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## THE INFLUENCE OF NEO-TRIBALISM ON PARTICIPATORY DESIGN

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#### **Abstract**

In the course of conceptual analysis, this paper recognises the contemporary information systems (IS) stakeholder as an integral part of a tribal setting. The paper argues the importance of neo-tribal notions in managing and understanding the stakeholders' identity, their individual perspectives, their group allegiances, and the impact of tribal behavior on the IS development process. The paper demonstrates how modern society has blurred tribal characteristics and as a result imposed challenges on individuals to resolve conflicting group demands and confounded loyalties. Finally some reflections are drawn on the benefits of tribal behaviour to participatory design in IS development.

Keywords: Tribalism, Participatory Design, Stakeholders, Project Management

#### 1 INTRODUCTION

Information Systems (IS) development methods have evolved along with the advances in IT, trends in business globalization and the demands of our society. It is generally acknowledged that in the earliest days of IT, development was commonly technology driven; in the eighties and nineties, IS development put the organisation in its focus; and in recent years, with the advent of global systems and social computing, IS development has increasingly become demand (or end-user) driven. Through the years, IS engineers have had to acknowledge the importance of the various stakeholder groups and their impact on the success of an IS development project. Hence, in recent years engineers have leaned towards the use of social participatory design methods (Muller & Kuhn, 1993), where the processes of IS requirements elicitation and negotiation have become a major part of a larger social arena (Guha et al., 2005; Boy, 1997), which forces heterogeneous stakeholders to act collectively, to legitimise or align their differing agendas, invoke their actions and impose their interpretations on others (Depaula, 2004). Consequently, researchers have been pushed to examine stakeholders at their most fundamental social level to highlight the influence they have on projects and the projects' ultimate success. Interestingly, many of the social structures, functions and behaviours - as displayed by the typical IS stakeholder group - persisted throughout the life-time of the IT evolution. Moreover, some characteristics of the modern groups have remained unchanged since the dawn of our civilization, reaching back to our tribal roots.

When discussing tribal bonds, we commonly turn to anthropologists and sociologists, who assure us of importance of tribal structures and functions in every aspect of human life since the Cro-Magnon times. In fact, tribal associations provided human groups with clear physical boundaries, social and ethical standards, a common language, and above all, group protection (Jowhar, 2005; Giddens, 1997). Tribalism further provides individuals with unique identity derived from the backdrop of a social group, where the self-concept of 'me' always associates 'we' (Nauta et al., 2001). It is therefore not surprising that, even though humanity evolved cognitive abilities, acquired remarkable knowledge and skills, evolved ancient tribal structures into a highly organised and political society; when in a group situation, we have still maintained many characteristics of our tribal forefathers in our technology-rich workplaces and homes.

In this paper, we explore the issues of modern (technology-permeated) tribalism. In the following sections, we examine the literature on tribal characteristics and behaviours, explore how the concept of 'tribalism' applies to Information System (IS) stakeholders, and finally reflect on the course of action that IS management could take to respond to the tribal behaviour of his or her IS development group.

Table 1 summarises and highlights the many similarities between characteristics of early, modern, corporate tribes and IS stakeholder groups (as discussed above). It shows that in spite of many intrinsic and environmental changes, in terms of IS stakeholder groups distribution, unparallel fluidity and dynamism, diminished reliance on commonalities of language and proximity, the essential tribal characteristics still apply to the modern technologically empowered IS stakeholder group and thus they should be acknowledge as a *neo-tribe* with *neo-tribal* characteristics capable of influencing IS development.

Maffesoli (1998) discussed modern society and its influence on individuals when it comes to design. He described the modern society as 'neo-tribalistic', comprising a main tribe made up of unstable sub-tribes that lack a common concept or identity. He also noted that individuals, although aligned to the sub-tribes at times do frequently move between them.

Interestingly, Maffesoli (1998) argued *neo-tribalism* to be detrimental to design because the deindividualised nature of the tribe members develops their immediate perceptions based on the tribe's point of reference, thus, they fail to gain the big picture perspective. Consequently, modern tribesmen are driven

by the goals and issues of their own sub-tribe and act in a tribalistic way to defend the traditional (tribal) ways.

