

TRANSITIONLAB 4

Chair of Business Information Systems and Digital
Transformation (SAP-endowed)
University of Potsdam

BIOTEXFUTURE
TRANSITION LAB



Insight Session -

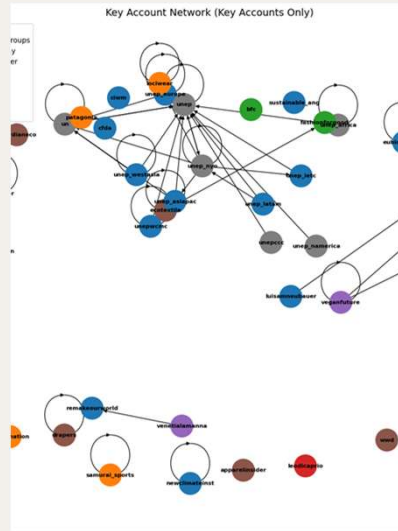
**Sustainable fashion communication
on X: Insights, Changes and future
direction**

28-02-2025

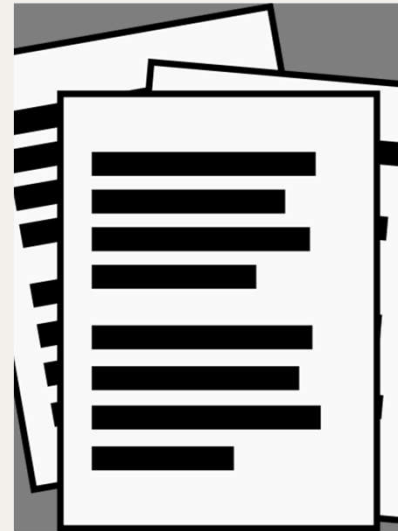
Content



Twitter Data



Main themes, trends and stakeholder networks



Communication guidelines



Future directions

Twitter Data

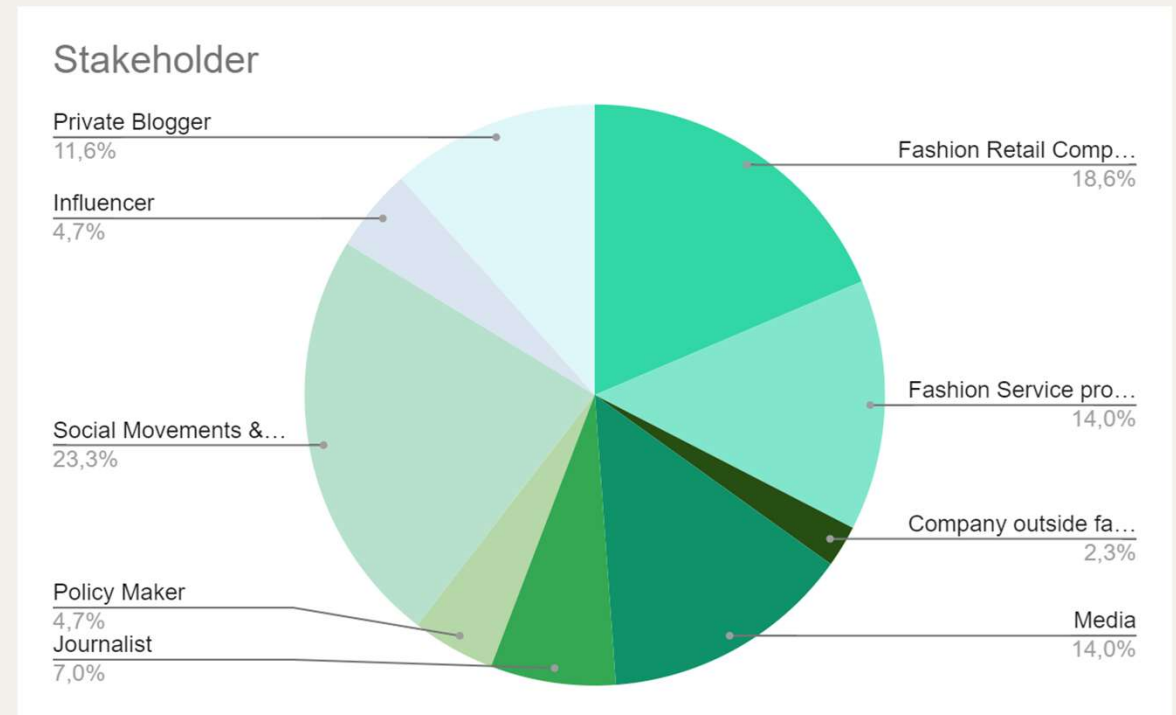


Stakeholder Classification

Fashion Retail Company	Companies, organizations or individuals who are producing or selling sustainable textiles or fashion	Niinimaki (2020)
Fashion Service Provider	Digital products and services in the sustainable textiles and fashion area	Inductive
Company Outside of Fashion Industry	Companies that engage in public communication about sustainable fashion but do not operate in the sector from a business perspective or financial perspective	Inductive
Media	Media organizations, that report or communicate about sustainable fashion	Niinimaki (2020)
Journalist	Journalist or bloggers that report or communicate about sustainable fashion	Inductive
Research	Academic institutions or researchers	Ki (2020)
Policy Maker	Legislators who can influence a company's business operations through statutory provisions or regulations	Menke (2021)
Social Movements & Groups	Non-profit organizations and independent social groups that are focused on climate or sustainability	Menke (2021)
Influencer	Actors with a high number of relationships and influence on organizational stakeholders through content production, content distribution, interaction, and personal appearance	Enke & Borchers (2018)
Private Blogger	Individual which posts regularly about his/her life and has no financial interest in doing so	Niinimaki (2020)
