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Role of Media in Hybrid Warfare in Pakistan: How to Convert Challenges into Opportunities

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ABSTRACT

In the defense community, the use of hybrid warfare has expanded. It is generally labeled as contemporary warfare. The term is usually adopted in strategic documents such as the national government of Pakistan, developing regions, as well as developed nation central such as NATO, and EU, based on which various articles have been presented. However, hybrid warfare has not yet been understood with social media and the opportunities it opens for Pakistan. Primarily, the concern is to assess whether the concept is understood clearly for its strategic implementation, which can help to overcome the risk concerning the defense community. It is suggested that efforts must be improved for enhancing and forming content on the meaning of hybrid warfare. While the social network's effect includes transparency, individuals mobilizing, and collective decision making negative effects that results from hybrid warfare include manipulation, an unregulated environment, and misinformation proliferation.

Keywords: Social Media, Hybrid Warfare, Pakistan, Social, Educational, Political, Governance Reforms.

INTRODUCTION

As this research concerning social media linkage with hybrid warfare was an interesting and meaningful undertaking being an emerging issue in Pakistan. The subject is new and challenging as very little research work has been done on social media's relation with hybrid warfare. Hybrid warfare has not yet been understood with social media and the opportunities it opens for Pakistan.

In this paper, an effort has been made to analyze the use of social media as a tool of hybrid warfare. It tries to understand the meaning of hybrid warfare and its relationship with other forms of warfare has been highlighted. This will also discuss the interrelation of hybrid threats through social media has been discussed. The research methodology relates to an analysis of the challenges of social media as a tool of hybrid warfare and reforms and needs recommendations for understanding the concept of hybrid warfare and the positive and negative affect of social media with hybrid warfare for Pakistan.

The term hybrid warfare and its relationship with other forms of warfare. Moreover, it also describes the significance of the study and objective of the research with the necessary research question which needed to be answered during the research. The increase in social media usage opened new development opportunities for the countries as a whole. The integration of information technologies individuals and nations to form, edit, and disseminate information for attaining a maximum advantage. Generally, this method is aggressively being adopted by the government and different organizations for communication purposes (Čižik, 2017). Similar usage is found for the defense community, particularly for hybrid warfare, which is the increasingly used term for defining contemporary warfare (Svetoka, 2016) describes hybrid threats as, "warfare has different modes including irregular tactics and formations, conventional capabilities, terrorist acts including indiscriminate violence and criminal disorder (Caliskan, 2018). For Hoffman, generally, hybrid wars can be

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controlled by the two states and sometimes different non-state actors, and they are separated by three units and often by the same unit, but to achieve symbiotic effects by both psychological and physical dimensions of conflicts the battle can also be directed operationally and tactically (Hoffman, 2007). Transformation Seminar-2015 was agreed upon by the members of NATO, and it was held in Washington DC. "Supporting tactics of hybrid warfare can include complex, opportunistic adaptive and sometimes a mixed sequence of conventional and unconventional methods. Such activities can be overt and covert including military, organized criminal networks, paramilitary and civilian actors having all factors of power" (in 2015, The transformation inner of NATO was conducted). "Hybrid threats as defined by the as, "hybrid hazard is a combination of violent and underground actions, traditional and untraditional procedure (That is, military, strategic, economic and technological), this perhaps used in an integrated way by the actors of the nation-state or non-nation state to manage particular targets while resting the specific point of properly defined warfare (Rehrl, 2017). These instruments aim n combine form patio ign, and it is created to achieve surprise, grab the capabilities a great physical advantage as well as psychological advantages by availing the strategic strategies, rapid, sophisticated information, cyber operations, electronic and intelligence actions, covert and sometimes face economic issues and overt military (Rehrl, 2017). Hybrid warfare has a con concept hatch that the use of arm forces and non-arm force tools are combined to accomplish strategic goals, and when this concept is published in any research, it is considered an actual interception of hybrid warfare, which has different other meanings and concepts other than hybridity. Moreover, there are other terms as well, which have interweaving definitions. For instance, differentiating the concept of information warfare, propaganda, political warfare, and subversive warfare is not easy. For better understanding, there are terms linked with the hybrid warfare used in this study that is deeply described in the following paragraphs.

