

The Internet and Political Stability In Fragile States

This paper analyses the potential impact of Internet access on the practice of politics in fragile states. It argues that such access has the potential to affect both positively and negatively the political features which define fragile states in the eyes of international donors and policymakers. The paper begins by outlining the concept of fragile states and the realities of Internet access in those states. It points out that policymaking in fragile states is largely pre-emptive, and so the impact of Internet access on fragile states should be taken into account when designing early-warning systems and interventions, rather than as a policy prescription itself. It then argues for Papua New Guinea (PNG) as a case study of Internet access in a fragile state. The paper goes on to discuss three political features common to most fragile states and the potential affect of Internet access on each of these features: criminalisation and delegitimation of the state; the rise of factionalised elites; and the intervention of other political actors. Finally, the paper outlines the underlying research gap relating to this issue, namely the absence of research on the impact of the Internet on political practice in non-Western democracies.

The Internet and fragile states

This section outlines the research gap on Internet access in fragile states, and defines the latter concept following a brief literature review. Much of the work on the impact of ICTs in developing countries, including fragile states, has focused on two issues: the role of mobile telephony and the political impact of the Internet in non-democracies. On the former, research has focused on the use of mobile telephony as a means for delivering financial services and microfinance as a poverty reduction mechanism¹. Work has also focused on the impact of mobile telephony in conflict situations and as an early warning system in humanitarian disasters². Although the political impact of mobile telephony is undoubted, Internet access offers important features which will affect its impact in comparison. These are the ability to store and retrieve data on a massive scale, the ability to interact with strangers/non personal connections, and the ability to interact with and access the outside (international) world.

Research on the political impact of Internet access has largely focused on Internet access as a ‘liberation technology’ (Diamond, 2010) in autocracies or repressive states such as Iran or China (Kelly and Etling (2008), McKinnon (2008)). However, little work has focused on what Internet access means for the practice of politics in fragile states which are neither autocracies nor fully functioning democracies but rather democratising—they are something in between³. Although Internet access is unarguably limited in many fragile states, this may not be the case for much longer. Mobile penetration in the developing world, including fragile states, is increasing at a

¹ See, for example, extensive work by the Consultative Group to Assist the Poor (CGAP).

² See, for example, the Ushahidi project (<http://www.usahidi.com/>) and Meir and Leaning (2009)

³ Indeed, research such as Hegre (2003) and Hegre and Fjelde (2009) on political stability suggests that states in transition are more likely to be conflict-affected and thus fragile.

massive rate—states such as Afghanistan, Somalia and the Democratic Republic of Congo (DRC) have an estimated average growth rate of 100% (Konkel and Heeks, 2009). The GSM association estimates that 80% of Internet delivery will ultimately occur via mobile phones (Denton, 2008), and so this increase in mobile connection will likely lead to increased Internet access in these states. And if the International Telecommunications Union’s link between development goals and ICTs is progressed effectively (ITU, 2006), then the effects of any donor-funded initiatives to increase Internet access in fragile states are relevant to policymakers in general.

The term ‘fragile state’ sits in a conceptual continuum which defines states as ‘failed’ at one end and ‘sustainable’ at the other. By highlighting certain features of these challenges, the methodology identifies states which may be in need of intervention as defined and enacted by the international donor community either presently or into the future if certain features are not addressed⁴. It also outlines certain features which may impact on interventions in such states such as high levels of corruption, high rates of illiteracy, and post-conflict environments. So it is both a pre-emptive and structural concept, identifying features which may necessitate intervention and which may later affect the design and implementation of such interventions.

A large part of the literature surrounding fragile states thus seeks to engage on what it is that leads to state failure, with state fragility seen as a precursor to state collapse/failure (Rotberg, 2002, Krasner, 2004 and Carment, 2003). The concept is derived from fears that state collapse/failure poses a global security risk, a concern outlined in key articles such as Krasner (2004, 2005). The term is by no means uncontroversial. Because the term by definition applies only to non-Western states, authors such as Duffield (2005), for example, argue that the concept pathologises the global South, and securitises development in a way which favours current hegemonic structures. This paper acknowledges the problems inherent in the terminology, but the concept provides a conceptually useful and policy-relevant way to outline the potential impact of Internet access on particular features of fragile states which are of relevance to donors.