Private Person	Individuals that engage in public communication about sustainable fashion	Inductive

Stakeholder Classification

Stakeholder	Count
Fashion Retail Company	8
Fashion Service provider	6
Company outside fashion industry	1
Media	6
Journalist	3
Research	0
Policy Maker	7
Social Movements & Groups	16
Influencer	2
Private Person	0
Private Blogger	5
Gesamt	54



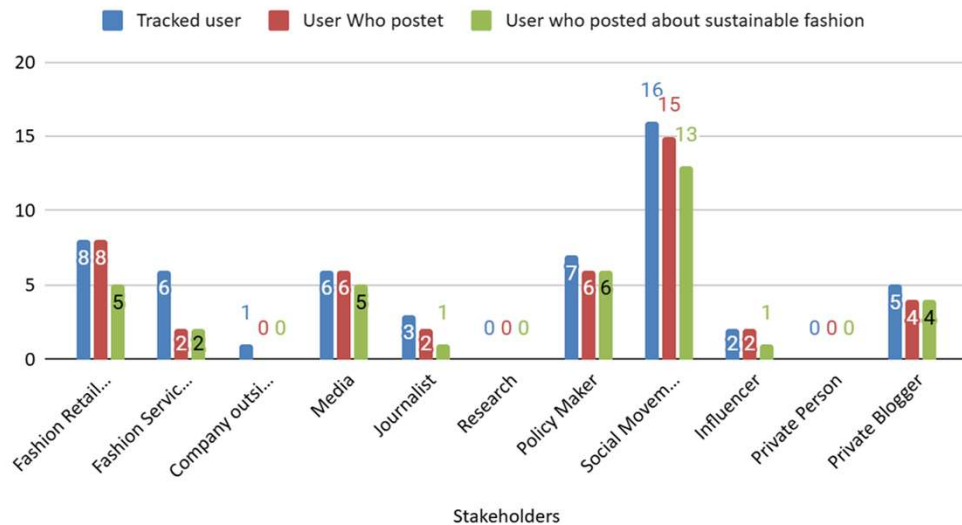
Posting behavior

By stakeholdergroups (July 2024)

31,48% - stopped posting about sustainable fashion

16,67% - Stopped posting altogether

Keyuser posting behavior group by stakeholdergroups



Stakeholders	Tweets	"relevant tweets"	Percentages
Fashion Retail Company	300	28	9,33%
Fashion Service provider	104	63	60,58%
Company outside fashion industry	0	0	0,00%
Media	1627	310	19,05%
Journalist	26	2	7,69%
Research	0	0	0,00%
Policy Maker	1028	288	28,02%
Social Movements & Groups	859	196	22,82%
Influencer	201	39	19,40%
Private Person	0	0	0,00%
Private Blogger	1576	68	4,31%
Gesamt	5721	994	17,37%

Main Themes, Trends and Stakeholder Networks

Main Themes and Trends

**Industry Leader & Key
Players**

**Sustainable Materials
& Innovations**

**Business Insights &
Industry Events**

**Awareness & Call for
Action**

Themes in the sustainable fashion industry

Industry Leaders & Key Players

Definition: This category of tweets explores the key stakeholders driving the evolution of sustainable fashion, including influential brands, designers, and thought leaders. It provides insights into emerging trends, new collections, and community perspectives while critically evaluating sustainability initiatives within the industry. At the core of these discussions are influential individuals, communities, and digital influencers shaping the discourse on ethical and eco-conscious fashion.

