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Sustainability Engineering

ACADEMIC REPORT

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1. Topic:

Online Social Network and Peace in Society

2. Abstract:

The increasing frustration, intolerance and mass killing has been reached to alarming level. The society unrest is not only impacting the life in general, but the economy and environment has suffered because of social unrest. As there are multiple factors that causes this unrest, but social networks have been handy tool for such extreme elements, and they are using this technology for spreading hate and terrorism. Social networks are popular and gaining more popularity day by day, but the lack of controls is being manipulated for wrong purposes. This paper focus on the key features that are used negatively for spreading terrorism in the society. Literature has been studied on the importance of social media in peaceful society and new suggestions have been made to avoid or mitigate such terrorism through social networks. We have also created a model that identifies the fake news and hence will not be published on social networks. Through this paper we aim to minimize the spread of false news that may cause social unrest. The validation of our study is yet to be done and future studies can use our suggestions and validate this.

3. Introduction:

Peace around the globe has become hot topic, which is now beyond any particular region or country. Undoubtedly, the developing nations are facing intense impacts due to lack of peace and social unrest. People are intolerant to different viewpoints and there is no sense of acceptance for difference of opinion. As social media is widespread and the usage of such powerful tool is also tricky as it can swing both positive or negative ways. People sharing extreme agendas on such platform without any constraint is major problem which usually cause catastrophic damage to the society. In the past, we can witness many such examples where unauthenticated/unverified information or news on social media has been cause of mass killing which later on proved wrong. So, usage of social networking sites can sometime become a tool for extreme reactions in the society. Political unrest through social network site is also trending nowadays.

Social networking sites can have some categories for the post and depending on the nature of category, there can be different constraints for the post. For example, if user needs to share some news or fact, user should enter some external source for the news. The algorithms of social networking site will verify the external links using some keyword match.

On social networking site, there can be some interactive activities designed keeping in view the liberal mindset. And these activities should be promoted throughout the platform targeting more in developing nations.

There can be a reward in terms of stars or ranks if some group has achieved any objective towards the goals defined by the UN.

Any content that instigates the society to mass killing or extremism should be banned.

There is no process to verify if the resource or information is coming from authenticated resource. Our solution is different from previous existing solutions as in this approach user would have to provide the authentic source of information i.e. URL, citation, publication or any other resource or some news website or any other proof which can verify if the information is correct.

3.1 Research Question

1- How can we make sure the information or news coming from social media is authentic.
2- What approaches can be used to verify authenticity of the news on social network websites.
3- How can we prevent the spread of hate or false information on social networks

We believe the implication of proposed solution prevent the spread of hate and false news and information. This is also controlling the disturbance in society which is mostly created by extremist groups intentionally. Overall it can help to maintain peace.

4. Related work:

4.1 Social media a digital tool of mass communication

Jenny D. (2016) defined social media as a collection of interactive Internet apps that make it possible for individuals or groups to create, curate, and share user-generated content. She further explained that they are a part of daily life that is becoming more and more prevalent. It can be seen as a crucial component of a social landscape that is interconnected rather than as something apart from the actual world. Jimmie M. (2014) in addition says that in providing more media consumption options than ever before, new technology is also more affordable and widely available. As a result, instead of relying solely on a small number of news outlets, people can

now access a variety of information sources and engage in discussion about what has been posted in message boards. Social media is the driving force behind this continuous revolution.

Mercy Corps in 2019 reports that social media's function as an "actor" in the context of resolving disputes and promoting peace has been the subject of existing literature. Disinformation campaigns that have been used in well-documented ways, such as targeted advertisements and messages that sow hatred and discord or spread misinformation, have been connected to the dynamics of conflict.

