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Executive Summary

This report outlines the design of a governance framework for VIRIDIS, aimed at enhancing transparency, stakeholder inclusion, and operational efficiency within its dual-entity structure, comprising VIRIDIS Green Tech Investment AG (GTI) and VIRIDIS Ecosystem gGmbH (VECO). VIRIDIS currently faces challenges due to a traditional hierarchical framework that limits stakeholder involvement and decision-making traceability, undermining operational efficiency and trust (G1,S.Geissler, 2025).
The proposed solution is a hybrid governance model that leverages blockchain technology and Decentralised Autonomous Organisations (DAOs) to foster transparency, traceability, and inclusivity. This model was developed through a mixed-methods research approach, incorporating qualitative insights from stakeholder interviews and focus groups, alongside quantitative survey data and Brainstorm techniques (GP2, S.Geissler, 2025). Key features include a centralized reporting system with real-time dashboards, blockchain for immutable records, and a tiered transparency model. The project also focuses on improving the conclusion of data through standardised formats and training (S.Geissler, 2025).
Financially, the transition to a DAO structure has estimated costs for expert services, platforms, and training. However, it is expected to lead to operational efficiencies and diversified revenue streams for V-GTI (e.g., digital platform services, investment management, capital gains from exits) and VECO (e.g., project-bound funding, donations, cluster services). VIRIDIS aims to position itself as a pioneer in sustainable business innovation, setting new standards in the green-tech and circular economy sectors through enhanced transparency and participatory governance and therefore being a role model in the general green-tech investment world. (S.Geissler, 2025).

Context Analysis

The global landscape is experiencing a significant shift toward sustainability, particularly within the green technology and circular economy sectors. This paradigm shift has redefined traditional notions of business success, emphasising resource efficiency, waste minimisation, and sustainable systems. VIRIDIS is strategically positioned at the forefront of this transition, aligning its mission to foster a collaborative ecosystem that supports critical global objectives, notably the United Nations Sustainable Development Goals (SDGs), including SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production), and SDG 17 (Partnerships for the Goals).
However, VIRIDIS operates as a dual-entity organization comprising a for-profit component (GTI) and a non-profit component (VECO), which presents inherent governance challenges. Its current hierarchical structure limits stakeholder participation and decision-making transparency, thereby impeding operational efficiency and undermining trust among diverse stakeholders such as investors, policymakers, and civil society. The market's prevalent focus on short-term profitability further conflicts with the long-term investments needed for sustainable innovation. Addressing these systemic issues requires an innovative governance model that prioritises transparency, inclusivity, and traceability. Emerging technologies such as blockchain and Decentralized Autonomous Organizations (DAOs) offer promising solutions to enhance stakeholder engagement and ensure accountability.

Problem and Opportunity

The Problem:
VIRIDIS faces a critical misalignment between its commitments to transparency, inclusivity, and sustainable innovation and its traditional hierarchical governance framework. This structure restricts stakeholder involvement, hampers traceability in decision-making processes, and leads to systemic inefficiencies, ultimately eroding stakeholder trust and hindering long-term strategic objectives. Key issues include the absence of a centralised, transparent system for tracking investments and operational performance; reliance on manual reporting processes; highly centralized decision-making; and low levels of stakeholder engagement. Qualitative data highlights frustrations with the lack of a truly transparent and inclusive governance structure, which causes project delays and unclear workflows. Additionally, literature identifies gaps in developing comprehensive metrics to evaluate governance success in terms of transparency and inclusivity and emphasizes the complexity of aligning stakeholder interests within a dual-entity ecosystem like VIRIDIS.

The Opportunity:
Despite these challenges, substantial opportunities exist for VIRIDIS to transform itself and emerge as a leader in the green-tech sector:

Emerging Technologies:
Blockchain and DAOs present promising tools to enhance stakeholder engagement, ensure accountability, and automate governance processes, directly addressing existing governance issues.

Market Positioning:
By resolving its governance challenges, VIRIDIS can establish itself as a benchmark for sustainable business practices and set new standards in innovative sustainable enterprise.

Global Impact:
VIRIDIS's initiatives contribute directly to the UN SDGs, especially SDG 9, SDG 12, and SDG 17, amplifying its societal impact and reinforcing its role in global sustainability efforts.

Operational Efficiency:
The adoption of automated systems, clearer workflows, and well-defined roles—facilitated by new governance models—can significantly reduce inefficiencies and accelerate project timelines.

Strategic Growth: Leveraging its dual-entity structure enables VIRIDIS to balance financial sustainability with social and environmental impact, fostering a collaborative ecosystem that drives innovation and sustainable economic practices. This strategic approach aims for strong revenue growth and capital gains through investments in green-tech startups.

These insights highlight the critical challenges and transformative opportunities that can position VIRIDIS as a pioneering force in sustainable business innovation, grounded in transparent, inclusive, and technologically-enabled governance.

Company Overview

VIRIDIS operates as a dual-entity ecosystem within the green-tech and circular bioeconomy sectors, with a core emphasis on sustainability, innovation, and stakeholder inclusion. The organisation is currently structured hierarchically but is actively transitioning towards a more inclusive and transparent model (VIRIDIS, Strategy Paper, 2025)

The ecosystem consists of two interconnected legal entities:

VIRIDIS Ecosystem gGmbH (VECO): This is the non-profit platform designed to support startups, research institutions, and civil society actors, fostering collaboration and knowledge-sharing for innovation in green-tech and circular bioeconomy. VECO is responsible for carrying out sustainability projects and managing central service structures, with capital gains reinvested into the cluster (Strategy Paper VIRIDIS, 2024).

VIRIDIS Green Tech Investment AG (V-GTI): This is the investment arm of VIRIDIS, promoting sustainable technologies and startups by providing financial resources and strategic guidance. Ownership of V-GTI is gradually being transferred to the non-profit VIRIDIS. V-GTI's business model is based on investing in startups, which are financed by capital from small and large investors (Strategy Paper VIRIDIS, 2024).

VIRIDIS's operational framework is defined by three central hubs:

Invest HUB: Focuses on sustainable and transparent investments in green-tech, facilitating financial partnerships and offering investors direct access to environmental technologies.

Project HUB: Serves as a collaborative platform for interdisciplinary stakeholders, facilitating digital and cross-border cooperation. This hub acts as an accelerator and incubator for green tech startups.

Physical HUB: Encompasses all physical locations of the VIRIDIS cluster, such as the initial demonstrator in Hebertshausen, providing infrastructure for research, development, and demonstration of technologies.

The VIRIDIS cluster includes a diverse range of innovative companies, such as MingaGreens (organic microgreens), Haepsi (sustainable paper packaging), GOC Nexus (cold plasma technology for cannabis sterilisation), AlgaeRithm (microalgae cultivation solutions), Filedgr (Digital Twin Hub for data management), and Pangea Virtual Nation (Web4 identity and governance) (VIRIDIS Strategy Paper, 2024). These entities collaborate synergistically across consulting, network services, infrastructure development, and knowledge transfer to support innovation and sustainable economic practices. Key leadership includes Josef Zacharias Köhl (Founder and CEO of V-GTI, Managing Director of VECO) and Friedrich Rackwitz (CEO of VECO) (GP2, S.Geissler, 2025).

Governance Operating Molde Framework

This chapter introduces the analytical lens guiding the assessment and redesign of VIRIDIS's governance system including pro and cons of the applied framework.
Lets first start with the Introduction to the Framework: The Four-Pillar Governance Operating Model by Howell (2024, July 2) provides a structured approach to assessing and designing governance. Its components include:

Structure: Legal setup, decision-making hierarchy, board composition
Oversight Responsibilities: Accountability systems, performance monitoring
Talent & Culture: Leadership values, team collaboration, knowledge flows
Infrastructure: Digital systems, data management, operational platforms

VIRIDIS Current Governance Infrastructure

The Four-Pillar Governance Operating Model after Howell,.J. (2024, July 2) was chosen as an analytical tool because it provides a holistic view of governance across structure, oversight, culture, and infrastructure. This framework ensured that all dimensions of VIRIDIS's governance challenges were systematically captured. Each pillar was applied to dissect specific strengths and weaknesses within VIRIDIS—ranging from organizational setup and leadership dynamics to talent management and digital capabilities—allowing for targeted solution development in the next stages of the report.

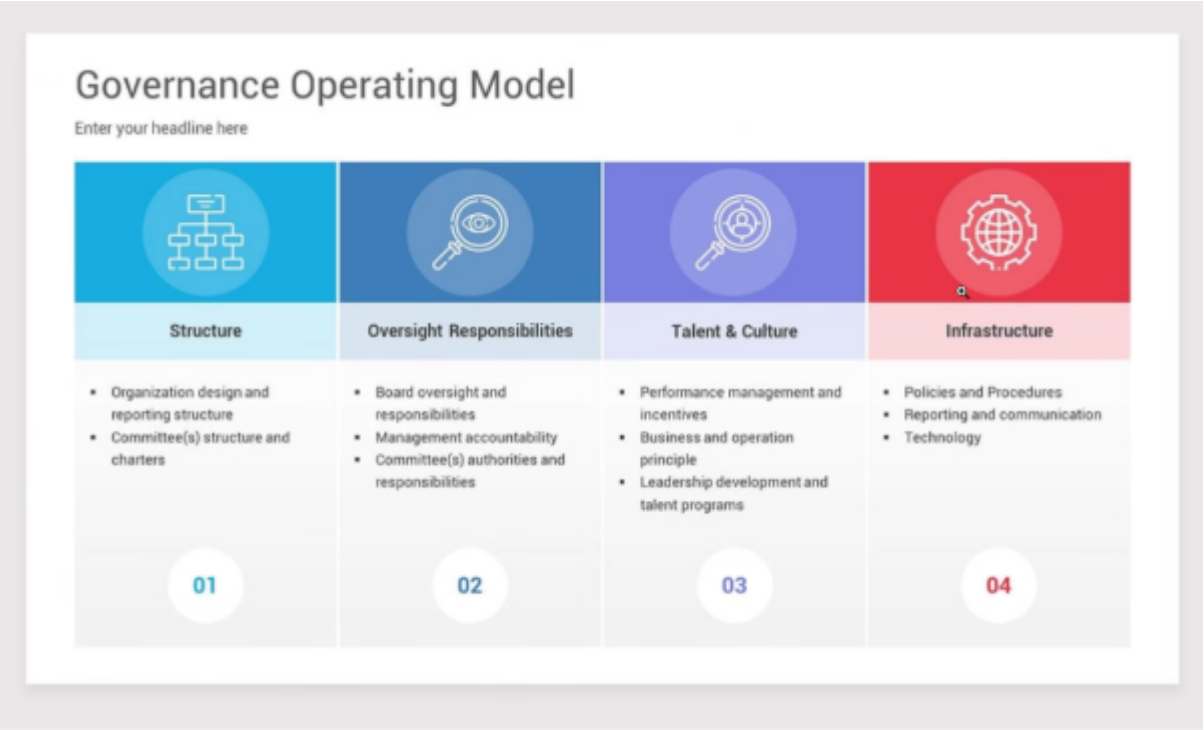


Figure 1 Classical Governance Operating Model (Howell, J. (2024, July 2)

Pros & Cons

Pros and Cons of the Four-Pillar Framework

Pros:

- Offers a comprehensive lens to evaluate governance across both technical and cultural domains
- Helps uncover root causes of inefficiencies beyond surface-level symptoms
- Aligns with organizational design best practices and system thinking
- Facilitates communication across stakeholders by clearly defining governance elements

Cons:

- Requires significant internal data and transparency to be applied effectively
- May overlook legal or regulatory nuances if not adapted contextually
- Can be resource-intensive to implement fully across large or complex organizations

Scope and Limitations

This chapter defines the scope of the GP3 project for VIRIDIS, clarifying what is and isn't included, what goals and deliverables are targeted, and what constraints were encountered during research and development. The project scope is built around the Governance Operating Model Framework and focuses on creating a future-proof, stakeholder-driven, and transparent governance model for VIRIDIS. The scope and its methodological boundaries support a realistic yet visionary transformation strategy grounded in organizational context and stakeholder needs.

Scope of the Project

To develop and implement a practical and conceptual governance framework for VIRIDIS, aligned with its values in sustainability, decentralized innovation, and mission-oriented leadership. This framework will enhance transparency, inclusivity, and operational efficiency within the dual-entity structure, addressing current limitations and anticipating future scalability and stakeholder complexity through the integration of decentralized technologies like blockchain and smart contracts. The initial implementation will be scoped for the Munich base of operations, with global scalability built into the model design, while giving strong consideration to cost, maturity, and adoption feasibility.

Out of Scope

To maintain focus and feasibility, the following areas fall outside the defined project scope:

- Corporate restructuring or legal entity transformation.
- Broader innovation of VIRIDIS's business model beyond governance.
- Fundraising or capital deployment strategy.
- Software development or third-party vendor selection for DAO tools.
- Full legal decentralization of decision authority or financial autonomy.

Limitations

Several factors constrained the execution of the project, which should be considered when reviewing its outcomes:

Research Evolution:
The project expanded from desk research to include co-creative workshops, interviews, and iterative design testing, increasing insight depth but requiring more time and resource planning.

Phased Development:
Rather than producing one final model, the governance design evolved through feedback loops and modular prototyping. This enhanced flexibility but affected project pacing.

Expanded Stakeholder Focus:
The inclusion of external actors (e.g., Investors, public partners) increased the complexity of insights and data consolidation.

Resource Constraints:
Limited access to dedicated budgets and governance technology tools restricted real-time prototyping of DAO components and impact dashboards.

Adoption Resistance:
Interviews revealed reluctance from some stakeholders toward radical decentralization, particularly concerning digital tools and data security.

Measurement Gaps:
Current industry tools for measuring governance transparency and stakeholder inclusion are underdeveloped, which required custom indicator development during the project.

In Summary, this project's scope strategically isolates VIRIDIS's governance challenge and proposes a high-impact, stakeholder-centered, and systemically coherent solution. It is grounded in the Four-Pillar Framework to ensure holistic analysis, scalable transformation, and measurable success. While limited by technological readiness and organizational constraints, the project offers a realistic and validated model to support VIRIDIS's long-term governance innovation.

Problem Analysis and Research

This section summarizes key insights and findings from the research activities conducted in GP2. Building upon the theoretical framework established in GP1, GP2 employed a mixed-methods approach. This approach, it incorporates qualitative data from stakeholder interviews and focus groups along side quantitative data from surveys. The goal of this research was to refine our understanding of VIRIDIS's operational ecosystem, strategic initiatives, and governance challenges, ultimately informing the development of a tailored solution design.

Key Research Outcomes

Transparency and Governance Gaps: Quantitative data revealed significant gaps in VIRIDIS's current transparency and operational frameworks, with stakeholders expressing dissatisfaction with manual reporting processes and centralized decision-making (S. Geissler, GP2 nterview data, 2024).

Stakeholder Perspectives: Qualitative insights highlighted the need for mechanisms to foster collaboration and deliver real-time updates on investments and project milestones. Decentralized technologies, particularly DAOs, were identified as promising solutions (S. Geissler, GP2 Interview data, 2024).

Operational Inefficiencies: A lack of automated systems and clearly defined roles have contributed to operational inefficiencies, with reported project delays ranging from 20% to 30% (S. Geissler, Interview data, 2024).

Emerging Dimensions: Beyond the initial theoretical framework, the research identified emerging dimensions such as the importance of stakeholder engagement as a transparency enabler (Albu & Flyverbom, 2019) and the need to address cultural and organizational resistance to change (S. Geissler, Interview data, 2024).

Overlaps and Standout Findings: Both desk and field research confirmed that transparency tools are essential for building trust, while field research uniquely highlighted the over-reliance on informal communication at VIRIDIS (S. Geissler, Interview data, 2024).

Insights for Solution Design

These research outcomes provide critical insights for designing an effective governance solution. Most importantly for our solution design: 65% of stakeholders are dissatisfied with existing manual reporting processes, while 78% acknowledged that founder-centric decision-making remains a bottleneck (S. Geissler, GP2 Interview data, 2024).