Insights:

- Discussions are centered around prominent industry figures.
- Often emphasizing on ethical issues like cruelty free materials.
- Discussions are often linked to political and international figures.
- Big industry players leading discussion about new sustainable ventures.

Takeaways:

1. Invite international experts or political figures into the discussion
2. Strategic use of mentions to collaborate with key players

**Industry Leader & Key
Players**

Themes in the sustainable fashion industry

Business Insights & Industry Events

Definition: This category of tweets focuses on significant industry events, exhibitions, and awareness initiatives within the sustainable fashion sector. These tweets primarily serve to inform audiences about upcoming or ongoing events, highlighting their relevance, objectives, and impact on sustainability discourse.

Insights:

- Events in the sustainable fashion industry focus on political regulations for sustainability and the strategies required to achieve these regulatory conditions
- Major events in the industry were livestreamed for wider audiences.

Takeaways:

1. Presence at Relevant Events
2. Social Media Livestreams
3. Consideration of regulatory

**Business Insights &
Industry Events**

Themes in the sustainable fashion industry

Sustainable Materials & Innovations

Definition: This category of tweets focuses on innovations within the sustainable fashion industry, highlighting emerging materials, circular design solutions, and responsible manufacturing techniques. These tweets primarily present research-backed insights and advancements, providing a knowledge-based perspective on sustainability-driven technological and design process. The primary purpose is to inform and engage audiences with the latest developments shaping the future of sustainable fashion.

Insights:

- Ethical considerations to sustainable material innovations are explored.
- Scaling materials innovations such as bio-based fibers were discussed
- New sustainable material innovations were discussed frequently
- Posted Frequently used science backed evidence

Takeaways:

1. Innovative materials are a hot topic on social media
2. Funding of sustainable projects should be transparently communicated
3. Credibility and seriousness can be achieved using scientific evidence while communicating new innovations

**Sustainable Materials
& Innovations**

Themes in the sustainable fashion industry

Awareness & Call to Action

Definition: This category of tweets serves as a platform for advocacy and education on sustainability within the fashion industry. These tweets highlight urgent calls to action, promote eco-friendly practices, and critically examine industry challenges. Their primary objective is to inform and engage audiences by fostering awareness of ethical and unethical behaviors, encouraging responsible decision-making, and driving systemic change toward a more sustainable fashion ecosystem.

Insights:

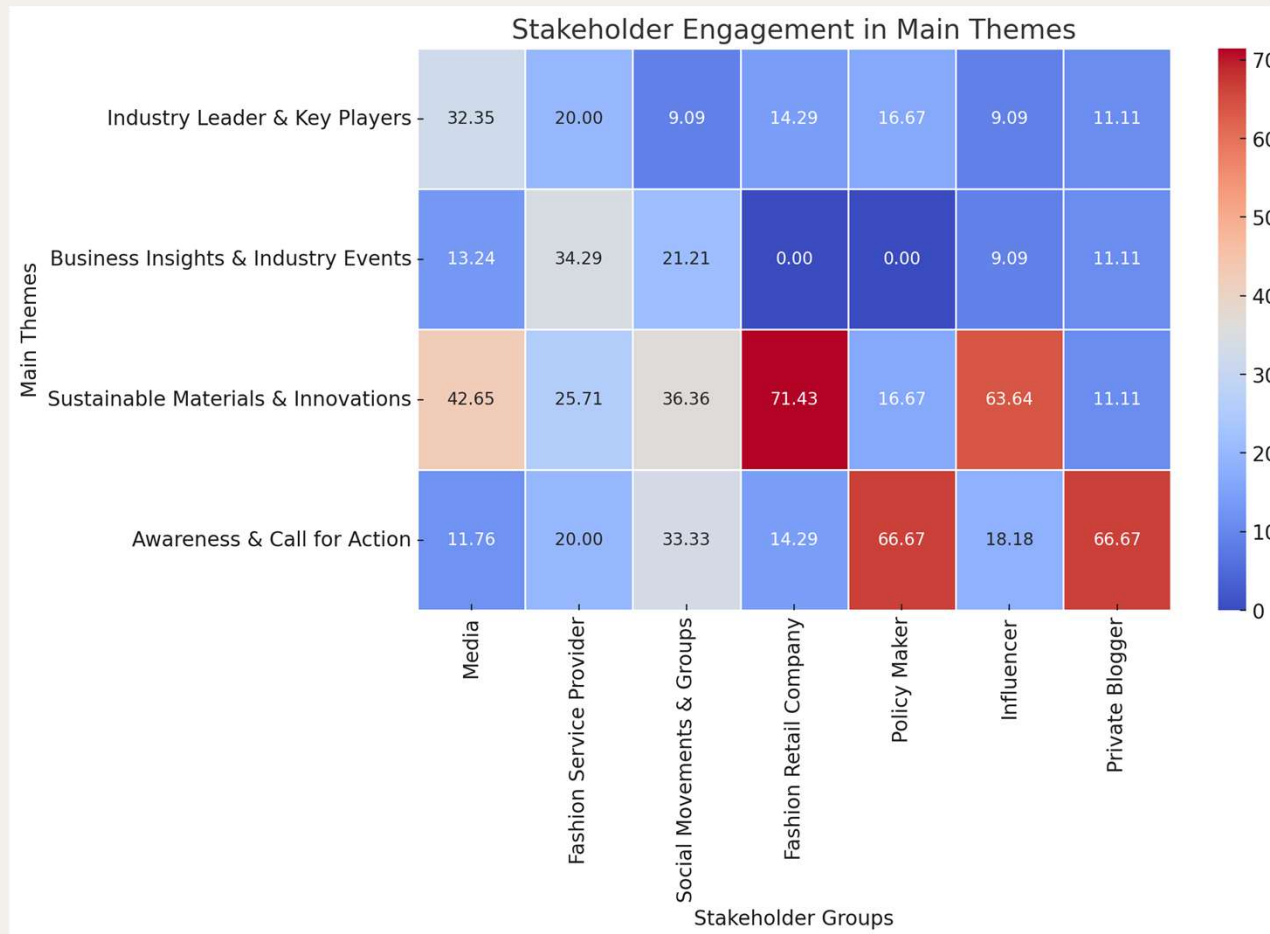
- Educational posts about climate crises and the connection to the fashion industry (e.g. plastic pollution through fast-fashion)
- Awareness posts about ethical issues in the fashion industry (animal cruelty awareness of leather products)
- Call to action to ethical consumption (what consumer can do to be more ethical)

Takeaways:

1. Including the problem while communicating innovation
2. Including ethical and climate benefits to sustainable fashion
3. Guidance to what people can do to help

