

Tact

Source veracity as a tool for reducing misinformation

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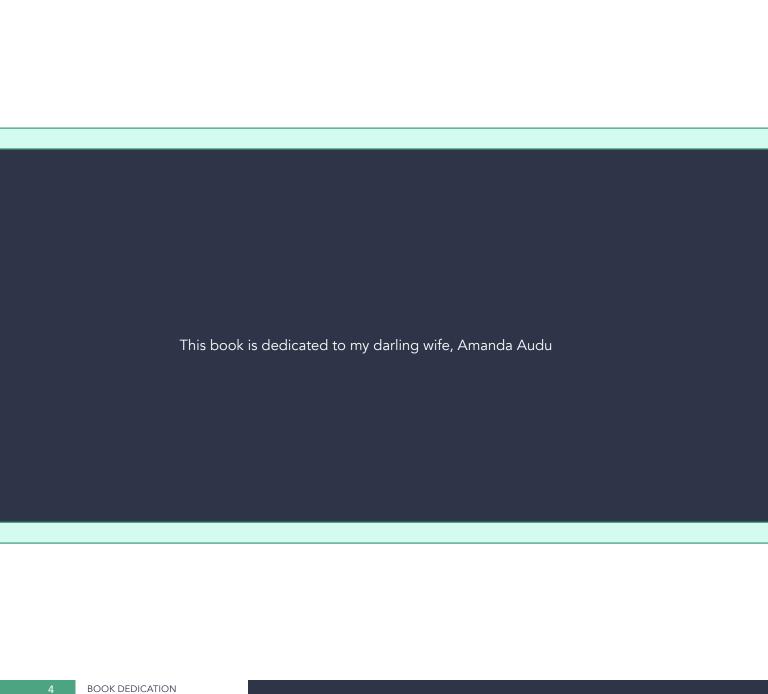
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Tact

Truth, Accuracy and Transparency

A Thesis Project Submitted in Partial Fulfillment of the Requirements for the Degree of Masters of Science in User Experience and Interaction Design

Thomas Jefferson University
College of Design, Engineering and Commerce



I would like to extend my sincere gratitude and devotion to God and everyone who has supported me along my journey as a graduate student.

Thank you to everyone who has provided with guidance, support, and inspiration. Without you, this work would have not been possible.

My wonderful family and friends.

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01

PROJECT INTRODUCTION

My interest in the impact of misinformation on society led me to seek solutions to address the problem. I aimed to enhance access to accurate sources of information available online and inspire people to reconsider their interactions with sources of misinformation. As a result of this pursuit, I developed "Tact" - Truth, Accuracy, and Transparency.

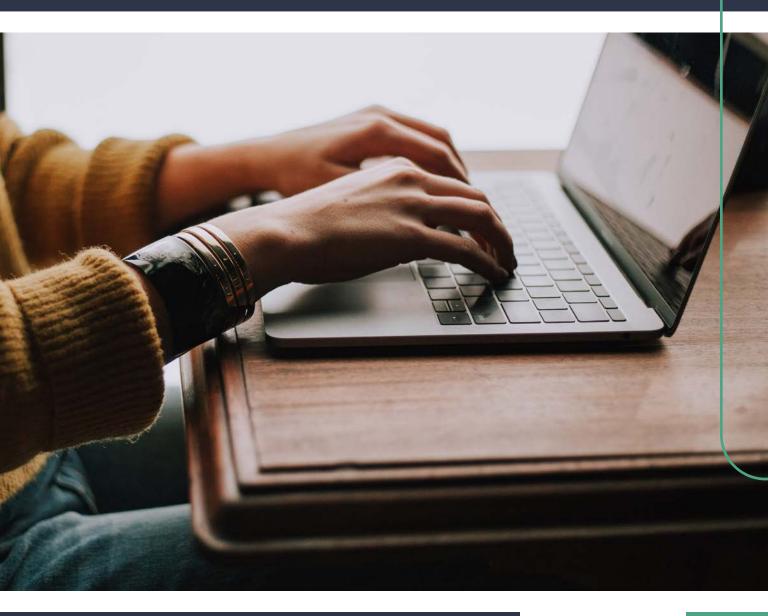
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Abstract

In light of the growing threat of misinformation on social media, it's crucial to take steps to address the issue. This project aims to hold digital content creators accountable for producing and sharing responsible content, as well as educating their audience about the dangers of misinformation.

To achieve this, we need a collaborative effort to improve media literacy and promote responsible decision-making among members of society. This can be achieved by ensuring that information is sourced from reputable sources and by promoting ethical guidelines for both novice and experienced content creators and journalists.





02

RESEARCH AND SYNTHESIS

My strategy was to first gather and synthesize insights on the problem space by identifying and understanding the user, their needs, and challenges before finally identifying an effective approach to building the right product to address the identified problems.

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Problem Definition

Misinformation is incorrect or misleading information that is spread unintentionally through various mediums, such as social media, news outlets, word-of-mouth, and other forms of communication increasing the difficulty of finding accurate information.

In today's society, the problem of misinformation is becoming increasingly prevalent and causing significant harm. Misinformation is often spread rapidly through social media, leading to false or misleading information being disseminated more quickly and broadly than accurate information.

This issue can have serious consequences, including creating distrust in institutions, provoking fear and panic, and even putting public health and safety at risk. It can come from a variety of sources, such as individuals, organizations, and even governments, and can be both intentional and unintentional.

There is growing concern that the rush to disseminate information quickly in the 24/7 news cycle has led to a decrease in the quality of writing and reporting. The fast pace at which digital content is written can result in errors and a relaxation of quality control, ultimately affecting its accuracy. Some online journalism has adopted a 'publish now, correct later' approach, which may lead to less reliable information being published.

In addition, defining and ensuring journalistic quality is a challenge not only for traditional news media but also for online commentary and the blogosphere. The hyper textuality, multi-modality, and interactivity of online communication can impact the quality of digital content.

Key Factors for Consideration in The Misinformation Eco-system



THE ORIGIN

Considered as the originator or sender of the message: individuals, media organizations, etc.



THE MESSAGE

Structured in different formats like audio, video, text, data, etc.



THE INTENTION

The underlying reason why the message was sent or what the message is aimed at achieving.



THE CHANNEL

The conduit through which the message is created, transmitted, and received.



THE RECEIVER

The audience or target population that receives and engages with the message.



THE REACTION

Any form of engagement, or response that occurs after the message has been received.

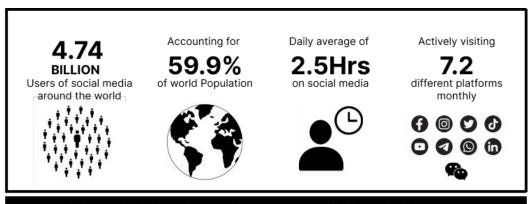


THE REWARD

Derived by the sender or receiver. Could be Financial, social, socio-political, or engagements.

How Big is the Problem

According to Data Reportal, about 59.9% of the global population, or roughly 4.80 billion people, use social media as of April 2023. This reflects an annual growth rate of 3.2%, resulting in 150 million new social media users between 2022 and 2023.



Overview of Global Social Media Use April 2023 DataReportal

Forbes reports that 64.5% of global Internet users rely on digital media platforms like websites, Facebook, Twitter, YouTube, Snapchat, and Instagram for breaking news instead of traditional media.

A study by Pew Research Center reveals that 93% of Americans receive their news online, with 36% citing a named news organization website or app, 35% citing a post from a news organization on social media, 20% through search engines, 15% indicating a news organization email, text, or alert, 9% from another source, and 7% from a family member email or text. The study also notes a declining public trust in traditional journalism in the United States.

Misinformation is produced and spread very easily through social platforms. A quick look at the potential reach of the different social media platforms and the information-seeking habits of users points out just how important it is for there to be proactive methods to make the information circulating through these platforms accurate and safe for consumption.

Misinformation is Easy to Create and Easy to Spread



Micro-targeted Communication



Multivariate Nature of Platforms



Eliciting Emotional Responses

Why this is Important

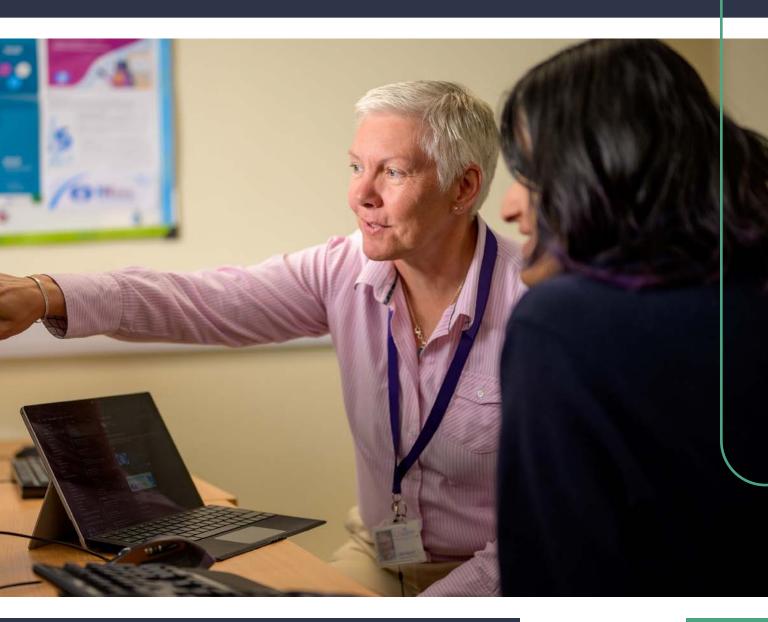
In today's modern digital age, spreading misinformation has become effortless due to the speed and vast reach of communication channels. Social media platforms have made it simple to share content and ideas with a wide audience, resulting in the rapid spread of false information before accurate data can catch up.

Content creators have a significant role to play in combating misinformation. They can help ensure that accurate information is shared by carefully verifying their sources and fact-checking their content before sharing it with their audience.

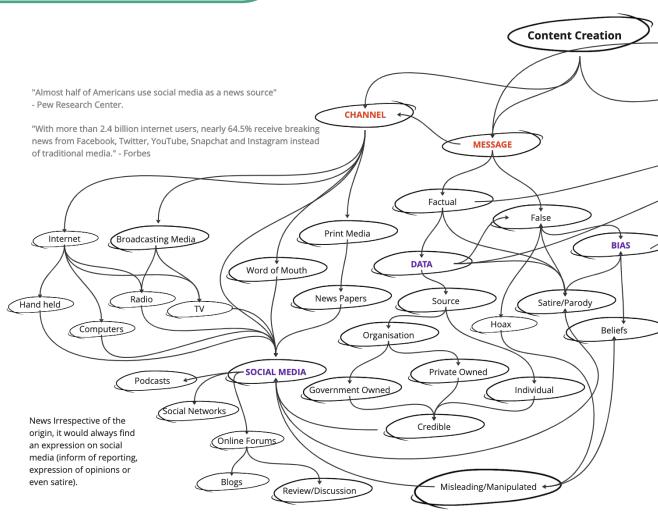
They can also use their platforms to promote critical thinking skills that enable people to identify and avoid engaging with false information once identified.

To build trust with their audience, content creators can be transparent about their sources and methodology, and engage in honest communication with their followers. By fostering a community, they can increase awareness about the dangers of misinformation and promote accurate information sharing.

