

**THE UNIVERSAL PRINCIPLES
OF THE CONSCIOUS
ATTENTION ECONOMY**

In a world over-flowing with information and dis-information, with politicians, businesses, and influencers jockeying to spread their message, attention has become a valuable and lucrative commodity. And when something is as valuable as human attention, it becomes the basis for a whole new economy.

Why are we concerned about the Attention Economy?

The social impact of this growing economy is of grave concern given that digital commerce and social media algorithms are, like drugs or alcohol, designed to stimulate emotional and hormonal responses that are at risk of developing into online addictions.

The monetization of individual attention and behavior, valued in the trillions, is believed to be sowing increased emotional strife among children and adults of all ages, causing polarization, extremism and radicalization around the world. There is increasing evidence that individuals, groups, corporations, governments and other actors can and do exploit behavioral data. Given most people are not aware of the vast array of algorithms working in the background while browsing and searching, individual sovereignty is being eroded as our behavior patterns are being commodified and sold without our knowledge, understanding, or access to the benefits.

Historically, Herbert A. Simon first introduced the concept of the attention economy in the late 1960s, characterizing the problem of information overload as an economic one. The rise of the internet led to an information explosion and a growing analysis of information consumption in the mid-1990s. Futurist, Hazel Henderson, referred to the rise of “mediocracies” and their “attention economies” in her book “Building a Win-Win World” (1996) in this way: “It would be useful if economics, which studies scarce means applied to supposedly infinite wants, switched its focus from money to studying the ultimate scarcity for humans: their time and attention.” It is the study of precisely that, which motivates the development of these principles.

What is a Conscious Attention Economy?

A conscious attention economy is defined by respect and reciprocity, where all stakeholders benefit and business models are generative rather than extractive, meaning that, as business is accomplished more effectively, value continuously increases for all stakeholders – business, governments, society, nature and humans alike.

Engaging individuals' attention with respect, acknowledging their right to informed choice, while supporting health and well-being should be designed into algorithms, social engagement models, digital environments and business models to create a regenerative attention economy that is based on mutual benefit to all.

The Conscious Attention Economy Principles serve as an invitation and an overarching collection of guideposts for next generation technologies, businesses, ideas, and systems. This framework was designed to be utilized for innovation in development so that we can all participate in a regenerative spiral of inter-connected mutual flourishing that serves the human and natural world.

Why the Conscious Attention Economy is vital?

As society and economies evolve into a mixed reality world, diverse perspectives should be respected, and unconscious bias should be prevented. 2030 is near; we have seen the power of technology and data, and the impact of our global society with the spread of massive social networks, search engines, and web platforms.

We believe that through application of the Conscious Attention Economy Principles we can substantially use that same power to alter the current trajectory of the attention economy to achieve a positive and flourishing vision of healthy digital environments embodied by the United Nation's (UN) Sustainable Development Goals (SDG). A conscious attention economy has the capability to:



IMPACT ON THE SDGS

- Reduce unequal access to digital resources and gender imbalances (SDGs 5 and 10),
- Promote strong institutions by reducing misinformation and enhancing attention literacy (SDGs 4 and 16),
- Promote sustainable digitally enhanced cities and infrastructure (SDGs 9 and 11),
- Ensure responsible consumer consumption by making time spent online more intentional (SDG 12),
- Create a more harmonious and efficient natural world (SDGs 6, 7, 13, 14, and 15),
- Promote human health through better online behaviors and a more generative system which shares solutions (SDGs 1, 2, and 3), and
- Build partnerships by aligning all stakeholders to a central set of guiding principles to create more ethical and empowering interactions (SDGs 8 and 17).

CONSCIOUS ATTENTION ECONOMY ECOSYSTEM



OUR MISSION

Our intention is to ensure trust is built into the evolving mixed-reality world and that these principles can serve as a guide for all stakeholders.

Our goal is to develop an ethical and value-based shared framework that puts individual well-being, personal sovereignty and a verdant natural world at the center of attention. To enable all stakeholders, those who create, collaborate, contribute, design, teach and engage in attention-based systems, to work, live and thrive in a world that is supported by an ecosystem based on these shared values.