This chapter comprises an explanation of hybrid and other forms of warfare to clearly understand the meaning of hybrid warfare and identifies ambiguities in using this term by various writers. Moreover, the use of social media for spreading misinformation and fake information which leads to intensive outcomes such as

civil mistrust as well as anti-government behavior is also covered.

Hybrid Warfare

The comprehensive roach of hybrid warfare was described as combining the military tools, civilians, and agencies of government departments not doing operations only but intensively dealing with the security issue of the 21st century, including slaughter and proliferation of dangerous material, weapons, and terrorism", considering the report of UK House of Commons Defense Committee (House, 2009). In a paper of Chatham House, a brief way of involving actors of international platform introduced as the following "the cross-public creation and security of the application, development services, administration, host regions, partner government, and partner foundations from both public and non-publicize considered as a comprehensive approach (.Lindley, 2010). NATO stated that "label the crisis conditions is considered as an extensive path including civilians, military and political tools. Although military tools are necessary but not enough for personal use and to face crucial objections for safety purposes. For the powerful implementation of a comprehensive approach to the right, the conditions require international organizations, and national, government organizations to grant concentrated effort (Aaronson, 2011). Hybrid warfare was defined by many researchers as "the comprehensive approach in the hybrid warfare is described by crime analysts as, "the comprehensive approach in the offense." As NATO Secretary-General Jens Stoltenberg declared in NATO's Transformational Seminar, the comprehensive approach of hybrid warfare of Russia is called "dark reflection". As claimed by the state of thoughtful approach about the differentiation among hybrid warfare and the extensive path lies in the aim. The comprehensive approach aims to build up governance; on the contrary, hybrid warfare aimed Fat full-spectrum warfare the term used for both comprehensive approach and hybrid warfare. Indeed, all these definitions have the same meaning. According to Kennan's definition, political warfare is a kind of employment that contains all the nation's commands and is intimate in times of wars happening to accomplish domestic objectives. Non-Kinetic instruments used in political warfare. Although hybrid warfare suggests that they combine a form of conventional military and nonkinetic means (Caliskan, 2019).

Political Warfare

It carries every instrument of domestic power: economic, informational, military, and diplomatic. Hence, unlike hybrid warfare, mainly arm-force instruments have irregular features, for example supplying military aid to the country, and helping proxy forces. This research states that hybrid warfare is considered "political warfare" where a researcher indicates every economic, national, informational, and military activity rather than combining animated and non-animated activities. Inefficient warfare is considered a brutal attempt surrounded by the actors of government, and non-government for legitimacy is influenced by the relevant population.

Irregular Warfare

It is in favor of asymmetric and indirect approaches, though it may apply the group of arm-forces and different other potentials are used to destroy an opponent's power, which will influence what are those factors that make irregular warfare and having different operations (JOC, 2007). A particular population- and its proper plans-to maintain, control, support, and gain effect on the relevant population. On the other way, its target is on the legitimacy of the political force to maintain and its effect on the relevant population. (IOC, 2007). As it is stated the Defense Directive Number 3000.07 (dated August 28, 2014) DoD, improper warfare comprises "any significant DoD actions and operation, for example, terrorism, foreign internal defense, unconventional warfare, counter-insurgency stability operations, in the situation of irregular warfare, comprises of reestablishing or establishing order in weak state or territory (IIC, 2007).

Unconventional Warfare

It's a vast paramilitary and military operation, generally for a long-term period, predominantly organized by surrogates for forces indigenous agencies, and they are properly organized, trained, directed, equipped, and as well as supported in the flexible amount of an exterior force. This comprises not bounded to, sabotage, guerrilla warfare, destruction, unconventional assisted recovery as well as intelligence activities (Joint Publication, 2001). Unconventional warfare or unusual warfare is possessed of actions and directed to facilitate a supportive movement or revolution to suppress or remove occupying power that operates through or auxiliary, the guerrilla forcing a banned area. Unconventional warfare is the main activity among all five activities that classify as irregular warfare (JOC, 2007).