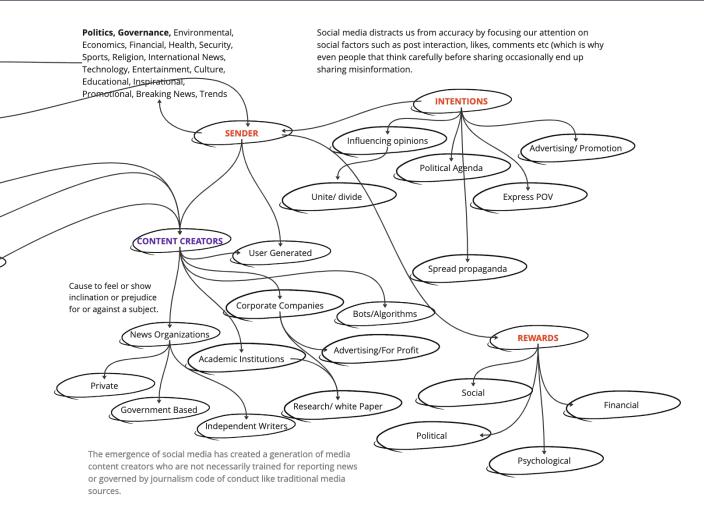




Understanding the Eco System



As a news source, social media allows user - news engagement in a variety of ways, including: generate, discover, consume, share or repost news, post their own photos, videos, or reports of news (i.e., engage in citizen or participatory journalism), comment on news

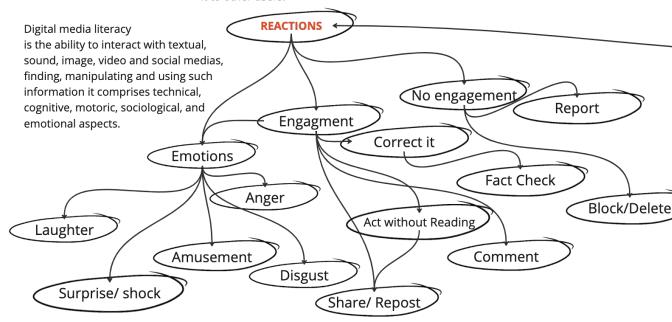


Truth and Accuracy | Independence | Fairness and Impartiality | Humanity | Accountability.

"Journalists cannot always guarantee 'truth' but getting the facts right is the cardinal principle of journalism. - Ethical Journalism Network

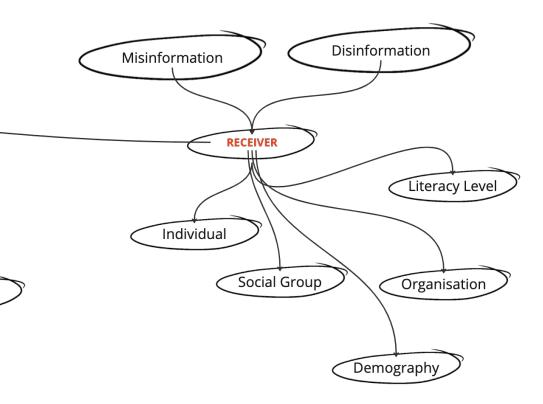
Understanding the Eco System

Ordinary people may propagate the material to their own social networks through deliberate sharing–a core function of platforms such as Facebook and Twitter. Other interactions with it, such as 'liking', also trigger the algorithms of social media platforms to display it to other users.



Consistency

Consistency is the extent to which sharing would be consistent with past behaviors or beliefs of the individual. Research has indicated that social media users consider headlines consistent with their pre-existing beliefs as more credible, even when explicitly flagged as being false.



Consensus

Consensus is the extent to which people think their behaviour would be consistent with that of most other people. In the current context, it is possible that seeing a message has already been shared widely might make people more likely to forward it on themselves.

Authority

Authority is the extent to which the communication appears to come from a credible, trustworthy source. Research participants have been found to report a greater likelihood of propagating a social media message if it came from a trustworthy source.

Existing Approach



FACT-CHECKING AND LABELLING

The clear labeling and definition of information i.e.: what is contained in it, its legitimacy, credibility score, etc.



REGULATIONS

Create an international advisory council, regulate ad networks, enforce minimum levels of public service news on the platforms, and set strong ethical standards across all media.



ETHICS AND PHILOSOPHY

Educate the public about the threat of information disorder, and create a standardized news literacy curriculum.



AI AND MACHINE LEARNING

Crack down on computational amplification, pay attention to audio and visual forms of information, and build engines for authentication.



TRANSPARENCY

Work collaboratively and provide transparent criteria for any algorithmic changes that down-rank content. Provide researchers with data.



REMOVING INCENTIVES

Eliminate financial incentives that reward advertising on platforms or websites with high traffic that share fake content.



Research Strategy

After getting an understanding of the problem space, my next step was to focus on the three main factors identified in the Eco system as key to the creation and distribution of misinformation.



I identified four research objectives listed below to facilitate an understanding of these three factors.

- Contextual insights into obtaining and sharing news on social media.
- Understand the psychology and emotions associated with content sharing.
- Obtain insights into the user's perceived impact of misinformation.
- Understanding informed decisions made when sharing on social media.

Following these objectives, I developed an interview script and recruitment criteria which were used to recruit 12 participants through my personal social media accounts and leveraging on WhatsApp groups which I am a part of and have experienced the sharing of misinformation by members.

Recruitment Criteria

Content Creators above the age of 35 who are:

- Actively dependent on the use of social messaging platforms for information sourcing and gathering.
- Are an active member of a social media community.
- Have previously shared misinformation through their platforms.

Interview Sessions

Part I

Background on Access to News and Preferred Platforms

- Can you tell me about your interests concerning the kind of news you like to read/watch/listen to and what platforms you use to access them?
- What sources do you seek information from and why? Take me through a typical scenario of how you spend your time accessing the information on the platforms you listed above.
- Tell me about what groups/communities you are part of on these platforms and share the reasons behind your choice.

Part II

Experience with Identifying and Sharing Fake News

- Share a previous example of when you encountered information that was factually incorrect/false and what your response/reaction was. What stood out as major indicators (please share examples)?
- What indicators do you look for when considering the validity of online information?

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Interviews

- Recall an experience when you shared some information online and later discovered it was fake (misinformation/factually incorrect). After knowing the information was fake, did you seek to correct it (if yes, why and how) if no – why not)? What were the implications of that?
- Tell me about your reaction to platforms/accounts/groups associated with the experience(s) described above. (Based on the response, ask) Why did you bother to do so? How are you dealing with this now?

Part III

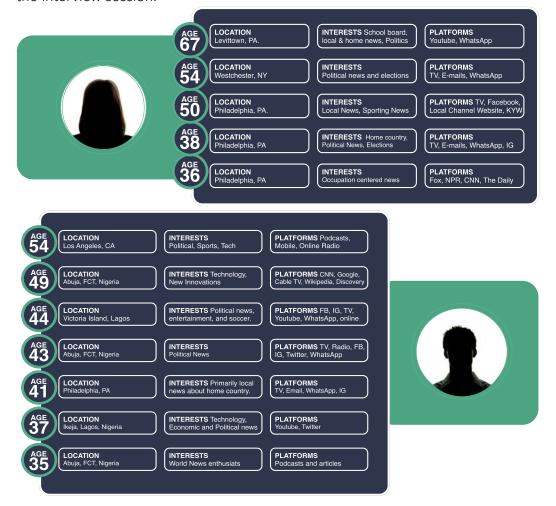
Looking Ahead

- Tell me about the pointers you look for when consuming content online to confirm the validity/authenticity of such information.
- How do we explain the difference between facts and opinions as well as misinformation and disinformation?
- What measures (if any) do you have in place to curb the sharing of fake news?
- Do you sensitize people online on fake news/posts? (IF yes How, If No why not?)

I conducted an average of 30 minutes of recorded interviews over Zoom and in person using the interview script as a guide. The interviews were then used to develop a debrief for each participant which was further synthesized to draw insights and answers to the initial objectives.

Participants

Below is a summary of some relevant details of the participants who partook in the interview session.



Insights

10 out of 12 participants expressed a strong sense of responsibility in their information engagement habits and the role that plays in dealing with misinformation.

"False stories thrives more than the truth"

"When I see(know) that I am very sure, I like to drop a sentence to say this isn't true, I watched this happen" "I have to stay aware of my bias is before I share anything"

"Would rather not carry a story than report bias news"

"Everyone has an opinion"

"Certainly If I'm not sure I don't talk about it"

"Facts and Opinion, both can change"

The media controls the narrative to suit their own agenda. I don't trust easily.

"I like to fact-check first, I don't like to copy and paste news because of how fast it can spread so I fact-check everything I get, and fact-check before I post."

"...I have to say what I mean and not be misunderstood."

"If it sounds too good to be true then it is"

"Like to listen to speakers who have no dog in the fight"

"I didnt say anything definitly the most important aspect of an article. The have to be succinct.

Active member of a social media community.

Dependent on the platforms for information sourcing.

Have previously shared misinformation through their platforms.



Affinity Maps

After reviewing my interview sessions, I identified seven themes among the participants displayed below. They cover how their interests and bias influence the steps they follow in information sourcing, their response to sources of false information and the measure they have in place to prevent from spreading misinformation.

Areas of interest











Interaction







Views on Bias



Reaction to Fake News



Habits around sourcing



Personal measures to prevent spreading misinformation



Actions after unintentional sharing false content



Insights



GATHER OTHER POINTS OF VIEW

Engaging in discussion-based platforms as well as interacting with professionals/reporters who have "no dog in the fight"



KNOW THE FACTS

Researching topics to have informed opinions when addressing topics of interest gives confidence in addressing misinformation.



"I'M NOT BIASED!"

Being aware of your biases and those associated with news sources doesn't make you immune to confirmation bias.



SWITCH OFF/REPORT

Disengage from known sources of misinformation and controversial subjects.



INTERESTS (9/12 PARTICIPANTS)

Participants expressed the highest level of interest in politics and governance-related news.



I WAS ASHAMED (12/12 PARTICIPANTS)

Participants hold themselves accountable, they feel shame and regret when they share misinformation.



ROUTINE (12/12 PARTICIPANTS)

Participants have and established routine for accessing news through preferred sources.



AGE AND FAKE NEWS

It is widely believed that digital illiteracy is directly associated with old age.



HOW I RESPONSED

Participants were more likely to address misinformation privately.



THEY WONT DO THAT

Participants expressed trust in known news agencies and believed they can be held accountable.



EVERYONE IS A TARGET (12/12 PARTICIPANTS)

Although participants believed to be news literate, they had fallen victim to sharing fake news.



WATCH OUT FOR ...

Headlines are instrumental in identifying cases of misinformation but you must always read the body of the article.

User Group Definition



The primary user group is content creators, editors, publishers, and educators responsible for producing content such as blog posts, and articles. They can use the platform to find verified sources of information to engage with.



2

A secondary user group is subject matter experts who are verified sources and can offer reliable and accurate information in their field of expertise. Content creators rely on these sources as they play a crucial role in maintaining the accuracy and credibility of their content.





The third identified user group is individuals who use the credibility assessment tool to review content created by the first two user groups. The credibility assessment tool allows these users to evaluate various aspects of the articles, such as the sources cited, and the overall quality of the content.







Content Creator Persona



NAME SAM AGE 37 OCCUPATION JOURNALIST

As an experienced journalist working the for the past 7 years, Sam has published a range of publications, from small newspapers as a freelance journalist to large media outlets. He is motivated to curb the spread of fake news as he has seen firsthand the harm it poses. He researches heavily and desires to always produce content that is accurate and unbiased so as to present content that positively influences his audience.

Goals

- Use verified news sources when reporting to ensure the accuracy and credibility of his articles.
- Positively impact society by finding ways to improve the media literacy of his audience.

Needs

 Access to a wide range of verified sources from reputable publications and experts.

Tools or platforms that simplify the process of finding and evaluating credible information.

Challenges

- The sheer volume of information available online can make it difficult to determine which sources are credible and trustworthy.
- Some sources may intentionally spread misinformation or propaganda, making it difficult to identify what is true and what is false.

Frustrations

- Coming across inaccurate information that requires additional factchecking.
- Limited access to certain reputable sources due to paywalls or subscription requirements.

Verified Source Persona



NAME JUDE AGE 45 OCCUPATION CONSTRUCTION SPECIALIST

Jude has over 15 years of experience in environmental science research and has been a professor in the field for the past 10 years. He is passionate about the environment and is dedicated to promoting awareness and education on environmental issues. As an expert in his field, Jude frequently receives requests from journalists seeking accurate and verified information for their articles.

Goals

- Aims to share his knowledge and expertise to ensure accurate reporting on environmental issues.
- Desire to contribute to the fight against misinformation by providing reliable information to journalists and the public.

Needs

- Platforms to connect with content creators and share insights, and expertise.
- Recognition and acknowledgment for his contributions to articles.
- Access to tools or resources that streamline the process of providing verified information.