Most commentators and donors agree on several features common to fragile states. These include economic factors, such as low GDP and resource dependence; social factors such as high rates of infant mortality and demographic pressures; and political factors. This paper focuses on the last of these. Major donors agree that political features are strategically important in defining fragile states and designing appropriate policies. For example, the World Bank’s fragile states group defines fragile states largely in political terms: weak policies, institutions, and governance (World Bank, 2010). The UK Department for International Development’s (DFID) research arm, meanwhile lists political features as a key factor in state fragility (DFID 2010). Indeed, recent work by the US government-funded Political Instability Taskforce suggests that it is a particular political factor—a certain kind of relationship between political

⁴. See OECD/DAC (2007) for a good overview of the link between fragile states methodology and state-building practices as harmonised at the international donor level.

elites—which is the key factor preceding and thus predicting political instability (Goldstone et al, 2010).

Given the lack of a definitive list of features of fragile states, this paper analyses three political features listed in The Failed States Index, published annually by *Foreign Policy* magazine and the US think tank Fund for Peace, which appear to mirror the features identified in major donor policy papers (*Foreign Policy*, 2010). These features are: criminalisation and/or delegitimisation of the state; the rise of factionalised elites; and the intervention of other actors. This paper focuses on Internet access as something which may occur outside donor control, much as mobile access has occurred in such states. It therefore focuses on Internet access as part of the ‘early warning’ aspect of fragile states methodologies. It supposes that Internet access may arise independently of donor activities and impact almost by default on the political features of fragile states relevant to policymakers. It does not address the design of Internet-based interventions by donors, addressing instead the pre-emptive rather than the structural elements of the fragile states methodology. The following section briefly outlines the arguments for using Papua New Guinea (PNG) as a case study, and is followed by a closer examination of the interaction between Internet access and the three political features of fragile states listed above.

Papua New Guinea as a fragile state

Papua New Guinea sits on *Foreign Policy*’s list of fragile states as a ‘moderately’ fragile state (Foreign Policy/USFP 2010). It has one of the highest rates of corruption in the world, very poor services and a highly captured and factionalised elite. It also has extraordinarily high illiteracy rates and a rampant AIDS infection rate (AusAID, 2010). In short, it has all of the political elements of a fragile state and many of the social and economic.

PNG experienced the liberalisation of its telecommunications market and the introduction of mobile telephony in 2007, and mobile broadband was introduced in 2009. Considering the country did not have a fully functioning landline network beforehand, has no national radio network and only a barely national newspaper⁵, the introduction of mobile telephony and Internet access is a significant expansion of the public political space. This process is likely to continue. The ITU estimates Internet access from mobiles in PNG may increase by over 500% to about 50% of the population by 2017 (World Bank, 2009 Berschorner 2008). This is in line with predictions made for Internet access in much of the developing world – that is, access will largely be via mobiles, and will increase exponentially. Although PNG has had access to the Internet via desktop computers since the beginnings of the 21st century, it is the liberalisation of the telecoms market and the attendant uptake of mobile broadband which will have a greater, and faster, impact. (Berschorner 2008). Importantly, PNG, like most fragile states, does not have the capacity to censor

⁵ Although the content of the two main newspapers, the *Post Courier* and the *National* is national and the press in PNG is largely free, distribution problems are such that it is difficult to describe them as ‘national’ in terms of circulation and readership.

Internet access and Internet access there is unfiltered. And like most fragile states, liberalisation of PNG's telecommunication market was not without a struggle, driven mostly by government rent-seekers. Even now, access to the Internet in PNG is under threat from a government review of the legislation governing telecommunications access, although given the government's failure to restrict the liberalisation of the mobile market despite its best efforts, this new attempt is unlikely to come to fruition⁶.

