

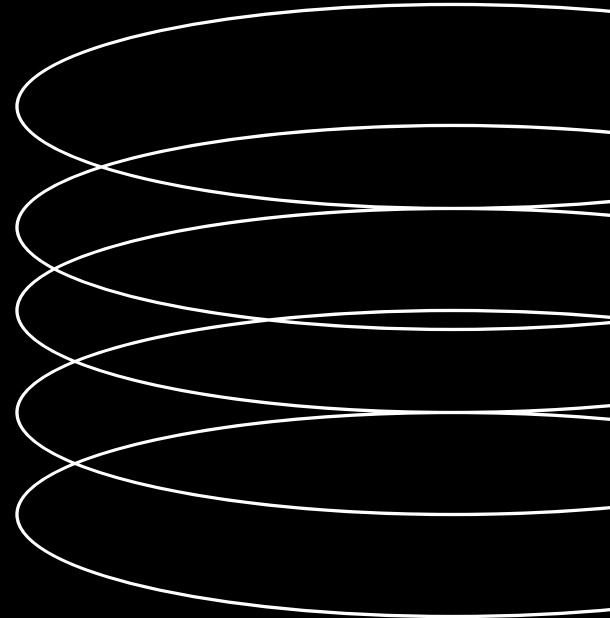


CRITICAL PIECES FOR human capital AGI

AGI can do lots beyond insights to problem solve and grow trust or confidence in wider process and people areas. The key to unlocking its potential is for domain experts to do more for abstraction and space model design



A LOOK AT THE LIMITS OF AGI IN PROBLEM SOLVING
And how people doing a little more is the secret sauce



Why AGI for Human Capital




Prediction needs large datasets that largely don't exist for human capital areas

Simultaneously driving results combined with excellent people management skills gives a powerful combination for growth — leaders who achieve this rank in the highest percentile of effectiveness. A push for results must also create a pull that inspires and motivates. Exceptional managers and leaders take responsibility for navigating career progression and employee development rather than leaving it solely to HR.

This paves the way for AGI to help in human capital areas by finding the best ways to grow energy, loyalty, passion, and enthusiasm with more positive and higher engagement.


Our AGI solution is a future-proof and comprehensive expert system that uses data to provide rich insights into a current state, actionable insights on improving things, and recommend how best to implement.

We provide a toolkit that respects and values individuality and combines it with essential data points in a comprehensive tracking and assessment system that yields high returns. Employees feel included, valued, developed, and empowered to reach their full potential.



“To create human-level intelligence, well, there’s probably another 50 mountains to climb”

- Yann LeCun
Godfather of AI



"Eighty-five percent of the reasons for failure are deficiencies the systems and process rather than the employee..." Will Deming

"Businesses have more than enough leaders; what they really need are more competent managers who can do the decision-making, planning, coaching.." Peter Drucker



A visual & decentralised ..

A good model cuts inattention and misinterpretation and gives a solid mental picture without inadvertently depersonalising employees and confining them to a one-size-fits-all management approach. AGI is far from being able to do this, so people need to bridge those capability gaps.

Segmentation is vital to make sense of similar characteristics among people. It helps group them in ways that tell a lot about a company. Machines need a model to spot patterns, but none outperform one made by a domain expert who covers every angle of human capital. If fed into a machine, it gives a rigorous component-level understanding to problem solve and recommend.

Link those segments into an abstraction or inference model, and machine learning can make and think through lots more options than people ever could, including advice in regular personalised coaching sessions, goal planning and navigation, tracking progress, and doing a balancing act of working with company finances and employee nuances. It's the best way to cut engagement score variances between line managers, with more than 70% firmly down to how they manage.

VISUAL PLASTICITY

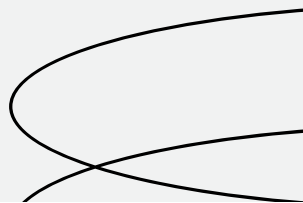
For a superficial understanding of people, 2-D charts work fine. However, a multi-dimensional model gives both a machine and people lots of new change plasticity and extends critical learning periods.

In visual terms, this is a more human-centred approach because eyes get a visual scene sense quickly and process 60,000 times faster than looking at tables. This also means people can feed a visual analytics system that combines machine learning and other analytical techniques with high levels of sense-making and analytical reasoning.

DECENTRALISED AGI

Our approach embodies a straightforward and transparent data science and machine learning methodology. Where large training data sets are available, data scientists spend a lot of time gathering and cleaning and experimenting with prebuilt templates.