Challenges

 Tired of the amount of false information online about construction management and is interested in promoting accurate and verified information.

Frustrations

- Receiving requests for information that is outside their area of expertise.
- Not receiving proper attribution or referencing for his their contributions.

Problem Statement

The masquerading of false information as legitimate or the intentional publishing of content that is verified as false to manipulate public perception has in the past been used to influence politics, spread propaganda, promote advertising, and stir up or intensify social conflict among users who cannot authenticate its legitimacy. Digital platforms offer users instant access risking their exposure to sources aiming to capitalize on human bias and achieve various intended effects.

As of October 2020, there are reportedly 4.74 billion users of social media around the world accounting for 59.3% of the world's population with each user actively visiting an average of 7.2 different social platforms each month and spending an average of 2½ hours per day on social media platforms. The existing proffered solutions to the spread of fake news are reactive where it has already been shared before being proven false, taken down (deleted), and archived; thus, the need to prove the accuracy of information remains vital for all social media use and interactions.

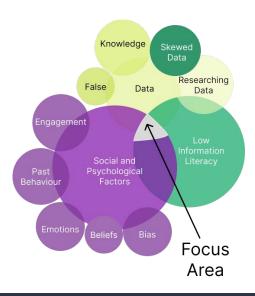
The shortcomings of existing solutions are type and/or platform-specific, have low cross-platform adoption, are human-dependent, and are without effective content moderation/governance. This makes it necessary for a proactive approach to establishing the verifiability of sources with the aim of reducing the proliferation of misinformation by malicious actors.

HMW Statement

How might we reduce misinformation among aging adults through the sharing of fake news over social media platforms.

How might we reduce sharing misinformation among targeted social media users, thus resulting in an increase in media literacy, and informed decision making.

How might we improve the accuracy of digitally published content by facilitating access to verified sources as a tool for reducing misinformation?



03

PRODUCT DESIGN

The design of Tact is focused around prioritizing ease of use, intuitive navigation, and clear communication of information in alignment with the needs and goals of the user group. Testing, and iteration of the product was conducted to address user feedback and pain points.

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Product Overview

Tact is an online platform that facilitates the publishing of trustworthy articles by evaluating content's credibility based on source, organizational, and content quality indicators. It provides reliable sources and quality indicators for content creators placing emphasis on the importance of author attribution as a metric for producing trustworthy and engaging content.

It aims to address the problem of misinformation at three key points of the eco system

ORIGIN

Find verified sources of information to improve content quality and accuracy. Users can search for sources and subject matter experts and request access to them for exchange of knowledge.

MESSAGE

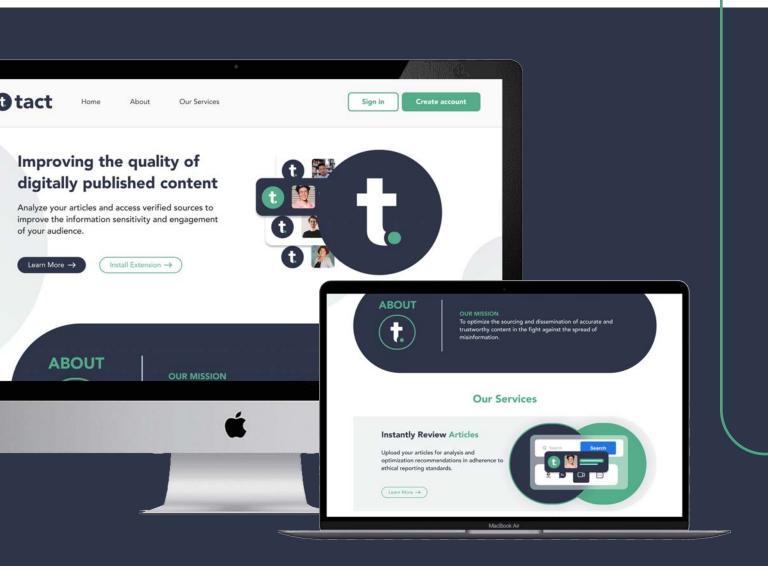
Check the content to ensure it is accurate and verifiable with proper references to sources and cited information.

Articles will be uploaded by users and reviewed based on content quality indicators to make improvement recommendations.

RECEIVER

Provide a credibility assessment tool that will present quality indicators to influence engagement positively.

The credibility assessment extension examines source and attribution quality to indicate if an article is trustworthy or misleading.



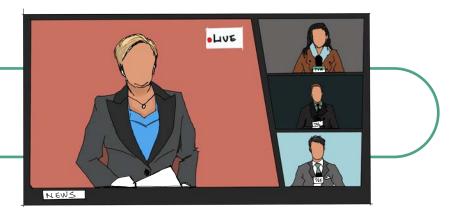
Storyboard

Elevator Pitch

Information tends to be presented in a skewed format where bias is introduced by various reporting bodies and then consumed over various platforms. Solutions are usually reactive but Imagine a scenario where we are able to restrict the use of false data in the creation of digitally consumed content and at the same time increase information literacy.

Storyboard

This storyboard presents a use-case for the product where a journalist is writing an article about a topic of interest and needs access to valid sources of information and subject matter experts.



Reporters are discussing about a topic of interest on TV



A freelance reporter who is writing an article about the topic visits the website of the outlet to gather more information.



After reviewing the website, she reconsiders the information and decided to conduct her own research



She decides to use the credibility assessment extension on her web-browser to check the accuracy of the post.

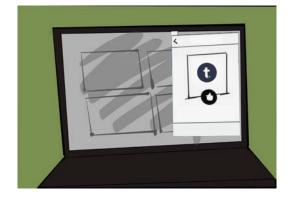


She uses Tact to search for verified subject matter experts and sources she can contact to gather information about the article she is writing about.

Storyboard



She places a request to contact the preferred option and receives approval. The transfer of knowledge begins and she is able to gather accurate information for her article.



After she uses Tact to verify her article, it gets verified by Tact label and the metrics of verification can be viewed by the credibility assessment tool.

MoSCOW Method

I prioritized the identified design requirements below to allocate resources for developing the most critical aspects of the product to create an MVP.

Must Have

Submit For Review

Users should be able to submit posts they generate for review to check source veracity, and presence of proper attribution.

in API their web pages.

Search Feature

Ability to search topics of interests and for specific different databases

API's Entity recognition

and NLP - IBM Watson Natural Language Understanding API. Digital object identifiers (DOIs) and metadata - OCRID, ISBNdb. ISSN, Google Books. Payment processing Stripe Payment API

Sign-in - Google & Facebook Sign Schema.org API to incorporate structured data markup into

Provide Reviews/ Comments

Ability to attach comments, reviews and feedback to posts and/or the certificates attached to articles.

User Accounts & on-boarding

Personal user accounts (with username and password) to grant restricted access to the service. Contains profile information, such as an email, phone, affiliations, subscriptions, and user permissions

Database

A database housing all the verified articles, sources and user data.

Access to existing databases of source materials (written materials in the form of journals or industry experts in the form of professionals).

Should Have

Content Generation Labelling

Ability to attach a label to any content generated to specify its category (For instance satire, parody, personal opinion, biased to a certain view etcl or to a source indicating if it is a trusted/verified

Share /Reference / Attach Rating

Users should be able to share reports showing the findines/discoveries associated with posts.

Varying File Format Media Upload

Ability to receive a variety of file and media formats ranging from text, picture, ideo to audio etc

Payment Integration

Ability for users to make payments for premium

Payment processing Stripe Payment API

Could Have

Language/Tone Analyzer/Detector

Ability to analyze the language used in any content to specify its category (For instance - satire, parody personal opinion, biased to a certain view etc)

Metadata insertion and tracking

Ability to attach the information (metadata) of the creator or generator of any post and transfer it along with the post as it is being

Guest Profile

This allows users access the free services without having to register or subscribe. They will have limited access to the tool and only be able to view a displayed result. (User will be encouraged to create at least a free account

Points/ Post Ratings

Representation of the validity/ accuracy status or score of an article (Could be numerical or verball

Reconsideration Prompter

Nudging users to consider an alternate form of expression

Won't Have

Trace Reach

Users should be able to trace and track the emergence as well as circulation and engagements of posts/articles on social platforms

Premium Membership features

Access to restricted or the product.

Customer Service

report any service/technical issue

Refute

Provide the legitimate sources to prove the degree of falsehood of data

Suggest a neutral or factual source or form of reporting the same information.

Reward

Media Analyzer

Ability to analyze media files

to discover if they have been

altered in any form.

Detection of deep fake (Al

generated) media content

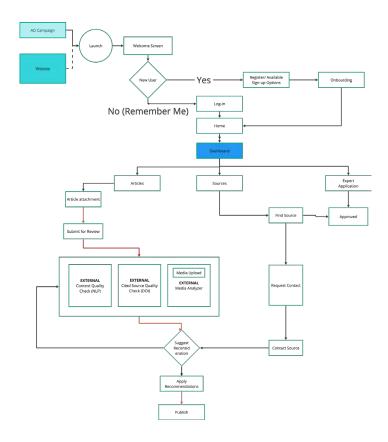
A system of tracking and then rewarding users who: Recognize, Reconsider, Research, and Respond to

User Dashboard

Overview of the users activities and engagements showing metrics such as content generated, reviewed and verified.

User Flow

Starting with the log-in/sign-up process, the diagram maps out the interactions and decision points of the user. Once the onboarding and profile creation process is complete, a user who is a content creator will have access to the dashboard to perform an article review or a search for sources while a subject mater expert can submit his profile for verification and approval.



Service Blueprint

Tact's service blueprint diagram gives a complete overview of the service delivery process. It includes all the touch points, processes, and actors involved in providing services. The diagram also maps out the user and source journey, which helps to identify critical areas in the delivery process.

From the user's perspective, there are four main phases. The first phase involves exploring verified sources and consulting subject matter experts.

Once signed up, the user can search using keywords or topics to find relevant sources. They can then evaluate each source and view their attribution and qualifying metrics. After exploring, the user can contact the source or access the source material to gather knowledge. The insights gathered will be used to create the article, which will undergo review and optimization recommendations. After applying the recommendations, the article will be packaged and attached for publishing.

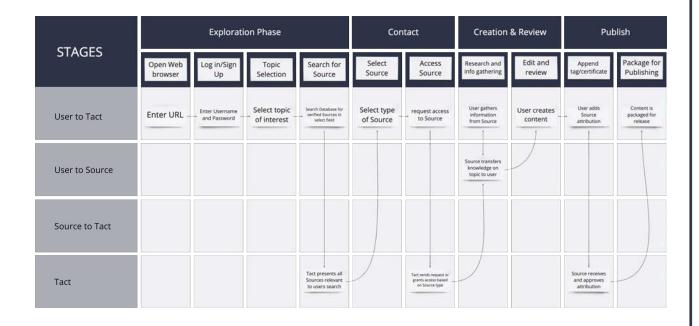
Subject matter experts are required to submit professional and personal information, qualifications, and areas of expertise during their application process. Tact will conduct a background check to verify the submitted credentials, professional memberships, and work history.

Once verified, the applicant will be approved to create a profile that highlights their expertise and past work. This profile will be visible to content writers

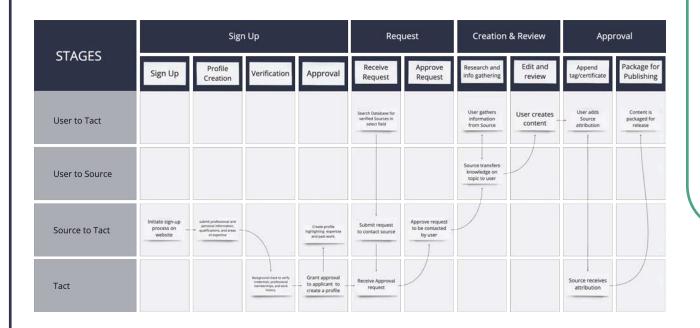
Service Blueprint

who use the app's search bar. Tact recommends experts to the content writer who can express interest through Tact's messaging feature to discuss project details.

The expert has the freedom to accept or reject requests sent by content writers through the app's messaging feature. As a result, you have complete control over what you accept and can select projects that are best suited to your skills and interests.



