



Decision Making in the Age of AI:

**Balancing Human Insight
and Machine Intelligence**



Big Data Trunk



The digital landscape is constantly shifting at breakneck speed. You are making decisions today that are not based strictly on instinct – or even the historical analytics of your predecessors. With artificial intelligence (AI) on the rise, decision-making is rapidly changing, and ensuring that this shift shifts your ability to make decisions from a reactive role to a proactive role. So the question then becomes: How do we responsibly find the right balance between machine intelligence and human wisdom?

This discussion is how you can capitalize on AI while also taking advantage of the human intuition and creativity that only you possess.

What is AI-Based Decision Making?

AI-based decision making is not meant to substitute for you; rather it is augmenting your ability to make smarter, quicker, and more informed decisions. AI tools can scan and analyze massive amounts of data in seconds, find correlations and patterns that you may not have identified, and even turn data into insights that inform the choices and strategies you take:

However, AI does not understand emotion, culture, or context the way you do. This means that your role in interpreting the findings of an AI output and then using those findings with a human lens is more important than ever.

When to Let AI Take the Lead



1. Data-heavy and repetitive tasks

AI works best when you are regularly exposing it to large structured data sets—especially when the task is repetitive. For example, if you are working on inventory projections, customer profiling, or a large list of transnational logs looking for anomalies, AI can complete these tasks at lightning fast speeds. Rather than spending a few hours reviewing spreadsheets, it is better to allow the AI to uncover patterns and generate output that is actionable. Then you can focus the value of your time on higher functions to bring about appropriate strategic planning and direction for the organization.

2. Time-sensitive circumstances

In cases where seconds matter, AI's ability to allow real time processing and decision making helps it get the upper hand. Take, for example, financial trading or cybersecurity, AI-based algorithms can make decisions about potential threats or shifts in the market quicker than even the fastest person. In situations where time matters, it is reasonable to allow AI to lead so that you can mitigate losses or capitalize on opportunities that might otherwise be lost.

3. Pattern recognition and prediction

AI can find patterns that you may easily overlook and make predictions based on those patterns. Whether you're trying to predict customer behavior, sales trends, supply chain activity, or another area, AI can make predictions with extraordinary accuracy. Such predictions allow you to make data-generated decisions sooner. While you consider the strategy, AI is helping give you a clearer picture of what is going to happen — allowing you to prepare rather than react.

Where Your Human Decision-Making Still Matters



1. Moral and ethical choices

AI can work through numbers and find trends, but it cannot consider context correctly as you do — especially when the consequence involves human emotion, judgement, or ethical implication. For instance, if you're deciding how to use customer data or whether to deploy a technology that surveils users or engage with questions of fairness in algorithmic hiring processes, your judgement is part of the equation. You have a sense of human empathy and social awareness that machines simply cannot offer. The decision involves balancing multiple business conflicts against responsible behaviour, and your judgement is irreplaceable.

2. Complex, ambiguous situations

Not everything can be reduced to data. You frequently make decisions with incomplete data, conflicting objectives, or ambiguous conditions. In such circumstances — such as launching a new business model, effecting a change in the organization, or dealing with an unexpected crisis — AI can't tell you what to do. It may provide options or solutions, but your experience, intuition, and capacity to consider multiple objectives and stakeholders will define how you navigate the decision, manage risk, and deal with uncertainty.

3. Emotional Intelligence & Leadership

AI does not lead people; you do. Whether you're managing interpersonal conflict between members of a team, prompting innovation, or making significant decisions that impact the livelihood of staff, emotional intelligence is a vital component. There are decisions associated with people, culture, and communications that require a level of understanding and complexity that AI does not have. Your ability to read a room, motivate people, or build trust cannot be replicated, and are areas where you can distinguish yourself as a leader, making decisions that fit key performance indicators (KPIs), purpose as well as people.

Best Practices for AI-Human Collaboration

1. Establish clear roles

In order to benefit from an AI-human collaboration, you need to decide on who does what. You will want to put AI to work on only the types of activities it is better than humans at performing, such as processing numbers, detecting oddities, and processing patterns to scale. Reserve human contributions for the judgement, creative, and emotional intelligence tasks. When both you and the AI know the roles you play, you can mitigate conflict, avoid duplicated work, and improve the quality of decisions. Think of it as building a team, where each participant can operate based on their strengths.

2. Invest in training

It is not just enough to adopt an AI tool – you need to know how these tools work. Make a commitment to learn about the systems you are using and their capabilities and limitations. If you can increase your knowledge of their algorithms, inputs and potential biases, you can become a more confident decision maker. This also means developing data literacy skills for your entire team. By committing to training, you help yourself and your colleagues and team members not just use AI, but challenge AI when necessary.

3. Maintain transparency

Transparency fosters trust in any collaboration. When working with artificial intelligence, ensure you and your team understand the rationale for how decisions are being made. Use explainable technology to achieve this goal, in particular, explainable AI systems that enable you to follow the chain of logic presented to develop predictions or recommendations. If a system is presented to you as a black box, don't simply accept it as is. Demand transparency – whether that is being able to see the training data, algorithms or outputs. This not only improves decision making but can also assist with proving regulatory diligence or for accountability purposes with stakeholders.