Subversive Warfare

It is a movement that is used to construct the weaken the arm-force, psychological, political, and economical, according to the DoD Dictionary of Military Terms (Joint Publication 1-02 Dictionary of Military and Associated Terms, 2001) this definition is similar to the other unconventional warfare definitions. This is mentioned in the one and the similar directory that "if somebody gives moral support, comfort and aid to an individual or group of people or organizations that encourage to weaken the occupant's governments by violence, force and it is incendiary and is committed with incendiary actions. Moreover, the directory manages that "all willful actions that are designed to be destructive to the finest interest of the government and will not decline into the sections of treason, sabotage, sedition or espionage will be arranged in the division of subversive actions." According to these three terms, unconventional warfare, irregular warfare, and incendiary warfare have identical perceptions in that, and it supposes that the utilization of military and nonmilitary efficiencies through actors of non-nation puts pressure on or weakens an organized government. A wide variety exists in their capacity. The meaning of Irregular warfare is always broadest, and it proposes the general notion of warfare among the actors non-nation and inclusion of nation and unconventional warfare, and it is comprised of actions for-example, counter-insurgency, stability operations, and counter-terrorism. Thus, there are vast definitions of unconventional warfare than subversive warfare on the internet here consists of many tools that subversive actions, for example, guerilla warfare, sabotage, intelligence activities, and unconventional corporative improvements.

Cambridge Dictionary suggested Subversive activity signifying efforts to take or sometimes change a ministry to work privately in it, along with ashlar warfare and unconventional warfare, but indirect procedures undermine the undermining of moral integrity. Hybrid warfare is similar to irregular and unconventional warfare as it supposes benefits and utilizes a mixture of arm-force and non-arm-force instruments. Comparatively, they recommend a conflict between the actor of nation and non-nation, whereas hybrid warfare will hire by both nation and non-nation actors. Subversive warfare has similar goals to those theories, but it does not have many dependencies on military tools.

All these ideas have the same feature with psychological-

propaganda warfare-information warfare in the sight that the focal point of their functions is to control the significant population. Moreover, these three terms will be later considered as a single tool that is very important for others and it can be used in irregular, subversive, and unconventional warfare.

Studies have verified that technology has a substantial impact on the institutions and warfare state (Danyk,2017). It is regarded as the unconventional means for territorial invasion, generally lacking the use of conventional means, i.e., military components (Vučinić, 2017). Ball et al, indicate that its presence has enabled the progression of the resistance movements concerning terrorism, where strategic goals of uncertainty are practices, lacking any form of violence (Ball, 2017). Therefore, hybrid war can be referred to as a high-tech conflict. It is stated as an extended form of the state policy or a policy for the coalitions, political groups, non-state actors as well as transactional corporations. The main purpose is to identify the conflict that is imposed by an opponent on the will of an actor using integrated, adaptive, and asymmetric synchronized destruction effects.

The hybrid conflict is generally defined as attaining control of a certain society, modifying the masses' mindset as well as manipulating them, which set the base for forming certain decisions. The main intention is to change the core values, act as a motivating fact, and cause a cultural basis, along with the different critical, strategic, and critical infrastructure of a state. This is accomplished by the complicated and balanced use of soft and hard powers. General areas of the impact of the social hybrid outlined in literature constitute a state, diplomatic, political, technical, social, socio-technical, financial, energetic, cyber, information, and socio-cyber,

as well as other systems (Ball, 2017). This includes parameters such as the desirable or synergizing of the goals for the deterioration of the system, relations, structures, processes, and functions (Ball, 2017).