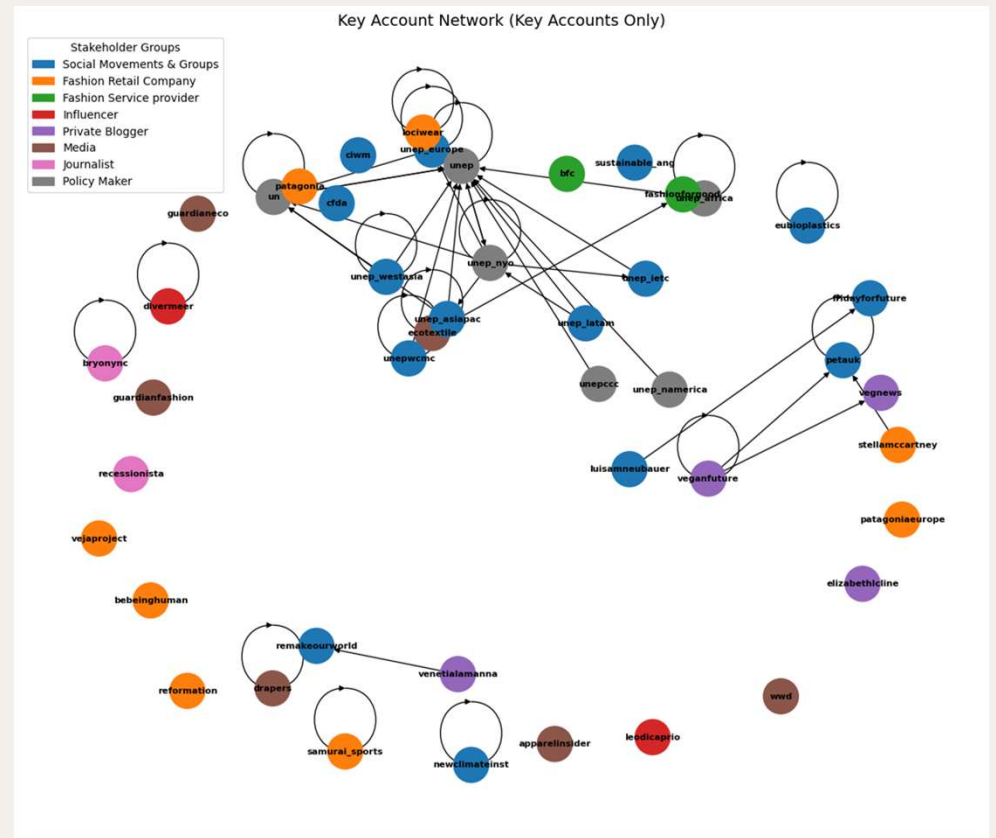
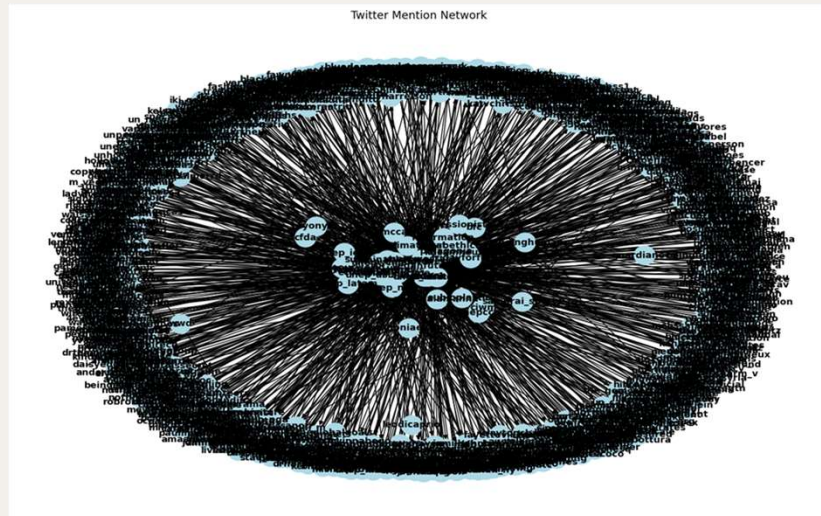
**Awareness & Call for
Action**