Most of this can be avoided, and the work can be better distributed with a focus on the things that matter and by the people who rely on insights the most. AGI relies on if-then decision sequences. Misinterpretations or deviations from human ethics or noisy senses are much easier to avoid with more decentralised AI builds.



AGI BUILDS TRUST BETWEEN PEOPLE & PROCESSES

61% say trust in senior management is crucial to job satisfaction, but only a third are very satisfied with levels (SHRM)



5% engagement growth gives 0.7% growth in operating margins (Towers Perrin) to turn an average S&P 500 into outperforming one.

Twenty times as much is spent on leadership training a year than HRMS but with most programs failing to create desired results (McKinsey).



Trust issues beyond just AGI

1. TRUST IN PEOPLE

83% have more positive work environments when they trust their managers and organization (IBM). Over three-quarters have an employee engagement strategy, but less than half measure how successfully it works (Maritz Motivation).

Over 80% of line managers learn to manage others through trial and error (WMS, CIPD). Managing others isn't something learned from textbooks. This trial and error process has meant 63% of employees trust robots and the information they provide more than their line manager (Oracle).

2. IN ANALYTICAL MODELS

But data and analytics also need improving, with less than half assessing the effectiveness of data models or using the outputs. The research found that 60% needed to be much more confident in the insights they got if they were to act on them. Only a tenth are satisfied with the quality of data and analytics, and 16% with the accuracy of models and processes (KMPG).

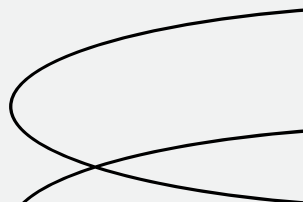
Less than a third get tangible and measurable value from data, and only a quarter get actionable insights (Forrester). HR data tends to be thin on the ground, so training datasets are not large or diverse enough, leaving few options beyond the reverse-engineered approach that can harness both supervised & unsupervised learning.

3. IN BUSINESS METHODS

Thought leaders like Josh Bersin liken HR to using methods and technology from a time when typewriters and paper memos were commonplace. With culture and human capital having so much value locked into them - methods and processes must change quickly to claw back losses through disengagement.

Performance reviews need to hit the mark. If they were a drug, their 14% success rates would not meet FDA approval for efficacy.

Most managers are not equipped to go from old-school masters to modern-day business coaches (Gallup).



MANAGERS NEED A TOOLKIT

95% of managers
don't know how to
coach and navigate
their employees
(SHRM, Globoforce)



85% of employees feel they function below their potential, and for a fifth, performance isn't managed in a way for them to do outstanding work (Gallup).

Only 14% of employees strongly agree their performance reviews inspire them to improve.. costing \$2.4 million to \$35 million a year for an organization of 10,000 employees (Gallup)

Knowledge distilled with rules

Human capital has fallen short, with so many other business areas benefiting from better use of data. A good segmentation model has a good evidence basis for us growing employee performance by 70% and cutting unit costs by 30%. If there were some way to build this into an AGI system without needing lots of training data to create one, we'd be so much closer to growing human capital. One that distils expert knowledge could grow employee engagement considerably more than 5% and show a 0.7% growth in operating income.

A big challenge in building one is because of business and tech domains; needing to learn more about each other's fields. A third of managers don't know what cognitive technologies even are. Data scientists and machine learning designers don't understand the domains well enough to integrate cognitive projects into existing processes.



Liberating knowledge distilled models

A combined segmentation and knowledge-distilled model shows machine learning exactly how to see and think. When people build this, the black box is transparent. Business intelligence, data science, machine learning engineers, and domain owners see eye to eye and can more precisely shape machine learning algorithms and search spaces.

LEANER INPUTS FOR PURPOSE RICH OUTPUTS

When it comes to people, the whole is much greater than the sum of its parts. When the dimensions and metrics are unclear, a model covering a bigger picture gives much more for less. It turns AI from a giant correlation machine to a worldly agile causation one.



HANDBAKED MODELS ARE ROCKET FUEL

HR has a big data shortage problem making conventional machine learning prediction cumbersome. ImageNet accelerated to human-level performance after Geoff Hinton manually separated 10,000 into 1,000 categories. Putting categories or clusters is popular in data science, but it doesn't need to be just something they can do.

An outside-in approach that defines every level of engagement, performance, costs, future potential, and management style put into a working model is just the trick.