Therefore the solution needs to focus on:

> The need for a hybrid governance model that balances innovation with operational efficiency (Wright & De Filippi, 2015).
>
> The importance of a phased implementation strategy to address cultural and organizational resistance (S. Geissler, Interview data, 2024).
>
> The potential of blockchain technology and DAOs to enhance transparency and stakeholder engagement (Hassan & De Filippi, 2021; Tapscott & Tapscott, 2016).
>
> The necessity of fostering stakeholder education and trust in decentralized systems (S. Geissler, Interview data, 2024).

By integrating these insights into the solution design process, we aim to develop a governance framework that not only addresses the immediate challenges faced by VIRIDIS but also promotes long-term sustainability and stakeholder trust.

Solution Design & Development

The project focuses exclusively on the governance layer of the organization and includes the following STEPS, validated through research and stakeholder feedback loops:

Step 1. Analysis of the Current Governance Setup:

A systemic review of VIRIDIS's dual-entity structure (V-GTI and V-ECO) and Hub operations (Invest, Project, Physical).

Diagnosis of governance bottlenecks using the Four-Pillar Framework: Structure, Oversight, Culture, Infrastructure.

Step 2. Stakeholder Analysis, Mapping and Involvement:

In-depth classification of key Internal Stakeholders (teams, boards, investors and External Stakeholders (regulators, partners, users).

Evaluation of current engagement gaps and inclusion challenges in decision-making.

Step 3. Solution Design of a Tailored Governance Model:

A solution concept combining structural clarity with decentralized accountability and procedural transparency.

Multiple iterations form a Minimal Viable Solution to an Optimal Solution.

Integration of feedback from relevant stakeholders to shape the optimal iteration.

Step 4. Business case and multiple Scenarios:

Scenarios

Financial set up

Creation of tools to monitor governance effectiveness (e.g., dashboards, KPIs).

Definition of mechanisms for continuous learning, stakeholder feedback, and adaptive improvement .

Step 1. Analysis of the Current Governance Setup:

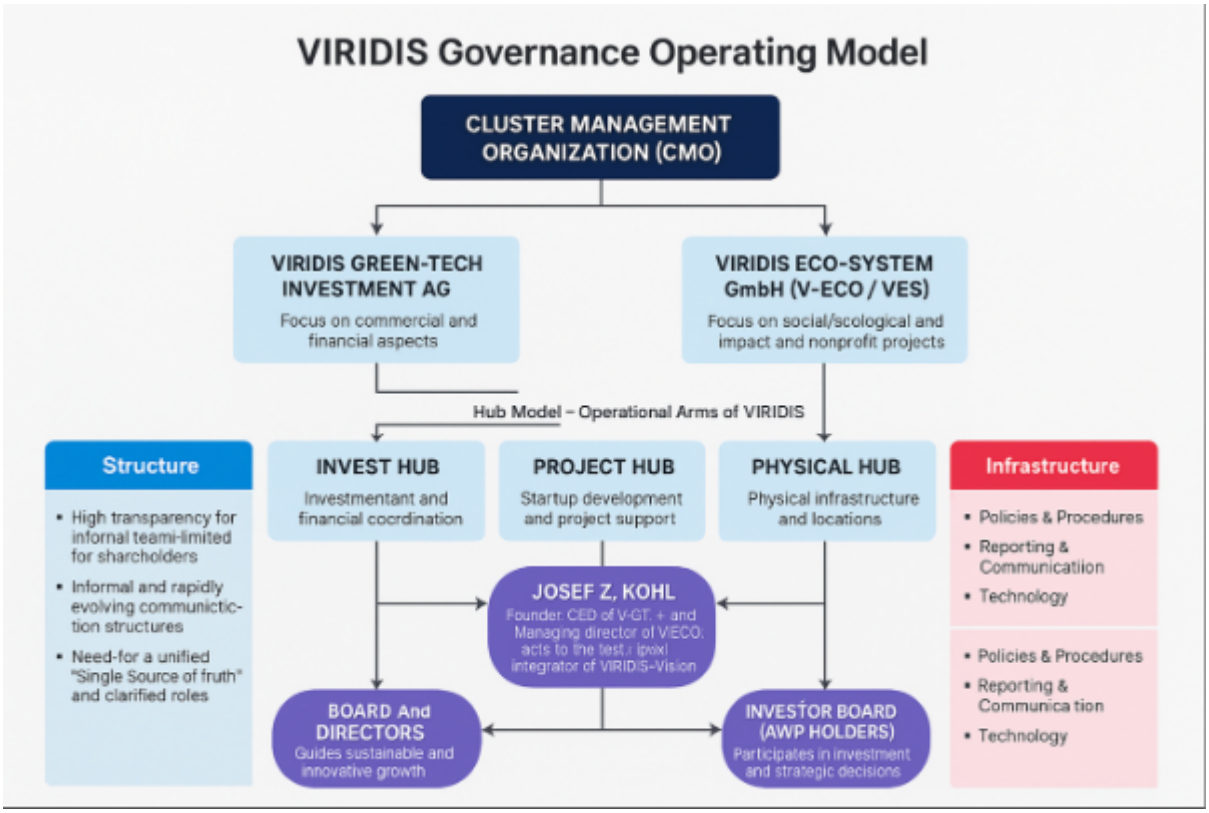


Figure 2 VIRIDIS Current Governance Model 2025 (S.Geissler,2025)

The current governance infrastructure of VIRIDIS is structured under a Cluster Management Organization (CMO) which oversees two primary legal entities:

VIRIDIS Green-Tech Investment AG (V-GTI): Focused on commercial and financial operations, particularly startup investment and capital coordination.

VIRIDIS Eco-System gGmbH (V-ECO / VES): Dedicated to social, ecological, and nonprofit initiatives, supporting stakeholder engagement and sustainability projects.

Both entities operate through a unified Hub Model, the operational backbone of VIRIDIS, which includes:

Invest Hub: Manages financial coordination and investment activities.

Project Hub: Oversees startup support, cross-functional collaboration, and project execution.

Physical Hub: Handles the infrastructure and physical locations (e.g., cluster centers, innovation spaces).

Structure:

The organization exhibits high transparency internally, particularly among the core team, but access is limited for external shareholders.

Communication structures are informal and evolve rapidly, often relying on personal relationships and meetings.

A critical need has been identified for a unified “Single Source of Truth” and clear role definitions across the organization.

Oversight Responsibilities:

The governance structure includes a Board of Directors (guiding innovation and sustainable growth), a General Advisory Board (offering strategic expertise), and an Investor Board (First Investors called First Founders) involved in financial decision-making.

Leadership is primarily concentrated in Josef Z. Köhl, who serves as both Founder/CEO of V-GTI and Managing Director of V-ECO. He acts as a meta-level integrator for the entire VIRIDIS vision.

Other key figures include Lars Friedrich Rackwitz (Managing Director, V-ECO) and Michael Hopf (Strategic Project Manager and Executive Assistant).

Governance challenges include over-reliance on Josef, limited delegation, and blurred accountability lines.

Talent & Culture:

Performance Management is undefined; success is currently measured through informal criteria such as perceived impact or investment traction. There is no standardized system to track or assess performance.

Operating principles emphasize agility, sustainability, and mission-alignment. VIRIDIS prioritizes scalable startup support and network-driven ecosystem growth.

Talent Development is critical but hindered by resource constraints and a limited talent pool. A more empowering and inclusive culture is needed to support retention and innovation.

The organizational goal is to cultivate an environment where individuals can operate freely, creatively, and safely.

Infrastructure:

Policies & Procedures:
Current procedures lack standardization. There is a clear ambition to implement transparent digital governance processes, especially in partner selection and internal approvals.

Reporting & Communication:
The communication strategy is fragmented. Stakeholder interviews reveal a strong need for structured, multi-level communication tools. Suggested improvements include real-time dashboards, AI-personalized reports, and a centralized knowledge base using tools such as Discord, feedback forms, and shared archives.

Technology:
The digital infrastructure is still under development. There is no centralized platform for data aggregation or cross-entity collaboration. A unified and consistent information flow is urgently required to support growth and transparency.

Analysis of current Situation

Structure: The dual- enterty structure leads to complexity. Leadership remains heavily centralized in individuals such a Josef Koehl. As well is the communication between the two enterties difficult.

Oversight Responsibilities: A Board exists but offers limited strategic oversight. The Reporting is manual and fragmented.

Telent & Culture: Informal communication patterns and undefined roles boundries reduce efficiency and puts a high stress level on the staff.

Infasturcture: Limited automation, lack of transparency dashboards, over-reliance on Excel, Google Drive and PDFs.

Key Gaps & Outcome

- Transparency and traceability are not systematized.
- Lack of Stakeholders accessible, real-time governance data.
- Operational inefficiencies delay project timelines.
- Collaboration is impeded by non-standardized processes

Key Insights and Takeaways

The Four-Pillar analysis revealed deep-seated structural and operational limitations within VIRIDIS. The centralization of authority around a single individual, the absence of standardized procedures, and fragmented digital systems collectively reduce the organization's ability to scale effectively. Talent development is ad hoc, with a lack of incentives and defined performance systems. Infrastructure shortcomings, especially in reporting and communication, hamper transparency and stakeholder trust.
Critically, the Four-Pillar model demonstrated that these issues are interconnected: limited oversight hampers clarity in structure; weak infrastructure obstructs talent development; and vague performance systems dilute accountability. Solving one area without addressing the others risks perpetuating inefficiencies. This insight underpins the need for a holistic, system-level redesign of governance—anchored in decentralization, clarity, and inclusivity.\

In summary, the current VIRIDIS governance infrastructure reveals several promising foundations, particularly its dual-entity setup and commitment to sustainability. However, it is hindered by centralization, lack of systematization, and underdeveloped digital and procedural infrastructure. These issues form the basis for the proposed solution design in the following chapters.

Step 2: Stakeholder Analysis, Mapping, and Engagement: An In-Depth Classification

Classification of Key Stakeholders

VIRIDIS operates within a diverse ecosystem of stakeholders, each contributing uniquely to its vision of a transparent, inclusive, and sustainable circular economy cluster. Stakeholders are divided into two main categories: Internal and External Stakeholders.

Internal Stakeholders

Internal stakeholders are directly involved in the governance, operations, and innovation processes within VIRIDIS and are essential for achieving the organization's strategic objectives.

Leadership Level:

Key Individuals: Josef Zacharias Köhl (Board Member, VIRIDIS Green Tech Investment AG), Friedrich Rackwitt (CEO, VIRIDIS ECO gGmbH), Miriam Martin (Management Team Member), Michael Hopf (Management Team Member). The supervisory board, including Hendrick Lasser, Florian Renner, Dr. Andreas v. Aufschnaiter, oversees corporate governance.

Roles and Interests:

They are responsible for strategic decisions, resource allocation, steering project direction, governance, and aligning the dual-entity structure of VIRIDIS (Green Tech Investment AG and VIRIDIS ECO gGmbH). Their primary interests lie in operational efficiency, building trust among stakeholders, achieving financial goals and strategic visions, and realizing the long-term vision of sustainability and innovation. Josef Köhl is primarily interested in promoting sustainability goals, climate neutrality, transparency, and accountability.

Employees and Researchers:

Key Individuals:

Jan Philipp Knebel (Researcher, Operational Hubs), Sophia Geissler (Researcher, Sustainability Officer), Eleonora D'Addato (Research Expert, Marketing and Communication), Michael Hopf (Project Manager, Business Developer), Christian Verhoef (Lab Leader, Technology and Policy Expert).

Roles and Interests:

They are the primary actors of change and are most affected by the transition to transparency and sustainability. They focus on implementing sustainable practices and promoting innovation within the three operational hubs: Physical Hub (laboratories, warehouses, production facilities), Investment Hub (managing green-tech investments, reinvesting profits), and Project Hub (accelerator and incubator for green-tech startups). Their concerns include transparency in decision-making, equitable resource allocation, fostering a collaborative and innovative work environment, and providing input for new processes, participating in training, and applying new methods. Michael Hopf is interested in promoting sustainability goals and building partnerships. Christian Verhoef emphasizes systemic sustainability changes through technology and policy.

External Stakeholders

External stakeholders influence or are influenced by
the operations of VIRIDIS and play a crucial role in its success by providing resources, ensuring compliance, and demanding accountability.

Investors and First Founders:

Roles and Interests:
They provide capital and strategic advice. Josef Z. Köhl also classifies himself as an investor. Hubertus Haller von Hallerstein is a strategic investor. Stefan Langer is an investor and founds other companies. The 31 "First Founders" are a unique and invaluable subgroup, combining financial investments with active participation in ecosystem development and mentorship. Their interests focus on Return on Investment (ROI), scalability, new technologies (especially blockchain), networking, and mentoring. There is a desire for transparent reporting and participation in decision-making. Hubertus HvH expects access to information without asking, e.g., the ecological footprint. Markus Steiner is interested in long-term projects and promoting sustainable innovations.

Political Decision-Makers and Regulatory Authorities:

Roles and Interests:
They oversee compliance with environmental, financial, and governance regulations, ensure compliance, and set sustainability standards. Hubertus Haller von Hallerstein also classifies himself as a political decision-maker. Palaash Gupta is also listed as a political decision-maker and sustainability expert.

Civil Society and NGOs:

Roles and Interests:
They advocate for environmental and social accountability, emphasizing the importance of transparency, inclusivity, and societal impact. They demand transparency and collaboration on sustainability campaigns. Palaash Gupta, a sustainability consultant and policy advisor, focuses on aligning organizational strategies with global sustainability standards.

Corporate Partners and Startups:

Roles and Interests:
They actively participate in ecosystem development and mentoring. Examples of portfolio companies include Haepsi, AlgaeRithm, Filedgr, MingaGreens, GOC Nexus, OVID Clinic Berlin, and Pangea Virtual Nation. They collaborate with VIRIDIS via the Project Hub, participating in innovation projects and utilizing the resources of the ecosystem. Their focus is on the collaborative development of sustainable solutions, access to funding, and leveraging the shared infrastructure. Stefan Langer, a Business Developer at GOC and founder, emphasizes his role as a networker, bringing together investors, technology providers, and other stakeholders.

Researchers and Academic Institutions:

Roles and Interests:
They provide knowledge contributions and third-party validation. Christian Verhoef (Lab Leader at a technical college) is an example of an involved researcher. They conduct sustainability-oriented studies funded by VIRIDIS and contribute to the development of innovative green-tech technologies. Their primary interest lies in knowledge expansion, access to resources, and collaboration with industry leaders.

Stakeholder Mapping

A visual stakeholder map (Table 1 below) provides a comprehensive overview of the VIRIDIS ecosystem, showing the relationships between GTI, VECO, their respective boards, shareholders, and external stakeholders. The report highlights the overlaps between the board members of GTI and VECO and identifies key external stakeholders such as the 31 First Founders and governmental and regulatory bodies.

The map categorizes stakeholders according to their roles and engagement strategies. For example, corporate partners participate in collaborative innovation projects, and researchers are incentivized through funding to conduct sustainability-oriented studies.

VIRIDIS focuses on an ecosystem based on three hubs:

Project Hub: An accelerator and incubator for green-tech startups.
Physical Hub: Provides laboratories, warehouse, and production facilities accessible to the entire ecosystem.
Investment Hub: Where investors can invest in a portfolio of hand-picked companies within this ecosystem.

Since VIRIDIS is a non-profit ecosystem (VECO), the profit flows back into the ecosystem to foster further synergies.

Detailed Classification of Stakeholder Engagement

VIRIDIS employs tailored engagement strategies to address the diverse needs and expectations of its stakeholders.

The following table provides a detailed breakdown of VIRIDIS's internal and external stakeholders, their roles, interests, and how they are engaged in the organization's governance and development:

Stakeholder Category	**Specific Stakeholders**	**Role & Responsibilities**	**Interests & Expectations**	**Participation & Engagement**
Internal Stakeholders	VIRIDIS Management	Strategic decision-making, resource allocation, steering project direction. Includes founder and CEO Josef Zacharias Köhl and CEO of VECO, Friedrich Rackwitz. The Supervisory Board with Hendrick Lasser, Florian Renner, Dr. Andreas v. Aufschnaiter oversees the corporate governance.	Successful project implementation, strengthening corporate reputation, achieving financial goals and strategic visions. Josef Z. Köhl is primarily interested in promoting sustainability goals, climate neutrality, transparency, and accountability.	Full involvement in key decisions and milestones. Weekly updates and access to information via platforms like Google, Discord, Miro, or Workadventure. Regular meetings on important decisions and milestones.