Use of Social Media

Various media analysis has shown the substantial impact of the mass spread of social media use, such as the formation of a social, political campaign that provides information though in a negative way. Such cyber aggression for the state government is assumed to spread negative behavior toward the government and increases prospects for misinformation and fake information. This leads to intensive outcomes such as civil mistrust as well as anti-government behavior. This spread in the al media in the form of fake or false, as well as malicious information forges attitudes and beliefs that in general, are kept in check concerning the c expectations. Also, the information not leading to a conscious change in the people's belief substantially affects the way future information is interpreted through the provision of effectual anchoring as well as media priming. This can facilitate the aggressors at a domestic level, which intends to impact the conflict course of action for weakening the support for a particular government (Gery, 2017). Also, in certain cases, this information can serve as an alternative for kinetic operation, which may jeopardize or deteriorate the campaigns launched for defensive purposes, even before their instigation. Cyber aggression generally leads to covering actors as well as motives using technological procedures that can help conceal their manipulative goals. This concealing generally constitutes the unknown authoritative claims, instigation of new items which are manipulated using half-truths, message repetition, burdening of information, operations concerning cyberpseudo, and more.

Table 1. Concepts Comparison.

	Developme	nt Destruction C	onventional Use I	rregular for	ces Economic D	iplomatic	Informatio	n State 1	Non-state
HW	+	+	+	+	+	+	+	+	+
CA	+	+	+	+	+	+	+	+	+
PW	+		Limited	+		+	+	+	+
IW	+	Limited	+	+		+	+	+	+
UW	+	Limited	+	+	Limited	+	+	+	+
SW	+		Limited	+	Limited	+	+	+	+
IW	+					+	+	+	+
PW	+					+	+	+	+
P	+					+	+	+	+

Hybrid Warfare (HW), Comprehensive Approach (CA), Political Warfare (PW), Irregular Warfare (IW), Unconventional Warfare (UW), Subversive Warfare (SW), Information Warfare (IW), Psychological Warfare (PW) and Propaganda (P).

The meaning of information warfare is quite broad, and it consists of the use of information-linked abilities the nature of these terms is similar because of the negative meaning of propaganda warfare, psychological warfare was used instead of this (Seppälä, 2022). Similarly, information warfare was used instead of psychological warfare because of its negative meaning. Another purpose to utilize information warfare is that otherwise arises in the interconnection of the communication system with other architecture. Having the same meaning in the three concepts, we like to use information warfare as the representative.

The hypothesis of the study is to explore social media

use in hybrid warfare with its positive and negative impact on Pakistan and met the ensure requirement to exploit its positive impacts.

DATA COLLECTION AND ANALYSIS

This research presents the initial part of a vast project; whose objective is to examine all the coverage of hybrid warfare done by media in the concept of 2014-2018. Although there are 66 total numbers of media items and few subjects are left untouched, we think that there are some important ideas for implementing the operations of hybrid warfare which is the major aim of this study. Table-2 indicates the re indicates the "me".

Table 2. Distribution of warfare types and strategies.

Meaning or Definition	Frequency (n)	Percentage (%)
HW	20	31
CA	17	26
PW	15	20
IW	4	7
UW	2	3
SW	1	2
IW	1	2
PW	2	4
P	4	5

Hybrid Warfare (HW), Comprehensive Approach (CA), Political Warfare (PW), Irregular Warfare (IW), Unconventional Warfare (UW), Subversive Warfare (SW), Information Warfare (IW), Psychological Warfare (PW) and Propaganda (P).

