to be the easy fix, and sometimes being more reliable than human intuition. Predictive analysis, video games, and Meetic/DirectDating style tests can all contribute to putting the right team together; how do these new types of technology actually work and can we trust them?**

“We can predict the future. We can tell you what problems you will have with which employees. We can even predict what kind of affinity there will be between a manager and a new colleague. Or we could for example predict that there is an 80% chance that an individual will only stay at a company for 3 years”. On paper the promises made by David Bernard are an attractive prospect. This occupational psychologist is co-founder of the Parisian company AssessFirst, which for two years has been proposing a method consisting of predictive analytics, mixing statistics and algorithms, allowing predictions regarding a potential candidate’s personality and attitude in the job. “Previously everyone shouted me down when I spoke about predictive analytics at conferences, because there was a kind of unwillingness to relinquish the omnipotence of recruiters. Things are different now, and demand is increasing hugely”, he states.

**Are computers more objective than human beings?** At the technical level, AssessFirst relies on three online tests. They are more or less the traditional tests that allow you to evaluate peoples’ intellectual aptitude, motivation and personality. “David Bernard continues, “we get a sample number of employees in a company to sit these tests. We study the answers and the time it took for people to complete the tests. From this we assemble a number of statistical indicators to which we add employee related data that the company has already compiled ranging from absenteeism to the company’s turnover. We generate correlation indicators that allow us to build a predictive model that in turn can identify which people will best succeed in the company. When we then have a job applicant sit the test the algorithm compares the results with the predictive model and we can then assign a compatibility percentage for that job applicant. The algorithm can also predict turnover levels and even the risk of absenteeism. The predictions are not perfect and have a margin of error of between 5 and 10%.” He states, “At the end of the day humans have more cognitive biases than machines. For example, we have a tendency to exaggerate the importance of certain data or information. This comes up during copycat hiring, where we have a tendency to more easily hire people who are like ourselves. Machines are immune to this and they also have a greater capacity for gathering data”. From this statement to asserting that computers are more accurate than humans is now just one step away for the algorithm supporters...

**A risk of recruiting clones.** “What is disturbing is that the algorithms are not transparent and how they function is kept secret”, says Gilles Gobron, head of the digital marketing section in recruitment specialist Randstad. Out of 1000 CVs, we receive a top 20-candidate list, but from this it is difficult to identify the criteria upon which the algorithm is based and more importantly which weight is attributed to which criterion. For example where someone lives; will someone in Saint-Denis (in the Paris suburbs) be treated more favorably? We are all asking, without getting the answers, what is going on behind the

algorithms? Moreover, what makes the difference between a good recruiter and bad one is actually going beyond the obvious and fitting a square peg in a round hole. The goal is not to recruit a group of clones with the same profiles. I am, for example, trained in law. Would the algorithm have matched my application to this position? Recruitment also contains an element of chance, of the unexpected, of wanting to give a chance to someone. Finally, correlation does not mean a causal link. It is all very well for the algorithm to say that 90% of people who live 2 hours from their jobs resign. There are also those who never resign and others who live two minutes away and do resign!"

**A solution in the face of burgeoning job applications.** David Bernard in mitigating these arguments ensures that the algorithm does not negate the subtlety of recruitment and allows for a wide selection of applicants. "When we set up a predictive model, for example in defining ten selection criteria, you will receive on average 60,000 profiles that are likely to be a 100% match", he calculates, all the while keeping the 'magic formula' under wraps. "When you go to the doctor, you take the medicine, or you have the operation without necessarily understanding everything, don't you?" Despite this culture of secrecy as embodied by the most used and most mysterious algorithm of all – the Google search engine, Gilles Gobron does recognize that these new methods may well be a breakthrough at a time when HR departments are buckling under the amount of applications they receive oftentimes not even targeted to the open position and that they do not have the time to process. "What's better when you get 5,000 applications, see everyone for 15 seconds or rely on the software to filter them down to 500 and spend 10 minutes on each of those, using the time that is freed up to discuss them with your team? It is really difficult to work out which is better!" he stresses.