I argue that as the introduction of Internet access starts from such a clean slate in PNG it is a useful example of the impact of Internet policy on political space—the use of the Internet, and telecommunications more generally, has the capacity to introduce significant changes to political practice. However, as in most fragile states, access to data in PNG is extremely limited, including on telecommunications access. In addition, the political impact of Internet access is difficult to measure and given the recent introduction of the technology is likely to be minimal at present. This paper focuses instead on projecting its impact into the future. The final section of this paper sets out a research proposal which addresses this issue. In the meantime, this paper proposes that the novelty of Internet access in PNG means its impact (potential and otherwise) on political practice is easier to discern and argue, although it is difficult to do so in anything other than a distinctly qualitative and anecdotal manner.

Internet access and the political features of fragile states

The following sections outline the three political features of state fragility which may be affected by Internet access: criminalisation/delegitimisation of the state; factionalisation of elites; and the intervention of other actors.

Criminalisation and/or delegitimisation of the state

Criminalisation and delegitimisation of the state is an all-too common occurrence in fragile states. The term refers to the illegal capture of state processes and revenue by political leaders. Bayart et al put it thus: 'the criminalisation of politics and of the state may be regarded as the routinisation, at the very heart of political and governmental institutions and circuits, of practices whose criminal nature is patent, whether as defined by law of the country in question, or as defined by the norms of international law and international organisations or as so viewed by the international community, and most particularly that constituted by aid donors' (1999, 15).

This criminalisation of the state necessarily delegitimises state governments, at least conceptually. It impedes the free and fair conduct of elections, and means that revenue is captured, so that votes cast may not have any effect on the populace's long term prosperity. International anti-corruption NGO Transparency International (TI) ranks PNG as one of the 30 most corrupt nations on earth (TI, 2009). Indeed, a former head of TI in PNG alleged that two-thirds of PNG's annual revenue was being stolen by corruption politicians and bureaucrats (Pacific Magazine, 2007), and observers argue

⁶ See Stanley (2008) for a further discussion of this process.

that elections in PNG are regularly ‘stolen’ (for example, see Transparency International 2003, Freedom House 2009, Haley 2002, 2004).

Internet access can affect this process by changing the way information flows occur. It can allow citizens access to information about political processes which may affect their interaction with the state and their expectations of it. The most telling of these is regarding corruption, one of PNG’s biggest problems, and a key contributor to the criminalisation or delegitimisation of fragile states. If citizens have no positive experience of state service delivery because of corruption (as opposed to simple incapacity, as in the case of failed states) then their interaction with the state is less likely to be engaged, and their access to services is likely to remain poor. Reinikka and Svensson (2005), for example, argued that prioritising information flows as opposed to other innovations in service delivery, like infrastructure or corruption design, can help to overcome corruption in education funding in developing countries. They argued that traditional anticorruption measures in developing countries focus on capacity building of legal and financial institutions –the judiciary, police and financial auditors. This top-down approach relies on weak and often corrupt institutions to monitor corrupt behaviour – often with predictably poor results. In their example, the bottom-up route of ‘citizen enforcement’ of education budgets in a particular district in Uganda via an information campaign directed at parents improved service and finance delivery considerably. They concluded that ‘public access to information can indeed be a powerful deterrent to capture of funds at a local level’ (5, 2007).

In other words, creating parallel information flows to a delegitimised government can allow citizens to engage with and monitor revenue streams. The Internet is poised to do this in particular ways: first, it potentially has wide access and is not constrained by geography. Second, it can be controlled by donors and citizens– it does not need to rely on government-owned press, for example. Importantly, and unlike mobile phones, Internet access also allows access to documents and inquiries etc which are not available in hard copy in remote areas. For example, the main paper in PNG, the *Post Courier*, links on its main web page to the largest inquiry into government corruption in the nation’s history. Although the inquiry occurred over ten years ago the digitising and display of the reports allows access to information not otherwise available and is particularly pertinent seeing as many of the figures targeted by the inquiry still occupy senior political positions in PNG.