It is shown thin e results that only 20 (31%) items of media, the word hybrid warfare is correctly used with its accurate definition. in 18 (27%) times author indirectly used the term "hybrid warfare" which is the apparent type of warfare, i.e. "information warfare" thereThere14 (21%) items of "political warfare" and 5 (6and %) of "unconventional warfare" and it is clearly stated in the results that the concept of hybrid warfare is understood the defense community. There is not an accurate no understanding definition available. 70% of the items implied by implied about other concepts when they used the term hybrid warfare. There are two possible reasons suggested by the results for miscommunication. Whether it is because the researcher does not have enough knowledge about the military or whether the military is too weak to define the present situation that the researcher suggests with other meanings. We observed that both concepts are valid. For example, there is confusion about hybrid warfare with political

warfare in 14 items of media, which are considerable similarities among these terms. The broad nature of the term makes it initially difficult for identifying the potential advantages it adds to the country and the way. The ambiguousness raises conflict concerning the term and the actions following it. Whereas the use of mistaking hybrid warfare in relation he information warfare is considered to be a precise and clear indication of the writer's inadequate understanding concerning military knowledge.

The difference in the meaning of the produced academic as well as journalist is that among academicians as analysts, the capacity to use the hybrid term varies slightly. The ratio of the difference among the terms is low. The meaningful difference is also not reflected in the media type concerning its correct use. However, the content analysis does not present any significant implication concerning the difference. The current analysis also presents that the use of hybrid warfare is

better presented for the content that is primarily focused on the defense in contrast to the one that is not focused on defenses. The war examples of id warfare raise two major contrasts generally for defining the term, the articles have primarily focused on the case of developed countries 'warfare, i.e., the case of conflict between Russia and Ukraine with no example quotes for that of Pakistan. This can be the reason for the inadequate understanding of the term in Pakistan.

However, other examples found in the developing nations include various examples, from the example of ISIL's Warfare in Syria to that of the Soviet invasion of Pakistan These examples further highlight the reference that vails concerning the t of hybrid which to different perceptions accepted as a concept. In addition, there are almost nine articles that lead to the attribution of hybrid warfare that is not correctly reflected in the articles.

Table 3. Analysis of the study variables and proper use.

•	,	1 1		
Study Variables	Frequency	Percentage (%)	Frequency of Proper Use	Percentage of Proper Use
Writer	17	24	5	20
AR	28	39	8	29
JE	9	13	1	11
EA	7	10	1	14
Off	7	10	1	14
Н	2	3	2	33
No author	9	13	3	32
Media				
GM	7	8	1	16
NM	11	17	4	34
GN	11	16	3	45
NN	8	12	4	49
Media				
DF	16	22	7	39
NDF	50	76	15	28

Global Magazine (GM), National Magazine (NM), Global Newspaper (GN), National Newspaper (NN), Defense focused (DF), and non-defense focused (NDF).

The demographic details of the survey respondents were analyzed which showed that the majority were male (70) followed by a few females (30). This may account for the social practices of Pakistan, where male

compared to female statistics revealed that most had aged between 25 to 35 years (55) followed by personnel aged 36 to 46 (25).

Table 4. Demographic details.

Variable		Frequency
Gender		
	Male	70
	Female	30
Age		
	18 to 24 years	20
	25 to 35 years	55
	25 to 35 years 36 to 46 years	35

When asked about the potential benefits of the media for Pakistan, it was found it helps in transparent practices of the different social causes and the response to the h troubles (where (n = 50) strongly agreed, (n = 10) agree,

(n = 25) were neutral and (n = 10 responded disagreement)). The second is related to the individuals mobilizing, where (n = 40) strongly agreed, (n = 10) agree, (n = 26) were neutral, and, collective decision making where (n = 40) strongly agreed, (n = 20) agree, (n = 15) were neutral (n = 15) stated disagreement.

Lastly fo,r information accessibility, the responses found where (n = 40) strongly agreed, (n = 20) agree, (n = 25) were neutral (n = 10) disagreed. Whereas the communication was found to be lacking such as where (n = 20) strongly agreed, (n = 15) agree, (n = 55) were neutral (n = 5) disagree.

Table 5. Pros of social media and Hybrid Warfare in Pakistan.

