

The future of humanity will be intertwined with the artificial intelligence we have created.

These visual frameworks distill the principles of Humans + Al. They are designed to help individuals and leaders to amplify human potential using Al.

Table of Contents

01 Humans + Al: Terminology

02 Humans + Al: Mapping Intelligence

03 Humans + Al: Workflow Principles

04 Humans + Al: Macro Workflow Roles

05 Humans + Al: Decision Structures

06 Humans + Al: Value from Artificial Intelligence

07 Humans + Al: Prompt Elements

08 Humans + Al: Better thinking with Al

09 Humans + Al: The Future of Al in Financial Advice

10 Humans + Al: Al Governance for Transformation







Human-Al collaboration

Humans and Al working together to achieve the best possible outcomes.



Augmented Intelligence

Using AI and other technologies to enhance human intelligence.



Cyborgs

The merger of organic and machine elements to create a hybrid being.



Human-Centered Al

Al focused on enhancing and augmenting human intelligence and maintaining human control.



Hu

Human-machine co-evolution

Machines learning from humans and people learning from and adapting to AI in a virtuous cycle.



Extended mind

Using a variety of tools, techniques, and technologies - simple and complex - to extend thinking beyond the human brain.



Human-in-the-loop Al

Al systems where humans participate in development through training, feedback, evaluation, or oversight.



Centaurs

Half human, half machine entities. In 'centaur chess' teams are comprised of humans and Al working together.



- Futurist
- Keynote speaker
- Strategy advisor



- Amplifying human potential
- Humans + Al workflow
- Information productivity

The advent of next-generation "Artificial Intelligence" means we must better understand what we mean by "intelligence", human or other.

This map offers a variety of definitions that have been proposed. Each has been framed to refer to humans, to machines, or intelligence in general..

There are today and there will remain forever different dimensions to the intelligence of humans and the intelligent artefacts we have created. Humans will always in some way transcend machines with their distinctive intelligence.

Uncovering and developing what is most distinctively human about our intelligence is perhaps the most important challenge (and opportunity) our species faces.

Adaptation

"a system that perceives its environment and takes actions which maximize its chances of success." Stuart Russell & Peter Norvig

"a behavior appropriate to the ends of the system and adaptive to the demands of the environment" Allan Newell & Herbert Simon

"a combination of abilities required for survival and advancement within a particular culture." Anne Anastasi

"an agent's ability to achieve goals in a wide range of environments" Shane Legg & Marcus Hutter

"a combination of many mental processes directed toward effective adaptation to the environment." Encyclopedia Britannica

"an ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation" Andreas Kaplan & Michael Haenlein

"achieving complex goals in complex environments" Ben Goertzel

Goal orientation

"autonomously acquire an extremely wide range of specific knowledge and skills and can improve its own cognitive ability through self-directed learning." Peter Voss

"an ability to solve problems, or to create products, that are valued within one or more cultural settings." Howard Gardner

"an ability to use optimally limited resources - including time - to achieve goals." Ray Kurzweil

"an ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience" Mainstream Science on Intelligence

"an ability to hold multiple perspectives and ask intelligent questions." Chimamanda Ngozi Adichie

"an aggregate or global capacity... to act purposefully, to think rationally, and to deal effectively with [the] environment." David Wechsler

"a capacity to acquire capacity." Herbert Woodrow

"an ability to learn from experience, to reason, and to understand complex ideas." Linda Gottfredson

"an ability to integrate, organize, and apply knowledge in a self-determined manner to solve complex problems or learn new skills and concepts." Edward Deci & Richard Ryan

"an Intelligence... acts to maximize future freedom of action, or keep options open... [it] doesn't like to get trapped". *Alexander Wissner-Gross*

"an ability to carry on abstract thinking." Lewis Terman

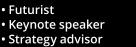
"an ability to generate novel and useful ideas." Robert Sternberg