Main Themes Heatmap

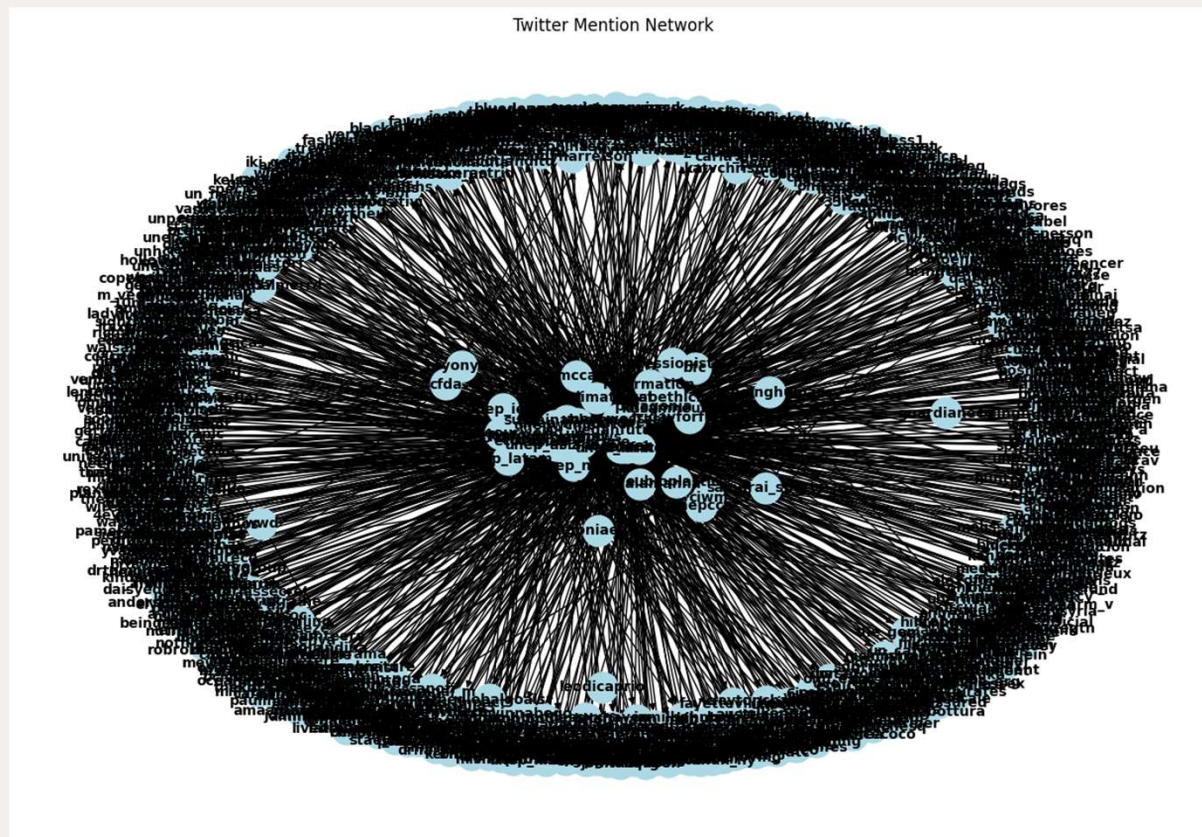


Stakeholdergroup Network

Metric	Value
Density	0,022727273
Assortativity (Degree)	0,033309117
Reciprocity	0,133333333
Modularity	0,606419753