On this note, PNG recently experienced its first attempts at government censorship of the Internet, in response to anti-corruption efforts by Internet users. Bloggers were circulating leaked reports of a major corruption enquiry⁷ which directly implicated senior political figures, and which the government was unwilling to release. When the report started surfacing on blogs, the PNG government delivered a writ to the country’s major ISP, ordering it to block blogs which hosted the report. This clumsy and ultimately unsuccessful attempt shows the government is rattled by the effect of the leaked publication. This sort of exposure of government corruption, which filtered

⁷ See, for example <http://www.pngblogs.com/2010/07/png-bloggers-claim-law-firm-censoring.html>

into the country's print media only after it appeared on the Internet, is a new phenomenon in PNG due solely to Internet access.

The rise of factionalised elites

The role of elites in fragile states is an important one, and the factionalisation of elites increases their deleterious impact. It means that resources are fought over at the very top level, often absorbing valuable government capacity and engendering conflict. In PNG, cabinet positions, and top public executive positions are often doled out along factionalised clan and tribal lines⁸ without regard to electoral process or simple capacity. Internet policy potentially interacts with the factionalisation of elites in two ways: increased factionalisation of said elites, and the dilution of the impact of such elites.

A recent study by the Political Instability Taskforce found that increased factionalisation of elites, was the most important factor defining state fragility (Goldstone et al, 2010). Internet usage at present is arguably largely confined to elites in fragile states, given the link between education, per capita income, and access to technology⁹, implying that increased factionalisation of elites may be one of the first of the impacts of Internet access. Research on the role of the Internet in factionalisation has so far been limited to Western democracies. Sunstein's (2002) seminal paper on the Internet and politics, for example, argues that the Internet allows media consumers to tailor their information experiences. In doing so, it encourages consumers to reinforce opinions already held, which then increases factionalisation. We see this problem in developed countries where the 'echo chamber' effect of the Internet increases factionalisation, as consumers tailor their information sources to suit their own prejudices. This concept, 'homophily' (McPherson 2001), implies that the Internet exposes us as much if not more to views of like-mindeds rather than a plethora of political viewpoints, thus increasing the likelihood of factionalisation. These arguments are potentially important for the practice of democracy in fragile states, given the role of factionalised elite politics therein.

Internet access may also have an impact on the power of elites in fragile states more generally. Although such elites draw their power largely from access to resources, this power is arguably drawn at least in part from control of the political space¹⁰ and associated information flows. It is for this reason that many state-building initiatives associated with fragile states focus on capacity-building of democratic institutions, including civil society and political participation. Internet access, however, may open

⁸ See Dinnen (2000) on the link between tribal and clan ties and grand corruption in PNG.

⁹ Assuming somewhat hopefully here that elites in fragile states really are interested in evaluating viewpoints rather than simple rent-seeking. Noting, however, that 'elites' can mean not only political figures but also members of the elite who are elite by connection rather than position – for example, students, businessmen or associates and so may have less immediate access to 'physical' rents but still have access to 'conceptual' rents such as the flow of information.

¹⁰ Although see the ongoing debate about 'guns v grievances' as the cause of conflict in fragile states (Hgere, 2003 and Hegre and Fjeld, 2009).

up the political space to others, at least in terms of one resource: information (see Lunat 2009).

Bimber's (2003) comments on the interaction between the Internet and the 'public sphere' are relevant here. He argues that the Internet enables the production of a 'post beauracrat' model of governance, where information flows are taken out of the context of elite bureaucrats, and democratised. In theory, this should lead to increased political engagement and information flows and in fragile states it may dilute the impact of elites. Indeed, this is the basis of many of the utopian arguments put forward to argue that the Internet as a cipher for freedom of information is a force for political good. (see for example Gentzkow and Shapiro 2010 and associated commentary such as Brooks, 2010).