Futurist

"an ability to see hidden connections. to discover what is important, and to make sense of the world. Maria Montessori

sense making

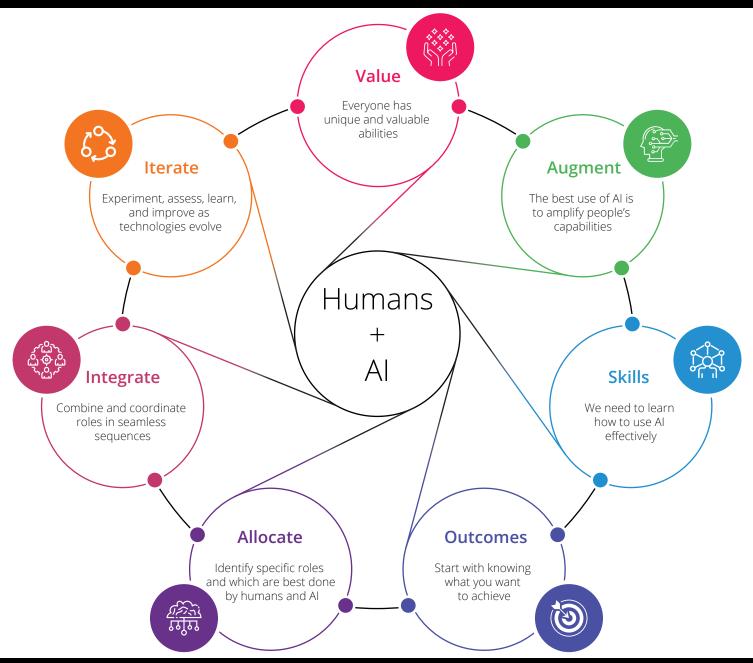
ROSSDAWSON





- · Amplifying human potential
- Humans + Al workflow
- Information productivity

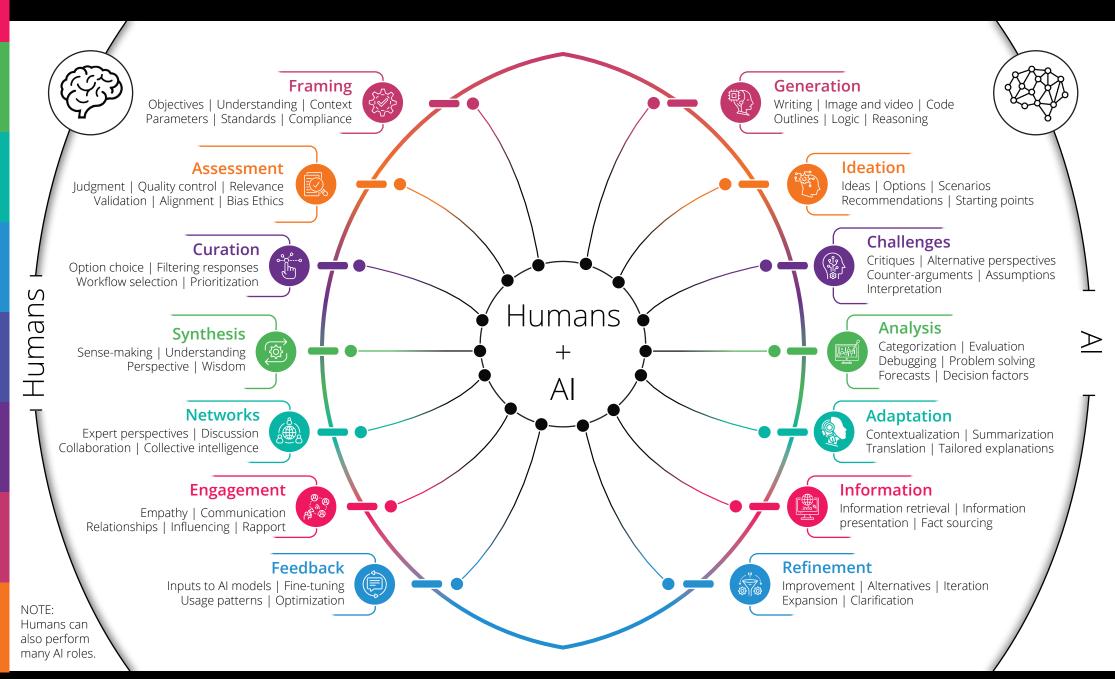
problem solving





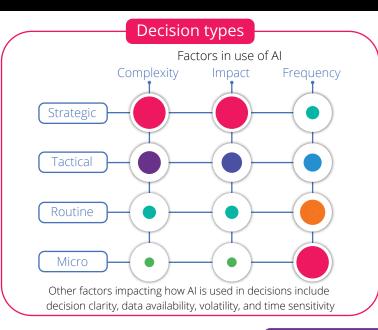
- Futurist
- Keynote speaker
- Strategy advisor

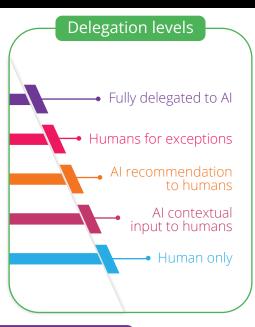
- Amplifying human potential
- Humans + Al workflow
- Information productivity

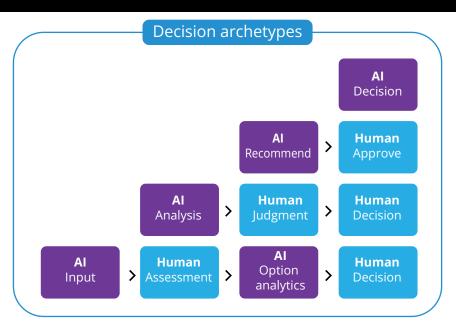




- Futurist
- Keynote speaker
- Strategy advisor
- INFORMIVITY
- Amplifying human potential
- Humans + Al workflow
- Information productivity







Decision process role allocation

Decision awareness



Strategic understanding of issues

Define decision



Establish scope and objectives

Generate options



Ideation Diverse outlooks

Assess options



Judgment
Apply
decision
frameworks

Decision



Apply experience and Al inputs

Post decision



Monitoring Review

Transparency

Bias

Explainability

Governance



Who is responsible for the decision?



Can automated decisions be explained?



What data and models underlie decisions?



How can any bias be identified and addressed?

Al ld rel trer em

Humans

Identify relevant trends and emergent issues Analysis on context Identify decision parameters

Option generation Prediction Data-driven analysis Recommendation

Automated

Outcome analytics Model improvement



- Futurist
- Keynote speaker
- Strategy advisor



- Amplifying human potential
- Humans + Al workflow
- Information productivity

Value from Artificial Intelligence

(2018)