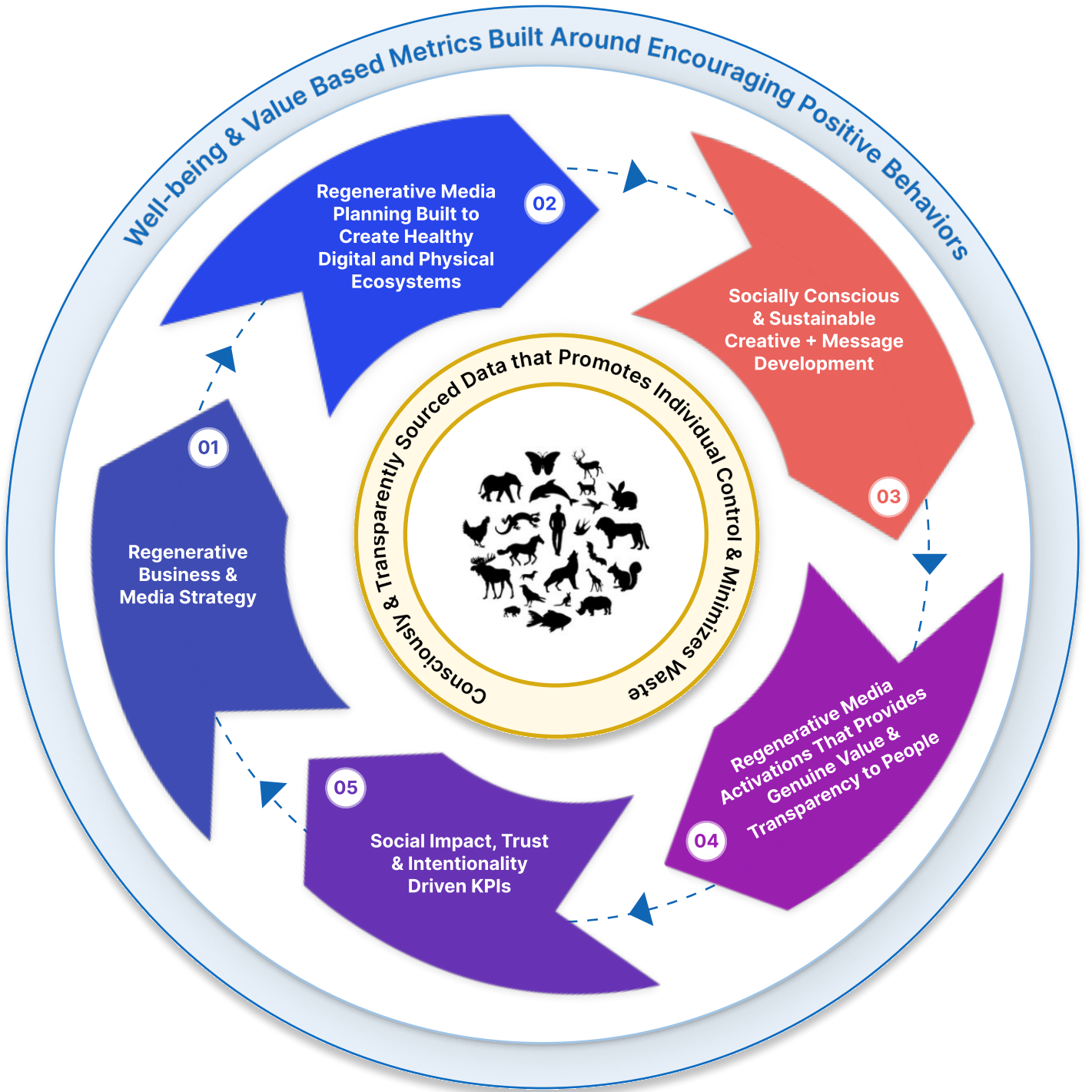
STAKEHOLDERS

The path to a Conscious Attention Economy and a regenerative future relies on stakeholders from different backgrounds and diverse points of view joining together to re-imagine what healthy digital systems look like. The Conscious Attention Economy Principles should be adopted and applied by all stakeholders who have an impact on how value is captured from human attention.