Experts can join the expert community for free or be members of existing professional bodies. When a content writer requests information from a verified expert, the expert is notified and can choose to accept or reject the request. With Tact, content writers can confidently rely on our expert network for reliable and valuable information.



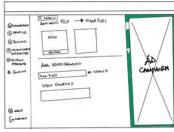
Wireframes

The hand-drawn wireframes I developed allowed me to quickly explore different design ideas and concepts to create a rough representation of the product's interface and allowed me to refine the layout efficiently.

Content Creator Side



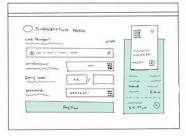
Landing page for user sign in.



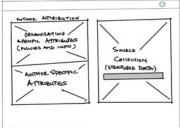
The main screen allows users to search and add new sources as well as upload documents for review.



Source type form to collect digital object identifiers to retrieve relevant information about the source.



Subscription page to collect payment information from users.

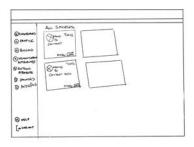


Attribution display page displaying organizational and individual data.

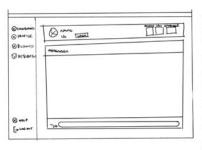


Source profile page displaying attributions and associated articles.

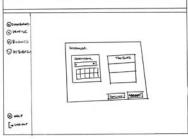
Verified Source Side



Results page displaying all the verified sources returned after a search

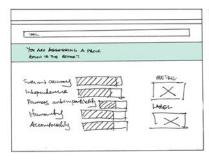


Message exchange between content creator and verified source.

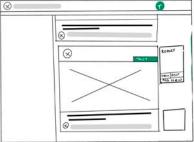


Screen to schedule and approve appointments with the content creator.

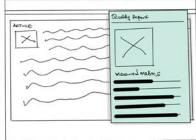
Credibility Assessment Extension Screens



Credibility assessment page overview (full summary screen view).



Hover view of the assessment report showing thumbnail and extension icon.



Content quality report showing article review improvement and recommendations.

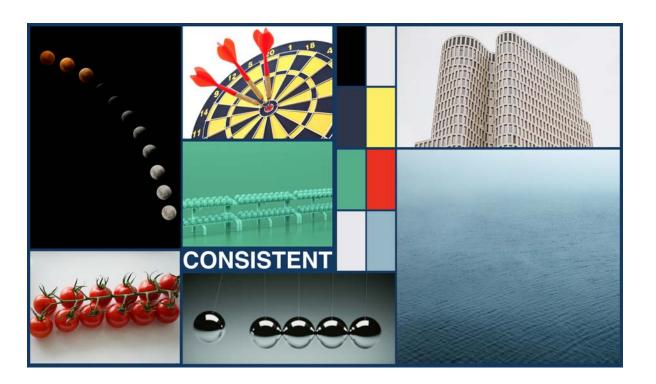
Moodboards

I developed five mood boards titled "consistent," "usable," "operational" "transparent," and "detailed," to explore different design directions for the visual identity of Tact.

Among these mood boards, I chose "consistent" as the primary focus because it aligns closely with the product's core values of truth, accuracy, and transparency as it emphasizes visual harmony, uniformity, and cohesiveness in design.



My vision for the product was to showcase a consistent use of typography, color, and layout, which reflects the brand's commitment to reliability and professionalism through a user interface that is visually pleasing and communicates transparency and trustworthiness.



Style Guide

The style guide reflects the theme of consistency, derived from its core values of truth, accuracy, and transparency. These values are integrated into the product name and logo, capturing the principles through visual elements, colors, and typography. (T – Truth, AC – accuracy, and T – transparency).

Color Palette

The color scheme for the brand focuses on shades of blue and green as the primary colors, representing trust, reliability, growth, balance, and positivity. I used these colors with complementary neutral tones to create a professional and polished look, evoking a sense of reliability, professionalism, and consistency. Finally, I incorporated red for the purpose of invoking a feeling of caution.



Typography

The font Avenir was chosen because of its clean and modern look with a focus on legibility and clarity to reflect the product's commitment to accuracy.

AVENIR BLACK - H1

AVENIR BLACK - H2

AVENIR MEDIUM - H3

AVENIR BLACK - H4

AVENIR MEDIUM - H5

AVENIR ROMAN - BODY

AVENIR MEDIUM - BUBBLE TEXT

Logo Development

The brand logo is a combination of three different elements (an icon, the wordmark, and a switch) all functionally incorporated into the brand identity and can be used individually or in combination.

To design the switch, I drew inspiration from the on/off switch and traffic lights with the intent of using green/on to encourage and red/off to discourage engagement among users.

Icon



















Logo Variations







UI Elements

Extension Icon

The browser extension icon plays a fundamental role in informing users of the status of an article's credibility after review. It has an on state indicating trustworthiness and an off state which shows that the article is considered misleading and advises users to exercise caution.







Buttons

The default, hover, and active states of different buttons used within the interface of the product.













The sidebar serves as the main menu bar when using Tact and it houses the buttons that access the main features.

Dashboard Icons

The icons used on the dashboard within the products interface.





Credibility Thumbnail

Displaying the credibility of an article.



Quality Indicators

Displaying the status of the content quality indicators.





Prototype

Website Landing Page

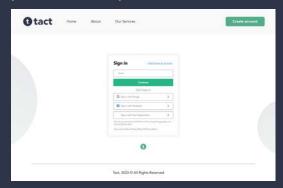
This page aims to engage and convert visitors into active users by effectively communicating the value and benefits of Tact. It provides an overview of the product's features with illustrations and screenshots demonstrating the product's functionality. It informs users and facilitates product sign-up and installation of the credibility assessment extension.

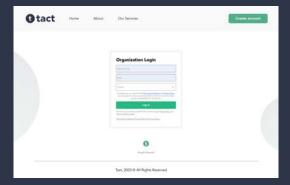




Sign in and Create Account

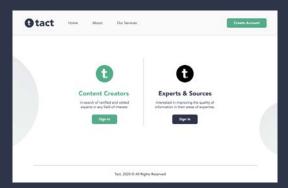
A secure gateway for returning users to enter their credentials to gain access to platform features or for new users to create accounts prior to onboarding. The product offers options to sign in through organization or mail accounts.





Account Selection

This page allows users to select the type of account they wish to create.

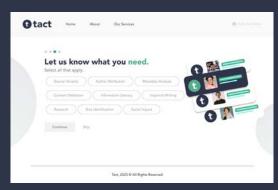


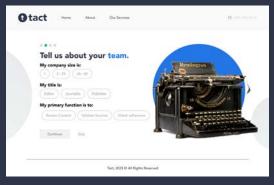
Prototype

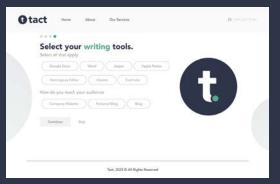
Onboarding:

Through a series of pages, users will provide information on their content writing process selecting the tools they use to build an experience tailored to meeting their needs.



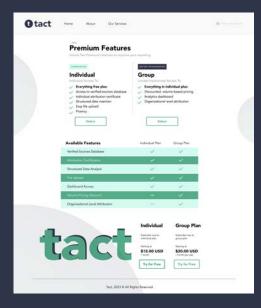


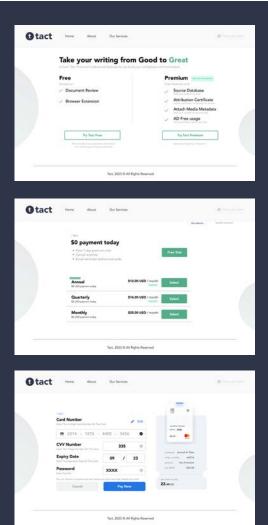




Subscription:

These pages display the premium features of Tact available to individual and group accounts allowing users to subscribe to any time-based payment model of choice. It also allows users to sign up for a trial period to test these features and also collects payment information.

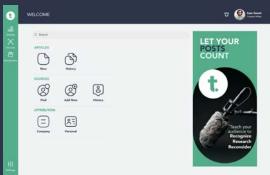


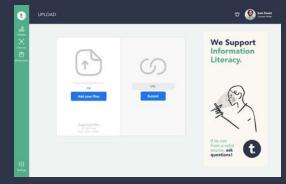


Prototype

Dashboard:

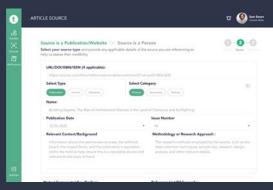
The dashboard provides access to the features of Tact allowing users to upload and view articles, find and contact sources, and view organizational and individual attribution details.

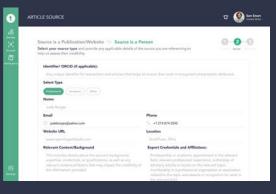




Article Source:

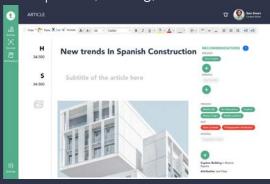
Before a review report is generated about an uploaded article, users will input information about the sources and contributors to the article being reviewed.

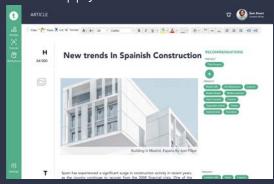




Article Review:

A report displaying quality indicators and recommendations on how to improve the reviewed article is displayed on these pages. It lists the status of each indicator as either present, missing, or bad and allows users to apply recommendations.

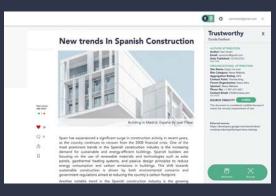




Credibility Assessment:

Clicking the browser extension icon opens the credibility assessment tool which displays a report of the article with trustworthiness, source, and attribution indicators.



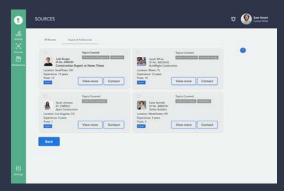


Prototype

Find Source:

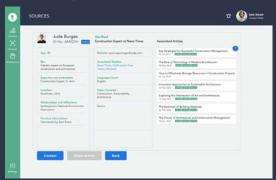
You can search for new verified sources or subject matter experts, review their expertise, and request to contact them for information gathering through the process of creating an article.





Source Profile:

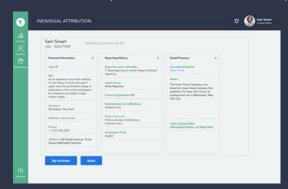
Users are able to review the experience of sources on their profile page, the articles they have produced as well as their attribution details.





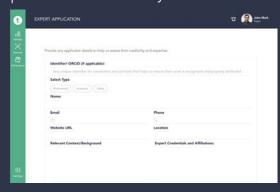
Attribution:

Users are able to view the attribution and policies of their affiliate organization. They are also able to create and edit their attribution displaying relevant personal information, reporting history, and social presence details.



Verified Source Application:

Subject matter experts can submit their profile to be verified by Tact.





Appointment Scheduler:

Scheduling page for users to set up meeting with sources/ experts.



Usability Tests

I conducted usability tests via Zoom with five participants, each completing six different tasks. My aim was to observe their ability to complete the tasks and identify areas for improvement to enhance Tact's usability. To ensure a diverse user group with varying levels of experience and expertise in content creation, I recruited three participants from my primary user interview sessions and two new participants who were content strategists and experienced technical writers.

To guide me through the process, I developed a usability testing script that included an introduction and brief scenarios explaining tasks for each participant to attempt. My goal was to note task success rate, and participant feedback, identify usability problems and make changes to improve the user experience. Each task is outlined below:

Task 1 - Extension Installation:

I asked the participants to locate and install the credibility assessment browser plugin from the Google Chrome web store while I took note of their interactions during the installation process.

Task 2 - Landing Page Review, Sign up, and Onboarding:

The participants were asked to review the landing page, explain their

understanding of the features of Tact, and create a profile that best identifies how they will make use of these features.

Task 3 - Add Article for Review:

Participants were then asked to upload an article for review, explain their understanding of the quality indicators, and apply optimization recommendations.