	VIRIDIS Employees & Internal Researchers	Primary actors of change, most affected by the transition to transparency and sustainability. They provide input for new processes, participate in training, and apply new methods. Examples include Michael Hopf (Project Manager, Business Developer), Christian Verhoef (Lab Leader, Technology and Policy Expert), and Jan Philipp Knebel and Sophia Geissler (Research/Reporting).	Operational efficiency, building trust, long-term sustainability. Michael Hopf is interested in promoting sustainability goals and building partnerships. Christian Verhoef values systemic sustainability changes through technology and policy.	Continuous engagement for input, feedback, and training. Christian Verhoef wants more inclusivity in decision-making. Michael Hopf wants more focused responsibilities.

External Stakeholders	Investors (including "First Founders")	Providing capital and strategic advice. Josef Z. Köhl also classifies himself as an investor. Hubertus Haller von Hallerstein is a strategic investor. Stefan Langer is an investor and founds other companies. The 31 "First Founders" represent a unique subgroup combining financial investments with active participation in ecosystem development and mentoring.	Return on Investment (ROI), scalability. Strong interest in new technologies (especially blockchain), networking, and mentoring. Desire for transparent reporting and participation in decision-making. Hubertus HvH expects access to information without asking, e.g., the ecological footprint. Markus Steiner is interested in long-term projects and promoting sustainable innovations.	Receive regular financial updates and have the opportunity to participate in decision-making processes. VIA Security Tokens enable direct profit sharing and voting rights on important decisions. There are plans for stakeholder education programs on blockchain technology to overcome resistance and build trust.
	Political Decision-Makers & Regulatory Authorities	Ensuring compliance with regulations. They monitor compliance and set sustainability standards. Hubertus Haller von Hallerstein also classifies himself as a political decision-maker. Palaash Gupta is also listed as a political decision-maker and sustainability expert.	Compliance and adherence to sustainability standards.	Engagement through open communication channels and participation in advisory committees. Continuous submissions to regulatory authorities with an open channel for their feedback.

	Civil Society & NGOs	Advocating for accountability and societal impact. They demand transparency and collaboration on sustainability campaigns.	Transparent reporting on sustainability metrics and societal impacts. Collaboration on advocacy campaigns and community initiatives.	Engaged through surveys and feedback mechanisms. Irregular meetings for in-depth discussions.
	Corporate Partners & Startups (in the VIRIDIS Cluster)	Active participation in ecosystem development and mentoring. Examples of portfolio companies include Haepsi, AlgaeRithm, Filedgr, MingaGreens, GOC Nexus, OVID Clinic Berlin, and Pangea Virtual Nation.	Access to accelerator and incubator programs of the Project Hub. Opportunities to co-develop and test innovative solutions within the Physical Hub.	Participation in collaborative innovation initiatives. Promoted through the hub structure (Invest, Project, Physical Hub) to integrate financial resources, project-related collaboration, and physical infrastructure.
	Researchers & Academic Institutions	Knowledge contribution and provision of third-party validation. Christian Verhoef (Lab Leader at a technical college) is an example of an involved researcher.	Funding for sustainability research projects. Access to laboratories and facilities for experimentation.	Involvement to ensure cutting-edge research and to validate credibility. Planned workshops at universities to promote understanding of Web3 technologies.

Figure 1 Stakeholder Overview (S.Geissler 2024)

Inclusion of all stakeholder groups is critical for VIRIDIS's transition to a transparent, inclusive, and sustainable business model. Research highlights that including diverse stakeholders in governance decision-making enhances VIRIDIS's ability to implement traceability and transparency.

Assessment of Current Gaps and Inclusion Challenges in Decision-Making

VIRIDIS faces a critical challenge in aligning its dual-entity organizational structure with its commitment to transparency, inclusivity, and sustainable innovation. All information are provided in the GP2 by S.Geissler.

Limitations due to the Hierarchical Governance Structure

The current traditional hierarchical framework limits stakeholder participation hinders traceability in decision making, and creates systemic inefficiencies. This undermines the long-term vision of VIRIDIS and reduces trust among stakeholders.

Decision-making remains highly centralized, with 78% of key decisions requiring the approval of the founding management. This has led to bottlenecks and limited the organization's agility and responsiveness.

Qualitative insights reveal frustration over the lack of a transparent and inclusive governance structure.

The lack of system automation has led to inefficiencies, with project delays of 20% to 30%. Unclear workflows and insufficiently defined roles were cited as significant barriers to greater operational efficiency.

Lack of Transparency and Communication

Abstance of a centralized, transparent system for tracking investments and monitoring operational performance. 65% of stakeholders express dissatisfaction with existing manual reporting processes, as they often exhibit delays and inaccuracies that hinder effective oversight.

Only 54% of respondents felt sufficiently informed about VIRIDIS's ongoing initiatives and progress. This perceived lack of transparency correlates with low participation rates in collaborative governance and decision-making processes.

The field study revealed an excessive reliance on informal communication and personal relationships at VIRIDIS, which undermines transparency.

Challenges in Technology Adoption and Change Management

Although blockchain and Web3 technologies have been highlighted as important tools for increasing transparency, the field study showed limited understanding and low willingness among stakeholders to adopt these technologies.

There is resistance to technology, lack of trust in decentralized systems, and concerns regarding data protection.

Cultural and organizational resistance to change was observed among long-standing stakeholders accustomed to traditional governance models.

Identified Research Gaps and Data Gaps

There is limited research on the practical implementation of circular economy practices, sustainable business models, stakeholder theory, and decentralized governance in dual-entity structures like VIRIDIS.

The integration of blockchain technology with stakeholder-driven governance remains unexplored, especially in the context of balancing transparency and operational efficiency.

There is a lack of comprehensive studies on how trust can be built and maintained in decentralized systems.

There is a gap in the development of metrics for evaluating the success of governance models in terms of transparency, inclusivity, and sustainability.

The complexity of aligning stakeholder interests in dual-entity ecosystems is unexplored in existing literature.

These challenges underscore the need for an innovative governance model that emphasizes transparency, inclusivity, and traceability.

Step 3: Design of a Tailored Governance Model

Introduction to the Governance Operating Model

The Four-Pillar Governance Operating Model by James Howell (July 2, 2024) offers a structured approach to assessing and designing governance structures. It has been selected as an analytical tool to enable a holistic view of governance across various dimensions. This framework ensures that all aspects of governance challenges can be systematically captured.

The four pillars of the model are:

Structure:
This pillar encompasses the legal framework, the hierarchy of decision-making, and the composition of the board.

Oversight Responsibilities:
This includes accountability systems and performance monitoring.

Talent & Culture:
This pillar addresses leadership values, team collaboration, and knowledge flows within the organization.

Infrastructure:
This refers to digital systems, data management, and operational platforms.
The model provides the advantage of a comprehensive assessment of both technical and cultural governance areas and helps identify root causes of inefficiencies that go beyond superficial symptoms. It is also aligned with best practices in organizational design and systems thinking, facilitating communication among stakeholders through the clear definition of governance elements. However, it requires significant internal data and transparency efforts for effective application and can be resource-intensive in full implementation, especially in large or complex organizations.

Current Situation and Gap Analysis of the GP3 Report

The GP3 report analyses the governance structure of VIRIDIS using the Four-Pillar Model to assess the current situation and identify gaps.

Analysis of the Current Situation at VIRIDIS According to the Four Pillars

Structure: The dual-entity structure (comprising VIRIDIS Green Tech Investment AG (GTI) and VIRIDIS Ecosystem gGmbH (VECO)) leads to complexity. Leadership remains heavily centralized around individuals like Josef Zacharias Köhl, and communication between the two entities is challenging. Internally, there is high transparency within the core team, but access for external stakeholders is limited.

Oversight Responsibilities: A board exists but provides only limited strategic oversight. Reporting is manual and fragmented. 78% of key decisions require the approval of the founding management, leading to bottlenecks and restricting the agility and responsiveness of the organization. This reflects a broader governance misalignment and indicates the need for a redistribution of power and the implementation of participatory mechanisms.

Talent & Culture: Informal communication patterns and undefined role boundaries reduce efficiency and lead to high stress among employees. Performance management is undefined, with success measured informally, e.g., through perceived influence or investment attractiveness. There is no standardized system for performance tracking or evaluation. A need exists for a more empowering and inclusive culture to support talent retention and innovation.

Infrastructure: There is limited automation and a lack of transparency dashboards. An excessive reliance on Excel, Google Drive, and PDFs has been noted. The digital infrastructure is still under development, and there is a lack of a centralized platform for data aggregation or cross-organizational collaboration.

Identified Gaps and Findings from the Analysis

The analysis using the Four-Pillar Model has uncovered deep-rooted structural and operational constraints within VIRIDIS. The centralisation of authority, the absence of standardised procedures, and fragmented digital systems reduce the organization's scalability. Talent development is ad-hoc, and there is a lack of incentives and defined performance systems. Shortcomings in infrastructure, particularly in reporting and communication, hinder stakeholder transparency and trust.

The main gaps are:

Transparency and traceability are not systematized. 65% of stakeholders are dissatisfied with the existing manual reporting processes, leading to delays and inaccuracies. Only 54% of respondents feel adequately informed about ongoing initiatives and progress.

Lack of accessible, real-time governance data for stakeholders. An excessive reliance on informal communication and personal relationships undermines structured transparency.

Operational inefficiencies delay project timelines. The absence of automated systems leads to project delays of 20% to 30%. Unclear workflows and poorly defined roles are cited as significant barriers to higher operational efficiency.

Collaboration is hindered by non-standardized processes.

Resistance from stakeholders towards technologies: Field studies revealed practical challenges in adopting new technologies, including resistance to technology, distrust in decentralized systems, and concerns about data privacy.

Regulatory hurdles: Regulatory barriers are very high, particularly concerning the legal personality of a Decentralized Autonomous Organization (DAO) and the bureaucracy of VIRIDIS's complex structure.

Lack of comprehensive studies on the practical implementation of circular economy, sustainable business models, and decentralized governance in dual-entity structures.
The analysis showed that these issues are interconnected; limited oversight hinders structural clarity; weak infrastructure obstructs talent development; and vague performance systems dilute accountability. Addressing one area without considering the others risks perpetuating inefficiencies.

Ideation & Selection

The ideation and selection of the solution for VIRIDIS were primarily driven by identified problems, research findings, and stakeholder feedback. The core problem revolved around VIRIDIS's traditional hierarchical structure limiting transparency, stakeholder engagement, and operational efficiency. The ideation process focused on addressing these challenges by exploring innovative governance models.

Initial Brainstorming: Prompted by the recognition that emerging technologies like blockchain and DAOs offer promising tools for enhancing stakeholder engagement and ensuring accountability, these technologies became central to the ideation.

Stakeholder-Driven Insights: Qualitative data from interviews and focus groups revealed strong support for decentralized technologies, with stakeholders highlighting DAOs as promising solutions for automating governance processes, facilitating equal stakeholder participation, and improving overall transparency. This direct feedback solidified the focus on DAOs.

Literature Review & Benchmarking: The literature review on relevant topics such as circular economy, sustainable business models, stakeholder theory, and decentralized governance informed the theoretical framework. Comparative analysis with industry leaders provided insights into effective transparent reporting and long-term vision, which VIRIDIS could adapt within a decentralized framework.

Refinement and Exclusion: The research evolved from a broad exploratory focus to minor adjustments in research questions and the exclusion of generic governance frameworks that were less relevant to dual-entity organizations. This refinement allowed the study to concentrate on solutions directly relevant to VIRIDIS's specific challenges, such as blockchain-based transparency tools and DAOs. The resulting selected concept was a hybrid governance model that combines decentralized decision-making with streamlined operations to balance transparency, traceability, and operational efficiency.

Based on all those information a few ideas have been generated using as input for an iterative redesign process of the Governance Model using different methods:
the Mind-Map-Method, the SCAMPER and later organized through the MOSCOW method to find the best solution for VIRIDIS. The ideas are based on the insights of the GP2 Research Report (S.Geissler, 2025) There have been 3 iterations to find the optimal fit for VIRIDIS which will be presented below.

Context, Rationale & Iterations

VIRIDIS operates a dual-entity structure (For-Profit AG and Non-Profit gGmbH) under a traditional hierarchical governance model. This structure has led to several systemic challenges:

- Limited stakeholder inclusion
- Reduced transparency and traceability
- Operational inefficiencies
- Eroded trust among partners and collaborators
- Short-termism over sustainable, long-term value creation

To address these limitations, a structured and participatory ideation process was initiated, combining visual brainstorming, stakeholder workshops, and creative ideation methods. This process was designed to culminate in a governance solution that could effectively transform VIRIDIS into a transparent, participatory, and efficient organization. Ultimately, the optimal solution selected was the implementation of a DAO (Decentralized Autonomous Organization). The Following part will show the process iteration for the redesign of the Governance Model.

Interactive Ideation Process Overview

Round 1: Mind Mapping – Exploring the Problem Space
Method Used: Visual Mind Mapping Buzan, T. (2006)
Participants: 4 core team members
Format: Online workshop with visual voting (virtual hand-raising)
Purpose: To explore diverse ideas across governance, transparency, operational efficiency, and sustainability.

Outcomes: A wide range of ideas emerged, grouped into three categories:
Governance & Transparency: DAO, blockchain, token-based voting, dashboards
Sustainable Growth: Real-time impact tracking, diversified funding
Operational Efficiency: Smart automation, centralized info hubs

Selected Concepts for Further Development:

- DAO & Smart Contract Governance
- Token-Based Voting Mechanisms
- Blockchain-enabled Dashboards

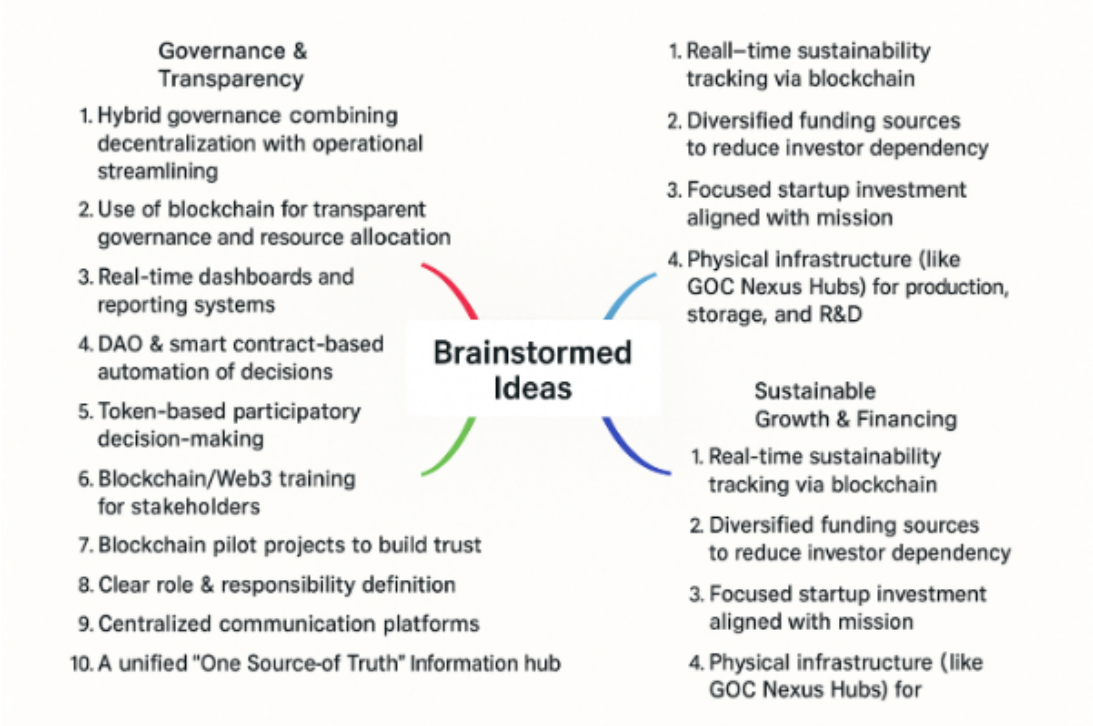


Figure 3 MindMap S.Geissler 2025

Round 2: SCAMPER Ideation – Refining & Reframing
Method Used: SCAMPER Michalko, M. (2006). (Substitute, Combine, Adapt, Modify, Put to Another Use, Eliminate, Reverse)
Participants: 12 stakeholders from different departments
Format: Virtual workshop with structured brainstorming and voting
Purpose: To refine previously selected ideas and generate innovative angles using SCAMPER thinking.