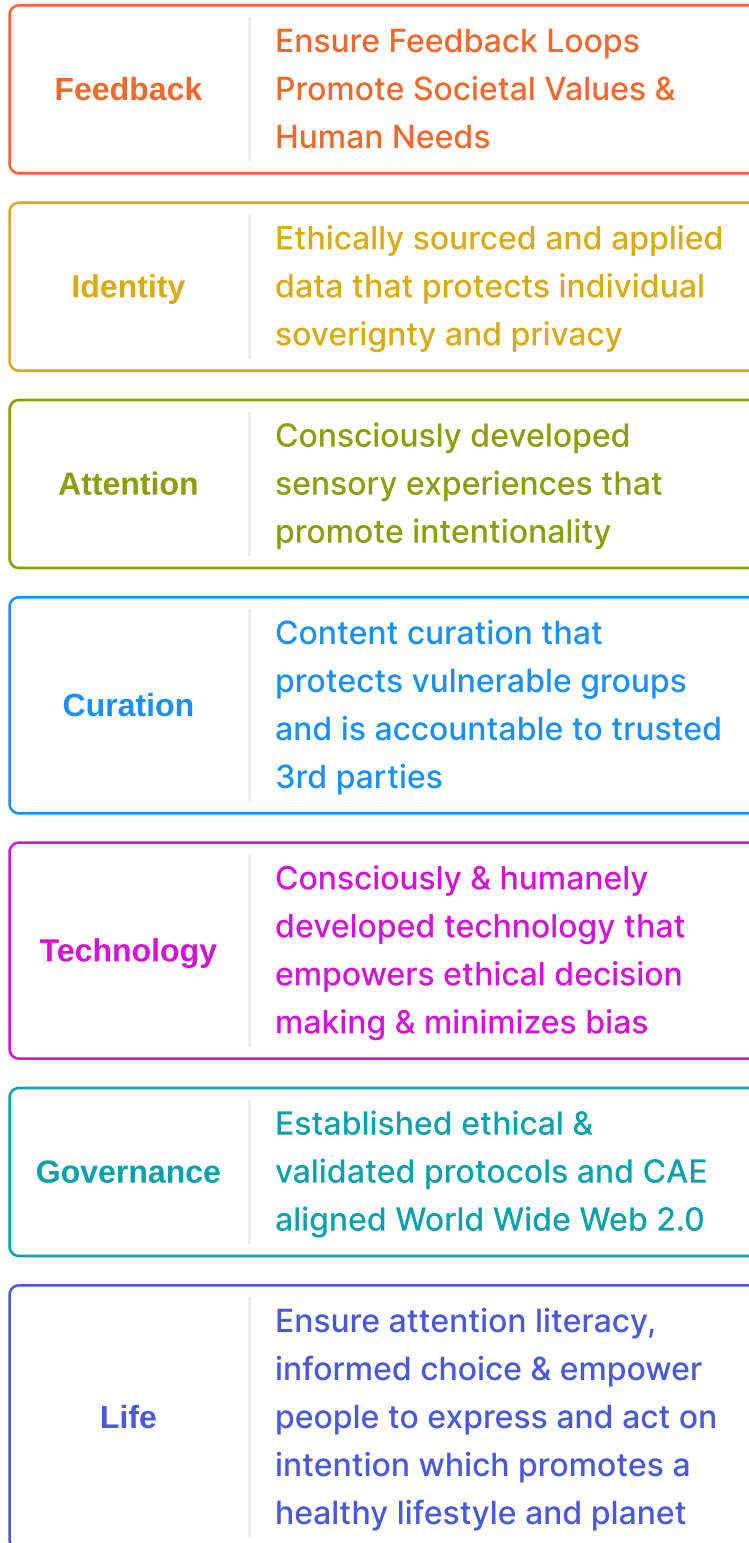
SCHOOLS + EDUCATORS + INCUBATORS
DESIGNERS + ARTISTS + CONTENT CREATORS
CIVIL SOCIETY GROUPS
NATURE + WILDLIFE
GOVERNMENTS



BRANDS
INVESTORS
PUBLISHERS + JOURNALISTS
ACTIVIST GROUPS + NON-PROFITS
TECH + ADTECH + DATA COMPANIES
ADVERTISING + PUBLIC RELATIONS AGENCIES