Task 4 - Find and Contact A Source:

Participants were required to find a subject matter expert, submit a request to contact, and conduct an information-gathering session to facilitate the writing of their article.

Task 5 - Review Attribution Policies:

I wanted to gauge the participant's understanding of both personal and organizational attributions. I asked them to navigate to the attribution page, review it and share their understanding of it.

Task 6 - Credibility Assessment Article Review:

The final task had the participants review an article using the browser extension. My aim was to gather valuable insight into their use of the tool and response to the label generated for the article.

Test Results

Task 1 - Extension Installation:

Feedback

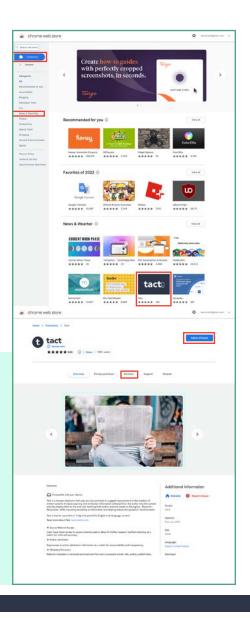
Task 1
P1
P2
P3
P4

100%

- The active extension button and combined categorization in the Chrome web store caused initial confusion in locating the product among users.
- The caption when the user hovers over the Tact icon didn't adequately explain its function.
- Overall, the task was successfully completed by all participants with commendation on the many links that lead to the website from the extension installation page.

Recommendations

- The use of screen grabs of the actual application in place of generic images and the addition of reviews from existing about their experience using the extension and the objectivity of the assessment tool will prove vital in increasing the confidence of potential users in the tool.
- The use of active state buttons to show priority and nudge other users.



Task 2 Scenario A - Landing Page Review:

Feedback

100%

- All users successfully completed the sign-in process stating that they found it "easy, familiar, simple, and straightforward." The users also commended the simple design and brand identity.
 - Four users stated that they understood the features after reading the About and Services tabs of the landing page while one user skipped reviewing the landing page going straight into creating the account without reading about the product features.

Recommendations

 The main recommendation received was to consolidate the various pages showing each feature into one landing page for easy and fast comprehension.



Test Results

Task 2 Scenario B - Sign up and Onboarding:

Feedback

- One user was initially confused about the account type to sign up for and found some of the labels, such as "research" and "social impact," to be broad and difficult to understand.

 There was confusion regarding pricing,
 - There was confusion regarding pricing, specifically whether it was per team member or for the entire group.

Recommendations

- More options need to be added to accommodate writers with diverse niches or the ability to type in entries and make multiple-choice selections.
- The need to improve alignment and navigation to make transitioning between pages smoother and micro-copy to provide feedback to users.
- One user signed up using the organization sign-up and suggested that company data should be auto-filled to prevent redundancy once the profile is created.



100%

Task 3 Scenario A - Add Article for Review:

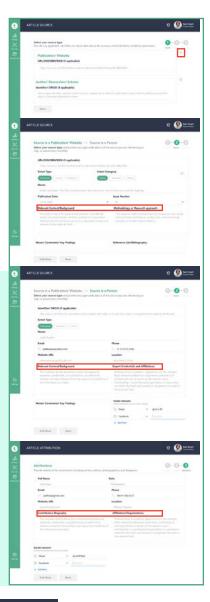
Feedback

Task 3A

80%

- The source type and contributors section was confusing for some participants as they were unsure about the proper way to provide the details.
- The participants needed clarity on whether the information about the sources would be imported automatically after providing a digital object identifier.

- Break up the form fields as some grouped fields may not be requesting the same information in order to make it easier to fill out or import article sources.
- Using a tooltip to explain what the user is interacting with and providing descriptive text for labels and captions to aid understanding.
- Two users recommended including a headshot or other visual identifier of the sources once their details have been imported.



Test Results

Task 3 Scenario B - Apply Recommendations: Feedback

- Task 3B

 The use of H and S tags, as well as the plus sign, caused confusion for some participants as they did not appear to have any effect when interacted with.
 - It was also difficult for users to understand what the recommendations were trying to correct and where they were being applied.

Success Rate

- To address this, participants suggested highlighting the area of the application when a user hovers over the quality indicator and including a title or line to distinguish between each section of the recommendations.
- Include micro-copy or tool-tips to explain the individual sections of the indicators or review the use of present, bad, and missing descriptive text which will be easier to assimilate by users.



Task 4 - Find and Contact a Source:

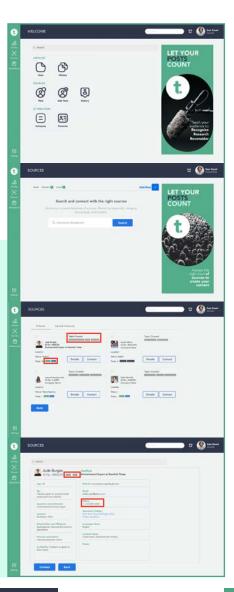
Feedback

- The selection of each participant was based on the subject matter expert's years of experience.
 - While the topics covered section was confusing in relation to the search field, the number of posts and tags used to qualify sources were good indicators of source quality.

Success Rate

Task 4

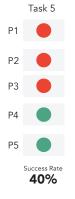
- Typically, users would review a source's website and associated materials, making it important to have access to articles associated with the source directly from their page.
- Participants suggested setting boundaries and changing the contact button to a request for scheduling an appointment instead of providing immediate access to the source's contact number.



Test Results

Task 5 - Review Attribution Policies:

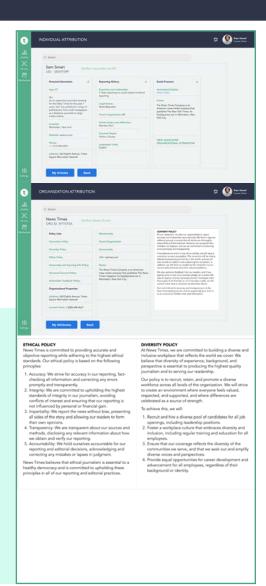
Feedback



- The feedback received for this task was generally positive as participants found it easy to understand the attribution of the individual and affiliated organization despite initial confusion bordering on the layout among some participants.
- One participant expressed the need to provide users with the ability to edit their attribution information.

Recommendations

 The only recommendation was the need to consider an alternate layout that may better present the attribution information and policies of the organization.



Task 6 - Credibility Assessment Article Review:

Feedback

Task 6

40%

- The report provided a clear summary of the article however, more details explaining why an article is considered credible would enhance user engagement with the tool.
- Participants found it difficult to locate the browser extension icon.
- The "package" button was confusing to some users, with one user suggesting it be changed to "publish" or a more understandable label.

- The "sources" button should link to the sources for the document, rather than all sources searched for while creating the document.
- The "attributes" button should provide more information on the assessment tool and not take users to a different page.
- Adding more navigation elements for smoother transitions between pages and the assessment tool.



Design Revisions

• I redesigned the landing page of the website and consolidated all pages showing the product features into one landing page which better explained the product features.

Previous Design



 I incorporated tool tips and micro-copy with descriptive text to aid the understanding of elements on each page.

New Design



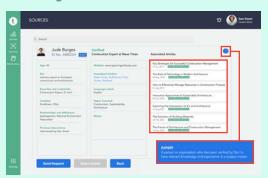
New Design



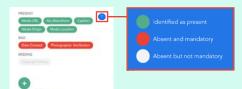
 I added a tab that displayed all articles associated with a source to allow users to review directly from their page.

I explained the color coding of the quality indicator to distinguish each section of the recommendation page.

New Design



New Design



Future Revisions

 My main consideration would be a redesign of the credibility assessment tool making the browser extension icon easier to identify, and improving the representation of each quality indicator and how they are used to inform if an article is considered trustworthy or otherwise. 04

PRODUCT DEVELOPMENT

The product development process entails a comprehensive breakdown of the essential requirements that need to be in place for the successful technical design and creation of Tact. The primary objective of this exercise is to provide a clear understanding of the relevant steps that will be taken in order to ensure that the project is executed flawlessly.

Development Practices	Page 84
Functional Requirements	Page 86
Content and Data Requirements	Page 88
Site Map	Page 95
Information Architecture	Page 96
Database Design	Page 97

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Development Practices

The IBM Watson Natural Language Understanding API will analyze the text for sentiment and entity extraction to enhance the quality and effectiveness of writing.

The Schema.org API will help in creating, editing, and extracting structured data from web pages while validating and testing the markup for errors.

CMS APIs will be utilized to manage website content, enabling the creation of new pages, the addition of images, and the publishing of articles.

The OCRID API provided by OpenCV, ISBNdb API, ISSN API provided by WorldCat, and Google Books API will be used to utilize digital object identifiers to search existing databases and locate verified sources, .

Django Python web framework will be utilized for building the web application. Its built-in Object Relational Mapper will work efficiently with the PostgreSQL database.

The PostgreSQL open-source relational database management system will be utilized due to its robustness, extensibility, and SQL compliance.

The Elasticsearch open-source search and analysis engine will be utilized to enable effective search and analysis.

Quality Indicators for Article Assessment

The content, source veracity, and attribution quality indicators will be used as the benchmark for establishing if analyzed articles, sources, and attributions are considered trustworthy or misleading. The indicators are represented under the recommendation section of the article review tab with each indicator identified as either present color-coded in green, bad color-coded in red or missing color coded as gray.

Content Quality Indicators

The content indicators serve the purpose of informing the content creator on how to improve the accuracy and verifiability of an article being produced.

These indicators include:

- Verification of information
- Self-obtained photographs
- References to primary sources

- Sufficient documentation
- Identification of corporate sources
- Investigative Journalism Present

Article Assessment Indicators

The presence or absence of the individual fields under the source and attribution indicators will be presented by the assessment tool to facilitate how they are engaged with by end users reading the published article. The indicators are listed below:

Source Quality Indicators:

- Author Expertise and Credentials
- Publication/Website Reputation
- Bias and Objectivity
- Accuracy and Reliability
- Currency and Timeliness
- Writing Style and Readability

Attribution Quality Indicators:

- Source reliability
- Timeliness
- Accuracy
- Objectivity
- Clarity
- Completeness

Functional Requirements

Functional requirements define the essential functions and features of Tact to provide a clear understanding of what it does and serve as a basis for designing, and developing the product.

FEATURE	IDENTIFIER	DESCRIPTION
Sign In/Login	Sign-In/Login	Access user account by entering a registered email address and password or sign up using Gmail, Facebook or mail client.
	Sign-Up/ Registration	New Users will be required to fill out a registration form as well as grant access to import data from existing accounts and go through an onboarding process.
	Forgot Password	Username or email of the user will be collected to send a reset account link for the user to reset their password.
	Guest Profile	Users without an account will be able to skip the sign-up process to have limited access to feature(s) for the service.
Dashboard	Add New/ continue article	Users are able to create as well as review their posts/articles.
	File Upload	Users will be able to submit files as well as paste URL.
	Image Object (from Structured Data)	Data peculiar to the nature of each media file being uploaded is collected. Structured data already contained in the metadata of these files will be automatically added and displayed. The user will have the ability to add missing structured data and be prompted on data that does not meet the ethical standard.
	Text-News article (from Structured Data)	Data that is peculiar to the content being published. Structured data will be automatically added and displayed. The user will have the ability to add missing structured data and be prompted on data that does not meet the ethical standard.
	Author Attribution (Organization)	Author attributes of the organization are drawn from structured data.
	Author Attribution (Individual)	Information about the author of the article/posts.

FEATURE	IDENTIFIER	DESCRIPTION
	History (Completed posts/ articles	Users will be able to review all the completed posts that have been analyzed and published.
Profile	Private/Personal	Information about the user will be collected here such as card or billing data, and profile photo.
Tact Report	Display Report	Users will have the ability to search keywords/topics to pull up reports as well as posts that have been reviewed or submitted for review.
Submit Source	Verify (review/generate source)	Users will be able to provide/submit or reference their sources (with proof) to substantiate the validity, truth, and accuracy of their posts.
	Database and Storage	Collects and saves the User's information as well as the media files that will be submitted.
	Natural Language API (google API)	Language processing API to categorize the language and tone of the post and provide a label. E.g., it would be able to tell if the material contains bias towards a certain subject.
	Attach Metadata Card	Users will automatically have their metadata card attached to the content they produce
	Color Codes	Based of the result of the data collected and reviewed, the posts will have a label (stating the results and the report) attached to it and available for viewing every time it is shared/reposted/ interacted with.
	Payment	Billing information will be collected for service subscription. Multiple payment method will be available for selection and processed through payment gateways. Users zip and CVV codes will be requested to authorize the transactions.
	Notifications	Users will be notified about updates, completion of their submitted requests, and the duration of their subscription period
	Subscription or Pay for use	Users will be able to sign up for monthly/ quarterly or yearly subscription plans used for their payment.
	Responsive Design	The app will be able to adapt to various screen sizes to ensure it meets accessibility standards.