Outcomes: Key focus areas identified:

- Substitute: Traditional governance with DAC/DAO
- Combine: Blockchain + Circular Economy + Dashboards
- Modify: Establish stakeholder training for Web3
- Eliminate: Remove opaque governance processes

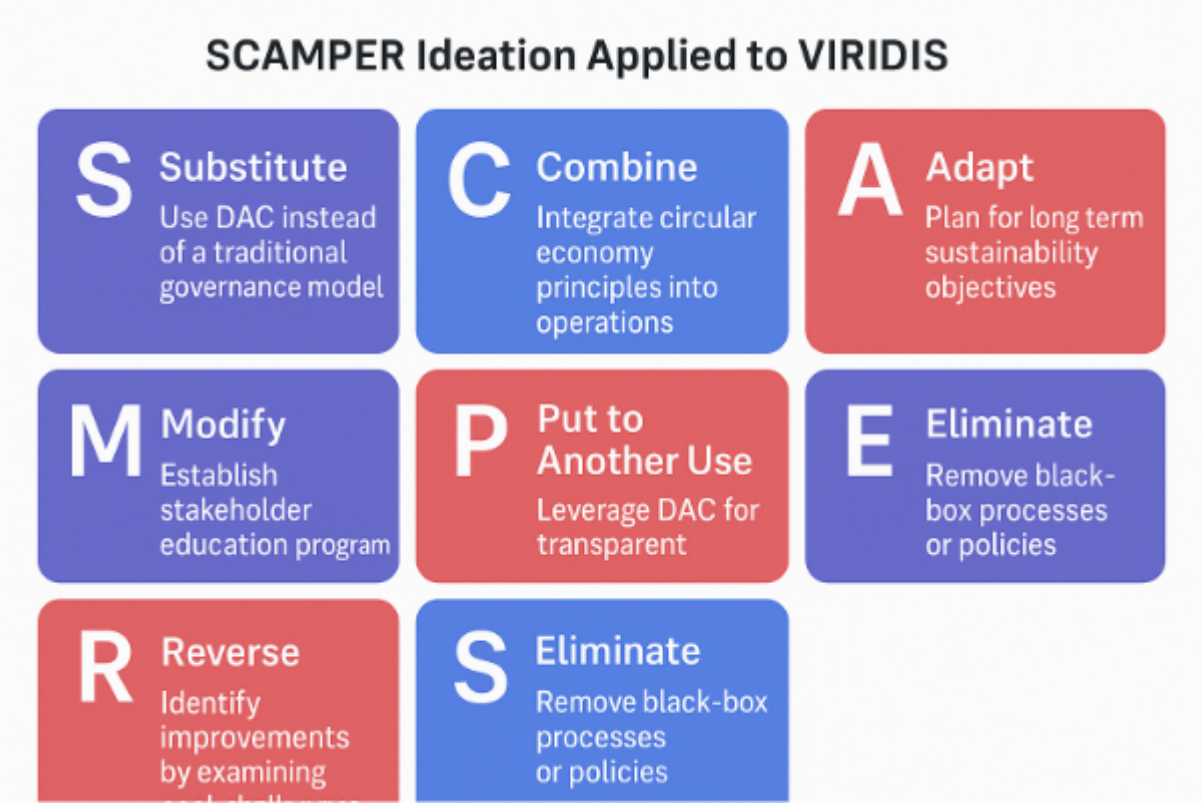


Figure 4. SCRAMPER S.Geissler 2025

SCAMPER Steps	Application to VIRIDIS Ideas
Substitute	Replace traditional governance with DAO-like systems
Combine	Blend blockchain with circular economy metrics
Adapt	Use Interface's "Mission Zero" as a blueprint for long-term goals
Modify	Modify existing stakeholder meetings into advisory boards
Put to another use	Use dashboards not only for operations but also for public engagement
Eliminate	Eliminate opaque decision-making through traceable blockchain logs
Reverse/Rearrange	Invert top-down governance to bottom-up via tokenized votes

Table 2 SCRAMPER applied S.Geissler 2025

Round 3: Final Selection & Prioritization Using MoSCoW

Method Used: MoSCoW [KK13] Prioritization Method Clegg, C. W., & Birchall, D. (2002 (Must have, Should have, Could have, Won't have)

Participants: 30 founding stakeholders (internal leadership and strategic advisors as well as investors)

Format: Final online workshop with voting and ranking

Purpose: To finalize and prioritize solution components for implementation

MoSCoW Analysis of DAO Implementation Components:

MoSCoW Category	**Item**
Must Have	DAO governance system with token-based participatory voting
	Smart contract automation of decisions
	Blockchain-based traceability for governance and resource allocation
Should Have	Stakeholder training for DAO interaction and Web3 onboarding
	Centralized dashboard for DAO activity monitoring
Could Have	Integration of AI-based stakeholder feedback systems
	Ethical framework for DAO governance
Wont Have	Full decentralization of financial approvals in first phase

Table 3 MoSCoW S.Geissler, 2025

Summary of Voting and Workshop Participation

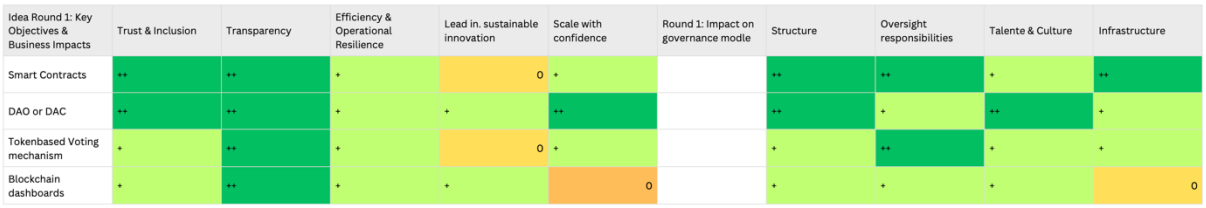
The Participans who attende can be found in the appendix section (x)

Iteration	Method	Focus	Participants	Voting Outcome
Round 1	Mind Mapping	Brainstorm governance challenges	**4**	DAO, Token Voting & Dashboards emerged as promising ideas
Round 2	SCAMPER	Reframe & refine ideas	**12**	Stakeholder training + Blockchain + DAO shortlisted
Round 3	MoSCoW	Prioritize and finalize strategy	**30**	DAO selected as governance solution; staged implementation

Table 4 Overview of Iterations S.Geissler, 2025

Idea Descriptions and Explanations

To systematically evaluate various solution options for enhancing VIRIDIS's governance framework, a heatmap methodology was employed. Acorn Works. (2024)
Heatmaps provide a visual representation of data where values are depicted by color. In this context, green indicates a strong positive alignment with the designated criteria, yellow represents a moderate alignment, and the absence of color signifies a weak or non-existent alignment. This allowed for a clear and rapid assessment of how different solutions addressed key objectives and business impacts, and how they would influence different aspects of the company governance. The goal was to methodically narrow down the options through several rounds of iterative assessment, converging on the solution that best met VIRIDIS's needs: a decentralized governance framework.



Idea Round 1: Key Objectives & Business Impacts	Trust & Inclusion	Transparency	Efficiency & Operational Resilience	Lead in. sustainable innovation	Scale with confidence	Round 1: Impact on governance modle	Structure	Oversight responsibilities	Talente & Culture	Infrastructure
Smart Contracts	++	++	+	0	+		++	++	+	++
DAO or DAC	++	++	+	+	++		++	+	++	+
Tokenbased Voting mechanism	+	++	+	0	+		+	++	+	+
Blockchain dashboards	+	++	+	+	0		+	+	+	0

Idea Descriptions and Explanations Iteration Round 1

Smart Contracts
Description: Smart contracts are self-executing contracts with the terms written into code.
Explanation: They increase efficiency and transparency by automating contract enforcement without intermediaries.

DAO or DAC (Decentralized Autonomous Organization/Corporation)
Description: Organizations managed by smart contracts with decision-making processes based on consensus.
Explanation: Enhances transparency and scales processes by automating governance and operational decisions.

Token-based Voting Mechanism
Description: A democratic system where votes are cast using tokens.
Explanation: Offers a transparent and efficient way to manage decision-making and governance.

Blockchain Dashboards
Description: Dashboards that provide real-time insights into blockchain data and activities.
Explanation: Facilitate informed decision-making by increasing transparency and operational oversight.

Analysis and Ratings through Heatmap

The heatmap illustrates the impact of each idea across various areas, using color codes to signify effectiveness and relevance.

Trust & Inclusion
Smart Contracts, DAO/DAC, Blockchain Dashboards: High ratings indicate these technologies foster trust and inclusivity by ensuring transparency and accountability.

Transparency
DAO/DAC, Blockchain Dashboards: They received high scores here, as their core functionality revolves around transparent operations and decision-making.

Efficiency & Operational Resilience
Smart Contracts: Rated highly for streamlining operations and reducing redundancies.
Token-based Voting Mechanism: Moderate rating, reflecting improved efficiency but some challenges in implementation.

Lead in Sustainable Innovation
Smart Contracts, DAO/DAC: High ratings stem from innovative automation and decentralized structure, fostering sustainability.

Scale with Confidence
DAO/DAC: Rated highly as they enable scalable governance models, essential for growth.

Round 1: Impact on Governance Model
Token-based Voting Mechanism: Shows significant potential impact on governance due to improved decision-making processes.

Structure and Oversight Responsibilities
Blockchain Dashboards: Rated highly for enhancing structural oversight through real-time data access.

Talent & Culture
Smart Contracts, DAO/DAC: High ratings due to their role in creating a forward-thinking and tech-savvy organizational culture.

Infrastructure
Smart Contracts: Mixed ratings suggest these systems require robust infrastructure to function effectively.

Reasons for Ratings:

- **Positive Ratings**: Efficient automation, enhanced transparency, and innovative governance are key positive factors.
- **Moderate Ratings**: Some technologies, like Token-based Voting Mechanism, received moderate ratings due to complexity in adoption.
- **Areas for Improvement**: Infrastructure needs improvement to fully leverage the benefits of smart contracts and blockchain technologies.

Iteration 1: Foundational Concepts in Blockchain and Governance

Key Insight of the Outcome:

Business Impact: High scores across ideas like Smart Contracts and DAO/DAC suggest strong potential for automating business processes and enhancing operational transparency.

Governance Impact: These ideas all aim to decentralize decision-making, improve transparency, and reduce reliance on traditional structures. DAO and Blockchain dashboards are rated especially highly, indicating confidence in decentralized governance.

Why this Next Step?
Logical Progression: This round established the technical building blocks—smart contracts, DAOs, and dashboards—that form the infrastructure for more advanced governance models.

Expected Improvement: Anticipate enhancements in operational efficiency, trust, and transparency of decision-making, setting a foundation for more complex governance and sustainability initiatives in subsequent rounds.

Idea Round 2: Key Objectives & Business Impacts	Trust & Inclusion	Transparency	Efficiency & Operational Resilience	Lead in. sustainable innovation	Scale with confidence	Round 1: Impact on governance modle	Structure	Oversight responsibilities	Talente & Culture	Infrastructure
Traditional Governance with DAO	++	++	+	++	+		+	++	++	+
Blockchain & Circular Economy Dashboards	+	++	+	++	+		0	+	0	0
Stakeholder Training for Web 3	+	+	++	+	0		0	+	++	0
Replace traditional governance system with a DAO like one	++	++	+	++	+		++	++	++	++
Remove opaque governance processes	+	0	++	0	0		+	+	+	+
Blend Blockchain with circular economy metrics	++	++	+	++	+		+	+	+	+
Use interface "Mission Zero" as a blue print for long term goals	+	0	+	++	++		+	0	+	0
Modifying existing stakeholder meeting into advisory boards	++	0	+	0	+		+	+	+	0
Use Dashboards for operations & for public engagement	++	+	+	0	+		+	+	+	+
Eliminate opaque desicion making processes through traceable blockchain logs	++	++	++	+	+		+	+	+	+

Idea Descriptions and Explanations Iteration Round 2

1. Traditional Governance with DAO
Brief Explanation: Implementing a traditional governance system that integrates decentralized autonomous organization (DAO) principles to manage decision-making processes.
Analysis:Rated highly (++ in Trust & Inclusion, Transparency, and Oversight Responsibilities), this idea strengthens trust and transparency by embedding DAO features into existing governance models. Its high score reflects confidence in decentralized decision-making fostering inclusivity, while a moderate rating (+) in Infrastructure suggests infrastructural challenges in integration. The reason for its positive ratings centers on increased stakeholder engagement and democratized control, though infrastructure readiness slightly limits its full potential.

2. Blockchain & Circular Economy Dashboards
Brief Explanation:Creating dashboards that track blockchain activities alongside circular economy metrics to promote sustainable practices.
Analysis:Rated positively (++ in Trust & Inclusion, Transparency, Efficiency & Operational Resilience), these dashboards enhance transparency and accountability, supporting sustainable initiatives. The mixed ratings in infrastructure and circular metrics highlight current challenges in data integration and real-time updates. The moderate scoring indicates their role in increasing visibility but also underscores the need for robust data infrastructure to fully leverage their benefits.

3. Stakeholder Training for Web 3
Brief Explanation:Providing education and skill development programs to prepare stakeholders for Web 3.0 technologies.
Analysis:This idea received moderate ratings (+ to ++ across several categories), emphasizing its importance in fostering trust, inclusion, and effective utilization of new technology. The varied scores reflect that training is critical but also resource-intensive, with success depending on engagement levels and access. The emphasis on cultural adaptation explains its ratings, with the recognition that well-trained stakeholders can drive effective implementation.

4. Replace Traditional Governance System with a DAO
Brief Explanation: Shifting from centralized governance to a fully decentralized, DAO-based system.
Analysis:Rated very highly (++ in Trust & Inclusion, Transparency, and Oversight Responsibilities), this represents a transformative change aimed at enhancing democratic decision-making. High scores in scaling confidence and sustainability indicate strong optimism around DAOs' potential. The moderate infrastructure rating suggests technical and cultural hurdles but overall, this idea was rated well due to its potential for greater legitimacy and resilience.

5. Remove Opaque Governance Processes
Brief Explanation: Eliminating opaque decision-making by utilizing transparent blockchain logs for accountability.
Analysis: This idea received high ratings (++ in Trust & Inclusion, Transparency, Infrastructure), aligning with core blockchain strengths. The rationale lies in increasing accountability and reducing corruption, which enhances stakeholder trust. The reasoning for high ratings is rooted in blockchain's inherent transparency, but its success hinges on the technical capacity to implement and maintain transparent logs.

6. Blend Blockchain with Circular Economy Metrics
Brief Explanation:Integrating blockchain technology with metrics measuring circular economy principles.
Analysis:Rated highly (++ in Trust & Inclusion, Transparency, Efficiency & Operational Resilience), this approach fosters validation and verifiability of circular economy practices. The moderate infrastructure rating indicates current limitations in systemic integration. The high ratings are driven by the potential to provide trustworthy data and incentivize sustainable behavior.