The Interlocking layers Needed to Build A Healthy Digital Environment
Based on the Conscious Attention Economy Principles

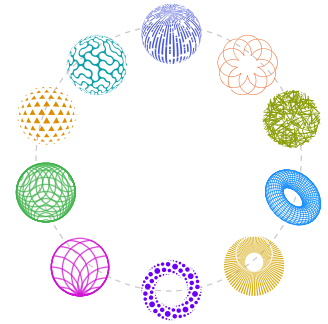


Each layer represents a different need state when developing digital spaces where stakeholders can apply the CAE principles to build quality human experiences

Each layer both influences and builds off of each other layer creating a need for all relevant stakeholders to work together in harmony to create quality human experiences online

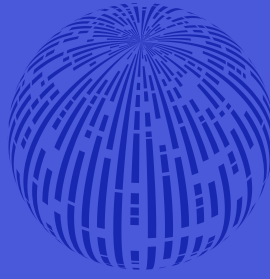
THE PRINCIPLES

It is our intention for the Conscious Attention Economy Principles to inspire innovation for building new attention-based business models, technologies, online environments, policies and education for all aspects of society.



- | | | |
|--------------|---------------------------|---|
| PRINCIPLE 1 | INDIVIDUAL SOVEREIGNTY |  |
| PRINCIPLE 2 | HARMLESSNESS |  |
| PRINCIPLE 3 | RIGHT-TO-PRIVACY |  |
| PRINCIPLE 4 | TRANSPARENCY |  |
| PRINCIPLE 5 | ACCOUNTABILITY |  |
| PRINCIPLE 5 | FAIRNESS+INCLUSIVITY |  |
| PRINCIPLE 7 | FREEDOM FROM EXPLOITATION |  |
| PRINCIPLE 8 | HARMONY WITH NATURE |  |
| PRINCIPLE 9 | ATTENTION LITERACY |  |
| PRINCIPLE 10 | ADAPTIVE SYSTEMS |  |

1. INDIVIDUAL SOVEREIGNTY



P1.1 Attention Sovereignty

Individuals should retain self-determination, ownership, access and control of self-generated attention economy data and content captured based on human interaction behavior, with the ability to revoke access for any reason.

P1.2 Right to Reward

Individuals should have the reasonable capability to understand, earn or allocate a significant portion of the rewards generated from the value of their attention and data.

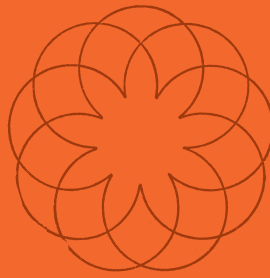
P1.3 Globalism – Digital Colonialism

All individuals, regardless of where they reside, should be treated with equity, entitled to adequate access, protections, and remuneration through means that are culturally relevant and abide by international law.

P1.4 Fiduciary Responsibility of Delegated Data Managers

An individual should be able to safely delegate their data and content management to a 3rd party with expertise who is responsible for attention economy resource management. Third parties should have the binding responsibility to act in accordance with the individual's expressed intentions in alignment with the principles of well-being, reciprocity, and harmlessness.

2. HARMLESSNESS



P2.1 Respectful of Dignity

Content should not violate human or digital rights, exploit individuals, or expose them to extremism or extreme violence, promote extreme fear, anger and hatred, or promote harmful behaviors to vulnerable groups.

P2.2 Respectful of Time

All stakeholders should ensure the amount of time an individual is encouraged to spend in an attention-based system is proportionate to providing high quality well-being to that individual. All stakeholders should ensure there is rigorous analysis supported by unbiased 3rd parties proving the time spent by an individual in an attention-based system is being minimized or eliminated whenever that impact is negative.

P2.3 Intentional by Design

To prove intent, no decision-making actions should be taken without proving alignment with the original individual's and stakeholder's intentions, and any new decision or action must gain additional transparent consent regardless of prior transparent consent has been given.

P2.4 Purposeful by Design

All attention economy stakeholders should be able to always define and express their purpose behind the use of an attention economy resource and should be required to present the purpose to any other stakeholder upon request.



P3.1 Data Minimization

Collection of personal and behavioral data by stakeholders should be minimized, even if not legally required, to prevent exploitation of vulnerabilities.