However, Bimber et al (2005) argue that this expansion may also have deleterious effects. They suggest that the Internet may in fact lead to disintegration rather than coherence in the public sphere. As Sunstein (2003) argues, democracy is enriched by the multiplicity of voices only when mechanisms for common attention and deliberation exist. Importantly for their relevance to fragile states, arguments such as Bimber's and Sunstein's account for the 'deintegration' of such a public sphere. In PNG and many fragile states, the 'integration' of the public sphere characteristic of western democracies has arguably never existed.

Overall, recent research on liberalisation of the media in general—including the Internet—suggests such moves may have destabilising effects. This is particularly the case in fragile states, which are generally in the process of democratisation. To this end, Allen and Stremlau (2005) caution aid policymakers engaging in fragile and crisis states to avoid funding liberalisation of the media as means to an end, and indeed any control of the media in aid of the intervention's goals. Putzel and van der Zwan (2006, 32) see 'anti-politics' an emerging trend in democratic practice in developed and developing states, whereby 'political outsiders contest public politics whilst denigrating the realm of public politics'. They see the role of unsophisticated support for free media, especially in fragile states, as potentially contributing to this problem (Putzel and van der Zwan 2006, Beckett 2007).

The deleterious effects of badly managed change in the media environment is further addressed by North et al's (2009) work on the process of state formation in developing countries. They argue that the provision of 'limited access orders' where political institutions and other instruments of power like the media and access to information, are held by a small group of powerful individuals is essential to the formation of a functioning state because they create an absence of violence and a type of political stability. They argue that Western style 'open access orders' in Western democratic institutions such as a free press and an emphasis on government transparency, may be damaging for such states and create a non-rational power relationships. These 'open access orders' may conceivably include increased access to the Internet—as Margetts (2009, 7) notes, the Internet 'changes a government's ability to wield authority'.

Some scholars argue that the Internet may have an impact on a particular type of power relationship: collective action. Bimber et al (2005), for example, write on the role of the Internet in diluting public/private distinctions in the developed world and the implications this has for facilitating collective action. However, in arguably partially pre-modern societies such as PNG, these public/private distinctions are already more fluid than those in the industrialised world, as the authors note. This may have an impact on political mobilisation, if not simply socialisation, in fragile states, but is as yet unstudied. The impact of the Internet on collective action has played out in recent protests in PNG against new environmental laws in PNG. The protests were the largest in many years, and were coordinated by PNG's first online activist group¹¹. The group publicised the protests using Facebook, blogs, and flyers, targeting university students with access to the Internet—the first time this appears to have occurred in PNG. Whether the protest actually leads to change or not, the implication for political practice in fragile states such as PNG is clear.

Intervention of other political actors

The intervention of other political actors in fragile state usually means the intervention of armed groups, such as the Lord's Resistance Army's recent intervention in the Democratic Republic of Congo, or Al-Qaeda's role in Afghanistan. I argue however, that the Internet enables a particular type of political actor – the diaspora. Brinkerhoff (2006) suggests that the Internet may be used by diasporas to foster peaceful endeavours in fragile states. Building on the work of Rheingold (1993) and others (Galston 2004) she argues that the Internet enables specific types of interaction among the diaspora which enable it to form a community more likely to act for positive than negative change. She writes of Somalinet, the web site for the Somali diaspora, that it suggests a 'potential for the Internet to promote liberal values, channel frustration for verbal debates thus diffusing tension, and create communities that counter the marginalisation conducive to violence' (2006, 27).

However, diasporas do not always to reduce conflict. Scholars such as Levitt and Jaworsky (2007) and Smith and Stares (2007), study the role diasporas can play in fomenting conflict in their source countries, funneling funds to insurgent groups or engaging international actors to intervene. A subset of this research, on 'digital diasporas', focuses on the role of the Internet in enabling diasporas to feature prominently in the political landscape of their home country. Bernal (2006) for example, focuses on the role of the Internet in enabling the construction of an Eritrean diasporic identity, amassing funds for war in Eritrea and mobilising demonstrators (see also Grant 2004). Bimber et al (2005) offer the well-known example of the Zapatista movement in Mexico, which used the Internet to deliver messages to allies who were then able to engage an international support movement, bypassing strong state control over traditional media in Mexico,