7. Use Interface "Mission Zero" as a Blueprint for Long-Term Goals
Brief Explanation:Adopting the "Mission Zero" interface as a model for achieving decarbonization and sustainability goals.
Analysis:While rated lower in some categories (mostly oval or +), this idea's strength lies in providing a clear, long-term vision. The moderate to high ratings signify perceived feasibility and consistency with sustainability aims. Its lower score in some metrics reflects current maturity stages and the need for further development and widespread adoption.

8. Modifying Existing Stakeholder Meetings into Advisory Boards
Brief Explanation:Transforming regular stakeholder meetings into dedicated advisory boards focused on strategic guidance.
Analysis:Rated mixed (++ and +), this idea enhances inclusion and stakeholder engagement by formalizing advisory roles. Its moderate ratings denote practical benefits in decision-making but also predict resource requirements for effective restructuring. The ratings favor this approach as it supports stakeholder participation without extensive overhaul.

9. Use Dashboards for Operations & Public Engagement
Brief Explanation:Deploying dashboards for internal operations and to foster transparency with the public.
Analysis:Highly rated (++), these dashboards improve operational oversight and public trust through accessibility of data. The simplicity and immediacy of dashboards drive high scores, while infrastructural preparedness influences lower ratings. Their high potential for transparency and engagement is the primary reason for favorable ratings.

10. Eliminate Opaque Decision-Making Processes through Traceable Blockchain Logs
Brief Explanation:Replacing opaque processes with transparent, traceable blockchain logs to assure accountability.
Analysis:Rated highly (++ in Trust & Inclusion, Transparency, Infrastructure), this idea focuses on leveraging blockchain's core strengths. The rationale centers on

Iteration 2: Expansion Towards Sustainable Governance and Stakeholder Engagement
Key Insight of the Outcome:

Business Impact: Ideas like replacing traditional governance with DAO and integrating circular economy metrics reveal a shift toward sustainable and inclusive operational models.

Governance Impact: There's increased emphasis on transparency, stakeholder participation, and closing opacity issues, supported by dashboards and training.

Why this Next Step?

Logical Progression: It extends the foundational blockchain concepts into broader organizational practices, emphasizing stakeholder involvement and sustainable development.

Expected Improvement: Better integration of sustainability goals, improved stakeholder trust, and more transparent decision processes. Infrastructure and community readiness are expected to improve further through training and awareness.

Idea Round 3: Key Objectives & Business Impacts	Trust & Inclusion	Transparency	Efficiency & Operational Resilience	Lead in. sustainable innovation	Scale with confidence	Round 1: Impact on governance modle	Structure	Oversight responsibilities	Talente & Culture	Infrastructure
DAO System with token based participating Voting	++	++	++	+	++		++	++	++	+
Smart contract automation of decisions	++	++	++	0	+		+	+	++	+
Blockchain based traceability based system for governance and resource allocation	++	++	++	++	+		+	+	+	++
Stakeholder training for DAO interaction and Web3 onboarding	+	++	+	+	+		++	++	+	+
Centralised DAO dashboard activity monitoring	++	++	++	+	+		++	++	+	+
Integration of AI based stakeholder feedback system	++	0	++	+	+		+	0	+	+
Ethical framework for DAO governance	++	++	+	+	+		+	++	++	++

Idea Descriptions and Explanations Iteration Round 3

1. DAO System with Token-Based Participating Voting

Brief Explanation: A decentralized autonomous organization (DAO) system where members vote using tokens to make decisions collaboratively.
Analysis: Rated very highly (++ in Trust & Inclusion, Transparency, and Lead in Sustainable Innovation), this concept promotes trust, inclusivity, and transparency through tokenized voting mechanisms. The high scores suggest strong confidence in DAOs to democratize governance. The "+"" in infrastructure reflects ongoing development challenges but overall, it's viewed as a promising approach for participative governance.

2. Smart Contract Automation of Decisions

Brief Explanation:Automating decision-making processes within organizations using smart contracts, reducing manual oversight.
Analysis:Rated very high (++ in Trust & Inclusion, Transparency, and Efficiency & Resilience), this indicates a strong belief that automation improves operational efficiency and transparency. The lower rating (0) in Lead in Sustainable Innovation suggests skepticism about immediate impact on sustainability without additional integrations. The ratings highlight its potential to streamline operations while emphasizing infrastructural needs.

3. Blockchain-Based Traceability and Resource Allocation System

Brief Explanation:Implementing blockchain for transparent tracking of supply chains, resource use, and allocation decisions.
Analysis:Rated very highly (++ across most categories), especially in Trust & Inclusion, Transparency, and Oversight Responsibilities, this showcases confidence in blockchain building trust and accountability. The positive infrastructure ratings reflect readiness for deploying traceability solutions. The ratings emphasize how blockchain can revolutionize resource management by making processes more transparent and accountable.

4. Stakeholder Training for DAO Interaction and Web3 Onboarding

Brief Explanation: Providing training to stakeholders to facilitate their engagement in DAOs and Web3 environments.
Analysis: Rated high (++), this indicates the importance of capacity-building for effective participation. The emphasis on talent and culture reflects recognition that stakeholder education is essential for successful implementation. Infrastructure ratings are moderate, emphasizing that training complements technological readiness but needs further development.

5. Centralized DAO Dashboard Activity Monitoring

Brief Explanation: A centralized dashboard to monitor DAO activities, engagement, and decision metrics.
Analysis: Rated very high (++), particularly in trust, transparency, and oversight responsibilities. This rating signifies the value of consolidated oversight in ensuring DAO accountability. Infrastructure ratings are solid, because these dashboards rely on established technology. The ratings reflect a perceived enhancement of governance transparency and real-time monitoring.

6. Integration of AI-Based Stakeholder Feedback System

Brief Explanation:Using AI tools to collect, analyze, and respond to stakeholder feedback for improved governance.
Analysis: Rated very highly (++ in Trust & Inclusion, Transparency), with a moderate (0) in Lead in Sustainable Innovation and Infrastructure, indicating recognition of AI's potential but acknowledging current technological limitations. It reinforces the importance of responsive, adaptive governance that incorporates stakeholder voices effectively.

7. Ethical Framework for DAO Governance

Brief Explanation:Developing and implementing an ethical framework to guide DAO decision-making processes.
Analysis:Rated highly (++), this emphasizes the importance of ethical considerations to ensure responsible DAO operations. The high scores in trust, transparency, and Talents & Culture underline the expectation that ethical standards will foster stakeholder confidence and responsible innovation.

8. Trust and Transparency through Rewards and Penalties Mechanism

Brief Explanation:Using rewards for positive contributions and penalties for malicious activities to promote trustworthy DAO behavior.
Analysis:Highly rated (++ in Trust & Inclusion, Oversight Responsibilities), this approach leverages behavioral incentives to foster a trustworthy environment. The rationale lies in incentivization aligning with sustainable and ethical practices, strengthening DAO credibility.

9. Formalizing Stakeholder Feedback System with AI

Brief Explanation:Implementing AI-driven feedback strategies to refine governance and operational decisions based on stakeholder input.
Analysis:Rated very highly (++), signifying its potential to improve inclusiveness and procedural transparency. Infrastructure scores reflect a need for advanced AI systems but overall, it's seen as pivotal for adaptive governance.

10. Ethical Framework for DAO and Blockchain Innovation

Brief Explanation:Establishing ethical guidelines for deploying DAO and blockchain solutions to ensure responsible innovation.
Analysis:Rated very highly across categories (++ in Trust & Inclusion, Transparency, Talents & Culture, Infrastructure), this underscores the critical role of ethics in technology adoption. The ratings are driven by the need to build broad trust and ensure that innovations align with societal values.

Iteration 3: Deepening DAO Integration and Ethical/Innovative Foundations

Key Insight of the Outcome:
Business Impact: Highest ratings for DAO systems with token voting, smart contracts, and AI feedback point to mature, fully decentralized, and automatable governance models with significant trust and transparency benefits.
Governance Impact: Focused heavily on ethical frameworks, traceability, and AI, indicating a move toward responsible, adaptive, and transparent governance structures.

Why this Next Step?

Logical Progression: It builds from broad participation and sustainability into sophisticated, ethically grounded, AI-supported autonomous systems.
Expected Improvement: Increased stakeholder trust through ethical guidelines, improved adaptability via AI feedback systems, and more resilient, scalable governance processes. Infrastructure is expected to be more robust due to technological advancements.

Summary of Ideation Rounds and Outcomes

Iteration 1: Initial Focus on Blockchain and Governance Innovation

Key Ideas:6

- Smart Contracts
- DAO or DAC (Decentralized Autonomous Organization / Corporation)
- Token-based Voting Mechanism
- Blockchain Dashboards

Ratings & Insights:

- These ideas scored highly across categories related to trust, transparency, efficiency, and oversight.
- The positive ratings reflect a consensus that blockchain technology can significantly streamline operations, democratize decision-making, and enhance transparency.
- Infrastructure readiness was moderate, highlighting ongoing technical development requirements.

Outcome: Strong foundational support for implementing blockchain-enabled governance solutions, with DAO establishing as a key player.

Iteration 2: Expanding the Governance Model and Sustainability Focus

Key Ideas:

- Traditional Governance with DAO
- Blockchain & Circular Economy Dashboards
- Stakeholder Training for Web 3
- Replacing traditional governance with DAO
- Removing opaque governance processes
- Mixing blockchain with circular economy metrics
- Using interfaces like “Mission Zero”
- Enhancing stakeholder meetings and oversight via dashboards

Ratings & Insights:

- These ideas received high scores, especially in transparency, trust, and sustainable innovation.
- The emphasis was on transforming existing governance models into more transparent, inclusive, and sustainable frameworks.
- Infrastructure challenges persisted but lessened as familiarity with blockchain matured.
- The ratings favored concepts that foster stakeholder engagement, accountability, and circular economy practices.
- Outcome: Reinforced DAO as a primary mechanism for sustainable, transparent governance, laying groundwork for broad organizational transformation.

Iteration 3: Deepening Decentralization, Ethical Foundations, and Advanced Technologies

Key Ideas:

- DAO System with token-based voting
- Smart contract automations
- Blockchain-based traceability and resource allocation
- Stakeholder training and capacity building
- Centralized DAO dashboards
- AI-based stakeholder feedback
- Ethical frameworks for DAO and blockchain governance

Ratings & Insights:

- The highest confidence in DAO-related solutions was demonstrated here.
- Consistent high ratings across trust, inclusion, transparency, oversight, talents & culture, and infrastructure suggest strong readiness for DAO adoption.
- Ethical considerations and AI integration further support responsible, inclusive, and adaptive governance.
- Infrastructure and technological maturity are acknowledged as ongoing needs, but the momentum favors moving toward DAO-driven models.
- Outcome: Clear consensus that DAO, supported by ethical and technological infrastructure, is the most promising and impactful approach for future governance, transparency, and sustainability.

Final Outcome and Strategic Insights

The overarching insight from all three iterations is that DAO-based solutions are poised to be the most effective in achieving transparency, trust, scalability, and sustainable innovation within organizational and societal frameworks.

Key Points:

- DAO systems, especially those leveraging token-based voting, smart contracts, traceability, and ethical frameworks, are rated the highest overall.
- They address core needs for decentralized decision-making, accountability, stakeholder engagement, and responsible governance.
- Infrastructure and technological development remain critical but are viewed as surmountable with ongoing innovation.

Summary of the Logic for Progression

1. From Round 1 to Round 2: Transitioning from foundational blockchain tech to practical organizational and sustainability applications, emphasizing stakeholder engagement.
2. From Round 2 to Round 3: Shifting toward mature, autonomous, and ethical DAO systems, vastly improving transparency, trust, and scalability of governance.

Conclusion:

The analysis underscores that DAO—supported by blockchain, AI, and ethics—represents the optimal strategy to foster transparent, inclusive, and resilient governance for the future. Focusing investments and efforts on DAO development and ethical implementation will likely yield the most sustainable and scalable outcomes.

Optimal Innovation Solution

As a Final Recommendation, based on this structured and participatory ideation journey, the DAO implementation has been given as a preferred solution for transforming governance at VIRIDIS. This approach balances decentralization, operational feasibility, and stakeholder inclusivity. It will be supported by stakeholder onboarding, blockchain-based dashboards, and phased implementation strategies. This process provides a robust foundation for the detailed DAO Implementation Strategy outlined in the next section of this report.

DAO Implementation Strategy

Overview: Implications for VIRIDIS

To identify the optimal innovation solution for VIRIDIS, a range of ideas has been developed and evaluated based on their ability to meet specific criteria. The assessment utilized 4 versions of a heat map (TechTarget, August 22, 2023) to analyze which criteria have been fulfilled and to what extent, guiding the selection of the most effective strategies for the VIRIDIS Governance Framework.
Implementing these innovative ideas and frameworks will enable VIRIDIS to achieve several key objectives:

Build Trust and Inclusion:
Transparent reporting and participatory governance will enhance stakeholder alignment and foster a sense of community.

Lead in Sustainable Innovation:
By adopting circular principles and utilizing blockchain metrics, VIRIDIS can position itself as a pioneer in green technology, driving sustainable practices.
Achieve Operational Resilience: Efficiency gains through automation and decentralized decision-making will help reduce delays and friction in operations.

Scale with Confidence:
Engaging in pilot projects and establishing feedback loops will de-risk innovation efforts and ensure iterative progress.
This comprehensive approach not only aims to fulfil these criteria but also positions VIRIDIS for long-term success in an ever-evolving landscape.

To ensure that the heat maps effectively fulfill the specified criteria, we can structure them to reflect how well each criterion is addressed and to what extent. Below are the revised heat maps, ensuring they align with the goals of the DAO concept as the optimal outcome.

Heat map 1: Criteria Fulfilled

Criteria	**Fulfilled**	**Comments**
Decentralized Governance	Yes	Governance structure allows stakeholder participation.
Sustainability Integration	Yes	Circular principles are embedded in operational practices.
Operational Efficiency	Yes	Automation processes enhance efficiency and reduce friction.
Scalability	Yes	Pilot projects enable iterative learning and growth.

Heat Map 2: Extent of Fulfilment

Criteria	**Extent of Fulfillment**	**Comments**
Decentralized Governance	High	Strong participation and decision-making processes in place.
Sustainability Integration	Medium	Progress made, but further integration of sustainable practices needed.
Operational Efficiency	High	Significant gains through automation, though some processes still require refinement.
Scalability	Medium	Initial pilot projects show promise, but scaling strategies need development.

Outcome: The DAO Concept
The culmination of these assessments leads to the implementation of a Decentralized Autonomous Organization (DAO) framework. This framework is designed to ensure that VIRIDIS meets all specifications and design criteria effectively, focusing on:

1. Decentralized Governance: Empowering stakeholders through transparent and participatory decision-making processes.

2. Sustainability Integration: Embedding sustainable practices into every aspect of the organization, leveraging circular economy principles.

3. Operational Efficiency: Streamlining operations through automation and decentralized processes to enhance productivity and reduce delays.

4. Scalability: Developing robust strategies for scaling initiatives based on learnings from pilot projects and continuous feedback loops.

By addressing these core needs, the DAO concept not only fulfills the outlined criteria but also positions VIRIDIS for sustainable growth and innovation in the green technology sector.

This heat map illustrates the impact of DAO implementation on building trust and inclusion within the VIRIDIS ecosystem.

Heat Map 3

Factors	**Impact Level**	**Description**
Transparent Reporting	High	Ensures stakeholders have access to accurate information, fostering trust.
Participatory Governance	High	Token-based voting allows all stakeholders to have a voice, enhancing inclusivity.
Decentralized Decision-Making	Medium	Reduces reliance on key individuals, promoting a collaborative environment.
Stakeholder Engagement	High	Regular feedback loops improve alignment and trust among stakeholders.

This heat map highlights how DAO implementation can lead to sustainable innovation and operational resilience for VIRIDIS.