P3.2 Inherent Privacy

All attention-based technology and decisions should be based on ensuring individual privacy and well-being.

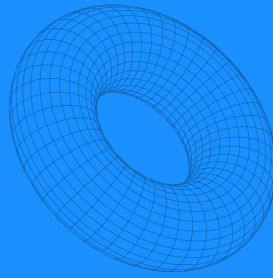
P3.3 Portability

User choice requires portability for identity, data, payments, and any other services. Individuals should be able to interoperate across providers without losing their identity information, social graph or content.

P3.4 Protection from Artificial Intelligence

The design of AI systems should ensure that individual attention economy resources are protected throughout the life cycle of the system and representation is accurately reflected in datasets with a minimum level of bias. AI systems must not exploit people, their digital twins, social data, or content and should be regularly checked by unbiased human sources to ensure adherence to humane values.

4. TRANSPARENCY



P4.1 Transparency of Access

Attention data shared between stakeholders must be accessible and comprehensible at a reasonable level of understanding and technical expertise to ensure all stakeholders can choose to act in accordance with their own values.

P4.2 Transparency of Risk

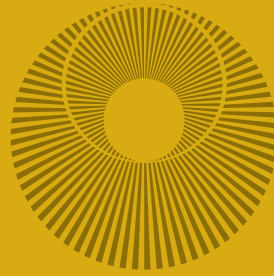
Individuals should be fully notified with meaningful explanatory information that empowers them to explicitly include or revoke access before their attention data influences background decision-making by human or AI processes.

P4.3 Transparency of Economic & Social Value

Individuals should have the right and capability to request economic and social impact information from any stakeholder which manages or monetizes their attention economy resources in a manner that is easy to comprehend.

P4.4 Trustful by Design

Stakeholders should build trust into their products and services by exposing assumptions and allowing users to adjust their experience to satisfy their personal values.



P5.1 Governance

Appropriate audits, impact assessments, and due diligence mechanisms, including whistle-blowers' protection and 3rd party analysis of bad behavior, should be developed to ensure accountability for all attention economy resources and processes.

P5.2 Supporting Civil Discourse

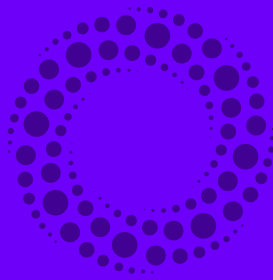
All stakeholders should ensure their efforts and operations actively support high-quality civil discourse based on quality information and develop laws that are proactive in respecting human attention, personal sovereignty, and diverse perspectives.

P5.3 Standard Metrics

Establish new attention-based economic metrics that showcase positive impact, improved well-being, social and cultural awareness, and reciprocity as a measure for success and in alignment with UN Agenda 2030 and its 17 SDGs based on scientific accuracy with long term goals set for longer timelines.

P5.4 Shared Standards

Establish stringent yet open standards, interoperability, and taxonomies to facilitate collaboration across attention economy stakeholders. The standards should be regularly evaluated for flaws and consistently updated by multiple human sources to reflect needed changes to address those flaws.



P6.1 **Common Infrastructure**

Tools for public conversation should exist outside of private companies as common infrastructure, like the Internet itself, certain tools, such as, Identity Management should be established as common infrastructure usable by all stakeholders.

P6.2 **Social Fairness of Benefits**

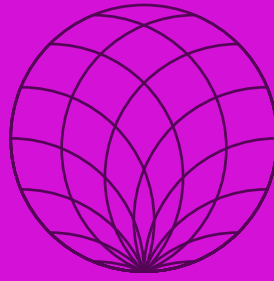
Stakeholders should promote equal access, social justice, safeguard fairness and promote non-discrimination ensuring that the benefits of the attention economy are available and accessible to all. Stakeholders should also prevent the replication of inequities in the digital world that reflect inequities in the physical world.

P6.3 **Supporting Quality Journalism & Information**

Attention economy stakeholders should ensure local, national, and international journalism and content are adequately funded, supported with attention economy resources, and given the freedom to act independently in order to promote fairness and inclusivity in societies.

P6.4 **Equitable Access to Quality Journalism**

Access to quality journalism should not be contingent on ability to pay for services and people's attention economy resources should be equally respected in free spaces as paid services.