Variable		Frequency	
Communication			
	SA	20	
	Α	15	
	N	55	
	D	5	
	SD	5	
Transparency			
	SA	50	
	Α	10	
	N	25	
	D	10	
	SD	5	
Individuals Mobilizing			
	SA	60	
	Α	4	
	N	26	
	D	5	
	SD	5	
Collective Decision Making			
	SA	40	
	Α	20	
	N	15	
	D	15	
	SD	10	
Accessible Information			
	SA	40	
	Α	20	
	N	25	
	D	10	
	SD	5	

SA = Strongly, Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree

The negative effects that result from the hybrid include manipulation, unread regulated environment, e,nt, and misinformation proliferation. Such as for manipulation (n = 50) strongly agreed, (n = 10) agree, (n = 25) were

neutral, and (n = 10,) disagree. While for misinformation these were (n = 40) for strongly agreed, (n = 24) agree, (n = 16) were neutral. The responses for unregulated environment proliferation (n = 40) strongly agreed, (n =

14) agree, (n = 26) were neutral and (15) disagreed. It also stimulates fear such as (n = 50) for strongly agreed, (n = 14) agree, (n = 20) were neutral and (6) disagreed.

In the responses creating ease-hoaxes, (n = 30) strongly agreed, (n = 24) agree, (n = 26) were neutral, and (10) disagreed.

Table 6. Cons of social media and hybrid warfare in Pakistan.

Variable		Frequency	
Manipulation			
	SA	50	
	A	10	
	N	25	
	D	10	
	SD	5	
Unregulated environment			
	SA	40	
	A	14	
	N	26	
	D	15	
	SD	5	
Create Hoaxes			
	SA	30	
	A	24	
	N	26	
	D	10	
	SD	5	
Fear			
	SA	50	
	A	14	
	N	20	
	D	6	
	SD	5	
Misinformation			
	SA	40	
	A	24	
	N	16	
	D	15	
	SD	5	

The instigation of the reform and its needs were also assessed, where participants denoted and strongly agreed with the social, political, and educational reform, with a comparatively limited focus on economic reform.

Table 7. Need for reform.

Vari	ables	Frequency
Social		
	SA	40
	A	14
	N	26

D	15
SD	5
SA	30
A	24
N	26
D	10
SD	5
SA	50
A	20
N	14
D	6
SD	5
SA	40
A	16
N	15
D	24
SD	5
	SA A N D SD SA A N D SD SA A N D SD SA A N D SD

This chapter sheds light on concluding the paper, limitations during research, and a few recommendations to overcome the problem.

CONCLUSION

In the defense community, hybrid warfare is the current idea that has been utilized within the last thirty years for modern warfare. It has been selected officially in the basic documentation of the strategy of social media and hybrid forces for Pakistan along with the other governments of the different nations and has influenced several articles, papers for the policy, and books as well. The pros and con analysis also highlighted various aspects which emphasize that the use, actual meaning as well as practices cater to the ambiguous meaning of hybrid warfare. Yet the warfare of hybrid technology is the idea as disputed as it is famous. Often condemned due to its uncertainty and a non-powerful idea, it brings itself the challenges to misguide the community of defense and hiding the basic strategic ideas. Having more than 66 literatures of content analysis and examination, this research has explained that hybrid warfare is in reality an unclear idea. It is exposed that the writer utilized warfare term in its actual essence in only 30% of the literature which makes only 20 media items majority of smoothes (70%) the writers suggested other ideas when they are writing about hybrid warfare. In recent times, Hybrid warfare is the most common word used to create the idea for the understanding of defense in the papers of Pakistan as well as the developing nations. Yet, it is an idea that is arguable for the majority of the people in the concerned community. It has been attacked a lot of times as the idea has no strength, and it is not clear at the same time. According to the outcomes of the research, most of the time the writers themselves are not clear about this concept when writing the papers and due to this being optimistic is not possible since the people don't speak a common language.

LIMITATIONS

The first limitation is that not much research was conducted on this topic, especially in Pakistan this topic was less explored, although government officials now realize the need for reforms. Therefore, the internet, newspapers, articles, and research papers have been used to explore different perspectives and dimensions of the topic. The second limitation of the research is that very limited time was available to cover this vast subject. Hybrid warfare is an unclear term and its use in Pakistan is not clear.