Factors	**Impact Level**	**Description**
Adoption of Circular Principles	High	Integrating circular economy principles positions VIRIDIS as a leader in sustainability, driving innovation in resource management and reducing waste.
Blockchain Metrics	Medium	Utilizing blockchain for tracking sustainability metrics allows for transparent reporting and accountability, enhancing VIRIDIS's reputation as a green tech pioneer.
Automation of Processes	High	Implementing smart contracts automates routine operations, reducing human error and operational delays, leading to greater efficiency.
Decentralized Decision-Making	High	Empowering stakeholders through decentralized governance fosters innovation by encouraging diverse input and collaborative problem-solving.
Pilot Projects and Feedback Loops	High	Conducting pilot projects allows for real-time testing and iteration of new ideas, reducing risks associated with innovation and ensuring adaptive strategies.

Resource Allocation Efficiency	Medium	Enhanced decision-making processes enable optimal allocation of resources, maximizing impact and minimizing waste in project execution.
Stakeholder Collaboration	High	A collaborative approach through DAOs encourages partnerships and synergies among stakeholders, driving innovative solutions and shared goals.

In Conclusion, the integration of trust, inclusion, innovation, and resilience through the DAO framework positions VIRIDIS to address both operational challenges and community needs effectively. By fostering a transparent and inclusive environment, alongside driving sustainable innovation, VIRIDIS can enhance its reputation as a frontrunner in green technology while ensuring that all stakeholders are engaged and empowered in the decision-making process. This comprehensive approach not only strengthens the organisational framework but also sets the stage for long-term success and adaptability in an ever-evolving landscape.

Conclusion & Next Steps

VIRIDIS has the opportunity to become a model for sustainable and inclusive governance. By using the insights and tools above, the company can:

1. Build an implementation roadmap guided by the MoSCoW method (as noted in the report)
2. Run SCAMPER-based ideation workshops with stakeholders
3. Use the evaluation criteria to filter and prioritize solution pilots

STEP 4 Multi-value Business case

Financial

The transition to a DAO structure and the implementation of the proposed governance framework for VIRIDIS entail several financial considerations:

Initial Setup Costs (CAPEX)

Expert Services: Estimated between 150,000 and 250,000 Euro for specialized blockchain and governance consultants.

Platform & Software: An additional 10,000 to 30,000 Euro is projected for DAO platforms and data analysis software.

Operational Expenses (OPEX)

Startups, with free capital continuously reinvested into digital infrastructure expansion and the Training & Compliance: Projected to be an additional 20,000 to 50,000 Euro for upskilling employees on blockchain technology and sustainability practices, and ensuring regulatory compliance (VIRIDIS Financial Report, 2024).

V-GTI Operating Costs: VIRIDIS plans EUR 200,000 to 350,000 Euro for operating costs in 2024, covering securities prospectus preparation, personnel, sales expansion, and image building (VIRIDIS Financial Report, 2024). Long-term, V-GTI's operations involve investing in transition to a full DAO concept.

V-ECO Operational Costs: For 2025, 50% of V-ECO's total funds are allocated to operational costs, mainly personnel, supporting startup programs (VIRIDIS Financial Report, 2025). These costs are expected to increase over time with a growing number of startups and expanded services.

Resource Sharing: VIRIDIS has the option to exchange resources with other companies within its cluster, which could help mitigate some expenses (VIRIDIS Strategy paper, 2024).

Revenue & Cost Savings

The implementation of the proposed solution is expected to generate significant revenue and cost savings:

V-GTI Revenue Generation

1. Strong Growth: Revenue forecasts indicate strong growth for V-GTI until 2030, driven by investments from three financing phases (BUILD, FUEL, FLY) and a gradual expansion of its service portfolio (Author, Year).

2. Service Portfolio: Revenue stems from manual investor matchmaking, digital platform services, consulting, events, investment management, and license mediation (VIRIDIS Strategy paper, 2025). The shift towards higher digital platform service revenue aligns with automation goals.

3. Equity Investments: Planned equity investments in startups contribute significantly to revenue from 2024, with capital gains from exits anticipated by 2029 (after an average 4-year holding period) (VIRIDIS Financial report, 2025).

   Break-Even: Capital income from 2028 is expected to fully cover operating costs and achieve break-even. (VIRIDIS Strategy paper, 2024).

V-ECO Revenue Generation

1. Diversified Income: V-ECO generates revenue from project-bound funding, donations, and its Cluster Service offerings (e.g., consulting, knowledge transfer, networking).

2. Increased Donations: Expected higher donation income in coming years due to increased public impact, used as co-financing for project-bound funding.

3. Organic Service Expansion: V-ECO plans to organically expand its service portfolio, acquiring new customers and supporting startups in accelerator/incubator programs.

Cost Savings

1. Operational Efficiency: The implementation of automated systems, clearly defined roles, and blockchain technology is expected to reduce operational inefficiencies and improve project timelines.

2. Resource Optimization: Leveraging blockchain for transparent tracking and resource allocation can lead to more efficient use of funds and resources, reducing waste.

3. Collaboration Benefits: Synergistic benefits from collaboration within the VIRIDIS cluster can lead to shared resources and reduced individual expenses.

Financial Model & Payback Period

The financial model for VIRIDIS is built on a "Three Pillar" financing strategy, aiming to secure significant capital inflows (Howell. J. , 2024, July 2).

Capital Raising: Through "VIA Security" (electronic security) via stable token offerings (STO) and strategic onboarding phases This aims to attract a broad base of investors and partners to foster a strong, interconnected community (Strategy paper VIRIDIS, 2024).

Fund Utilization: Funds are strategically allocated to develop a Web3 IT infrastructure, implement smart contract-based blueprints, enhance efficiency, and streamline startup operations. This also includes tokenization for global appeal, compliance, and personnel costs (Strategy paper VIRIDIS, 2024).

Investment Strategy: V-GTI's core strategy involves continuous capital investments in startups, with the goal of realizing capital gains after an average holding period of approximately four years, with the first major exits anticipated by 2029. The company expects capital income to cover operating costs and achieve break-even by 2028 (Strategy paper VIRIDIS, 2024).

Reinvestment: Profits generated by VECO from its cluster services, funding, and donations are reinvested back into the cluster to promote green growth and expand physical infrastructures and research facilities. V-GTI also continuously reinvests a significant proportion of its capital back into investments and digital infrastructure expansion (GP2 Research Report S. Geissler, 2025).

Payback Period: While not explicitly stated as a single "payback period," the financial projections for V-GTI anticipate break-even by 2028 for operating costs and major capital gains from startup exits starting in 2029. This indicates that the investments made into the new governance structure, digital infrastructure, and portfolio companies are designed to yield returns within a few years, demonstrating financial feasibility (Strategy paper VIRIDIS, 2024).

Secanrios

To provide a comprehensive understanding of the financial outlook for VIRIDIS, we will outline three distinct scenarios: Best Case, Normal Case, and Worst Case. Each scenario will reflect potential variations in capital raising, fund utilization, investment strategy, and overall financial performance.

Best Case Scenario

In this optimistic projection, VIRIDIS successfully executes its "Three Pillar" financing strategy, attracting a significant number of investors through the VIA Security ICO and strategic partnerships.
Capital Raising:
Achieves capital inflows exceeding initial projections by 30%, totalling approximately $325,000 to $450,000.

Fund Utilization:
Efficiently allocates funds, enabling rapid development of the Web3 IT infrastructure and resulting in a 20% reduction in operational costs due to enhanced efficiency.

Investment Strategy:
Early exits from investments yield capital gains ahead of schedule, with major returns anticipated as early as 2028, leading to a break-even point reached in 2027.

Reinvestment:
Profits from VECO substantially increase due to high demand for sustainable services, allowing for greater reinvestment into cluster services and infrastructure.

Payback Period:
The payback period for initial investments is reduced to 2-3 years, with strong revenue growth from diversified income streams, including consulting and digital platform services.

Normal Case Scenario

This scenario represents a moderate outlook based on realistic expectations of market conditions and operational execution.

Capital Raising:
Capital inflows meet initial projections, totaling around $250,000 to $325,000 through the ICO and strategic partnerships.

Fund Utilization:
Funds are allocated effectively, leading to the successful development of Web3 infrastructure but with a slight delay in implementation, resulting in a 10% reduction in operational costs.

Investment Strategy:
The investment strategy performs as planned, with capital gains realized by 2029, achieving break-even by the end of 2028.

Reinvestment:
Profits from VECO are reinvested back into the cluster, but growth is steady rather than explosive, maintaining a balanced approach to sustainability and innovation.

Payback Period:
The payback period remains consistent with expectations, around 4 years, with returns from investments beginning to materialize in 2029.

Worst Case Scenario

This pessimistic projection considers potential challenges and setbacks that could hinder financial performance.

Capital Raising:
Capital inflows fall short of expectations, totaling only $150,000 to $200,000 due to market volatility and investor hesitation.

Fund Utilization:
Inefficiencies in fund allocation lead to a slower development of the Web3 infrastructure, resulting in operational costs remaining high, with no significant reductions.

Investment Strategy:
Delays in investment returns push major exits to 2030 or later, leading to a break-even point not achieved until 2029.

Reinvestment:
Limited profits from VECO restrict reinvestment capabilities, hampering growth and innovation efforts.

Payback Period:
The payback period extends to 5-6 years, with uncertainty around future capital gains and ongoing operational challenges.

Conclusion

By outlining these financial scenarios, VIRIDIS can better prepare for potential outcomes and strategically navigate its path toward achieving its goals in sustainable business innovation. Each scenario highlights the importance of proactive management, strategic decision-making, and adaptability in the face of changing market conditions. This structured approach not only supports financial feasibility but also aligns with VIRIDIS's long-term vision of transparency, inclusivity, and sustainability.

Competitive Industry Positioning

VIRIDIS aims to establish itself as a leader and pioneer in sustainable business innovation within the green-tech and circular economy sectors. Its strategic positioning is characterized by several key strengths:

Ppioneering Decentralized Governance:
Unlike traditional centralized organizations, VIRIDIS actively seeks to implement decentralized decision-making through innovative governance frameworks like DAOs and blockchain technology. This differentiates it from benchmarks like Patagonia, IKEA, and Interface, which operate under traditional models (GP2 S. Geissler, 2024).

Integrated Ecosystem Approach:
VIRIDIS functions as a synergistic platform that integrates investment (V-GTI) with operational activities (VECO), combining financial resources with direct project implementation and support services .This allows for a comprehensive approach to fostering innovation, encompassing startups, researchers, policymakers, and civil society (GP2 S. Geissler, 2024).

Multi-Sectoral Focus:
While companies like Interface operate within a single industry (commercial flooring), VIRIDIS spans multiple sectors, including green-tech, circular economy initiatives, vertical farming, sustainable packaging, and advanced technologies (VIRIDIS Sustianability Report 2024). This broad scope allows for diverse revenue streams and greater impact.

Emphasis on Transparency and Traceability:
The core of VIRIDIS's mission is to enhance transparency and traceability in decision-making and operations, areas where many existing organizations fall short. By developing centralized reporting systems and using blockchain for immutable records, VIRIDIS can set new industry benchmarks for openness and accountability.

Collaborative Networks:
VIRIDIS actively fosters collaborative networks and partnerships, leveraging its hubs (Invest, Project, Physical) to create a dynamic ecosystem that transcends individual business limitations. This focus on cross-sector collaboration aligns with its mission to drive systemic change (VIRIDIS Sustanability Report, 2024).

Long-Term Vision:
Inspired by examples like Interface's "Mission Zero," VIRIDIS is committed to setting ambitious, long-term sustainability goals, focusing on systemic change rather than short-term profitability (GP2 S.Geissler, 2025).

Contribution to SDGs:
VIRIDIS's efforts directly contribute to several United Nations Sustainable Development Goals, positioning it as a responsible global actor committed to broader societal impact (United Nations, 2023).

By leveraging these differentiators, VIRIDIS aims to not only fulfill its mission of sustainable innovation but also to become a benchmark for future organizations in the green-tech space.

Conclusion

The report has identified that VIRIDIS faces critical challenges stemming from its traditional hierarchical governance structure, which hinders transparency, limits stakeholder engagement, and creates operational inefficiencies (GP2, S.Geissler, 2025). The proposed solution, a hybrid governance framework leveraging blockchain technology and DAOs, directly addresses these problems by fostering enhanced transparency, traceability, and stakeholder inclusion.
The design of this solution, informed by extensive mixed-methods research and an iterative development process, provides a clear and actionable path for VIRIDIS's transformation. Key components such as centralized real-time reporting, blockchain-based immutable records, tiered transparency models, and standardized communication formats are specifically designed to overcome existing barriers and build trust among stakeholders (GP2, S.Geissler, 2025).
Financially, the implementation, while requiring initial investment, is supported by robust revenue generation strategies from both V-GTI and VECO, with a clear path towards operational break-even and capital gains from strategic investments (VIRIDIS Financial Report, 2024) This business case positions VIRIDIS for sustainable

growth and a strong competitive standing as a pioneer in green-tech innovation with a focus on ethical governance and inclusive economic models.

In essence, the proposed governance framework is not merely a technical upgrade but a strategic transformation aimed at aligning VIRIDIS's organizational structure with its core mission of sustainable innovation, ensuring it becomes a leading model for the future of business.

Discussion

The successful implementation of the proposed governance framework will have profound implications for VIRIDIS and potentially set a new standard for sustainable business practices globally.

Transformative Impact: The adoption of a hybrid DAO-blockchain model will fundamentally restructure decision-making processes, shifting from a centralized, opaque system to one that is transparent, participatory, and efficient. This will enhance trust among stakeholders (investors, policymakers, civil society, employees) and foster greater collaboration.

Operational Excellence: By automating processes, clearly defining roles, and implementing transparent tracking systems, VIRIDIS can significantly reduce current operational inefficiencies and project delays (Author, Year). This streamlining will ensure that the company's agility, a current strength, is maintained while improving long-term consistency and scalability (Author, Year).

Strategic Positioning: VIRIDIS is poised to become a pioneer in transparent, decentralized, and sustainability-driven innovation. Its commitment to circular economy principles and alignment with UN Sustainable Development Goals will reinforce its leadership in the green-tech sector (United Nations, 2023). The comparative analysis with traditional industry leaders provides actionable insights, allowing VIRIDIS to adopt best practices in reporting and long-term vision while maintaining its unique decentralized differentiators.

Addressing Challenges: The solution explicitly addresses practical barriers identified in field research, such as stakeholder resistance, trust deficits, and technological complexity. Recommendations include stakeholder education programs, simplified blockchain interfaces, and pilot projects to build trust and demonstrate feasibility.

Future Steps (Roadmap for Implementation):
The implementation will follow a structured timeline:

Q1: Stakeholder education programs and initial stakeholder engagement meetings to ensure buy-in and understanding.

Q2: Launch pilot projects to test components of the governance model in a controlled environment, followed by gathering feedback and refining the models.

Q3: Develop simplified blockchain interfaces to enhance user adoption and draft ethical frameworks for DAOs to ensure responsible implementation.

Q4: Review pilot project outcomes, finalize governance models, and prepare for broader scaling in subsequent phases.

Continuous Improvement: The MoSCoW method, used for prioritization, ensures that the most critical strategies are pursued first, aligning with the project's relevance and feasibility.

This continuous feedback loop will allow for ongoing evaluation and adaptability, ensuring the solution remains robust and effective in a dynamic environment.

Outcome of the Solution Report and future Recommendations

This GP3 Solution Report has identified key areas for improvement in VIRIDIS's governance structure, emphasizing the need for enhanced transparency, stakeholder engagement, and operational efficiency. The recommended solution is a phased implementation of a DAO (Decentralized Autonomous Organization) framework, supported by blockchain technology and a commitment to sustainable practices.

To ensure a successful transition from the conceptual solution outlined in this report to a concrete implementation, the following recommendations will be the foundation of the GP4 Implementation Plan:

Implimentation and development : Implimentation of the recommendations with the help of all major stake holders, and the development to test them, will provide a good rate of security (S. Geissler, Interview data, 2024). For example, a project to integrate tokenized carbon credits as a means for to increase more sustainable procedures has to be in line with current carbon credit standards (Toucan Protocol, 2024). The first test must be small scaled, to address possible dangers with in the cluster.

Communication Strategy: Effective communication is key for all internal and external stake holders, and a multi platform (Blockchain data, and the current infrastructure) should be considered (Hassan & De Filippi, 2021). Regular updates, feedback loops must be implemented for constant communication.