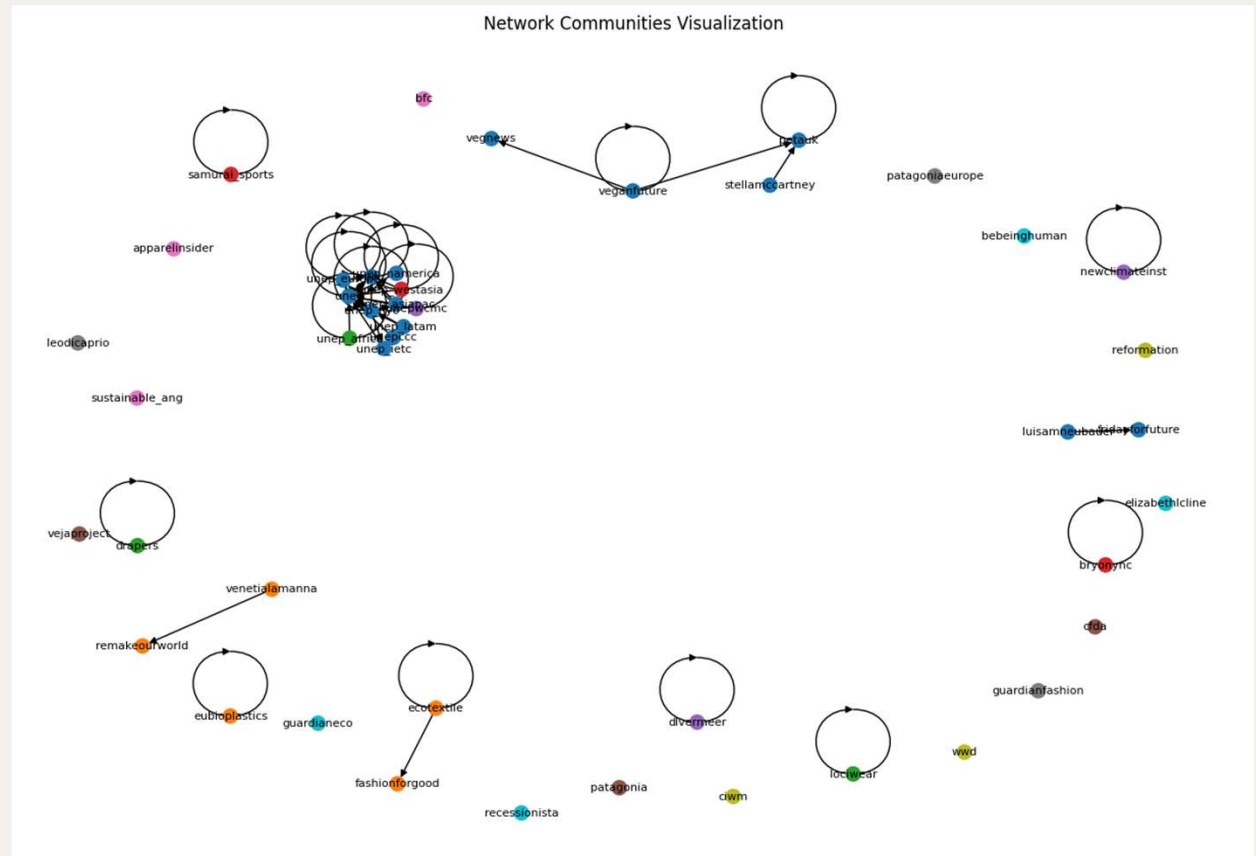


Mention Network



Network Communities

- **Stakeholders mostly interact within their own category**, meaning discussions are **sector-specific** rather than cross-disciplinary.
- **Fashion Retail Companies are isolated**, rarely engaging with media.
- **Social Movements & Groups form strong, independent clusters**, engaging mainly with similar organizations.



Communication Guidelines

Communication Guidelines

Derived out of themes and network analysis

1. Targeting Diverse Stakeholder Groups

- Information circulates within small, homogenous communities on X.
- The overall network on X is loosely connected, limiting the organic spread of messages.
- Communication should be concentrated on stakeholders most relevant to the topic.

2. Engaging Social Movements & Groups

- Social movements and groups have a strong presence in Sustainable Materials & Innovations (36.36%) and Awareness & Call for Action (33.33%).
- Dense stakeholder group network with high amount of outgoing edges.

3. Collaborating with Fashion Retail Companies & Media

- Fashion retail companies are highly engaged in Sustainable Materials & Innovations (71.43%), making them key players for conversations around innovation.
- Media plays a crucial role in industry leadership (32.35%) and sustainability (42.65%), indicating they are effective channels for professional and innovation-focused messaging.

4. Aligning Communication with Main Themes and Stakeholder Groups

- Industry Leader & Key Players: Engage media (32.35%), fashion service providers (20.00%), and policy makers (16.67%) for credibility and thought leadership.
- Business Insights & Industry Events: Fashion service providers (34.29%) and social movements (21.21%) are the most engaged in these conversations.
- Sustainable Materials & Innovations: fashion retail companies (71.43%), influencers (63.64%), and media (42.65%)—these are key targets for innovation-related messaging.
- Awareness & Call for Action: Strong engagement from policy makers (66.67%), private bloggers (66.67%), and social movements (33.33%) suggests these groups should be involved in advocacy campaigns.

Sustainability Communication Guidelines for Stakeholder Engagement

Fashion Service Providers

How to Engage:

- Develop joint sustainability projects (e.g., eco-friendly supply chains).
- Provide practical sustainability guidelines and best practices.
- Organize supplier workshops on sustainable material sourcing.
- Highlight suppliers' sustainability efforts in case studies and reports.

Best for Communicating:

- Business insights
- Industry events
- Sustainable innovations

Sustainability Communication Guidelines for Stakeholder Engagement

Media

How to Engage:

- Provide press releases with compelling stories, statistics, and expert quotes.
- Organize press events, webinars, or industry panels featuring sustainability experts.
- Offer exclusive interviews or behind-the-scenes insights into sustainability projects.
- Utilize data-driven storytelling to make sustainability trends more engaging.

Best for Communicating:

- Industry leadership
- Sustainability innovations
- Business insights

Sustainability Communication Guidelines for Stakeholder Engagement

Social Movements & Groups

How to Engage:

- Collaborate on awareness campaigns or joint advocacy initiatives.
- Provide transparent data on sustainability impact.
- Support their initiatives through funding or expertise.
- Engage in meaningful dialogue via public discussions and social media.

Best for Communicating:

- Awareness campaigns
- Calls to action

Sustainability Communication Guidelines for Stakeholder Engagement

Fashion Retail Companies

How to Engage:

- Present sustainability strategies aligned with consumer demand.
- Offer practical tools for integrating sustainability into business models.
- Develop partnerships on eco-friendly product lines.
- Share success stories of sustainable product transformations.

Best for Communicating:

- Sustainable materials
- Circular economy innovations

Sustainability Communication Guidelines for Stakeholder Engagement

Policy Makers

How to Engage:

- Provide clear, data-backed recommendations on policy changes.
- Participate in government consultations & policy discussions.
- Align sustainability goals with national and international regulations.
- Publish white papers and reports showcasing best practices.

Best for Communicating:

- Awareness
- Regulatory improvements
- Systematic industry change

Sustainability Communication Guidelines for Stakeholder Engagement

Influencers

How to Engage:

- Provide exclusive insights, behind-the-scenes content, and interviews.
- Offer them early access to sustainable collections or initiatives.
- Develop co-branded campaigns to promote sustainable fashion.
- Ensure authenticity by allowing them to share their own perspectives.