The global political landscape is being stirred up by social media, which affects not just private businesses but also governments and decision-makers. People who previously didn't have access to the internet, such as those who can't afford PCs or laptops, can now connect through gadgets like cell phones. According to the World Bank, currently Sub-Saharan Africa has more mobile phone subscribers than either the United States or the European Union combined, which indicates a significant uptick in the adoption, use, and expansion of new communication technologies in the developing world (Madzima-Bosha, 2013). How about Politicians and political campaigns Shahbaz and Funk (2019) argue, they now have more expenditures for social media campaigns around the world, but governments are also using social media more and more for monitoring and surveillance, raising concerns about user privacy and the emergence of authoritarianism.

4.2 Social media and peace building

Key matters about social media and peace-building in the society were prioritized-reports until Kahl and Puig Larrauri (2013) in their analysis of peace-building efforts, more generally they put a stronger emphasis on technology as a solution. The main areas of interaction have also been the main areas where social media tools have aided in promoting peace. They came to some key conclusions, one of which is that most of the case studies they looked at used technology to support them. However, very little is known about the long-term contributions of social media to supporting different stages of post-conflict, peaceful societal transformation. Social media can complement existing projects, increase involvement and engagement.

Comninos, A. (2013) reported that initially built in reaction to the 2008 post-election violence in Kenya, Ushahidi was designed to deal with conflict prevention and response. Ushahidi and other

fourth generation dispute and early warning systems are being utilized in post-conflict peace-building; however there are currently just a few instances of such use. The Liberian office for peace-building is one instance of a user of Ushahidi. The knowledge and practice of using ICTs to prevent conflicts must be integrated with the newly developed knowledge and practice of using ICTs to promote peace.

New communication tools bring up new lines of contact and present new chances for local residents to participate more actively in activities aimed at preventing conflicts and promoting peace. They are not, however, the solution to preventing conflict and promoting peace. According to Oatley, concerns with trust, credibility, and validity; the need to protect privacy, ethical standards and security; and, finally, challenges brought on by environmental and cultural variables are among the challenges associated with the use of communication tools (Oatley 2011).

4.3 Social media and conflicts

Himelfarb (2012) in his speech reported that they observed a more subdued revolution in the way communities use social media to try and reduce the root causes of violence. It is impossible to emphasize how frequently we observe this happening in the field wherever cell phones are used. He mentioned some of the major trends in the field which included: managing elections, preventing gang violence, fostering inter-ethnic dialogue, protesting violence, and constitution building.

Theohary (2015) a specialist in National Security reported that governments can also utilize social media to promote a public diplomacy message and support pro-democracy (or authoritarian) movements abroad. In addition, Cyberattacks on Ukrainian government networks may have been planned by "patriotic hackers," who gathered information, trained, and armed themselves via social media. Systems used by the Ukrainian government were found to contain spyware, which was initially thought to have been created in Russia. By recruiting hacking groups and pushing them to manage several profiles and post and comment on numerous social media platforms each day, it is thought that the Russian government exploited the blogosphere to influence the narrative of the conflict. Social media is said to have played a significant part in helping both Russia and Ukraine accomplish a number of goals in their ongoing conflict, as both nations have attempted to exert control over the information environment.

In his quest for peacebuilding through social media, Denskus (2019) wrote that decolonizing theory, knowledge, and methodology is a topic of discussion across academic fields. He added that the Global North and Western institutions have produced a number of presumptions that support the study of peace and media and how social media can affect processes of peacebuilding. As illustrated by the case from Sri Lanka, the multinational firms that operate social media platforms and applications have infiltrated developing nations in the Global South without appropriately localizing disruptive content. For those working on peacebuilding, this means that community- or people-centered approaches must not only use social media to bring old methods into the modern era but also critically examine how these tools function, how they might be abused by authorities, and what alternatives there are for long-term collaboration, communication, and conflict resolution.

International Alert Policy paper (2020) made several recommendations, including the formation of partnerships between social media companies, donors, and peace-building organizations, investment in a stronger evidence base, increased support for and emphasis on social media as a public forum for constructive political dialogue and countering misinformation, increased flexibility in the design and funding of social media peace-oriented programming, and protection of civil society space in the regulation of the sector.