P7.1 **Avoiding Psychological Manipulation**

Attention based systems are at risk of trapping individuals in psychologically harmful behaviors through feedback loops that exploit the human desire for stimulus and can be addictive. All stakeholders should ensure they promote psychologically sustainable ideas and behaviors. Similarly, stakeholders should avoid promoting behaviors that devalue self-worth and use attention to achieve goals not aligned with an individual's personal values or that manipulate them into behaviors they would otherwise choose to avoid.

P7.2 **Exploitation Awareness & Prevention**

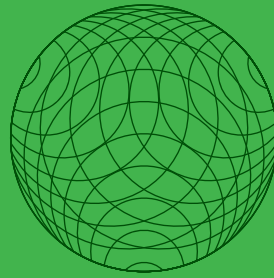
All attention economy stakeholders agree to prevent exploitation for any reason, at all times, and in all spaces whether physical or digital, even if those platforms or systems were not intended for those individuals as the primary audience. Additionally, there should be special considerations and protections for children and the elderly in all attention-based systems.

P7.3 **Fraud Awareness**

All attention economy stakeholders should ensure the prevention of relevant types of fraud such as ad-fraud, identity fraud, technology fraud, bot-traffic, and content-fraud, and only acquire resources from trustworthy and audited sources.

P7.4 **Balanced**

Stakeholders, from professional or User-Generated Content (UGC) sources, should endeavor to meet a high standard of quality and accuracy of information and promote quality journalism from diverse sources to support credible narratives.



P8.1 **Generative Systems**

All attention economy platforms and systems should embody mutual respect, mutual benefit, accessibility, do no harm, and be an instrument for the common good.

P8.2 **Environmental Impact**

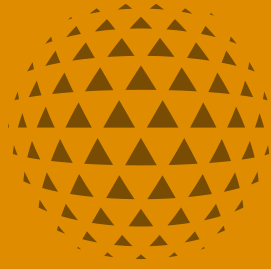
All attention economy stakeholders should promote, embody, and embed practices that improve the health of our environment by reducing wherever possible the environmental impact of data processing, business operations, and human behaviors that stem from the attention economy including media promotions, greenwashing, and the downstream impact advertisements and content have on promoting unsustainable behaviors. Stakeholders should understand the emissions tied to their attention economy operations and the impact those operations have on supporting healthy wild ecosystems.

P8.3 **Environmentally Responsible Media Production**

All media and content generated by or for an attention economy stakeholder should be produced in an environmentally responsible manner and ensure human, animal, and natural rights + values are respected throughout the production process. How nature and wild ecosystems are depicted in media is important, and media professionals should ensure diverse wild ecosystems are well represented, promoted, and protected.

P8.4 **Nature & Wildlife as a Stakeholder**

Wildlife imagery should only be used when the wildlife benefit in some way as they are entitled to reasonable compensation in exchange for value. Attention economy stakeholders should make attention economy resources available to wildlife protection groups.



P9.1 **Explainable**

Attention Economy decision-making should be intelligible to its intended audience so that all individuals and stakeholders can understand the impact of their interactions and realize their intentions.

P9.2 **Public Awareness**

Education should be available for individuals to gain greater agency over their own attention to ensure individual control and decision-making power for effective public participation. In this way all members of society can make informed decisions about their use of attention economy resources and be protected from undue influence.

P9.3 **Professional Awareness**

Education for professionals in the attention economy should include training and access to tools and information to help professionals understand conscious attention economy principles and the impact of make ethical decisions to meet conscious attention economy-based and UN SDG aligned business goals.

P9.4 **Mis-information Literacy**

Stakeholders agree to expose and educate the public about disinformation content, to limit the ability for technology and bad actors to spread false or misleading content.



P10.1 Cultural & Technological Preparedness

Attention economy stakeholders agree to take precaution by developing efficient and effective methods that respect individual rights and conscious attention economy values, with capacity to adjust as cultural values evolve regarding human and digital rights, shifts in technologies, cultural changes, vulnerabilities, and new regulatory burdens.