Facet	Early (Cro- Magnon) Tribe	Contemporary Generic Tribe	Contemporary Corporate Tribe	IS Stakeholder Tribe
Uniformity	homogeneous	heterogeneous	homogeneous in corporate affiliation heterogeneous in sub-tribe affiliations	homogeneous in mission heterogeneous in sub-tribe affiliations
Boundary	clearly bounded	fluid boundaries	fluid organisational boundaries	fluid organisational boundaries  yet small and bounded are more agile and adaptable yet protective of their own boundaries
Proximity	geographic	geographic	organisational	globally distributed dependent on membership proximity via technology shared information shared system services joint system ownership
Communication	common language	common language	unification is controlled by attention exchange between members emphasis on shared understanding less reliance on common national language unique industry or departmental language common methods of collaboration common communication channels	less reliance on common national language unique industry or departmental language common methods of collaboration common communication channels
Common Leadership	common leader	common leader	a common figure of authority who typifies the value expectations of the tribe	distribution of power administrative support formal decision processes strong leadership is effective
Membership	stable	dynamic	emotional collectiveness desires peer acceptance membership gives value and non-members deserve sub- human acknowledgement and treatment	open and dynamic membership yet stable membership is successful membership is dependent on information relevant to IS development

Facet	Early (Cro-	Contemporary	<b>Contemporary Corporate</b>	IS Stakeholder Tribe
	Magnon) Tribe	Generic Tribe	Tribe	
Shared Social Structure	primordial social ties blindly accept direction	social structure blindly accept direction	organisational structure	flexible organisational structures
Shared Political Structure	parochial	political	Corporate culture	political consensus based socio-political standards yet parochialism is common

Table 1 Comparison of early, contemporary, corporate and IS tribes (continued)

#### 2 TRIBES AND TRIBAL CHARACTERISTICS

The earliest anthropologists used the notion of a tribe to refer to primitive societies organised largely on the basis of proximity and kinship, acting as individual micro groups of a land (Giddens, 1997). As knowledge developed and the need for a fresh gene pool became evident tribes began to affiliate and eventually amalgamate. Hence, the definition of a tribe also developed to include macro-tribes (pre-state) bounded by political unison and leadership, which allowed them to wield significant economic and administrative influence over other regions (Fried, 1975). Evolution has resulted in a contemporary view of the 'tribe' as that of a social group sharing a common culture and dialect, under the leadership of traditional authority, and with whom the external state may choose to interact (Wikipedia, 2006, term 'tribe').

Commonality of culture and dialect hinged upon the ability to carry out an ongoing communication between generations of tribe members. In fact, it is this communication, and not mere proximity and interaction, which were at the very root of tribal success facilitated through transfer of knowledge for social construction (Aiello & Dunbar, 1993) and for the creation of its social structures (Lieberman, 1977). The tribe's very survival was reliant on the transfer of information to create bonds, dependence, social organisation and life making decisions (Aiello & Dunbar, 1993; Steele, 1994; Giddens, 1997). The original concept of a tribe encompassed all facets of the members' daily lives due to the interdependent nature of co-existence. Members may have ventured from the mythical tribal geographical boundary for hunting purposes yet they remained within proximity of their fellow tribal members and tribal influences. Maffesoli and Foulkes (1998) recognised the tribal concept and all its influences as being relevant to contemporary business. In fact they acknowledged the existence of the 'neo-tribe' in the form of corporate tribes or social groups. Maffesoli and Foulkes (1998) felt the generic historical tribal concept of physical proximity and membership gained by birth right or marriage had been replaced by 'emotional community' or the feeling of 'belonging to a collective'. They described the characteristics of a neo-tribe as unstable because its collective is based on fluidity, punctuated gathering and scattering. In support, Hilder (2004) expanded on the concept of the neo-tribe arguing it influences all group activity as every human community endemically possesses the following modern tribal characteristics;

- Sharing an authority figure who exemplifies the value expectations of the tribe;
- Followers blindly accept the leader's example of values;
- Membership gives value and non-members are neither acknowledge nor treated well
- Group unification is dictated by attention exchange between members.

Interestingly, Hilder (Hilder, 2004) feels that modern corporate groups are psychologically indistinguishable from historical or Cro-Magnon like tribes in that they are driven by peer acknowledgement and acceptance, they are obedient to authority figures and their knowledge of other tribes in different hierarchical levels of the organisation.

It is now commonly accepted that IS development is dependent on three groups; IT, Business and end users (Easterbrook, 1991; Carroll & Shanks, 2001; Shi et al., 1996; Borovits et al., 1990). Using the definitions above, based on their social emotional community and their organisational and/or departmental proximity individually, these groups can be considered tribes. Therefore, it is not surprising that when they enter any situation of confrontation or negotiation, as often encountered during the Requirements Engineering Process (REP), their actions and reactions are based on their individual tribe's influences, goals and issues (Price & Cybulski, 2006). However, as they proceed through the REP and interact with the one common goal to develop the IS, an acquired proximity and emotional collectiveness should develop a unified 'IS stakeholder tribe'. The issue raised by this research is that the success of the IS has become dependent on the development of the new entity, the IS tribe and is therefore subject to the influences of *neo-tribalism*. Therefore from this point forward when discussing the IS tribe this article will be collectively referring to the sub-tribes; developers, business and end user stakeholder groups who interface as one IS tribe consisting of members not assimilated to the new tribal characteristics because of the retention of their sub-tribe characteristics and life experiences which ultimately define their individual goals, issues, perspectives and perceptions (Price & Cybulski, 2006).