Best for Communicating:

- Sustainable fashion trends
- Material innovation
- Awareness campaigns

Sustainability Communication Guidelines for Stakeholder Engagement

Private Bloggers

How to Engage:

- Offer deep-dive insights into sustainability topics for long-form content.
- Provide expert interviews and exclusive research materials.
- Engage through guest blogging and article contributions.
- Build long-term relationships for credibility and consistency.

Best for Communicating:

- Personal sustainability journeys
- Critical industry perspective
- Awareness campaigns

General tipp for social media communication

Personalized approach – tailor communication styles to each group.

Clear and compelling storytelling – data alone is not enough; create narratives.

Transparent and authentic – trust is key in sustainability communication.

Long-term relationships – consistent engagement builds credibility.

Multi-channel communication – ensure visibility across different platforms.

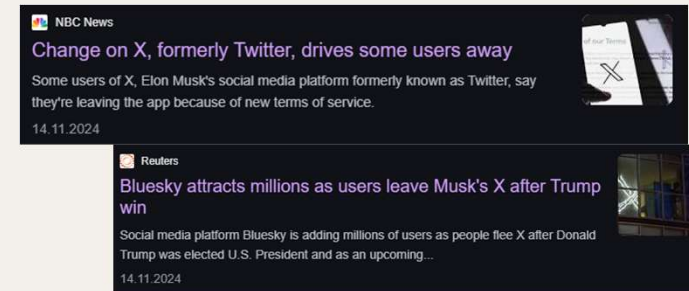
Future Directions

Future directions

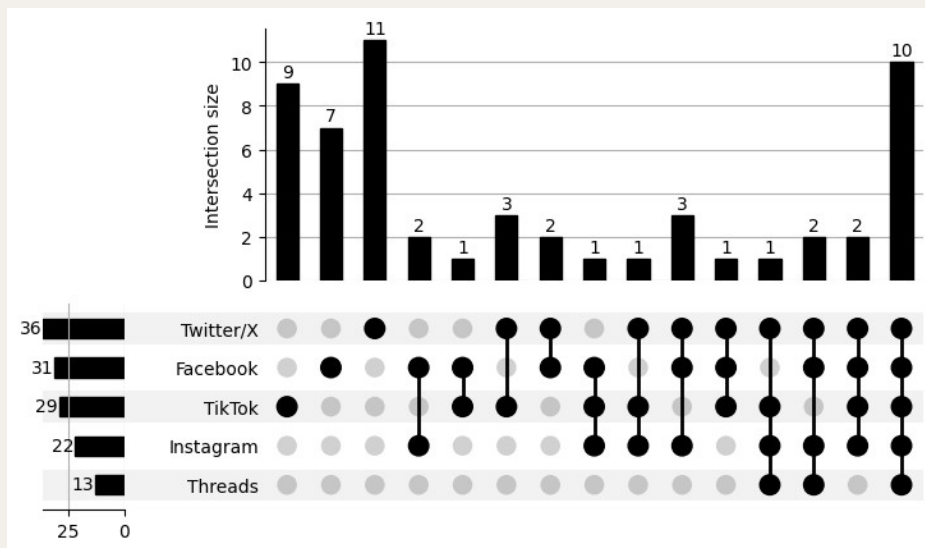
- The conducted analyses were performed on Twitter/X communication
- Are findings applicable across platforms
- Communication on other platforms
 - could differ from X
 - could provide more insights
 - could support findings on X
- Recent platform changes and political leaning influencing discussions on X

yahoo/news

Everything that's happened to X, formerly known as Twitter, in the 2 years since Elon Musk bought it







User and post variables across platforms



Post

-  Content
-  Likes
-  Comments
-  Post Date

User

-  Username
-  Bio
-  Verified Status
-  Follower Count

Takeaway

Across platforms, 10 common data points are available, but Post ID and User ID lack analytical relevance. Resulting in 8 relevant variables.

Automated stakeholder classification

- A machine learning based approach was trained on the Twitter dataset
- Model is applicable to datasets from multiple platforms
 - Utilized the 8 platform independent variables



Future application

Collect data from different social media platforms

Apply machine learning stakeholder classifier

Analyze communication on different platforms

Identify similarities and differences

Derive conclusions for sustainability communication on social media platforms



Thank you for your attention!