P10.2 Re-imagining Attention Based Business Models

In order to meet the goals of the UN SDGs, current attention-based business models must evolve to better align profit goals with human values and ecological needs to support a regenerative economy. Financial return on investment must better coincide with the return on impact to society of the investment and reward those who build trust between buyers and sellers and leverage attention to enhance healthy communication over those who exploit attention to extract value from people and nature.

P10.3 Resource Sharing

Attention economy stakeholders should make a reasonable effort to share innovations with other stakeholders that would benefit society and nature at large. Large-scale stakeholders should share resources with smaller stakeholders in areas that promote sustainability, inclusivity, ethics, and well-being to ensure barriers to ethical decision making are not determined by monetary constraints.

P10.4 Future Proofing Education & Learning

All stakeholders must educate their respective ecosystems on new technologies, methods, and systems entering their sector or domain with equal weight given to the positive and adverse effects they may have to the economy, regulatory landscape, environment, and culture within communities. Organizations and governments should continuously interface with professionals who can focus on the long-term implications of technologies and processes with the capacity to disseminate the knowledge to their peers and communities.

The principles we propose are based on biomimicry, the generative pattern of nature and the natural inter-relatedness of people, organizations, systems, and things. Ultimately, these principles will help stakeholders cooperate and collaborate for the good of all, creating a continuous regenerative spiral.

Artificial Intelligence (AI) was not specifically addressed in these principles, but we do acknowledge machine learning algorithms and language models are intrinsic to the infrastructure that run Attention Economy business models, applications and technical platforms. The United Nations produced a comprehensive set of recommendations for [AI Ethics](#) published in November 2021. The United States White House also sponsored an [AI Bill of Rights](#). We believe the Conscious Attention Economy Principles are core to any technology platform that engages human attention including artificial intelligence, and the application of these principles should be applied to every dimension that AI impacts.

We realize that to many, what we are proposing may seem too abstract or insurmountable to have relevance in our world, but we must consciously direct how we want our attention to be 'managed'. If we don't, the current economic model valuing profit over healthy ecosystems will prevail. In order to move from an extractive to a regenerative attention economy model, we must re-imagine the current attention economy to align business, government, education, and civil society by empowering individuals to express their intentions, respecting their wishes, and protecting human rights.

The current system is not in alignment with mutually thriving life for all beings and nature. Our principles are based on mutual respect and benefit, adaptability and stewardship. We honor the rights of individuals, but not at the expense of the commons.

The Conscious Attention Economy Principles provide a foundation for an adaptive, regenerative ecosystem that generates value for individuals, society and the natural world with each unique online experience. Decision-making that affects attention should use these principles as a source for guidance. Human and natural well-being should be the paramount concern in the implementation of attention-based systems. We can all contribute to greater well-being through conscious awareness of how we use our own attention.

As an individual stakeholder, I commit to implementing these principles in any way that is relevant to my personal, community, and professional worlds.

'First Movers' are individuals and organizations that inherently know and embody Conscious Attention Economy Principles and are committed to expressing themselves in accordance with the values they represent, even if it places them at an economic disadvantage under the current extractive economic model.

Many First Movers are already developing technology and business models based on these principles. You know who you are, and we are supremely grateful for your vision and commitment. To First Movers, we offer support and validation. We know that others will follow.

'Second Movers' Are those professionals, educators, innovators, activists, policy makers, and individuals who are aware of attention economy issues and are eager to be part of the solution, but feel current systems and frameworks do not provide the necessary education and agency to do so.

For Second Movers, the Conscious Attention Economy Principles can serve as a framework to ignite creativity, align values and drive action. We hope they help inspire innovation for all stakeholders when used as a guide to create business models, technologies, policies, and curriculum that acknowledges our mutual interdependence and serves well-being for all life.

The goals presented here are ambitious. It will take time to educate, advocate, coordinate, network, prototype and collaborate with the many individuals and groups who are either already focused on these principles or are anxious to embody them in their work.

This is just the beginning.

Thank you for your valuable attention.



In closing we want to acknowledge and offer our gratitude to the Future Capital Initiative for its sponsorship.

Future Capital's mission is to convene individuals and organizations to manifest conscious economic models that can deliver health, well-being, and prosperity in support of mutual interdependence for all beings including the Earth.