¹¹ http://www.facebook.com/posted.php?id=105585152822471&share_id=137076459637414&comments=1
<http://www.actnowpng.org/content/unitech-madang-students-will-protest-march-against-environmental-bill>

Importantly, diasporas can also engage other international actors to intervene in the politics of their home country (see King and Melvin (1998) or Smith, (2007)). For example, Dade (2006), shows how the Internet allows the Haitian diasporas to lobby the US government on Haitian policy, to coordinate its response in ways not possible previously. The role of ‘bridge bloggers’ is relevant here. Zuckerman (2008) describes bridge bloggers as those who ‘reach across gaps of language, culture and nationality to enable interpersonal communication’ (2008, 48). As he notes, bridge blogs are distinguished from the vast majority of blogs because they are designed for an international audience. Providing information on the Internet in English, for example, allows the West access to information in non-Western states. As in the Zapatista and Haitian examples given above, diasporas using the Internet to focus and disseminate this information as a lobbying technique are thus able to engage international actors in the situation in their home country.

The composition of diasporas abroad may also affect their political activity in their source country. Little work exists on the composition of Internet diasporas. Quite rightly, it is assumed that the diaspora writing in English is largely composed of the elite–English speaking Kenyans, for example (Zuckerman 2008) or ‘avant garde’ Eritreans (Bernal 2006). This may hold true in PNG as well, where most of the diaspora in Internet discussion forums appear to be Sepik, the same tribal identity as the Prime Minister. Anecdotally, this has meant that forums involving expatriate Papua New Guineans appear to be dominated by Sepiks¹². Interestingly, this appears to have coalesced a ‘non-Sepik’ identity on some issues, such as discussions of corruption. This is striking in PNG, where tribal identities usually are usually conflict-ridden—political ‘collaboration’ of this sort if relatively is rare.

However, the ethnic composition of a diaspora may also reflect the experiences of non-elite groups such as certain refugee groups. This may affect the direction and impact of that diaspora’s digital engagement. In fragile states, large and well-established refugee diasporas in the West originating from states such as Somalia, Afghanistan and Iraq have significant online presences. The case of the Afghan Hazara community is a relevant example here. The Hazara diaspora network has a strong online presence in English via sites such as www.hazara.net. The Hazara community in Afghanistan itself has no such online presence, and the community there is far from elite. Hazaras were massacred under the Taliban and continue to be routinely persecuted. As such, the diaspora in the West –with Internet access—is composed largely of refugee communities (see for example, Monsutti 2007).

Not surprisingly, the English-language Hazara sites, whether consciously or not, project to an international audience. Hazara.net in particular regularly updates with news stories reflecting the fate of Hazaras in Afghanistan and neighbouring countries. I argue that this sort of media activity by refugee diasporas from fragile states where

¹² For example see PNGscape at www.network54.com, particularly the politics and expatriate boards, or <http://niuginicafe.com/index.php?cat=17&wid=201&msg=thread>

conflict is ongoing is an inherently political act. Targeting Western audiences with specific news stories relating to a persecuted minority potentially tips the information balance of power. It provides an international media outlet for a group which is decidedly non-elite in its source country. In doing so it not only potentially engages international actors to intervene, but generates supporting material for new claims for refugee status. The composition of fragile state diasporas is important. Finding out whether these diasporas are elite or non-elite, who are they are communicating with via the Internet and what they are trying to achieve is potentially important for their political influence in fragile states.

Conclusions and future research

This paper has given an overview of the political features of fragile states which may be affected by Internet access in those states. The paper has argued that the relevance to policymakers of Internet access in fragile states is inherently pre-emptive. That is, it potentially exacerbates or ameliorates the political features of fragile states which shape donor activities. It needs to be evaluated and assessed as part of the 'early warning' modality of fragile states, which in itself may lead to specific policy interventions. The following paragraphs spell out the current state of research on this phenomenon, with a view to proposing a research program which may be of use to policymakers focusing on fragile states, but which focuses on research gaps on Internet use in the developing world more generally.