To substantiate the theory of an IS stakeholder tribe we will assess the main characteristics of a generic tribe, pre-state or contemporary against a contemporary corporate tribe and then compare this to the characteristics of a contemporary IS stakeholder group to establish its qualification as a *neo-tribe* influencing IS development based on *neo-tribalistic* characteristics. Thus, sourcing the accepted lists of an early (Cro-Magnon like) and contemporary generic tribe's characteristics; uniformity, proximity, boundary, membership, language and leadership as well as, social and political structures (Fried, 1975; Wikipedia, 2006, term 'tribe'; Hilder, 2004; Maffesoli & Foulkes, 1998), we determined the most prominent features of a contemporary corporate tribe as follows.

Considering *uniformity* early tribes were homogenous in most aspects of their lives because of their highly independent and/or isolated existence from other tribes (Refer Table 1). As tribes amalgamated for protection and other social reasons they became more heterogeneous. In the modern world the corporate tribe remains homogeneous through a distinct organisational affiliation that prescribes a set of values and standards. This is not necessarily the case for the IS stakeholder group as representatives may have origins in different companies; however, both the corporate and IS group are heterogeneous because of their members' distinct sub-tribe affiliations. For the IS stakeholder group the sub-tribe influence is particularly evident during requirements negotiation where differences based on representation, expertise and most importantly their disparate needs must be reconciled. Yet, they do demonstrate the tribal characteristic of *uniformity* as they are homogenous in their mission (to jointly construct information systems), as well as, some of the processes and objectives shared between the group members. And still, the Cro-Magnon traits within us favour the IS tribe based on sameness, compliance with the norm and conformity (Kaplan & Martin, 1999; Klischewski, 2001; Ransley, 2000).

The *tribal boundary*, another tribal characteristic, has always been an ephemeral phenomenon continually under construction because typically tribes were nomadic and had to move for food, shelter or to avoid war or pestilence (Jowhar, 2005; Giddens, 1997) (Refer Table 1). In fact the boundary became less geographical and more *emotional* providing the feeling of 'belonging to a collective' rather than living within one (Hilder, 2004; Maffesoli & Foulkes, 1998). The corporate tribe and the IS stakeholder group do not deal with issues of shelter or food in a business environment however they both have geographical and emotional boundaries which are very fluid. A corporate tribe's boundaries change based on

amalgamations or dissociation. For the IS stakeholder group these changes are specifically based on the IS development and operation which often involves stakeholders employed across projects, departments and organisations. IS infrastructure may also link multiple organisations, some forming alliances, others collaborating via supply chains, or establish business relationship (even for an instance of conducting a single transaction). And yet, whether embedded within an organisation, established as an independent business unit, or collaborating within an alliance, the IS stakeholder group shows the *tribal boundary* characteristic as they also struggle to protect their boundaries, risk conflict and enter into tribal warfare to secure their resources (Lewicki et al., 2003a; Lewicki et al., 2003b).

Proximity of tribe members is commonly considered the pre-condition to effective tribe formation (Refer Table 1). In a modern global environment, both corporate tribes and the IS stakeholder groups are often distributed geographically with different time zones, language and cultural boundaries, Nevertheless, in both cases a shared global communication infrastructure enables members to establish relative proximity. Thus proximity is no longer geographic but communicational hence IS tribes are still totally dependent on effective and efficient communication channels. Proximity is also influenced by language. While the commonality of national language is no longer a significant barrier to trade and business cooperation, industry and departmental distinction, specialist terminology, and the specificity of domain knowledge, can indeed hinder IS stakeholder groups' communication and interaction. Therefore shared understanding of purpose, social structures and processes, are as vital to an IS stakeholder group member as they were to the Cro-Magnon tribes (Easterbrook, 1991; Easterbrook, 1994). Importantly, corporate tribes differ from the IS stakeholder group in that a corporate tribes' proximity is determined by the organisation where, the IS stakeholder groups' proximity is an evident neo-tribal characteristic determined by association with the development and implementation of the IS. In other words it is dependent on membership to the IS stakeholder group which, is dynamic yet only open to project stakeholders whose inclusion to the tribe is reliant on the project or infrastructure needs, techno-organisational needs, budgets and deadlines. These in turn can impact the IS stakeholder group size and its life-time. Nevertheless, in all this complexity of global collaboration, the most successful IS stakeholder groups are not large and fluid but rather those, which can take advantage of their small, stable and bounded workforce to assure its superior agility within its area of specialisation (Nerur et al., 2005).