GOVERNANCE



Design to complement humans

Explainability and accountability

Equality and inclusion

Safety and security

Bias auditing

Human oversight structures

Societal goal alignment

STRATEGY



Executive understanding **Evolutionary** roadmaps

Support employee value

Value-focused pilots

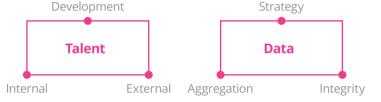
Process reconception

Rebalancing customer communication

Business model redefinition

COMPETENCES





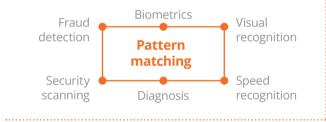


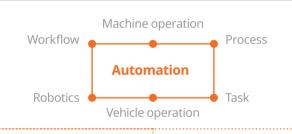




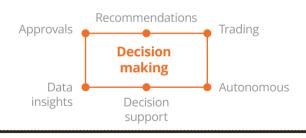
APPLICATIONS













CAPABILITIES



Defined pattern recognition

Emergent pattern recognition

Natural language processing

Predictive analytics

Multi-parameter optimization

Spatial processing **Generative** design

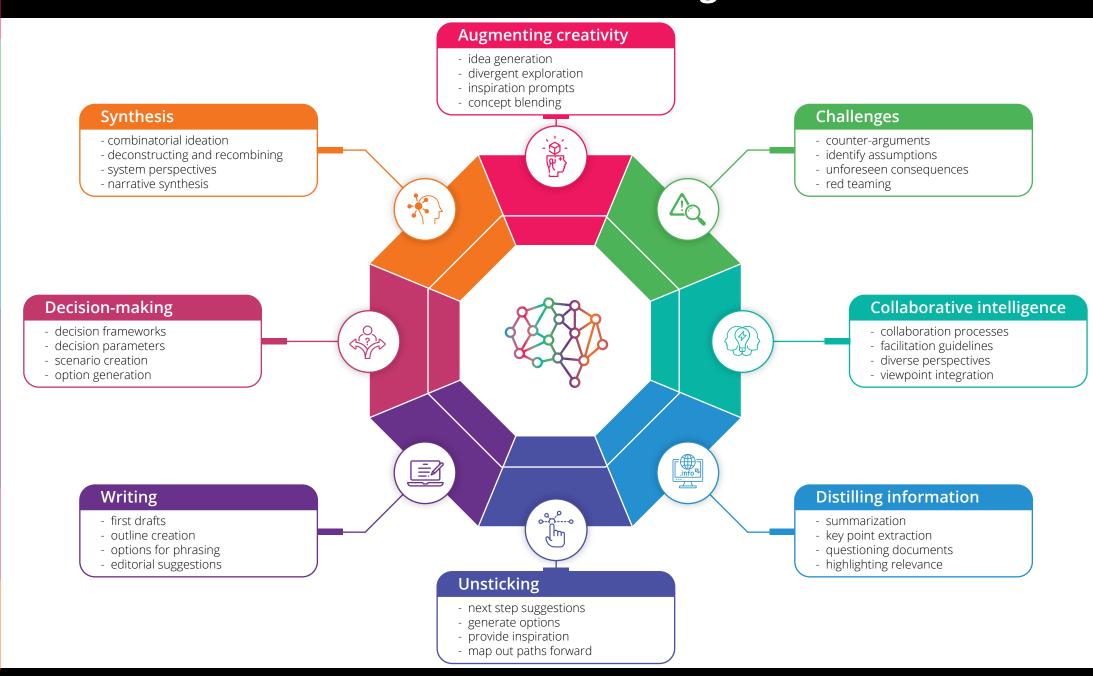
Futurist

- Keynote speaker
- Strategy advisor



- Amplifying human potential
- Humans + AI workflow Information productivity

humansplus.ai







The content offers examples only, these are not intended to be comprehensive.



Persona

Role Values Occupation Emotion Specific individual Proficiency Personality Archetype

Context

Objective Industry Situation Location Assumptions User role Scenario Use of response

Audience

Age Motivations Education Interests Knowledge Preferences Culture Ideology

Instructions

What you want, stated clearly



Style

1st, 2nd, 3rd person Tone Language level Use of analogies Formality Storytelling Model writer Dialogue

Format

Text length Code

Number of responses Lists Outlines

Templates and forms Tables or structured data Specific (Markdown, UML etc.)

TRAINING



Examples

Single-shot: one example Few-shot: multiple examples Prompt > Response Question & Answer Conversations Completions



Variability

Temperature Serendipity Creativity Diversity (Top-p) Style conformity Randomness Focus Originality

Constraints

Word count What not to include Avoid words Relevant time period Avoid references Geography Sensitivities What to include

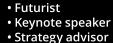
Large Language Model response



Refinement

Clarify Restructure More detail Summarize Provide examples Revise style Provide references Revise format Alternative viewpoints More creative Less obvious Step-by-step explanation Simpler explanation Provide examples More engaging Provide detailed logic







- Information productivity

Leadership



Impact

MAXIMIZING positive outcomes from use of Al on society, the economy and the environment.