**Online dating services used as a model for recruitment.** Another example of the possibilities that can result from putting new technologies together with algorithms is the startup company Saberr. Saberr sits on the Google campus in London and has perfected a method to build the 'perfect team'. "Everything starts with the idea that people you are working with have a big impact on our performance," says Alistair Shepherd an aerospace engineer and co-founder of Saberr. So as to best understand the essence of a good relationship between two people, Alistair Shepherd and his team have meticulously studied...online dating service websites! We took all the data of these websites that used to be public and studied profiles of people who had close their account because they had found the right person. It helps us to understand what kinds of questions are really apt to indicate that people will match. For example, do you like horror movies is a good question that tells something about your personality and what you like. What's your favorite color, no. We mixed all these questions with psychological and behavioral studies and we created an algorithm. Now if someone completes the 70 question test, we find how much he'll get on with someone else"

**An algorithm that finds the weakest link.** Are you shy? Do you like horror movies? Do you believe in sex or in true love? Some examples of the 70 confusing questions to which you have respond so that Saberr's algorithm can calculate a compatibility rating between different people. "We have tested our algorithm in company competitions", says Alistair Shepherd who continues, "In Bristol University there was a competition with 8 teams of roughly 8 people each. We had them complete the test and according to the results we found out which was the best team and we accurately predicted all the results rankings purely on the basis of their ability to get on together." Saberr who is already working with 50 businesses across the world and boasts 87% reliability states for his part that he constantly works towards perfecting the algorithm that companies are currently using in three different situations: recruit the best team player candidate, build a project specific

team, or thirdly... decide on whom to dismiss from a team first! This venturing into the ethics of using the algorithm brings us back to a question partially raised by Gilles Gobron: "the problem is that once again we do not know how the algorithm works. Whatever about using an algorithm to search on Google or find something on Amazon, this isn't serious, it is a pastime but here we are talking about human beings and it is not at all the same thing!"

**A pre-selection filtering tool.** All the companies that promote this new technology are nevertheless conscious of the fact that the human factor remains the key element in the recruitment process and argue that it is not a question of removing the famous 'feeling' that a recruiter has but instead assisting during the pre-selection process. AssessFirst, David Bernard says, "we can't fall under the power of the machine. The algorithm can pre-select candidates but it is a human resources expert who receives the list and then selects from human criteria. It is important to work with people with whom we get on well." Guy Halfteck who set up Knack says, "the algorithm does not replace humans, it helps them make good choices." Knack promotes videogames, created by neuroscientists, behavioral psychologists, and designers, that try to identify the specific 'thing' or 'knack' that people possess and Knack allows businesses to use its tool in order to uncover and then recruit the precious jewel. "He continues, "By playing for 10 minutes, you have to make explicit and unconscious choices. These micro- behaviors are analyzed and treated by our algorithm to discover your particular knack." "When a company contact us for a recruitment, we take 30 or 50 employees from this company and let them play our game to understand the company's DNA. Then, the job candidates also play the games and we are able to say, using an algorithm, who has the knack to work with this company compared with the first round of results."

**"We don't lie when we play video games"** Filling balloons with water to combat fiery enemies, serving sushi to clients while guessing what they might like or even still helping creatures from outer space: these are the scenarios of the first three Knack games. Knack is developing more games to come online. These games allow businesses to know if a profile matches the needs of the available position. "In interview we always say I like people, I am gentle. However we can't lie in a game", Guy Halfteck follows on, "We don't calculate all our moves, we get caught up in the game and it is all the more authentic because we enjoy playing". This game-based approach has already attracted tens of businesses across all genres from banking to hospitality. For Gilles Gobron this method is useful because "it allows us to go beyond clichés" and the limit of it is that the method has to match the company's vision. Attracting different profiles to then get them to work in an office without social networks or smartphones just doesn't make sense!" At the same time, the choice to use these algorithms or no must be part of a coherent and well thought out recruitment process by the company. "In fact one has to think about how to use the method intelligently and ask oneself where is the value added for your company. One mustn't cede to the fact that it is easy to use, one must be careful and vigilant, he warns, stating that his own group has decided not to use the algorithm at the moment. For example, I advise missing things up a bit by having the algorithm choose from a personal selection of candidates, checking the results and then adding a random selection. What is most important is the Human Resource experts are in charge and driving the process."

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