Most studies of the Internet in the developing world focus on its role as a service delivery mechanism or its impact on financial services and activity (Donner, 2006), (Sherwani et al, 2007). As discussed above, the existing research on the political impact of Internet access in non-Western states has focused on the use of the Internet as a 'liberation technology' in non-democratic states. There is little corresponding research on the political impact of Internet access in developing, democratising states, including fragile states (although see Karanasios 2010, Gitau et al 2010, Hill and Sen 2000, Chigona et al 2009).

There is a burgeoning field of research on the impact of media development in fragile states (Putzel and van der Zwan (2006)), which by definition includes the Internet. Not surprisingly, however, in-depth analysis of the Internet in this body of research is rare, with researchers understandably choosing instead to focus on more readily accessible media such as radio and print media. This paper has attempted to take the research which has been conducted on the political impact of the Internet in developed democracies and apply it, if only hypothetically, to the political life of developing democracies. Internet access in countries which are in a state of democratic transition, such as fragile states, has the potential to be as complex and powerful as the impact in the West, or in non-democratic states, but similar levels of research are yet to appear.

This paper has taken as a basic case study Internet access in Papua New Guinea. As discussed, Papua New Guinea's case is useful in that it has so recently experienced the introduction of Internet access, and has previously had no national phone network,

radio network or newspapers. The impact of Internet access on PNG's political space is therefore likely to be substantial. However, as in most fragile states, data is difficult to collect, if not non-existent. A useful research project might delve more closely into the actual political experiences of the currently limited number of users in a state such as PNG, or focus on the impact of the Internet on general political features of a more developed state such as Nigeria, or Pakistan, where Internet access is more entrenched and operates in the context of broader media landscape.

Ultimately, the research gap this paper identifies is not only about the impact of Internet access in fragile states. It links to questions about a general lack of work on the use of the Internet in the non-Western world which should form part of a larger research agenda. Scholars such as Recabarren et al (2007), Li and Kirkup (2007), (2008)) and Zheng and Heeks (2008) have suggested that Internet use is culturally specific. This can conceivably be related to as differences in 'information culture', meaning differences in the way populations approach information flows and associated concepts such as space and time. (Zheng and Heeks, 2008). These differences are important to the political impact of the Internet internationally and domestically. The concept is particularly important to fragile states where, as in PNG, significant cultural and social features affect the practice of democracy and concomitant ideas about information, power and truth. The Internet has the capacity to interact with cultural values such as these, which may affect its political impact.

Several barriers exist to Internet use in fragile states which will mean that its true impact, if any, will likely be some way in the future. Barriers regarding infrastructure, cost and knowledge transfer are significant, particularly in the context of mobile Internet access. In particular, mobile-only access to the Internet is a paradigm shift for web developers and infrastructure stakeholders, meaning user experiences will be affected until appropriate software is developed, although the importance of emerging markets to today's ICT economy means the development of such software is likely to be timely. A less easily transcended barrier is illiteracy. Research on the intersection of illiteracy and Internet use is rare. The research which does exist (such as Gitau et al (2009) or Medhi et al (2007)) suggests that illiteracy need not pose an ultimate barrier to Internet use, but the high rate of illiteracy in fragile states is an obstacle to increased Internet access, as is a lack of web content in languages other than English.

Despite these barriers, Internet access will potentially have a substantial impact on the political features of fragile states, particularly given increasing rates of mobile phone penetration in the developing world. This paper has outlined this potential impact regarding the following political features common to fragile states: the criminalisation/delegitimisation of the state; the factionalisation of elites; and the intervention of other actors. Given the 'early warning' methodology inherent in the fragile states mindset, any changes in the political landscape are of relevance to policymakers. This preceding paragraphs argue that Internet access may induce several such changes, across several features of the political space in fragile states. As such, it should be considered within the fragile states methodology, at least in terms of a direction for future research.

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