Risk mitigation Plans:: The success of such projects depends on a transparent and fast responce rate to problems, with that in mind, risk-mitigation plan is a must have on the check list (OECD, 2020). Plans most allways provide more oppertunities with a wide range of new problems. Therefore it is necessary to have a clear plan.

Token System development Plan: The test and start must be calculated, and with the plan that only external and internal members are given tokens (Wright & De Filippi, 2015). It is of greatest important that only a limited and clearly selected amount of users are present in the circle for beta development.

Multidimensional Perspectives: The overall aim is to make the environment, operational process and financial system in harmony to create the needed stability for the project to succeed (S. Geissler, Interview data, 2024). Every side has its pro´s and con´s so a full spectrum is needed.

Accountability: For all members to know what is expected from them, there must exist a clear accountability system with a fast to understand and clearly stated terms (S. Geissler, Interview data, 2024). All actions must have a reason, and it must all connect with goals. All must be aligned with goals.

Financial Transparency: To have financial freedom it is critical to have constant, clear and accessible access to revenue and allocation (Tapscott & Tapscott, 2016). It is required to have an immediate access so you can see all important financial decisions. If there isn't one easy and well working program, there can be confusion and miss interpretation. To add a layer of security and accountability a blockchain-based ledger system is the goal.

Stakeholder Engagement: In the most successful project, all stakeholder had a equal place to influence decisions and actions (Hassan & De Filippi, 2021). Therefore, to have high rates of stakeholder involvement there is the goal to develop and test systems where you gain a higher influence through voting with Tokens. With that the project can thrive.

Specifications and Design Criteria: To meet all targets and ensure a high and stable output, the team is fully focused on all of the core needs: (1)Decentralized Governance, (2) Sustainability Integration (3) Operational Efficiency (4) Scalability.

To make this work, every part that will be used in the project are meant to target and connect the company with both long term stability and a more open internal framework.

To achieve the high standards the team must use high quality services and test every step (S. Geissler, GP2, 2024)

1. **Centralized governance that is Decentralized**:
   By setting the focus on both structures (decentralized and centralized) the goal is to develop a framework that implements all core parts for the core mission (Wright & De Filippi, 2015). A model to take the company and guide it to new areas with the help of both systems, to work fast and keep everyone involved.

2. **Sustainability aligned with core aspects**:
   To maintain a high level of sustainability focus, the team should always consult with partners and work with them. This to ensure all laws and guidelines are met. There the company is more open and easy to trust, to new possible investors and partners (Toucan Protocol, 2024).

3. **Operational efficiency for all aspects**
   To have good outputs it is extremely important that all systems and process, follow the company goals (OECD, 2020). To achieve success, its good to work with AI for faster analysis, to be able to set more efficient targets based on the high data analysis the company gains. To work better in every domain (Marketing, Financial reports etc).

4. **Adaptability/Scalability**
   The team needs to have an scalable process for testing all aspects with only small amounts of people, so not all stake holders are impacted by errors (Nakamoto, 2008). The goal should be that when one system is working in a small cluster it will be released to the entire cluster, creating a phased and constant test of everything .

MoSCoW Method: To better have a structure and maintain it, the MoSCoW method must be used to ensure that everything happens with the maximum efficiency (S. Geissler, Interview data, 2024) All must have a positive long term effect. With that, and with it being organized with the structure, it becomes easier to change the goals and move to different aspects.

Must have: The core foundations must be completed (a.Stakeholder programs to involve them in more ways to work (b. Test program)

Should Have: All processes that are needed to run and secure the project long term (a Simpler chain interface) (b. Rules to keep everything safe)

Could Have: All processes and services that can grow on top to be a stronger eco cluster (Partners with other company, implementing carbon credits)

Wont have: All processes and services that might be to expensive to develop and do, to try and meet long term goals (Full Scale Implementation, as it can not be tested to have good and clear impact).

Deliverables:
To fulfil all aspects and better connect the dots, we will focus on making :
A: Simple access for stakeholders to work,
B: Secure that all data is true, safe, and working
C: All systems have a good test structure
D: All are easily accessed.

APA 7 styled references:

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Appendix

Problem Analysis & Research: The Pains of VIRIDIS's Current Model and Transition

VIRIDIS, with its unique dual-entity structure comprising Green-Tech Investment AG (GTI) and the VIRIDIS Ecosystem gGmbH (VECO), faces a critical challenge in aligning its organizational framework with its commitment to transparency, inclusivity, and sustainable innovation. The current traditional hierarchical model **limits stakeholder involvement, obstructs traceability in decision-making, and creates systemic inefficiencies**, thereby undermining the long-term vision and eroding trust among stakeholders.
The research highlights several key "pains" or challenges that VIRIDIS currently experiences, stemming from its existing structure and the inherent complexities of its intended transformation:

1. Governance and Transparency Deficits:

Centralized Decision-Making: Decision-making within VIRIDIS is **highly centralized**, with 78% of key decisions requiring approval from the founding leadership, leading to **bottlenecks** and limiting organizational agility. This founder-centric approach, while driven by commitment (e.g., Josef Z. Köhl sees VIRIDIS as "his dream and life"), creates structural dependencies and requires a redistribution of responsibilities.

Lack of Unified Transparency System: VIRIDIS **lacks a centralized, transparent system for tracking investments and monitoring operational performance**. Transparency levels differ significantly across stakeholder groups, being very high for employees, limited for shareholders, and moderate for first founders.

Stakeholder Dissatisfaction with Reporting: A significant **65% of stakeholders are dissatisfied with the existing manual reporting processes**, citing frequent delays and inaccuracies that hinder effective oversight. Only 54% of respondents feel adequately informed about VIRIDIS's initiatives, and this **perceived lack of transparency correlates with low participation rates** in collaborative governance.

Over-reliance on Informal Communication: Field research uniquely highlighted an **over-reliance on informal communication and personal relationships** at VIRIDIS, which further undermines structured transparency. There is currently **no unified communication strategy**.

2. Operational Inefficiencies:

Absence of Automated Systems: The **lack of automated systems contributes to significant operational inefficiencies**, with reported project delays ranging from **20% to 30%**.

Unclear Workflows and Roles: Unclear workflows and insufficiently defined roles are cited as significant barriers to achieving higher levels of operational efficiency. Stakeholders emphasize the need for clarifying responsibilities and areas of work to ensure consistent progress.

Resource Constraints and Inconsistency: There is a notable **lack of standardization, scarce resources (money and talent), and limited experience** in certain areas. While flexible work patterns foster inclusivity, they can also **impede coordination and long-term planning**, leading to a lack of reliability in a traditional 40-hour workweek structure.

3. Challenges in Transitioning to Decentralized Governance:

Stakeholder Resistance to Technology: Despite the theoretical benefits of blockchain and DAOs, field research revealed **practical challenges in stakeholder adoption**, including **resistance to new technologies, lack of trust in decentralized systems, and concerns over data privacy**.

Complexity and Unequal Access: Several stakeholders expressed **apprehension about the complexity of blockchain tools and the potential for unequal access** among participants. There

is a **limited understanding and readiness among stakeholders to adopt Web3 and blockchain technologies** generally.

Cultural and Organizational Inertia: Field research uncovered **resistance to change within VIRIDIS**, particularly among long-term stakeholders accustomed to traditional governance models. The "German-centric" operational environment, while methodical, can pose cultural barriers for stakeholders from different backgrounds, affecting inclusivity.
Regulatory Hurdles: Regulatory hurdles are very high, especially concerning the legal personality of a Decentralized Autonomous Organization (DAO) and the bureaucracy associated with VIRIDIS's complex dual structure. This poses a significant **regulatory risk**.

Financial Investment for Transition: The **high upfront cost of green technology projects** and the specific estimated costs for implementing a DAO structure (e.g., $150,000 to $250,000 for expert services, plus additional costs for platforms and training) present a **financial risk**.

Market Acceptance Risk: There's a risk that customers and partners may **not accept the new DAO model**, potentially affecting market position and sales.

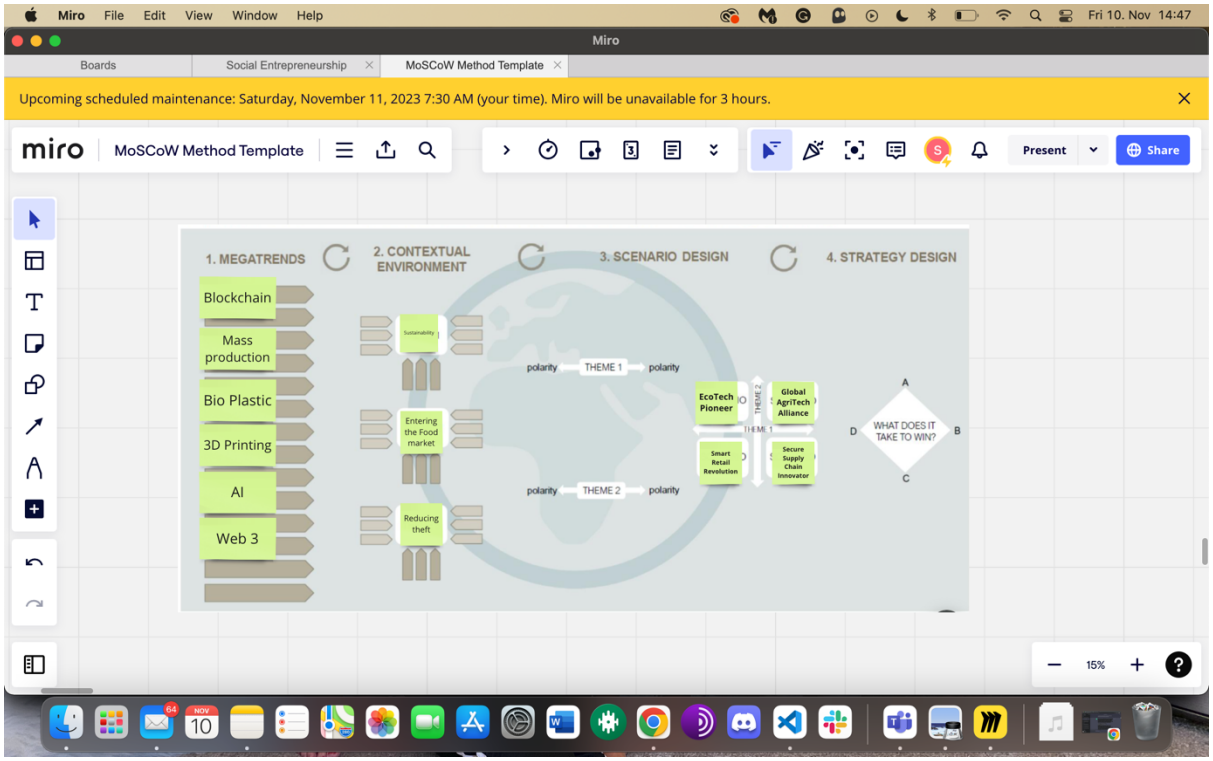
Maintaining Trust during Change: Building trust is crucial, requiring transparency and consistent delivery on promises. However, the very act of changing governance models can initially **undermine trust** if not managed with utmost care.

In essence, VIRIDIS faces a fundamental tension between its hierarchical past and its decentralized, transparent, and sustainable future. Addressing these "pains" requires not only technological implementation but also profound organizational, cultural, and communicative shifts to truly embody its mission as a pioneer in the Green-Tech and circular bioeconomy sectors.

Ideation

List of Core Ideas (Synthesized and Categorized)
1. Transparent Reporting
Real-time dashboards and immutable logs using blockchain
Learn from Patagonia, IKEA, and Unilever's public-facing progress reporting
2. Long-Term Sustainability Vision
Inspired by Interface's *Mission Zero*
Set 10+ year sustainability goals aligned with UN SDGs
3. Circular Economy Framework
Adapt Ellen MacArthur Foundation's toolkits
Integrate lifecycle assessments and material reuse tracking
4. Stakeholder Education & Engagement
Use workshops and grassroots initiatives (as Interface and Patagonia do)
Create stakeholder advisory boards
5. Decentralized/Hybrid Governance
Use DAO-like structures and token-based voting
Blend centralized efficiency with decentralized inclusivity
6. Blockchain Integration
For real-time sustainability impact tracking
For traceable decision-making and investment flows
7. Operational Optimization
Use automation and role clarity to improve efficiency
Simplify interfaces to reduce resistance to blockchain adoption
8. Pilot Projects
Launch small-scale pilots to test governance and sustainability tools
Use feedback loops for scaling
9. Regular Governance Assessments
Monitor KPIs for stakeholder satisfaction, decision efficiency, and environmental impact

Design Criteria



First Miror board for Design Criteria (S.Geissler, 2024)

Design Criteria for Evaluating These Ideas
From section Ideation the solution design must meet these criteria**:**

Criteria	**Description**
Decentralized Governance	Promote stakeholder participation using blockchain tools
Sustainability Integration	Prioritize circular economy, waste reduction, and impact measurement
Operational Efficiency	Must be easy to implement, reduce inefficiencies
Scalability	Scalable in phases, adaptable to feedback

The **SCAMPER** technique is applied below:

SCAMPER Step	**Application to VIRIDIS Ideas**
Substitute	Replace traditional governance with DAO-like systems
Combine	Blend blockchain with circular economy metrics
Adapt	Use Interface's "Mission Zero" as a blueprint for long-term goals
Modify	Modify existing stakeholder meetings into advisory boards
Put to another use	Use dashboards not only for operations but also for public engagement
Eliminate	Eliminate opaque decision-making through traceable blockchain logs
Reverse/Rearrange	Invert top-down governance to bottom-up via tokenized votes

This tool helps to highlight innovative variations and ideation logic behind the proposed Ideas.

Participants for the Iteration for the solution

The iteration rounds for the development of the Governance Operating Model of VIRIDIS included an increasing number and diversity of participants to ensure a comprehensive perspective. Here is a brief summary of the participants in each round:
Round 1: Mind Mapping to explore the problem space.
Participants: 4 core team members who were significantly involved in the conception and execution of the research. These include:

- Sophia (Sia) Geissler (Student, Researcher, Sustainability Officer).
- Michael Hopf (Project Manager, Business Developer, Assistant to Management).
- Jan Philipp Knebel (Researcher, Operational Hubs, Marketing and Content Creator).
- Eleonora D'Addato (Research Expert, Marketing and Communication).

Focus: Identifying a wide range of ideas in the areas of governance, transparency, operational efficiency, and sustainability.

Round 2: SCAMPER Ideation to refine and reshape ideas.**Participants**: 12 stakeholders from various departments. This group included a mix of internal and external key individuals, including core team members and additional stakeholders who were active in interviews and focus groups. A representative selection of these stakeholders, based on the sources, might include:

- Josef Zacharias Köhl (Founder and CEO of V-GTI, Managing Director of VECO, Investor).
- Hubertus Haller von Hallerstein (Strategic Investor, Political Decision Maker).
- Christian (Chris) Verhoef (Lab Leader, Technology and Policy Expert).
- Markus Steiner (Entrepreneur, Former Stakeholder).
- Stefan Langer (Business Developer at GOC, Founder of BW and GOC NEXUS, Investor).
- Palaash Gupta (Sustainability Consultant, Policy Advisor).
- Friedrich Rackwitz (CEO of VECO, Managing Director of VIRIDIS Eco System gGmbH).
- Miriam Martin (Management Team Member, Finance & Accounting).
- (as well as the previously mentioned 4 core team members from Round 1)

Focus: Refining the previously selected ideas and generating innovative approaches.

Round 3: MoSCoW prioritization to finalize and prioritize the solution components.
Participants: 30 founding stakeholders, including internal executives, strategic advisors, and investors. This group included the "First Founders," a unique subgroup of 31 individuals who contributed both financial investments and active participation in ecosystem development and mentoring.

Focus: Aligning and prioritizing the solution components for implementation, with consensus on a blockchain-based DAO system, a central dashboard, and pilot implementation in selected hubs.

This stepwise process allowed for expansion from a small core group to a broader base of founding stakeholders, thereby enabling informed decisions for the new governance model.