MORE THAN JUST TECHNOLOGY

With almost a hundred times more HR system vendors than CRM ones, there is plenty of technical skill. But despite this advance, engagement levels have stayed the same. A decade after SIRI and Watson and a couple of years after a brain-to-keyboard interface, you'd think we'd be close to AGI, but it's far from that.

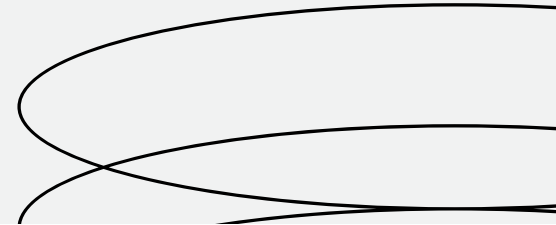
Technology isn't self-sufficient to grow human capital, but when a system embeds several best practices into day-to-day workings - a world of growth possibilities surfaces.

PEOPLE & THEIR COMMON SENSE IS NEEDED

There has been an over-reliance on machines and data science to get AGI to the next stage of progress. Even in state-of-the-art systems, twenty per cent of manual processes, thirty per cent of data processing and a third of all data collection need people to do the work at some level.

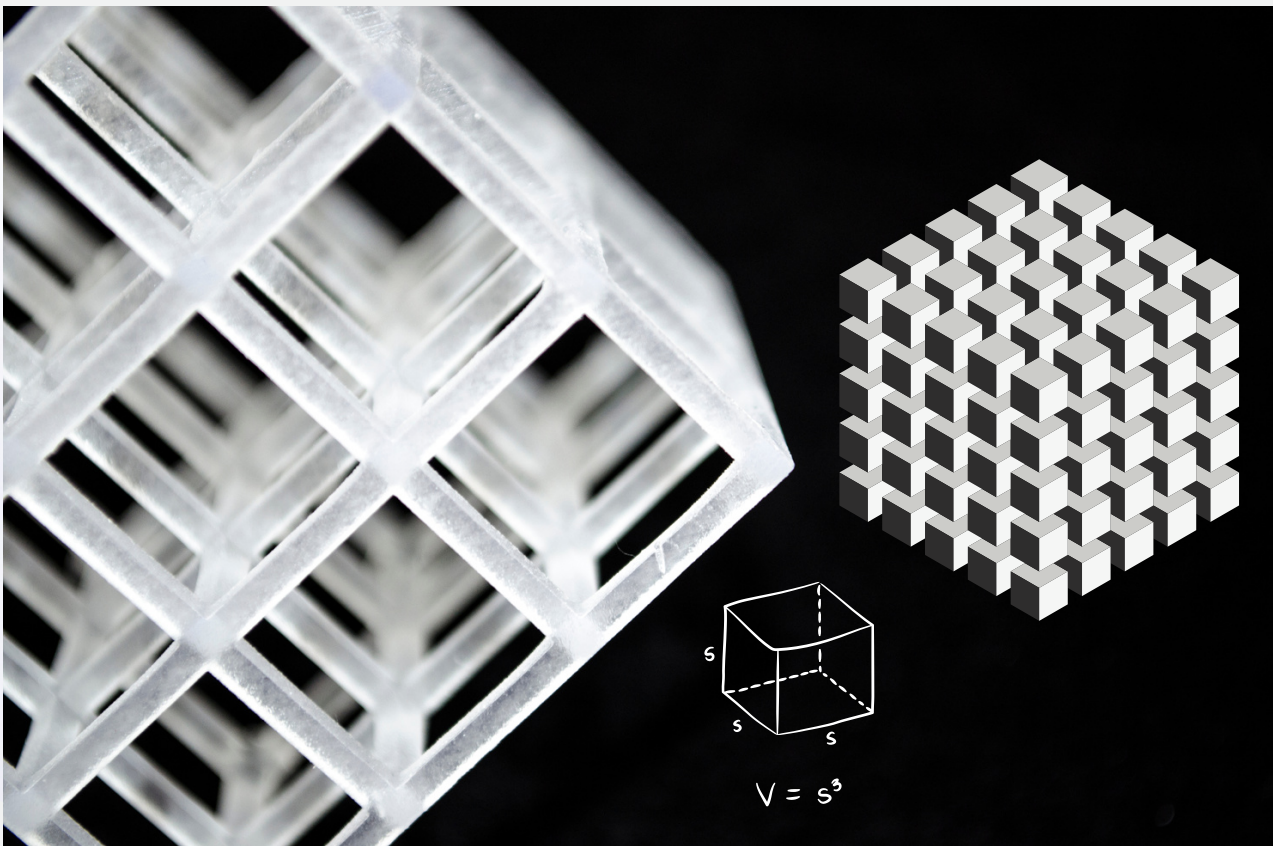
AI has lived many hype cycles or winters with a growing realisation that current techniques can only carry us some distance but not close enough to AGI. For the next wave, a step back for a giant leap forward needs, as Geoff Hinton said, 'throw it all away and start again.'