Effective *leadership*, a further tribal characteristic, was vital to early tribal survival as it facilitated the creation of tribal identity and shared vision (Refer Table 1). While small groups of Cro-Magnon leaders were capable of single-handedly managing a small range of tribal functions, in contrast the planning and operation of a corporation or a large scale IS usually requires large administration and an active governance body. Where the two groups may differ is the reliance of IS stakeholder groups to engage in a formal decision making process and their unwillingness to blindly follow any authority who may only exists for the short period of IS development. Still, effective IS development necessitates the support of a management group which includes development and project managers, as well as, project leaders. In spite of the distributed power and the need for the vast administrative and managerial support of IS stakeholder group, strong and long-term archetypal leadership from the top, i.e. CEO or CIO, are still considered essential to the success of the modern IS stakeholder groups' survival and hence is considered a neo-tribal characteristic of the IS stakeholder group (Deutsch, 1973; Myers & Young, 1997).

Early tribes' social structures were shared and parochial with members loyally 'towing the party line'. Through tribal amalgamation social structures changed but devotion continued even if it was really surrender for the greater good. And even though the corporate tribe and the IS stakeholder group have been greatly affected by global influences enabled through communication, both groups still adhere to a corporate social structure. However, due to the complexity of IS development and operation, IS organisational *structures* are often determined on an as-need-be basis by the IS hosting and user organisations. Therefore, in contrast to the fixed social structures of early tribes, the IS organisational

structures are quite fluid and dynamic, they are also commonly monitored for their effectiveness, and then changed and improved when so required. At the same time, inter-tribal marriage, trade and warfare emulated many aspects of the modern IS tribe's fluidity in structure and membership (Nauta et al., 2001) therefore the IS stakeholder group can be considered to possess the *neo-tribal* characteristic of *shared social structure*.

In contrast to Cro-Magnon tribes, IS stakeholder groups cannot be parochial. IS stakeholder groups need to accept their members' opinions, individual perspectives and issues to achieve consensus on all major (possibly contentious) requirements (Price & Cybulski, 2006). The socio-political standards employed in the negotiation process are often regulated, and when such procedures are non-existent, as for the corporate tribes they are commonly implied by the business functions and the organisational culture. Interestingly, in many contemporary tribes, the consensual decision making by tribal elders reflects the modern IS stakeholder groups' management approach. At the same time, many IS projects fail because decisions are made only by the business stakeholder sub-tribe from a management perspective based on their goals and issues (Myers & Young, 1997).

Apart from the sharing of tribal characteristics, it is worth remarking that the interactions between individuals in any group are influenced by many factors including personal motivation, organisational culture, environment, task at hand, individual roles, group norms and group behaviour (Milton et al., 1984; Giddens, 1997). Also important is that irrespective of the era or location, all groups share common implicit and explicit social structural and behavioural influences (Bovee & Thill, 2000; Milton et al., 1984), e.g. social or functional hierarchy, accepted procedures or rituals and rules to follow, reward systems, expected leadership and personal behaviours, and group norms. For this reason, we have undertaken research of historical and contemporary *tribalism* to identify the tribalistic nature of groups and to establish if these influence the IS tribe during IS project development.

### 3 TRIBALISM

Hilder (2004) argued that neo-tribalism drives the behaviour of individuals in the work environment and the viability of the organisation can be compromised if this tribalism is not understood. Tribe members (whether early, modern, corporate or IS) not only demonstrate some common behaviour and characteristics but also share their opinions, perspectives and more importantly their fundamental belief systems, which all help maintain the tribal cohesion and control. The commonality of world views pertains to the issues of group identity and reputation, ideology, access to information and the potential conflict with other groups (Jowhar, 2005; Gaetner & Schopler, 1998). Our research has shown that IS stakeholders can be viewed through the lens of tribalism and tribalistic concepts, they indeed demonstrate tribal behaviour, and will just as fervently as Cro-Magnon man defend their tribe. What is important to note is initially IS tribe members come to the REP not unified as the IS tribe but more representing the sub-tribes; developers, business and end-users. Hence it is these sub-tribes goals, issues and norms that can detrimentally influence the REP until the sub-tribes become one unified IS tribe. When discussing this concept it is important to note that an IS tribe can hold membership for individuals with varying cultures, political, socio-economic, religious, educational, industry and departmental backgrounds. As researchers we acknowledge each facet affects IS tribe member's individual personality, perceptions and perspectives as well as bargaining behaviour (Price & Cybulski, 2005; Price & Cybulski, 2006; Price & J., 2006); hence, we offer this generalisable theory based on the context of an IS tribe consisting members not from diametrically opposed backgrounds. Previously we discussed the tribal characteristics uniformity, proximity, boundedness, communication, language, common leader, and shared social and political structures. The following discussion will cover tribalism concepts and how they influence the IS tribe during IS development.