The content and data requirements outline the data types and format in which it is stored or presented, as well as any specific rules or constraints regarding the content.

SCREEN TITLE	SCREEN DESCRIPTION	CONTENT	ТҮРЕ	DB	ORIGIN
Landing Page	Website landing page displaying the mission, features, and services of Tact	Logo Descriptive text Descriptive Images of product	Image Text	No	1
Account type Sign in page	Sign in as either a content creator or subject expert	Logo Descriptive text Content creator sign-in button Expert & source sign-in button	Image Text Image Image	Yes	1 1 1
Sign in page	Collect login details for returning users also with SSO (facebook, google, organization)	I don't have an account link Email/Username textbox Password text box Continue button Can't sign in link Sign in SSO buttons (Facebook, Google, organization)	Text Text Text Image Text Image	Yes	1 2 2 1 1 3
Create account page	Initiate the sign up process for new users also with SSO (facebook, google, organization.	I have an account link Terms and conditions link Privacy policy link Email/Username textbox Password textbox Agree and sign up button Sign in SSO buttons (Facebook, Google, organization)	Text Text Text Text Text Image Image	Yes	1 1 1 2 2 2 1 3
Verify email page	Allow user enter verification code sent to their email address	Back button Title text Email textbox Code textbox Resend code button Agree and sign up button Sign in with SSO button (Google and facebook)	Text Text Text Text Text Image Image	Yes	1 1 2 3 3 2 3

SCREEN TITLE	SCREEN DESCRIPTION	CONTENT	ТҮРЕ	DB	ORIGIN
Profile Building Screen 1	Select writing type	Title Descriptive text Select type buttons (creative, entertainment, other) Next button Skip button Feature image	Text Text Image Image Image Image	Yes	1 1 2 1 1
Profile Building Screen 2	About company Screen	Descriptive text Select company-size buttons Descriptive text Select title buttons Descriptive text Select function buttons Next button Skip button Feature image	Text Image Text Image Text Image Image Image Image	yes	1 2 1 2 1 2 1 1 1
Profile Building Screen 3	What you need screen	Descriptive text Multiple select tools button Descriptive text Multiple select audience button Next button Skip button Feature image	Text Image Text Image Image Image	Yes	1 2 1 2 1 1 1
Profile Building Screen 4	Writing tools screen	Descriptive text Multiple select needs button Next button Skip button Feature image	Text Text Image Image Image	Yes	1 2 1 1
Select plan page	Display the available features for each plan giving the user the ability to choose whichever plan they want	Title text Descriptive text Try Tact free button Try Tact premium button	Text Text Image Image	Yes	1 1 1

Data Type 1 - Product created. Type 2 - User-created. Type 3 - External service data. Type 4 - Machine generated. Type 5 - Formula or function generated.

SCREEN TITLE	SCREEN DESCRIPTION	CONTENT	ТҮРЕ	DB	ORIGIN
Amount due today page	Display the available billing options for annual, quarterly and monthly plans	Back button Title text Descriptive text Free trial button Annual payment column Quarterly payment column Monthly payment column Select button	Text Text Text Text Text Text Text Text	Yes	1 1 1 1 1 1 1 1
Card details page	Allow user fill out billing information	Back button Title text Descriptive text Card number textbox CVV number textbox Expiry date textbox Password textbox Pay now button	Text Text Text Text Text Text Text Text	No	1 1 1 2 2 2 2 1
Payment Approval page	Displays the status of payment transaction	Title text Image Descriptive text Continue button	Text Image Text Image	No	1 1 1
Dashboard homepage	Dashboard screen displaying articles, sources and attribution categories	Search bar New article button Article history button Find source button Add new source button Source history button Company attribution button Personal attribution button Adblock	Text query Text Text Text Text Text Text Text Text	Yes	5 1 1 1 1 1 1 1 1 1 5
Add file/paste URL page	A screen allowing the user to upload or link a new article	Image Add file button Paste url text box Submit button Descriptive text	Image Image Text image Text	Yes	1 2 2 1 1

SCREEN TITLE	SCREEN DESCRIPTION	CONTENT	ТҮРЕ	DB	ORIGIN
Upload/open file page	A screen confirming the selected upload or link	Image Progress indicator Upload button Open URL button Cancel button Descriptive text	Image Image Image Image Image Text	Yes	1 1 2 2 1 1
Source Publication attribution page	A screen that allows the user provide details of the sources used in the uploaded article	Descriptive text URL/DOI/ISBN/ISSN textbox Source information (Name, publication date, issue number, background, research methodology, notes, references) Add new button Next button	Text Text Text Image Image	Yes	1 2 5
Source person attribution page	A screen that allows the user provide details of the sources used in the uploaded article	Descriptive text Identifier/ORCID textbox Source information (Type, Name, email, phone number, url, location, background, credentials, affiliations, notes, social accounts) Add new button Next button	Text Text Text Image Image	Yes	1 2 5
Contributor attribution page	A screen that allows user to provide details of any contributors used in the uploaded article	Descriptive text Name,role, email, phone number, URL, location, biography, affiliations, social accounts Add new button Next button	Text Text Image Image	Yes	1 2 5 1 1
Article review page	This page shows the recommendations made by Tact giving the user the ability to review and apply them	Recommendations(present, missing and bad) Apply button Save button	Text Image Image	Yes	5 1 1

Data Type 1 - Product created. Type 2 - User-created. Type 3 - External service data. Type 4 - Machine generated. Type 5 - Formula or function generated.

SCREEN TITLE	SCREEN DESCRIPTION	CONTENT	ТҮРЕ	DB	ORIGIN
Articles history page	The user can view all his articles	Search bar New article button Article Title Image Type Status Author Contributors Date Time	Text query Image Text Image Text Text Text Text Text Text Text	Yes	5 2 5
Find Source Page	This page will allow the user to search for sources to be used in their article	Title text Descriptive text Search bar	Text Text query	Yes	1 1 5
Sources/ expert display page	This page will display the results of the users search/query	Name Image Email Topics covered Location Experience Number of posts Status View more button Contact button	Text Image Text Text Text Text Text Text Text Image Image	Yes	1 1
Sources page	This page displays the comprehensive attributions and details of a source who is a subject matter expert	Name Image ID Number Verification status Associated article title Age Bio Topics covered Location Experience, expertise, and credentials Send request button Share article button back button	Text Image Text Text Text Text Text Text Text Tex	Yes	1 1

SCREEN TITLE	SCREEN DESCRIPTION	CONTENT	TYPE	DB	ORIGIN
Request approval page	This page displays the status of the users request to contact the source	Descriptive Image Descriptive text Continue button	Image Text Image	Yes	1 1 1
Contact source page	This page provides the user access to message or video call the expert after receiving approval	Name Image ID Number Verification status Message panel Back button Share article button	Text Image Text Text Text Image Image	Yes	3 1 1
Add new source page	This page will collect data from the user and verify it against credible data sources registered to their affiliate body.	ID Number Name Verification status Age Bio Topics covered Location Experience/expertise Affiliations Any previous interactions URL Type Associated outlets Languages Cancel button Submit button	Text Text Text Text Text Text Text Text	Yes	1
New source approval page	This page will display the results of the application to add a new source	Descriptive text Back to sources button Results button	Text Image Image	Yes	5 1 1
Source history page	The user can view all sources they have engaged with	Source Title Image Topics covered ID number Affiliate organization	Text Image Text Text Text	Yes	5

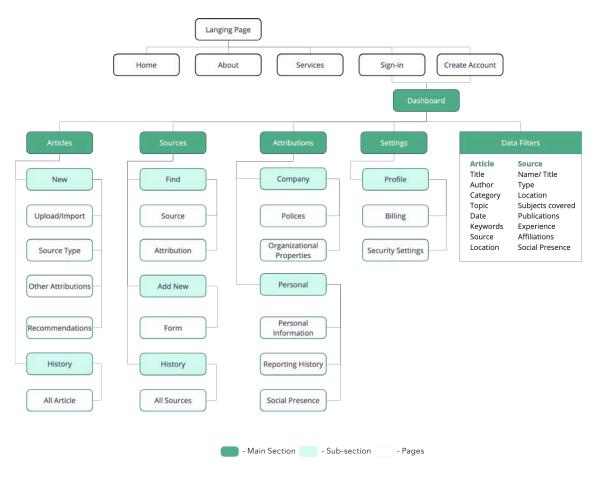
Data Type 1 - Product created. Type 2 - User-created. Type 3 - External service data. Type 4 - Machine generated. Type 5 - Formula or function generated.

SCREEN TITLE	SCREEN DESCRIPTION	CONTENT	ТҮРЕ	DB	ORIGIN
Company attribution page	This page displays the attribution of the company/organisation the user is affiliated with	Title Text Organization Name ID Number Verification status Policy list Organizational Address Contact point Memberships Sponsorships URL Notes My attributes button Back button	Text Text Text Text Text Text Text Text	Yes	5
Personal attribution page	This page displays the user.	Name ID Number Verification status Personal Profile Report history Social profile My articles button Back button	Text Text Text Text Text Text Text Image Image	Yes	5
Tooltip/resource	Provides detailed description of a label or identifier to the user	Image Descriptive Text	Image Text	No	1

Data Type 1 - Product created. Type 2 - User-created. Type 3 - External service data. Type 4 - Machine generated. Type 5 - Formula or function generated.

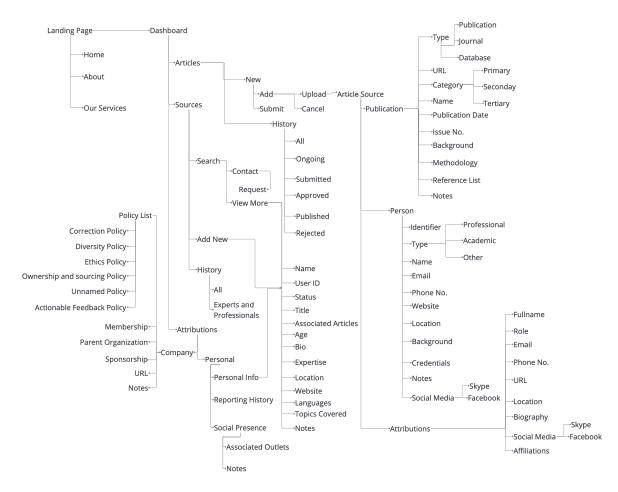
Site Map

The site map provides an overview of the main sections, sub-sections, and pages, enabling users to easily find and access the different product features. Users are able to search and apply filters to articles and sources to aid their selection process.



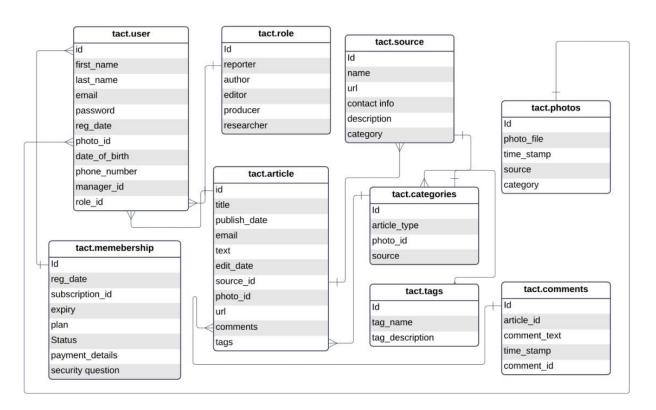
Information Architecture

The information architecture creates a clear navigation system, categorizing content effectively, and improving functionality to make it easy to find and access articles, sources, and other relevant information.