Trust

CULTIVATING trust with users, stakeholders, and the wider public through consistent positive interaction, transparency, and accountability.

Ecosystems

PARTICIPATING actively in and contributing to platforms, and engaging with academia, startups, and industry for shared value creation.

Legacy

BUILDING towards lasting, powerful contributions the organization will leave for communities, industries, and nations.

Strategic Vision



Innovation

EXPLORING proactively current and potential applications of Al to enhance the organization's mission.

Scalability

DESIGNING All platforms that can rapidly grow in capabilities and support the iterative scaling of the organization's scope and impact.

Sustainability

PRIORITIZING environmental, social, and economic impact in decision-making, and applying Al for efficiencies and sustainability innovation.

Evolution

DEVELOPING continually as an organization with Al capabilities improve, uncovering new opportunities for value creation and organizational design.

Excellence



OPTIMIZING the efficiency, accuracy, and effectiveness of Al systems and the processes in which they are applied.

Learning

EMBEDDING learning into every role and every Al interaction, continuously developing the skills of all staff and the organization.

Reliability

MAINTAINING Al systems as they expand so they are consistently available, robust, and dependable.

Safety

ENSURING All operates without causing unintended harm or making risky decisions in critical situations.

Responsibility (



Transparency

PROVIDING clarity on how Al systems operate and make decisions, ensuring stakeholders can understand and trust Al processes.

Accountability

ALLOCATING unambiguously the ownership of Al-related outcomes, with mechanisms to address and rectify any issues.

Bias and Fairness

SUPPORTING equity by identifying and rectifying biases in Al systems, ensuring fairness across all user groups.

Privacy and Security

PROTECTING user data, ensuring ethical AI data usage, and defending against potential threats or breaches.

Alignment



ALIGNING all aspects of Al design and implementation with societal and organizational objectives and values.

Compliance

ADHERING to rapidly evolving legal and regulatory standards across nations and proactively meeting expectations.

Intellectual Property

ADDRESSING use and ownership of IP in Al models, and protecting algorithms, data, and applications.

Infrastructure

ESTABLISHING underlying technologies and systems that are robust and enable all higher-order objectives.





Client expectations



Quality personalized service

Seamless integrated experience

Access to real-time portfolio information

Tailored learning and education

Affordable and flexible advice

Transparency on fees and incentives

Advisor innovation and good tech interfaces

Customized ethical investing

Human connection and advice

Data security and privacy

Role of humans



Earning trust

Experience, judgment, and quality control

Ethical guidance

Empathy and emotional engagement

Human personalization

Helping clients change behaviors

Lifelong learning

Role of Al



Data-intensive portfolio and risk analytics

Personalization for advisor and client

Automation of routine tasks

Ideas and suggestions

Content generation

Tailored education

Feedback for continuous improvement

Advisor amplification



Personalization of service

Becoming better informed

Automating and offloading and tasks

More efficient compliance and documentation

Creating interactive client content

Proposal checks and suggestions

Prospecting and generating marketing content

Insights on client activity, sentiment, and emotions

Guidance in helping clients change behaviors

Scaling business, operations, and visibility

Humans + Al financial advice



Amplifying financial advisor knowledge and capabilities

Integrating digital services and human interaction

Customization of service delivery for client preferences

Human oversight of all AI processes and outputs

Ethics and transparency at the heart of all client interactions

Delivering client value at massively greater scale





The future of humanity will be intertwined with the artificial intelligence we have created.

These visual frameworks distill the principles of Humans + Al. They are designed to help individuals and leaders to amplify human potential using Al.

Learn to put these frameworks into practice!

Join the Humans + Al Learning community for lessons led by Ross Dawson and other Al explorers designed to amplify your capabilities and accelerate your workflows using Al.

https://humansplus.ai/



Looking for more?

Check out the Amplifying Cognition Podcast to learn from the best on how to achieve better thinking, sense-making, and decision-making using Al and other innovative techniques.

https://amplifyingcognition.com/episodes/