An approach employing graph databases, decentralised AI, and data meshing are areas needed but without any reasonable descriptions of how to combine them all. Common sense through analogies and storytelling are missing pieces and perhaps the only way to put the ambition back into AGI artificial general intelligence.



From gaming to commerce

Starting with a delineated model and visual means machine learning doesn't need to build itself a model that will decay and need regular revisions. We offer something that cuts to chase in business, maths and technology terms. A visually rich and informative mapping system comprehensively linking customer & employee areas into a seamless architecture showing and telling AGI precisely how to see, think and predict.



NOVICE TO MASTERING

With 90% of companies piloting AI projects and spending growth of 60% in 2020, only 5% can apply AI to core areas of a business. We offer something that capitalises fully on machine learning's strengths at game playing (Go, Rubik's), surpassing human skill with its plain sight navigation system.

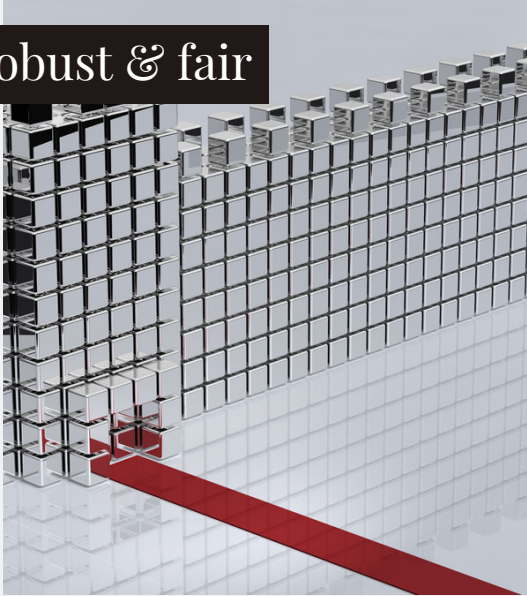
NAVIGATION FOR BIG GAINS

For 147% higher earnings per share, companies need nine engaged employees for every actively disengaged one (Gallup). With 60-70% engagement density, total shareholder returns triple to 24%. A 5% growth in engagement grows revenues, 3% (AON), and 0.7% growth in operating income (Towers Perrin).

Cohesion & coherency



Robust & fair



Robust & resilient with fairness, quick spotting of biases and doesn't need to rely on ingesting data from spreadsheets as an option.

Explainable



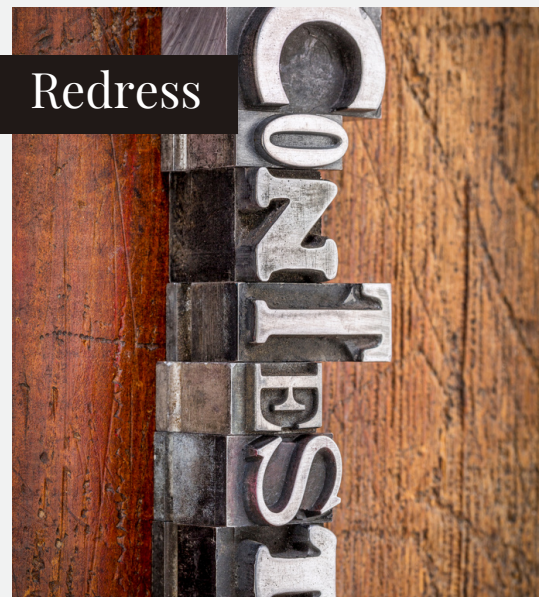
To the point and what matters for business users with high explainability and interpretability for both builders and users.

Accountable



Highly accountable for who owns what parts. The analytics translator and reward system are highly customisable with any corrective measures. The model can work to collect informed data first-hand from coaching sessions or reviews.

Redress



Quick to spot decision errors through a single visual, giving solid mechanisms for contestability and redress. Defined conduct before any wrongs surface.