One of the most significant concepts in tribalism is *entitativity*, which can be defined as the state a group reaches as they become one unit or entity (Gaetner & Schopler, 1998) (Refer Table 2). Entitativity creates group bias and a tendency to favour in-group rather than out-group decisions. Jowhar (2005) a contemporary anthropologist who researches Somalian tribes, noted that individuals in groups, like an IS tribe, share an exaggerated or 'grandiose self image' in respect to other groups. This self image is primarily based on the tribal characteristics membership and proximity (as discussed earlier). In fact it has been frequently documented that one attribute of a 'successful' business tribe is the social, emotional and psychological definition individuals receive from being part of a tribe that differentiates them from other tribes (Immelman, 2003; Maffesoli & Foulkes, 1998; Hilder, 2004). The grandiose self-image is reflected in the 'us and them' situation that often arises between the different IS sub-tribes representing IT, business and the individual end-users during requirements negotiation. The bias resulting from these sub-groups certainly influences the acceptance of any decisions put forward by those considered to be 'outsiders', the stakeholders who are not members of their own tribe. As Maffesoli (1998) stated this deindividualisation and neo-tribalistic 'inward' preferences can inhibit the contemporary design process (such as that prevalent in IS development), due to ignoring the 'outward' big picture, which can hinder viewpoint alignment essential for a natural 'inter-group' consensus building, thus commonly resulting in narrow decision outcomes that lead to the subsequent dissatisfaction. Therefore it is reasonable to say that the IS tribe and IS development are influenced by the tribal concepts entitativity and grandiose self image.

The *tribal shadow* or *reputation* is another tribal concept; however it is not possessed by a tribe in its own right but rather as a group's trait perceived by the tribal counterparts (Jowhar, 2005). Traditionally a tribe's reputation reflected their abilities as fighters, hunters and trackers (Giddens, 1997). Nowadays, in business, strong tribes have clear measures of success which they record and celebrate to ensure a reputation is developed and shared to create an image that provides competitive advantage (Immelman, 2003). This competitive advantage is sought at the departmental, business, industry and global level, often resulting in a 'brand' image. In the IS context this manifests as stakeholders' perceptions of their counterparts based on their level of knowledge, their ability to negotiate, their personality and their tribal shadow which includes the power associated with their status in the social or employment hierarchy and their departmental position. Acquired and visible reputation can expedite or hinder the inter-stakeholder negotiation process or in contrast, can be used to create alliances, persuade the less informed or block counterparts (Morris et al., 1999). Hence, the *tribal shadow* should be considered an important IS tribal influence on IS development.

Traditional (early) tribes are claimed to have survived by relying on *group polarisation* (Giddens, 1997) (Refer Table 2). Under the tribal concept of group polarisation, the individual identity is less important than the group identity or for that matter the group's survival (Jowhar, 2005). In extreme cases, this is evidenced by some historical tribes that would sacrifice their own (including even cannibalism) for the good of the great. Thankfully in modern society we do not (often) revert to atrocities; however, when under threat we do turn to group polarisation and unite whether it be at the corporate or national level (Immelman, 2003). In fact, McGee-Cooper (2004) believes that the standard organisational hierarchy encourages *neo-tribalism* and this in turn results in *group polarisation* within departments and agencies, who consider themselves sub-tribes, and who are often threatened by other corporate groups competing for the shared resources. During IS requirements negotiations, *group polarisation* can be utilised negatively or positively and may manifest as collusion, peer pressure, majority vote or authority power. Whether used positively or negatively, a tendency to *group polarisation* is an influence that must be acknowledged by management of both business and technology groupings.