Database Design

The database provides the necessary analysis and filtering of information related to articles and sources allowing users to efficiently retrieve and manage data. With the tables storing attributes and metadata like title, author, publication date, content, and source name, the database enables fast and reliable search and retrieval to enhance Tact's functionality.



05

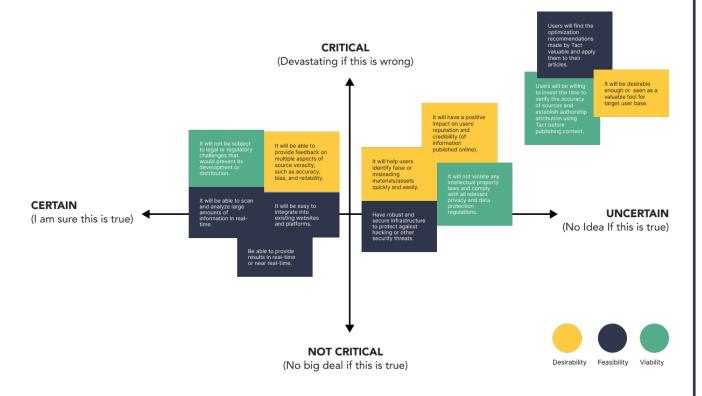
VALIDATION STRATEGY

The Pretotyping Framework is a tool used to quickly and cheaply validate the core assumptions of a new product or service. It involves creating simple and low-fidelity prototypes that simulate the core features of the product and then testing these prototypes with potential users to gather feedback and insights. This product was used to validate assumptions about user behavior and the effectiveness of key features before investing significant time and resources into development. It also offered the opportunity to collect insights and recommendations for quick iteration to refine the product based on user feedback, reducing the risk of building a product that doesn't meet user needs.

Risky Assumptions Matrix	Page 100
Pretotype Planning	Page 101
Fake Front Door + YouTube	Page 102
Mechanical Turk	Page 106
Survey	Page 108

Risky Assumptions Matrix

The Risky Assumptions Matrix was used to prioritize and assess the key assumptions about Tact. The matrix helped to test and validate assumptions about the target market, user behavior, and the effectiveness of the platform's features. This process helped to ensure that Tact is efficient, desirable, and able to satisfy the needs of its users.



Pretotype Planning

It was important to determine the feasibility, desirability, and viability of Tact before developing and launching it into the market to establish that the target user base will use a product like Tact, find out how easy it is for them to use, and if they find it effective in delivering its services.

The Fake Front Door in combination with a YouTube video experiment was used to test the product's desirability, while a mechanical torque exercise tested its feasibility. Finally, a survey form was used to collect valuable insights from each participant of the mechanical Turk exercise.

RISKY ASSUMPTIONS

The product will be desirable enough / will be seen as a valuable tool for content creators, journalists and other media professionals

Users will be willing to invest the time to verify the accuracy of sources and establish authorship attribution using Tact before publishing content.

Users will find the optimization recommendations made by Tact valuable and apply them to their articles.

XYZ STATEMENT

At least 3% out of users who come incontact with the sponsored ad will click to learn more about the product and open the website to sign up for a demo of the product.

At least 3 out of 5 users will maintain communication with a verified source to gather information from the source for the production of an article.

At least 3 out of 5 users will be able to define improvement in their articles based of the recommendations they receive from Tact.

PRETOTYPING EXPERIMENT

Youtube and Fake Front Door

A sponsored video ad on facebook explaining the product will be used to drive traffic to product website. A wix website will be used to track sign up.

Mechanical Torque

Simulate the experience of exchanging information with a verified source while creating an article. SMS will act as the medium of information exchange.

Survey Form

Upon successful completion of the mechanical torque exercise, a survey form will be used to collect information on how the product impacted their experience.

Fake Front Door + YouTube

To test the Initial Level of Interest, a YouTube video and social media posts that suggest Tact already exists and is available for potential users were used to drive traffic to a website with a sign-up form to collect e-mails from interested users. Sponsored advertisements were used on Facebook and Instagram as well as a post on my LinkedIn profile to drive traffic directly to the website.

Social Media Posts





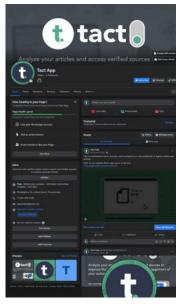




Website Landing Page



Facebook



INSTAGRAM



Linkedin



Results

Facebook

Three sponsored ads were published on Facebook, two (a video and a flier) served the purpose of driving traffic to the website while the third (a flier) was used to initiate conversations with potential users. Although a total of 52 conversations were initiated, I con-sider the third ad campaign as unsuccessful as messages were not in relation to the product. Below is a summary of the results:

Reach **36,617**

Post Engagement **4,593**

Link Clicks 1,154

Instagram

Two sponsored ads were published on Instagram to drive traffic to the website. Below is a summary of the results:

Reach **8,888**

Post Engagement **599**

Impressions **12,485**

Ad Taps **12,485** Link Clicks **7**

Linkedin

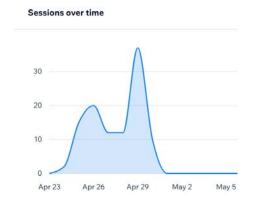
Two sponsored ads were published on Instagram to drive traffic to the website. Below is a summary of the results:

Post Engagement **28**

Impressions 1,280 Link Clicks **7**

Website

The fake front door experiment proved successful in testing the level of interest in the product. The website recorded a total of 108 site sessions with 6 sign-up forms submitted.





XYZ STATEMENT

At least 3% out of users who come in-contact with the sponsored ad will click to learn more about the product and open the website to sign up for a demo of the product.

RESULT

5.55% Signed Up

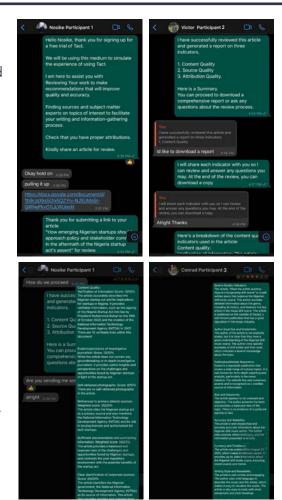
6 Sign-ups from 108 site Visitors.

Mechanical Turk

I conducted experiments with three participants to test their understanding of the indicators used to rate the quality of articles they were writing similar to the content review feature of Tact.

Using WhatsApp, I simulated the experience of uploading an article with each participant making a submission for review. Next, I used the generative pre-trained transformer language model of ChatGPT to review each piece and generate a report outlining each quality indicator (content, source, and organizational attribution).

A brief explanation of each indicator with a score and improvement recommendations was presented to each participant for review.



Feedback

Participants found the report to be easy to comprehend and self-explanatory stating that the recommendations were helpful in pointing out specific areas of improvement within their work. Two areas in which I plan on making improvements and testing are better representation and interpretation of the scoring system and providing users with replacements within their articles in addition to the existing informative feature.



The experiment proved successful in testing the feasibility of the product with all 3 of the anticipated 5 participants tested.

XYZ STATEMENT

At least 3 out of 5 users will maintain communication with a verified source to gather information from the source for the production of an article.

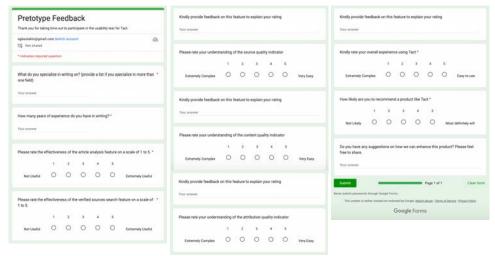
RESULT

3/3

Users who participated in the Mechanical turk exercise maintained communication and found the recommendations useful.

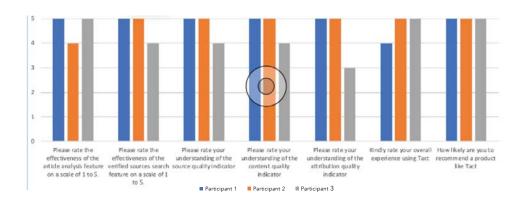
Survey

After each Mechanical Turk experiment, the participants filled out a survey to gather insights about their experience and rate the features they had just tested. The rating system allowed participants to rate their comprehension level of various content, source, and attribution indicators on a scale from 1 (very complex) to 5 (very easy).



Feedback

The experiment validated that the indicators presented in the report made the participants review the structure and content of their work and critically analyze their use of verified sources to reduce the spread of unsubstantiated information. The reports were enlightening and the feedback they received was useful in creating insightful and well-rounded stories.



XYZ STATEMENT

At least 3 out of 5 users will be able to define improvement in their articles based of the recommendations they receive from Tact.

RESULT

3/3

Noted substantial improvements in the articles submitted for review.

Future Considerations

Generating a condensed version of reports with actionable insights directly applicable to the articles to change the experience from being primarily informative.

Using the scoring system as a driving factor to motivate content creators to attain target high scores before publishing their articles.

06

BUSINESS STRATEGY

The business strategy for this product focuses on delivering value to the target market by addressing the pain points and challenges that content creators face when creating high-quality content. The business strategy includes identifying and targeting the key customer segments, developing a pricing model that is affordable and sustainable, building partnerships with relevant organizations and institutions, and continually refining the product based on user feedback and market trends. The ultimate goal of the business strategy is to create a profitable and sustainable business that provides real value to content creators and their audiences.

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Objectives	Page 112
Value Proposition	Page 112
Success metrics	Page 113
Goals (Short and Long Term)	Page 114
SWOT analysis	Page 116
Stake holders	Page 118
Competitive Edge	Page 119
Revenue stream	Page 120
Business Model Canvas	Page 122

THESIS | MAY 2023



Our Mission

To optimize the sourcing and dissemination of accurate and trustworthy content in the fight against the proliferation of misinformation.

Objectives

Create a more informed and educated society, where accurate and reliable information is readily accessible to all.

Combat the proliferation of misinformation by reducing the sharing of poorly sourced and attributed articles.

Value Proposition

Tact helps content creators produce high-quality, accurate, and credible content. Creators can easily verify sources, provide proper attribution, have clear formats for citing sources, and find relevant information. Using Tact saves time, minimizes errors, and ensures content meets the highest standards.

Success Metrics

Customer Satisfaction

KEI

Measuring customer satisfaction through user feedback survey. Targeting a 75% CSAT score

Conversion Rate - 60%

Measuring the completed tasks in a time interval.

Retention Rate

KPI

Measuring the level of customers who remain on the platform.
Targeting 60% monthly retention.

New User Acquisition

Measuring the number of new users signing up for the product each month against the projected number.



Goals

Short Term (1-2yrs)

Metric

Increase user adoption by targeting relevant user segments, such as bloggers, journalists, and students through targeted product promotion campaigns and partnerships with educational institutions.

5% monthly new user sign-up rate. Active user count. Time spent on the platform, pages viewed, and searches conducted.

Refining search algorithm, adding filters and sorting options to improve search functionality.

Satisfaction rating of at least 80% for search result relevance.

Expand the source database to include sources across more domains and industries through partnerships with academic institutions, news organizations, and industry associations.

Increase the monthly % of sources sign-up to the database, and the diversity and quality of sources available.

Improve attribution functionality by adding more citation styles, and providing additional guidance on proper attribution. Reduce the time taken to complete attribution, and user satisfaction with the attribution process.



Long Term (3-5yrs)

Metric

New features and functionalities integration for language and tone detection

10% increase in search result relevance after the integration of NLP and ML technologies.

Provide analytics and capture more insights to provide users with more actionable feedback and recommendations for accuracy improvement. Achieving an attribution accuracy rate of at least 90% and a plagiarism rate of less than 5%.

Partnership with social media companies leading to end-user integration of the credibility assessment tool into mobile phone-based applications.

Reach an agreement to integrate into a minimum of one social media company.



Strengths

Weaknesses

A proactive approach to combat misinformation associated with source veracity.

Provides guidance and resources on ethics and best practices to improve the quality and credibility of content.

Facilitate collaboration and communication between content writers and sources of information for more accurate and reliable reporting.