4. Encourage feedback loops

AI models learn from data, while you learn from experience. If you can achieve a feedback loop between an artificial intelligence model and your experience, you have brewed great success. When working with an AI model, be sure the AI system takes into account your feedback – both for its great decisions and bad decisions. You can also let the insight from the AI model steer your actions from that point forward. Mastering two-way feedback produces continuous learning, reduces errors over time, and ensures humans and machines both adapt to new goals in unison.

5. Promote ethical oversight

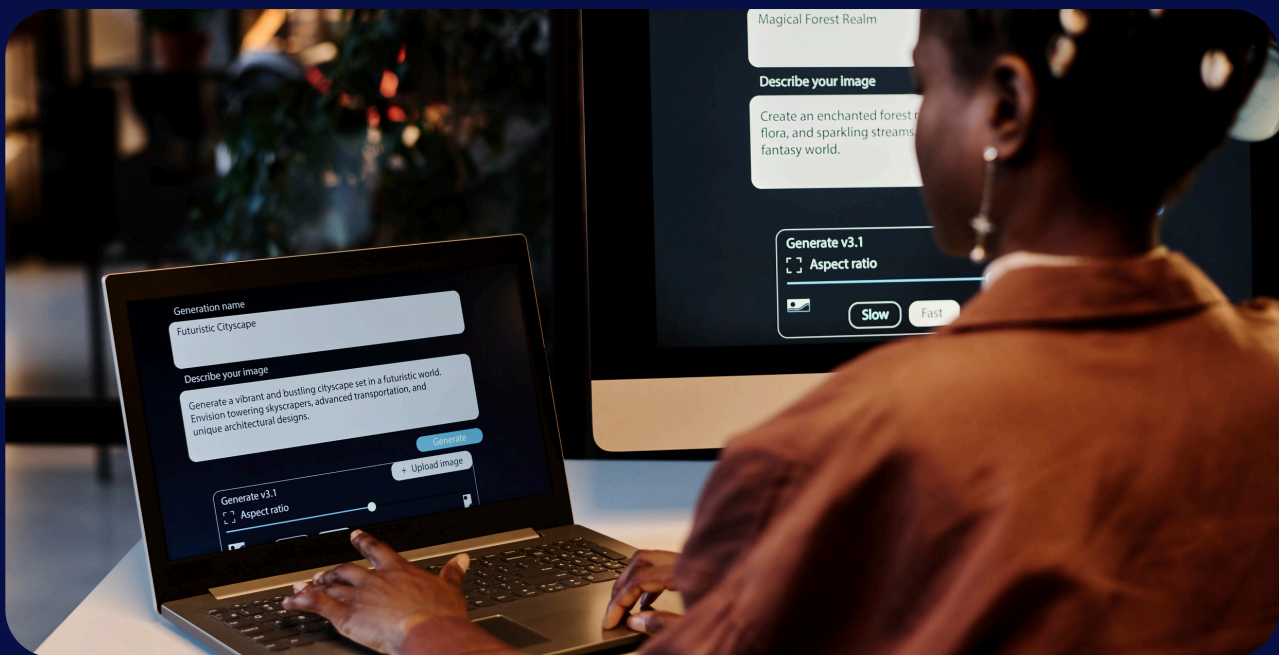
In any AI-human capacity, ethics must occupy the highest ground. You will want to establish limits on the capacity for human or machine force or wrong to prevent misuse. This is especially crucial when deploying sensitive data, or if decisions impact other humans and their lives. You will always want to ask, Is this fair? Is it inclusive? Does it protect privacy? Make ethical assessments part of your workflows, or at least in internal discussions, and frame discussions of design and deployment in terms of ethics. Your thought and discretion are paramount here – because even the brightest AI needs the human conscience to navigate things with care.

Real-World Examples You Can Learn From



In healthcare, AI systems are increasingly assisting radiologists (possibly) with early-stage cancers through advanced imaging systems to detect these, with more accuracy than human radiologists, who use their prior experiences, while possibly human doctors are recommended screening. In finance, AI will predict market trajectories from data, and alert analysts to fraud areas (the analysts bring the context, and make the actual decisions), while retail companies like Amazon will automate lower-level recommendations, yet marketing teams consider many other variables that go into marketing. These examples speak to the need to blend machine intelligence with human perspectives. By learning from examples like this, you may find how to deploy similar measures in your own fields to benefit from efficiency, accuracy, and creativity.

Equip Yourself for the Future of Decision Making



Are you prepared to improve your decision-making capabilities with AI as your tool? The first step is to get educated. You need the skill set, the toolkit, and the proper mindset to succeed in this hybrid space.

This is where [BigDataTrunk](#) comes in.

BigDataTrunk provides applied, industry-centric training in AI, machine learning and data analytics, and digital transformation. Whether you are a business leader, technical specialist, or data novice; you will be equipped to lead in the world of AI confidently.

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accelerate innovation through high quality corporate training.**

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