In the past, tribes survived by strengthening themselves through continually changing political allegiances (Giddens, 1997). In primal terms, strength usually came with numbers, the expansion of territories to increase food sources and through the widening of the gene pool (Jowhar, 2005). Coordinating *tribal war* 

and controlling day-to-day social behaviours of the group required strong leadership which often meant dictatorship in one's own tribe or in the case of allegiances, submission to the stronger for the benefit of the group (Jowhar, 2005). Weak tribes often conceded their own perspectives for the sake of survival, thus, leading to the willing sacrifice of their own identity through the stronger tribal concept, *group think* (Refer Table 2). In such situations, group consensus was achieved with minimal negotiation and was based on power, strength and numbers. The *group think* is different from *group polarisation* in that it is a willing choice rather than a forced action. It relies on the alignment or willing surrender of a perspective as opposed to the forced sacrifice of it, which can lead to project failure (Directorate, 1993; Eglizeau et al., 1996; Finkelstein & Sommerville, 1994). *Group think* also takes place during IS requirements elicitation. IS tribal members can cooperate and willingly surrender to the *group think* by voting with the majority or they can adopt a new perspective and align themselves to the *group think*. Either way, it is a tribal concept that influences IS negotiation and development that requires recognition.

Information filtering is a further tribal concept (Jowhar, 2005) (Refer Table 2). Tribes historically filtered information about the world based on their self-interest or an existentialist standard (Maffesoli & Foulkes, 1998). In other words, tribal members only acknowledged what was beneficial or detrimental to them and did not consider the external environment if it did not affect them personally. This is somewhat different in the business world, where there is usually an employment hierarchy and naturally some members will be more informed of the organisation's future direction than others. During IS development *information filtering* can influence the project success or failure, as understandably, project members can only make decisions based on the information they are provided. Hence, if information is withheld or misinterpreted, e.g. due to the power struggle in the organisation or communication mismanagement, the incomplete will lead to incorrect decisions. Thus, the tribal concept of *information filtering* should also be considered a *neo-tribalistic* influence on IS development.

The final tribal concept, discussed in this paper, is *tribal war* (Refer Table 2). Politics, revenge and survival were the primary reasons *tribal wars* were fought and to a certain extent this has not changed (Jowhar, 2005). In the contemporary business context *tribal war* still exists and may manifest as a tribe member defending their job when they fear replacement by automation, corporate politics which affects all interactions including requirements negotiation or prior conflict existing between counterparts which influences any negotiation (Easterbrook, 1993; Robbins, 1974; Strauss, 1978). Most importantly tribe members still battle to secure their identity as individuals when not challenged, but as a group when challenged (Immelman, 2003). In particular IS tribes battle to achieve their goals and solve their issues during requirements negotiation (Price & Cybulski, 2006). This conflict is usually inevitable during the REP because of the tribalistic nature of the participants and the need to align the various IS sub-tribe viewpoints; however, conflict will not always be detrimental as it can expose underlying issues that need to be resolved before the IS is built and implemented in the organisation (Easterbrook, 1993; Easterbrook, 1994; Deutsch, 1973; Robbins, 1974; Strauss, 1978). Therefore the concept of *tribal war* must also be acknowledged as a *neo-tribalistic* influence on IS development.

Table 2 is a summary and comparison of views on *tribalism* from the vantage point of generic, corporate and IS tribes. The summary highlights the main concepts as they relate to the behaviour of different types of tribes. Importantly however, as IS stakeholders are constantly interlocking seeking their contradictory objectives, project managers need to be looking for ways to improve the chances of project success. They need to acknowledge that certain patterns of behaviour by participating stakeholders, which may lead to negative effects and sometimes be offensive to others, arise not from the ill-will of the participating parties but rather from their tribal loyalties, their drive to protect their tribal associates, and from the will to elevate the status of their group and its members.

Generic Tribe Behaviours	Contemporary Corporate Tribe	IS Tribe
Entitativity or grandiose self image	Individuals are defined by their tribal membership.	Stakeholders are representative of specific groups whose goals and issues they defend during IS
mage	trioar memoersinp.	negotiations.
Tribal shadow based on	Tribes record and celebrate	All rely on expert opinion based on reputation;
their history	success to reinforce their	those lesser informed or lower in employment
	identity and value.	rank may rely on management for decision making.
Group polarisation	Individuals act to reinforce	The needs of the individual do not exceed the
	their self-worth, tribe protects	limits set for the project in respect to deadline,
	security.	development timeline and budget.
Group think	Tribe offers sub-ordinate identity to sub-tribes.	Individuals will often sway to majority or peer pressure.
Information is filtered based	Tribes communicate in a non	Information is filtered through the employment
on self interest or an	traditional, intuitive and	hierarchy on a need to know basis.
existentialist standard	subjective manner.	-
Conflict was based on	Tribes act to secure their self	Conflict can arise if goals are not achieved or if
politics, revenge or survival	preservation if their security is	insufficient communication occurs.
	under threat.	