5. Research design and methods:

The purpose of this study is to mitigate the issues that arise with the wrong accusations and false news spread on the social network. This study has been targeted to the developing countries, in particular Pakistan. The social network has been analyzed with respect to its measures towards the peace formation. And new guidelines and features have been suggested on the basis of our current observations and literature review on social networks.

In this project, social peace can be achieved by two approaches. First, through restricting and publishing only credible news on social posts. Secondly, Identifying the threating words and removing them before a sender sends the message.

To carry out this study, we have designed a model that identifies the objectionable words and removing them from the sentences. Below is the diagram of our model.

Literature Review > Problem Identification > translate problem to features > implement a model > Suggestions to the social networks
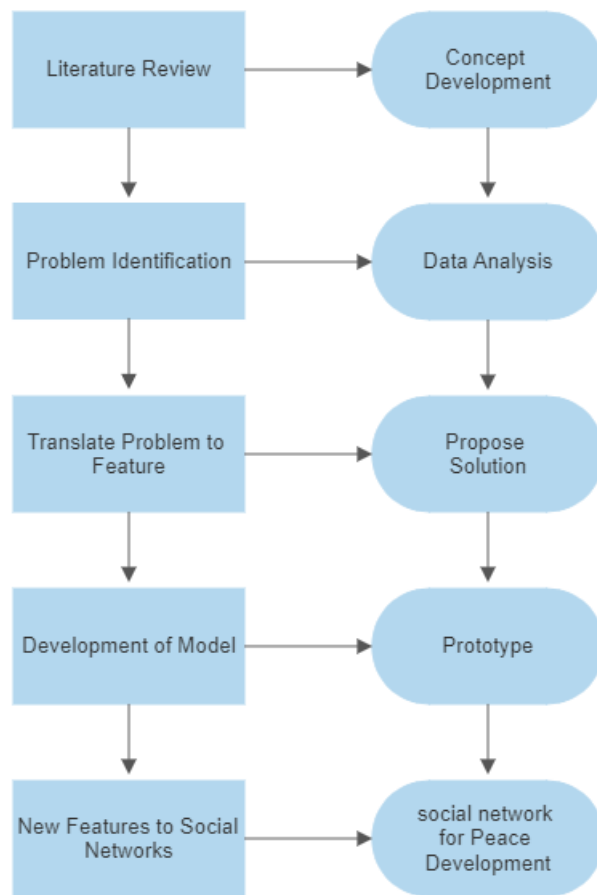
Picture 1. Design Methodology

We have proposed a tool which will act as API in social network sites. It can be integrated on front end for example in post text area or messages text area. As user will write something to post or send as message this API will be called on submit and will check if the content of the post or message is coming from an authentic source or not.

6. Results:

present very concise results by using graphs, tables, or other visuals. It is also possible to present results from the prototype - if available.

7. Discussions:

provide a detailed discussion on your findings, try to answer the research questions (if applicable), and reflect on your findings while connecting them to previous studies.

8. Conclusion & Future work:

Social media plays an important role in maintaining the peace of society, enforcing rules and to aware the people. However now a days social media is being used negatively among society to spread hate, it is being used by powerful people to make its use in their favor. Which causes disturbance, hate, in society. Peaceful society formation is possible in result of correct and meaningful usage of social network sites. Respect of political and other views can be established through interactive approach with different minds. And positive reinforcement gives satisfaction to the people, and they are encouraged to achieve good in the society which eventually is beneficial for the society and entire world. By using this tool, we can prevent people to spread fake news and hate speeches. Fake news could be sorted out and discarded from the social networks.

In the future we can expand datasets and add newsapi as the news source. We can also create a visualization of this tool in future. Currently its just acting as API or backend tool.

The suggestion on groups promoting the peace and implementation of ranks to the groups that achieve goals defined by UN can also be done in future studies.

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