Revenue generation for sources.

Dependence on partnerships with external stakeholders like news outlets and publishers, social media platforms, and fact-checking organizations, may be difficult to establish and maintain.

Requires significant investment in software development, data storage, and analysis.

The scope of offering verification of sources and attribution may lead to low adoption.





Opportunities

Threats

Partnerships opportunities with stakeholders committed to improving verified content sourcing.

Opportunity to integrate into mobile application environments or in-app integration on social media platforms.

Potential to expand to new markets and languages, reaching new user segments and increasing user adoption. Compromise to the integrity and reliability of our data as a result of cybersecurity breaches.

Possible legal and regulatory issues related to privacy, data protection, and intellectual property rights.

Low adoption in regions with unfavorable cultural and political climates.

Stake Holders

Internal Stakeholders

Management Team

Determine the strategic direction of the business and oversee its operation.

Technical Team

(Developers and engineers):
Develop and maintain the
product, ensure it meets user
needs, and retains a competitive
edge.

Sales and Marketing Team

Drive user acquisition and retention, build partnerships, and promote the brand.

Customer Support Team

Provide support to users, and resolve technical issues and customer concerns.

External Stakeholders

Journalists, Content Creators, Media Outlets, and Publishers

Primary product users rely on it to communicate the accuracy of news and sources.

Regulatory Bodies and Industry Organizations

Control the regulatory environment the business operates in.

Advertisers

Interested in accessing the user base of the product, potentially generating revenue for the company.

Society

Engagement with more accurate and trustworthy news media benefits society as a whole.

Competitive Edge

During my initial research, I identified different approaches currently employed towards combating the spread of misinformation and aimed to incorporate them into the development of Tact.

Fact-Checking Initiative employed by social media platforms like Facebook, Instagram, and Twitter which aims to Labeling (fact-checking, flagging, and deleting). Organizations like Politifact and Snopes employ this method as their primary model

Content regulations and moderation governance as seen in the Facebook Oversight Board approach.

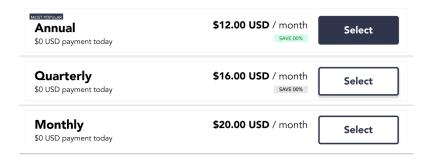
Credibility Evaluation through Al-powered data tracking and the use of Artificial Intelligence, machine learning, and Natural language processing to review data and present a credibility score metric.

Tact's competitive advantage is that in addition to the above-identified approaches, it has a combined approach of addressing the originator/sender, the message, and the receiver.

Revenue Stream

Primary - Subscription-based Model.

Users would pay a monthly, quarterly, or yearly fee to gain restricted or full access to the product and its features.



The premium features for individual accounts offer personalized benefits based on user preferences while group accounts provide collaboration tools to enhance teamwork and productivity.



Secondary - Advertising.

Partnerships with brands and organizations for advertising of sponsored content leveraging user data to deliver tailored advertisements will serve as a secondary means of revenue generation.

We Support Information Literacy.



If its not from a valid source, **ask questions!**



LET YOUR POSTS COUNT

Access the right kind of sources to create your content

Business Model Canvas

Key Partners

- Content writers and publishers
- Source providers and databases
- Cloud hosting providers
- NLP technology providers

Key Resources Acquired from Partners

- API integration (Entity recognition and NLP API, Digital object identifiers API, Schema.org API).
- Data centers and servers for hosting the platform and databases
- Software development and programming expertise
- Access to sources Database

Key Activities Partners Perform

Platform management and development

Motivation for Partnership

- Increased productivity
- Build trust and increase credibility among customer segment

Key Activities Value Props Requires

- Developing and maintaining platform
- Marketing and promoting
- Partnering with stakeholders
- Providing guidance and support
- Collecting and curating sources of information
- Developing and improving search and language algorithms
- Providing customer support

Distribution Channels

- Website
- Chrome web-store for extension

Key Resources Value Props Require:

- Secure data centers and servers for platform hosting and integration
- Machine learning and natural language processing algorithms
- Marketing and advertising resources

Value Proposition:

- Improve user access to verified of sources and facilitate accurate attribution
- Facilitate engagement and build end user trust and reliability.
- Provide sources avenue for knowledge exchange and increase their attribution

Bundles and Products Offered

 Tailored pricing to suit the size of customers organization.

Customer Needs Satisfied

- Promote the spread of accurate and reliable information
- Provide guidance and resources on content development ethics and best practices
- Facilitates collaboration and communication between user base and verified sources

Cost Structure

- Software development and maintenance costs
- Data storage and analysis costs
- Employee salaries and benefits
- · Marketing and advertising costs
- Partnership and collaboration costs
- Api and 3rd party integration
- Licensing and membership costs

Customer Relationships

- Automated services for process optimization
- Product effectiveness monitoring and user interaction tracking
- Customer support for technical issues and questions
- Regular updates and improvements to the platform

Channels:

- Browser Stores and website
- Social media advertising and promotion campaigns
- Email and direct outreach to news organizations and journalists
- Partnerships with relevant organizations such as journalism schools and associations

Customer Segments:

- Content creators, such as journalists, bloggers, researchers, and students
- Organizations that produce content, such as media companies and universities
- Fact-checkers and verification experts
- Media and news consumers

Revenue Streams:

- Subscription-based revenue model for news organizations and individual journalists
- Advertising-based revenue model for media consumers

07

THE CANDIDATE

Hello, my name is Akin Agboola. I am a UX/UI and graphic designer with experience in digital product design, strategic communication, content creation, graphic design, and print production.

One of my biggest accomplishments is my role in the design of a disease monitoring and reporting database for healthcare professionals to report and trace the emergence of zoonotic diseases within the ECOWAS sub-region. I am also proud of my work in strategic communication where I develop content for the federal government of Nigeria to use in COVID-19 sensitization campaigns across the country.

Ssays Page 126 Page 130

Ethics and Social Impact Essay

TACT as a product was developed to promote ethical writing reporting as a tool to improve sensitivity and engagement with information sources and set up accuracy and impartiality in web-based published content as metrics for reducing the spread of misinformation. It will allow cross-referencing with identifiable trusted sources and analyzing meta-data, to provide creators and consumers of news with accurate and reliable information as they produce and consume news.

Tact also depends on user-fed data, which is cross-referenced through existing databases for verification. Consequently, the primary potential risk which exists is the dissemination of inaccurate information contained in the data sources used. This event could lead to the spread of misinformation despite the product functioning correctly leading to a situation where it promotes existing biases received via the data it is fed. There also exists a similar risk of cyber-security breaches that may expose the system and make it vulnerable to misuse.

Tact aims to influence better engagement with news sources and as a result, there exists the potential to be perceived as a tool to influence public opinion, stifle free speech, censorship, or suppress information or viewpoints, and discriminate against groups or agendas if a certain source is discouraged from use because it falls short of verification criteria. This will be a problem specifically in regions where the political climate is unfavorable to free speech

or unbiased journalism.

To mitigate these ethical risks, it will be important to incorporate strong principles and guidelines into Tact's design and operation. Establishing transparent verification processes for users to understand how sources are verified and feel confident in the accuracy of the information provided. There is also the need for protecting the user's data from unauthorized access by implementing strong encryption and security measures as well as conducting audits to ensure system functionality, and adherence to ethical standards and to identify and address any biases or inaccuracies that may arise.

In conclusion, it is important to establish user feedback mechanisms, and a community of stakeholders to facilitate the escalation of issues or concerns and channel pathways to address these issues promptly and effectively. By incorporating these measures and partnering with stakeholders to implement other best practices, it now becomes possible to mitigate the ethical risks and problems that may arise and ensure the responsible use of Tact for combating misinformation and promoting accurate and trustworthy content writing.

Program Reflection Essay

Throughout my academic experience at Thomas Jefferson University studying User Experience and Interaction design, I have acquired invaluable insights into the art of crafting intuitive and user-friendly products. The process has been challenging, yet highly rewarding, as it has required me to think critically about the end users and how to design products that cater to their unique needs and preferences.

One of the most significant lessons that I have learned is the value of empathy in design. This approach involves putting oneself in the user's shoes is paramount in creating products that serve their perspectives, goals, and pain points. Achieving this requires a deep understanding of human psychology and thorough research to identify user preferences and needs. It is only through this empathetic approach that designers can create products that truly connect with their target audience.

Furthermore, a vital aspect of the design process that I have come to appreciate is the significance of iteration and testing. Design is not a linear process, and it often requires several rounds of testing and refinement to achieve a great product. Hence, designers must continuously iterate and refine their designs to create the best possible outcome. This means seeking feedback from the end users, analyzing the data, and making modifications where necessary. In the end, the goal is to create a product that not only meets the user's needs but also exceeds their expectations.

In conclusion, this journey has been truly enlightening. I have gained a wealth of knowledge and practical skills that have not only improved my understanding but also sharpened my ability to design. I am grateful for the opportunity to learn from experienced professionals in the field that have challenged me to apply my learning in practical situations. As I move forward in my professional journey, I am confident that the skills and knowledge gained from this program will serve as a solid foundation for my career. I am excited to continue to learn and grow as a designer and to create meaningful experiences for users.

Resume

AKINBOLUWAJI AGBOOLA

User Experience and Interaction Designer +1 914-374-5139 | agboolakin@gmail.com | www.agboolakin.webflow.io

Goal-oriented and focused on building solutions to complex problems. Experienced in digital and print media, content creation, UX Strategy, event planning and coordination, 2D motion graphics, strategic communication, and presentation.

EDUCATION

MS. User Experience and Interaction Design, Thomas Jefferson University, Philadelphia, PA.

August 2021 – May 2023

B.Eng. Information and Communication Technology, Covenant University, Ogun State, Nigeria.

September 2007 – June 2012

WORK EXPERIENCE

UX DESIGNER | LUMEN MEDIA LTD

MAR 2017 - FEB 2022

Interface design for web and mobile devices, visual design, 2D animation, user research, asset and layout creation, and print and video campaign production for stakeholders drastically increasing customer satisfaction.

DESIGN AND ANIMATION CONSULTANT I CREDO ADVISORY JUNE 2020 - JULY 2021

Executed comprehensive end-to-end design projects for The Presidential Task Force on COVID-19 in campaigns across Nigeria reducing the emergence of new cases across.

Collaborated with teams to develop graphic elements and videos for print and digital media for The National Safety-Nets Coordination Office under The Federal Ministry of Humanitarian Affairs, Disaster Management, and Social Development.

DESIGN CONSULTANT | ALERT AFRICA AND ALERT NIGERIA MAY 2018 – JUN 2021

Developed political campaign identity guidelines, design standards, manifestos, and graphic elements for governorship aspirants in Nigeria and a presidential aspirant in Ghana.

REGIONAL DISEASE DATABASE CONSULTANT | ECOWAS – REGIONAL ANIMAL HEALTH CENTRE | OCT 2018 – JAN 2019

Front-end application and web design for the proposed Regional Zoonotic Diseases Database and website during two work-group sessions held in Mali.

Facilitated the development and interpretation of a collection sheet for the disease database model to gain insight into data across ECOWAS member states.

Resume

Prototype development and disease alert system simulation of regional disease outbreak notification system.

SKILLS AND PLATFORMS

UX Design, 2D Motion Graphics, Web Design, mobile design, Sketching, Storyboarding, Gamification, Wireframing, Prototyping, and Product Design.

Adobe Creative Suite, Figma, Miro, Procreate, WordPress, and Webflow.

PROCESS AND APPROACH

Discovery and Definition Phase

Contextual inquiry research.

Root cause and problem space definition.

Synthesis of insights and themes.

Design Phase

Functionality and understandability.

Efficiency and maintainability.

Usability and desirability.

Brand conformity.

Emotion and behavior influencing.

Validation Phase

Hypothesis analysis and testing. Prototyping and pretotyping. Rapid iteration and testing. Feedback loop implementation.

AFFILIATIONS

National Black MBA Association Incorporated Member, New York Chapter

D-Tigers Nigerian Men's National Basketball Team Graphic Design Consultant - Olympic Games 2016 and 2020, FIBA World Cup 2019, Afro Basket 2015

Connect with me on LinkedIn