Table 2 Comparison of tribalistic concepts and behaviours

Should management resist their team members' tendencies to be tribal? Should tribal behaviour be isolated and punished? Is tribalism damaging managerial effectiveness and preventing business opportunities to take place? Even asking these questions hints on the fears of the primordial, unexplained and innate. The questions assume that tribal behaviours represent some savage and primitive acts, which are capable of potentially damaging modern settings, its projects and ultimately the organisational success. However, there is nothing further from the truth - on reflection of the previous discussion (see Table 1 and 2) being 'tribal' also means being a team player, being loyal, caring for the team and its reputation, being protective of team members, being unselfish, favouring the group's interests over own, acting in unison with the group, being supportive of the leader, trusting the leader, etc. Being tribal also means being natural and being one's self, in a sense it also means being uninhibited and open. The natural tendency to be part of a group (possibly more than one) with its huge positives and some negatives can be effectively harnessed by skilled managers to the benefit of the project, the team or the entire organisation. The inclusive entitativity of modern tribal structures allows members to be readily adopted when needed - this supports the IT and design tribalism, and promotes participatory team work (Guha et al., 2005; Boy, 1997). Group polarisation can be wielded by management in focussing the attention of the team members drawn across the organisation to assist in the participatory design tasks (Mao et al., 2005). While group think and conflict should be actively discouraged by employing creative group techniques (Holmquist, 2006) and negotiated consensus outcomes (Easterbrook, 1994).

The main difficulty lays in recognising and promoting *neo-tribalistic* behaviour in its modern and technologically intensive environment, while suppressing highly selfish and individualistic conduct, which is being promoted by the modern business education and which seems to discourage participatory engagement and go against the innate and tribal propensities.

### 4 CONCLUSION

This paper has acknowledged the importance of tribalism and social identity to mans' survival in the past. It has also demonstrated that even though heterogeneous in nature, contemporary business tribes and in

particular the IS stakeholder *neo-tribe* share the tribal characteristics established as far back as Cro-Magnon times including *membership, proximity, communication, strong leadership, boundaries* and a *social and political structure* paramount to tribal survival. This article has also explained how tribalistic behaviours and concepts such as *entitativity*, the *group think, group polarisation, tribal shadow, information filtering* and *tribal war* that affect all group interactions have survived the evolution of man to remain an influence on our modern day group interactions in both the social and business context. But more specifically as an influence on the IS development process in particular the requirements negotiation phase. In context, this article highlights the importance for project sponsors and developers to acknowledge that even though as a race we have evolved, we still survive by resorting to our fundamental tribalistic behaviours and these behaviours detrimental or positive, do influence IS development and therefore should be recognised as contributors to IS project success.

#### References

Aiello, L. C. and Dunbar, R. I. M. (1993) Neocortex size, group size, and the evolution of language. *Current Anthropology* 34 (2), 184-193.

Borovits, I., Ellis, S. and Yeheskel, O. (1990) Group processes and the development of information systems. *Information and Management* 19, 65-72.

Bovee, C. and Thill, J. (2000) Business communication today sixth edition. Prentice Hall, Sydney.

Boy, G. A. (1997) The group elicitation method for participatory design and usability testing. *Interactions* 4 (2), 27-33.

Carroll, J. and Shanks, G. (2001) Modelling the requirements process; where are the people? In *ACIS*, pp 1-11, Australia.

Depaula, R. (2004) Lost in translation: A critical analysis of actors, artifacts, agendas and arenas in participatory design. In *Participatory Design Conference*, pp 162-172, ACM, Toronto, Canada.

Deutsch, M. (1973) The resolution of conflict. Yale University Press, New Haven.

Directorate, T. C. (1993) Report of the inquiry into the london ambulance service. South West Thames Regional Health Authority.

Easterbrook, S. (1993) Negotiation and the role of the requirements specification. In *Social dimensions of systems engineering: People, processes, policies and software development*, pp 144 - 164, Ellis Horwood, London.

Easterbrook, S. (1994) Resolving requirements conflicts with computer-supported negotiation.

Easterbrook, S. M. (1991) Elicitation of requirements from multiple perspectives. *Department of Computing*,

Imperial College of Science, Technology and Medicine, University of London, London, p 126.

Eglizeau, C., Frey, O. and Newman, M. (1996) Socrate: An implementation debacle. In *IEE Colloquium on Human, Organisational and Technical Challenges in the Firm of the Future*.

Finkelstein, A. and Sommerville, I. (1994) The viewpoints faq.

Fried, M. H. (1975) *The notion of tribe*. Cummings Publishing Company, Menlo Park.