We also would like to acknowledge the partnership and cooperation with the United Nations Economist Network (UNEN), New Economics for Sustainable Development Initiative (NESD) Yellow Attention Economy Working Group, Dr. Chantal Line Carpentier from the United Nations Conference on Trade and Development (UNCTAD) and all the wonderful people who have contributed to this effort.

United Nations New Economics for Sustainable Development (NESD)

<https://www.un.org/en/desa/unen/policy-briefs>

Here is the full UN document for the Yellow Attention Economy

https://www.un.org/sites/un2.un.org/files/attention_economy_feb.pdf

GET INVOLVED

The core working group is a diverse collaboration of professionals from technology, advertising, academic, civil society, finance, non-profit and creative sectors who are passionate about creating a world that works for all life.

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To learn about next steps or to engage in how you can implement these principles into your life or work, please reach out to the team.

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Website:

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APPENDIX

The attention economy refers to the many interrelated technology systems, applications, advertising and adtech business models including search engines, social media, games and the currently nascent metaverse itself. We offer these terms to align on common language to facilitate communication and add clarity to our intentions and meanings.

Attention Capital

Financial investments and/or financial returns based on capturing value from attention data

Attention Data

The combination of personal and behavioral data collected while individuals are engaged online

Content

The flow of information produced to garner attention in order to achieve a goal and any production costs or gains associated with it

Data Algorithms + Tools & Artificial Intelligence

The technical processes and technologies used in capturing, analyzing, and acting on data inputs

Data Inputs

The raw data generated by a stakeholder and/or initial data included in a process. The data captured through online engagement by individuals. This could be both identifying data or behavioral data such as time spent browsing a particular site

Data Outputs

The processed data developed from refining the data inputs. Data produced by processing and analyzing raw data inputs

Data Sovereignty

The ability for an individual or entity that produces an original dataset to be identified as the rightful owner-of that data with the ability to steward and monetize the data they have cultivated with maximum autonomy

Digital Attention Infrastructure

Interactable content or infrastructure within digital ecosystems designed to capture attention data and influence behavior

Digital Ecosystem

An electronically connected space in which individuals and enterprises can directly interact with no intermediary

Digital Twins

The digital representation of an individual or physical entity inclusive of all representations of that person or physical entity in a digital medium

Ethical Research, Templates, Language, and Frameworks

Guidelines for algorithms, content and technical design that are oriented towards individual attention safety and well-being

Human Experience

The totality of attention by an individual or group of individuals interacting with a space and/or entity and its returned impact

Human Labor

Work performed by people in the process of developing and supporting the attention economy

Intention

In relation to the attention economy refers to the expressed interests, desires, and actions of an individual or stakeholder that contributes attention economy resources to a system

The Metaverse

A virtual-reality space in which users can interact with a computer-generated environment and other users

Metric & Accountability Systems

How success is measured in relation to attention, data processes, and well-being

Patents & Proprietary Acknowledgements

Ownership of attention economy resources by a stakeholder which is in alignment with conscious attention economy principles

Physical Attention Infrastructure

Physical technology, physical ecosystems and/or physical tools utilized to support the attention economy and/or capture attention (ex. newspapers, phones, headsets, billboards, etc.)

Portability

The ability to move between platforms that perform the same services without losing any personally- generated data

Purpose

In relation to the attention economy refers to the reason why an individual or entity expressed an intention

Spatial Web

Refers to a computing atmosphere that exists in a 3D space. It is a pairing of real and virtual realities and accessed through the interface of Virtual and Augmented Reality

Social Networks

Social systems with multiple stakeholders where individual attention is utilized as a currency for community engagement (does not need to have monetary value)

The Overweb

Refers to the decentralized public space above the webpage. More specifically, the portion of this meta-layer above the web page where people can meet and interact directly through content

Individual Attention

the immediate time spent with mental perception of an occurring phenomena (can be conscious or subconscious)

Well-being

The quality of the human experience

Web 2

Also known as the social web, this layer of the Internet refers to websites that emphasize user- generated content, ease of use, participatory culture and limited interoperability (i.e., compatibility with other products, systems, and devices) for end users

Web 3

A layer above Web 2 that supports user transition into becoming individual stakeholders with self- sovereign rights over their intentional content and attention alongside greater interoperability