RECOMMENDATIONS

The survey results show that the use of social media as a tool for hybrid positively affects Pakistan, by assisting in integrating transparency, individual mobilization, and

collective decision-making. Whereas f, or the observed negative effect, the result suggests that the use of hybrid warfare includes manipulation, unregulated environment, and misinformation proliferation. This emphasizes the need to induce efforts for achieving consensus on the term's meaning while also assisting in the tactical use of the term. Some of the recommendations are as follows: -

It is high time that the global community of defense must agree and stand on the same page regarding the true meaning and reflection of hybrid warfare. Hew Strachan defined that words share ideas; if they are not well defined, the ideas which are built on their basis will be vague. This vagueness will create doubts among the people of a nation, so the alliances apparently must speak one language known and understood by all. As words define ideas, ideas create the understanding for defense in our minds, and in the same way for the forces, the doctrines, and the way they struggle for the nation. Government should establish an independent National Cyber Security Centre under the direct control of the Prime Minister with the ability to implement countermeasures and counteractions in the wake of the Hybrid Attack. It should be equipped with modern

In the Education sector, the present curriculum does not have any guidance on cyber awareness and the use of social media. A committee should be formed under the Ministry of Education to evaluate the existing curriculum (school, college, and university) to recommend the addition of cyber security as a dedicated subject. It should be designed for students at different levels in line with the requirements of Pakistan i.e. primary, secondary, matriculation, MS, and Ph.D.

technology for monitoring and analysis functions.

Ministry of information technology and Telecommunication through PTV and other news channels should launch a cyber awareness campaign to educate the masses on the pros and cons. Steps should be taken through provincial Governments to bring intelligentsia and notable of society for spreading awareness among the masses about the threat and opportunities of social media. The Ministry of Information in collaboration with the Ministry of Education should organize seminars conferences, symposiums, and workshops in colleges and universities to sensitize youth as part of the Cyber Awareness Campaign.

Pakistan Telecommunication Authority (PTA) is the

prescribed authority under the Prevention of Electronic Crime Act (PECA)-2016; whereas, FIA has been designated as an investigative agency for investigating cyber-crimes. The above-mentioned laws could have proved to be a potent deterrent in controlling the negative use of social media, however, due to the lack of capacity of designated state institutions, these laws have seen little success so far. Therefore, capacity building should be in terms of resources both human and material, and tech expertise by pooling tech/ cyber experts and imparting cyber education/ training to their employees. Finally, the authority of these institutions needs to be substantiated by government/ political backing without prejudice of liberals, critics, and vested political interests.

Pakistan should embrace the new technology and use it intelligently to catch up with the changing world and challenges posed by hybrid warfare. Mostly, the websites of the different departments/ institutions are outdated and there is the least presence on social media and therefore least success in perception management of the masses. The state departments need to upgrade their websites complemented by subtle strategic communication campaigns to keep the masses/ citizens abreast with their efforts and safeguard them against falling prey to the propaganda and information operations (IOs) of hybrid warfare adversaries.

There is a need to pursue the development of a more sophisticated and subtle communication campaign at the mass level, based on independent media cells of every state institution (Military, Federal Investigation Agency, Law Enforcement Agencies, Intelligence agencies, and Federal Government). These should be aimed to monitor social media platforms against any anti-state/anti-institute propaganda while remaining active on these social media networks. In addition, narrative-driven perception management of the masses for propagating a positive image of Pakistan should also be the mandate of these teams, duly approved by the parliament with consensus.

Government should work with like-minded countries and share weaknesses to transform them into strengths. Pakistan's government should utilize regional and international forums such as SCO, ASEAN, SAARC, OIC, and UN. The strength of strategic partners is utilized for developing indigenous software and hardware industry. Joint exercises for Cyber Professionals can provide fast-track improvement.

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