Gaetner and Schopler, J. (1998) Entitativity and intergroup bias: An interconnection of self and others. *European Journal Of Social Psychology* 28, 963-980.

Giddens, A. (1997) Sociology. Polity Press, Cambridge.

Guha, M. L., Druin, A., Chipman, G., Fails, J. A., Simms, S. and Farber, A. (2005) Working with young children as technology design partners. *Communication of the ACM* 48 (1), 39-42.

Hilder, T. (2004) Viability versus tribalism. Kybernetes 33 (3/4), 632-646.

Holmquist, L. E. (2006) Inventing the future. *Interactions* 13 (2), 44-ff.

Immelman, R. (2003) *Great boss, dead boss.* Stewart-Phillip International, Arizona.

Jowhar, D. A. (2005) Part v: Essentials of tribal psychology.

- Kaplan, M. F. and Martin, A. M. (1999) Effects of differential status of group members on process and outcome of deliberation. *Group Processes & Intergroup Relations* 2 (4), 347-364.
- Klischewski, R. (2001) Commitments enabling co-operation in distributed information systems development.
- Lewicki, R. L., Barry, B., Saunders, D. M. and Minton, J. W. (2003a) *Negotiation*. McGraw-Hill, Burr Ridge.
- Lewicki, R. L., Barry, B., Saunders, D. M. and Minton, J. W. (2003b) *Negotiation: Readings, exercises and cases.* McGRaw-Hill/Irwin, New York.
- Lieberman, P. (1977) More on homonid, evolution, speech and language. *Current Anthropology* 18 (3), 550-551.
- Maffesoli, M. and Foulkes, C. R. (1998) Postmodern tribalism. Design Issues IV (1 & 2), 140-151.
- Mao, J. Y., Vredenburg, K., Smith, P. W. and Carey, T. (2005) The state of user-centered design practice. *Communications of the ACM* 48 (3), 105-109.
- Mcgee-Cooper, A. (2004) Tribalism: Culture wars at work. *The Journal for Quality and Participation* Spring, 12-15.
- Milton, C. R., Entrekin, L. and Stening, B. W. (1984) *Organizational behaviour in australia*. Prentice-Hall of Australia Pty Ltd, Sydney.
- Morris, M. W., Larrick, R. and Su, S. K. (1999) Misperceiving negotiation counterparts: When situationally determined bargaining behaviours are attributed to personality traits. *Journal of Personality and Social Psychology* 77, 52-67.
- Muller, M. J. and Kuhn, S. (1993) Participatory design. Communications of the ACM 36 (6), 24-28.
- Myers, M. D. and Young, L. W. (1997) Hidden agendas, power and managerial assumptions in information systems development: An ethnographic study. *Information Technology and People* 10 (3), 224-240.
- Nauta, A., De Vries, J. and Wijngaard, J. (2001) Power and biased perceptions of interdepartmental negotiation behaviour. *Group Processes and Intergroup Realtions* 4 (3), 263-270.
- Nerur, S., Mahapatra, R. and Mangalaraj, G. (2005) Challenges of migrating to agile methodologies. *Communications of the ACM* 48 (5), 73-79.
- Price, J. and Cybulski, J. (2005) Stakeholder bargaining behaviour the social backbone of communication, negotiation and consensus as used for information system requirements elicitation. In *Australian Workshop on Requiremenst Engineering (AWRE)*, Melbourne, Australia.
- Price, J. and Cybulski, J. (2006) The importance of is stakeholder perspectives and perceptions to requirements negotiation. In *Australian Workshop on Requiremenst Engineering (AWRE)*, Adelaide, South Australia.
- Price, J. and J., C. (2006) A negotiation model for the alignment of is stakeholder perspectives and perceptions. In *Australian Workshop on Requirements Engineering*, Adelaide.
- Ransley, P. (2000) White paper: A primer on requirements engineering & management version 0.2.
- Robbins, S. P. (1974) *Managing organizational conflict: A non-traditional approach*. Prentice Hall, New Jersey.
- Shi, Y., Specht, P., Stolen, J. and Vanwetering, F. (1996) A consensus ranking for information system requirements. *Information Management & Computer Security* 4 (1), 10-18.
- Steele, J. (1994) Communication networks and dispersal patterns in human evolution: A simple simulation model. *World Archaeology* 26 (2), 126-143.
- Strauss, A. (1978) *Negotiations: Varieties, contexts, processes and social order*. Jossey Bass Publishers, San Francisco.
- Wikipedia (2006) Wikipedia encyclopedia. http://en.wikipedia.org/wiki/.