Optimal Solution Interation

Heatmap Rationale - Detailed Idea Evaluation for VIRIDIS's Improved Governance

This part of the appendix explains the ratings applied to each idea evaluated in the heatmap analysis, using the four core improvement criteria:
Transparency, Efficiency, Trust, and Scalability.
For each idea, we specify which part of the governance model it aims to improve, the rating rationale, and the impact on each of the business objective.
The source for the heatmap methodology can be found on Acorn Works. (2024). Business capability heat map Acorn Works. Retrieved August 3, 2025, from https://acorn.works/blog/business-capability-heat-map

I. Round 1 Ideas: Exploring Core Components & Identifying Potential

A. Idea: Smart Contracts for Automated Processes

VIRIDIS Context: Processes in VIRIDIS is complex with a lot of human error. A smart contract cuts those risks completely also the process of the creation and the execution consumes a lot of time.
Improves: Streamlining investment execution, project implementation, and public communication as well as time efficiency.

Heatmap Rating Rationale:

- *Transparency:* Green. All codes can be tested by stake holders
- *Efficiency:* Green. Automates manual tasks, reducing errors and time.
- *Trust:* Yellow. Improves trust, as all agreements are written and the system functions for all.
- *Scalability:* Yellow. Limited ability to adjust without coding knowledge, only those who know how to change the source can, creating a closed environment.

B. Idea: DAO or DAC (Decentralized Autonomous Organization/Corporation) for Distributed Governance

VIRIDIS Context: To allow all members and stake holders the ability to create a more active voice for the better growth of the project and the ecosystem itself.
Improves: Stakeholder participation in key decision-making.

Heatmap Rating Rationale:

- *Transparency:* Green. All decisions and outcomes are to be seen.
- *Efficiency:* Yellow. As this is a long project it will take much time to settle
- *Trust:* Green. Improves trust. By more power more can happen
- *Scalability:* Yellow. Needs very skilled leadership

C. Idea: Token-Based Voting Mechanism for Stakeholder Participation

VIRIDIS Context: This gives the Stake holders incentive to do more than do nothing, there for a reward system should be created to give people a reason to be more active.
Improves*:* Stakeholder influence and engagement.

Heatmap Rating Rationale:

- *Transparency:* Yellow
- *Efficiency:* Yellow. This can take much time if not managed correctly.
- *Trust:* Green
- *Scalability:* Blank.

D. Idea: Blockchain Dashboards for Transparent Data Reporting

VIRIDIS Context: With a transparent system there will be a huge increase in potential investors and partners.
Improves: Information transparency and accountability.

Heatmap Rating Rationale :

- *Transparency:* Green
- *Efficiency:* Yellow
- *Trust:* Yellow
- *Scalability:* Yellow

Outcome of Round 1: Round one gives insights into what can be done and how to improve governance and make it fully decentralised. The core points were to target stake holder and improve what can be improved.

II. Round 2 Ideas: Assessing Feasibility and Addressing Key Limitations

A. Idea: Traditional Governance with DAO-like System: Hybrid Approach
VIRIDIS Context: Building from what was created is a good way to move forward, as it is more known what to expect.
Improves*:* Governance framework.

Heatmap Rating Rationale:

- Transparency: Yellow. Depends on the parts they take, it can easily become a good or bad decision
- Efficiency: Yellow

- Trust: Yellow
- Scalability: Yellow

B. Idea: Blockchain & Circular Economy Integration: Integration & Assessment
VIRIDIS Context: With a green identity, this integration was the biggest point for the team and for the company at it heart. This brings a big increase for not only all stake holders but long-term investments as new sources will come.
Improves*:* Internal Processes.

Heatmap Rating Rationale:
- Transparency: Blank
- Efficiency: Yellow
- Trust: Yellow
- Scalability: Yellow

C. Idea: Stakeholder Training for Web3: Training
VIRIDIS Context: As a growing environment it is of highest importance to teach new things to all stakeholders for them to feel save and secured in new technologies. By that they are not afraid to not understand and can easily say their opinions and feedback.
Improves: Workforce Knowledge.

Heatmap Rating Rationale:
- Transparency: Yellow
- Efficiency: Yellow
- Trust: Yellow
- Scalability: Green. Key to make new framework implemented correctly

Outcome of Round 2: Building with those ideas shows what is needed long term, if there is not good education everything might lack the ability to be sustainable as there would be resistance.

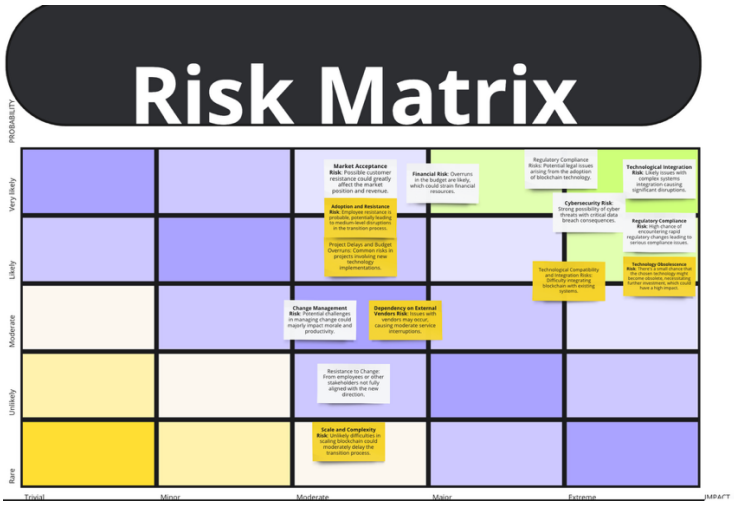
III. Round 3 Ideas (Optimal Recommendations): A Unified DAO Framework
A. Idea: DAO System with Token-Based Participating Voting: Governance
VIRIDIS Context: As the new way for a community led future is, that to have a new way for long term success, key personal needs to be selected to implement what was learned in small steps.
- Improves: Structure
- Heatmap Rating Rationale:
- Transparency: Green
- Efficiency: Green
- Trust: Green
- Scalability: Green

B. Idea: Smart Contract Automation of Decisions: Automation
VIRIDIS Context: For a long-term stability, it is of high importance to remove human error.
- Improves: All 4 pillars of Governance.
- Heatmap Rating Rationale:
- Transparency: Green
- Efficiency: Green
- Trust: Green
- Scalability: Green

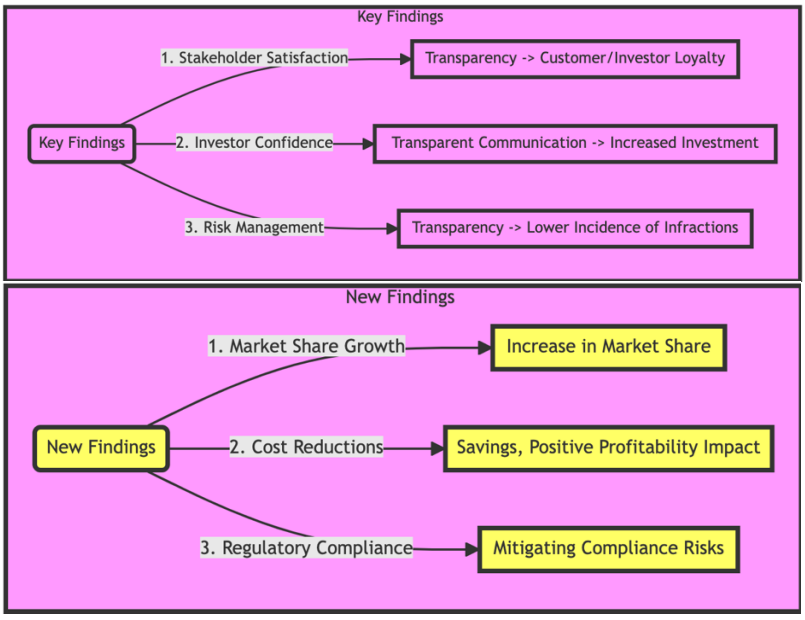
C. Idea: Blockchain-Based Traceability System for Governance and Resource Allocation: Accountability
VIRIDIS Context: As all is set in stone. A chain of actions can create and enable higher engagement between members as there are no secrets
- Improves: Trust.
- Heatmap Rating Rationale:
- Transparency: Green
- Efficiency: Green
- Trust: Green
- Scalability: Green

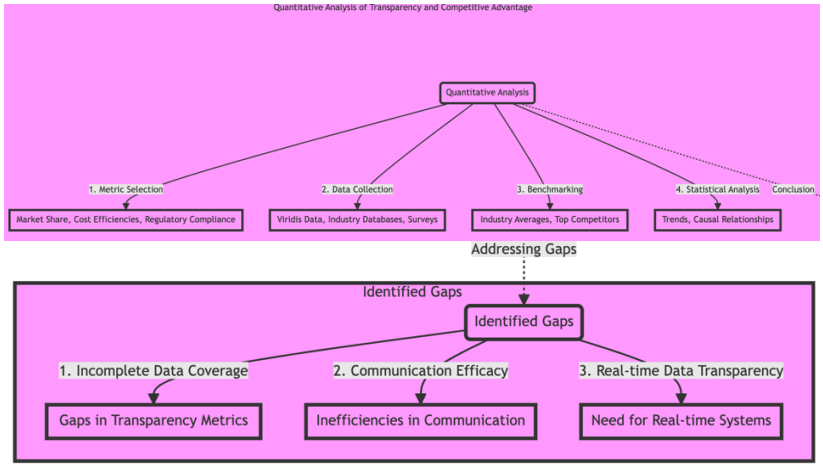
After applying the heatmap in different iteration phases leaded by the 32 participants who represents the main stakeholder of VIRIDIS the outcome was almost clear. The people voted online for the DAO governance framework. Which will create a safe long term scalable environment, improving the value for all 4 sections. The framework ensures stability, traceability, high brand identity and trust. A perfect system for the brand identity its guarantee to be efficient and sustainable with its impact and its allocation of resources for the ecosystem.
This process enables VIRIDS to take the best route for the goal: Improving the traditional governance system by implementing a decentralized automated system which guarantees trust, efficiency, transparency and scalability for the governance framework of the company.

Risk Overview & Tools



Maps for Key findings, gaps and an overview of the Riskmatrix. (S.Geissler, 2025)

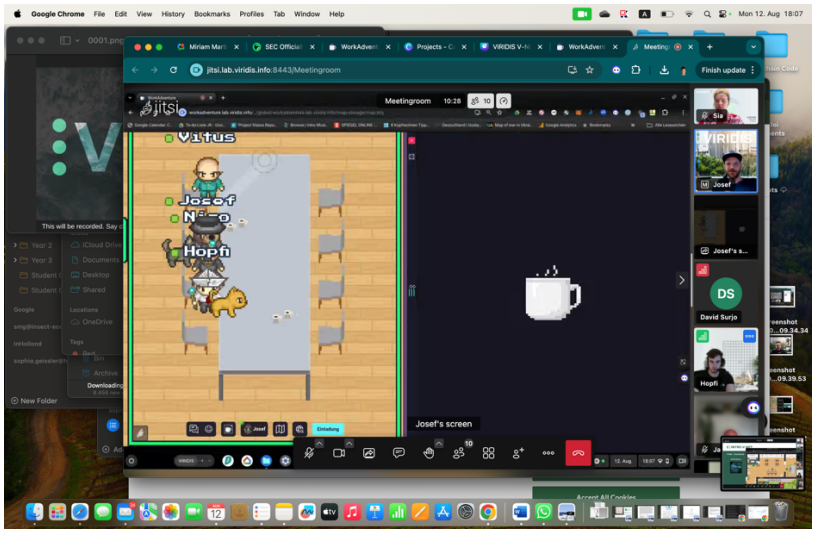




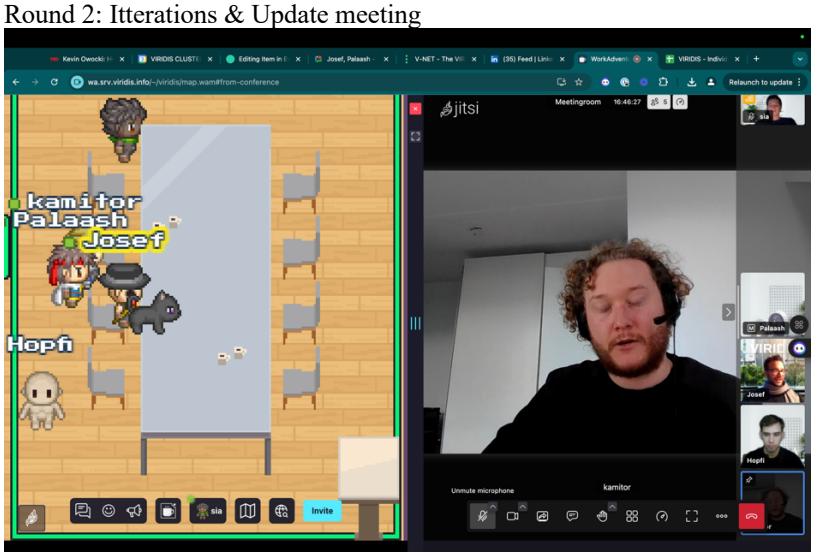
Voting Process online

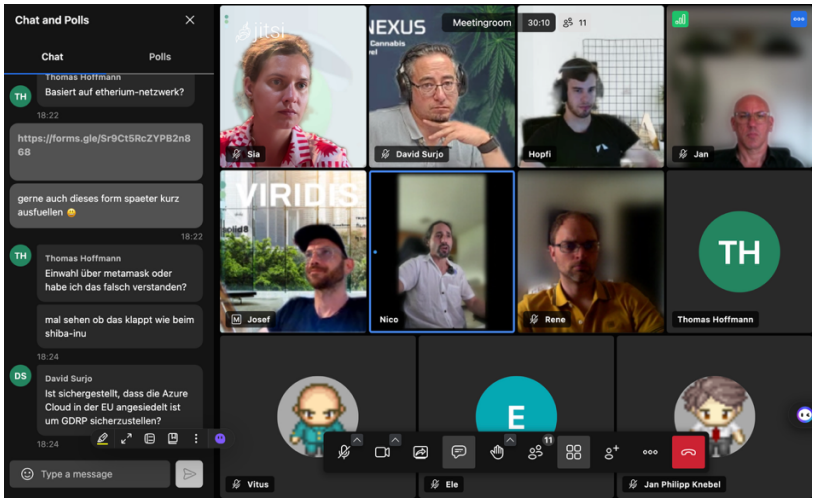
The next couple pictures show the attendees who evenatually voted from round 1-3 the itterations. We decided to use the open source platform Workadventure to have the general meetings and the voting ones for each itteration. (S.Geissler, 2025)

Round 1 of the itterations

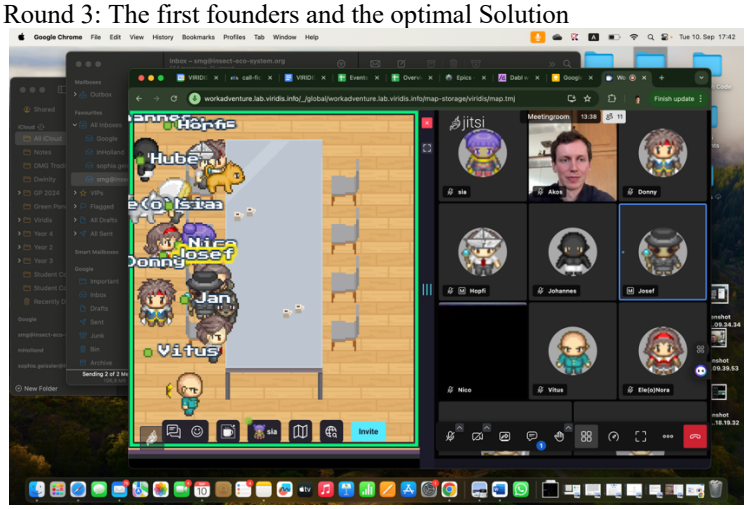


Round 2: Itterations & Update meeting





Round 3: The first founders and the optimal Solution



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