Public sector site is always known for its continuous games of power and control. Public managers often use control to enhance their power and to legitimise their actions. Empirical evidence showed that during the process of implementing accounting information system (AIS), the management adopted various strategies in securing accountants’ participation such as offering accountants to be part in the implementation process as change agents and change champions. Participation is seen as a mechanism to mitigate resistance and to cement commitment of the accountants to the new AIS which would ultimately produce “consent”. Theoretically, this paper is informed by Tannenbaum & Kahn (1957) contribution to organizational control structure, especially their idea that the total amount of control within an organization can be increased by emphasising decision-making among different organizational members. Nonetheless, this paper argues that multilevel conflicts need to be resolved before participation can be secured and ultimately management control can be enhanced in organizations. The significance of participation in resolving conflicts in the public sector has been under researched and this deficiency remains the focus of this paper. Case studies were conducted in four Malaysian public sector organizations where the interplay of participation, control and conflict were observed and suggestions are proposed for future research.

**Keywords**: Control, Participation, Public sector, AIS, Conflict.
workers skills for effective interface with new processes and technology while inculcating the culture of excellence and productivity mindset in the society. Malaysia is targeted to assume the status of developed nation by the year 2020 and to this end, to improve the effectiveness and efficiency the concept of Electronic Government (EG) has been introduced in the public sector (Karim & Khalid, 2003). Initiatives are now undertaken at all levels of administration to ensure that this can be achieved by having an integrated information system starting with finance sections as they are considered to be the vital components of government departments. However, the implementation of new AIS in public sector organizations face challenges from accountants who have been in their comfort zones for ages. Obviously, changing the mindset and influencing the accountants to accept the new AIS are the main challenges faced by the Malaysian public sector management.

Participation in the AIS implementation is seen as a way to secure commitment of the accountants, to reduce resistance and to improve management control. Previous studies in management, implementation and change claim that participation can result in success, satisfaction of the users and improve in management control (For further details, see Barki & Hartwick, 1994; Ives & Olson, 1984; Tannenbaum & Kahn, 1957). This lead to some organizations practice employees’ participation in managerial decision making.

In management control studies, Tannenbaum & Kahn (1957) developed the concept of a polyarchic model which implies that the introduction of worker participation in management may lead to an increase in management control over human resources by creating attitudes of involvement and commitment to the organization among all members. This perspective is a break from the more established view of control depicted by the autocratic or oligarchic model, where managers are allocated with legitimate or formal control that gradually diminishes with the decent of hierarchy (Richbell, 1983).

Four organizations experiencing change in their AIS are chosen by comparing empirically based pattern with a predicted one taking within the same context of providing health and education in the public sector. The fundamental comparison between the predicted and actual pattern was however, involved no quantitative or statistical criteria and therefore it may lack precision. This nevertheless may allow the researcher for some interpretive discretion of claiming whether the patterns were violated or in fact, matched. By illustrating empirical evidence in these organizations, this paper showed that the management in the Malaysian public sector did make use of participation to enhance its management control. Nonetheless there are prominent issues of conflicts that need to be recognised and resolved before participation can improve its management control through employees’ participation as suggested by Tannenbaum & Kahn (1957).

This paper is structured as follows. First, it briefly summarises the concept of participation and management control in management and information system
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(IS) literature. Next, a brief introduction and explanation of Tannenbaum & Kahn’s (1957) Polyarchic Model of Control & Hierarchical Levels is provided. Moving from the theoretical level, empirical evidence from four organizations experiencing change are then presented to reveal how the issue of conflict are dealt with in securing participation of the accountants to enhance management control. The last section concludes the paper and suggests avenues for future research.

The terms “user participation” and “user involvement” have been commonly used interchangeably in the literature. In IS literature, Robey et al. (1989, p. 1174) define participation as referring to the extent to which members of an organization are engaged in activities related to system development. Successful innovation implementation depends upon acceptance by organizational members targeted as end-users of the innovation (Leonard-Barton & Deschamps, 1988, p. 1252) as user involvement is frequently cited as one possible method of overcoming implementation failures (Tait & Vessey, 1988). The users need to feel involved and adequately represented in the systems development process, understand the systems objectives, receive adequate training, and be provided with adequate system documentation (Lawrence & Low, 1993). Participation is also thought to increase user acceptance of systems by: developing realistic expectations about system capabilities; providing an arena for bargaining and conflict resolution about design issues; fostering system ownership by users (Baroudi et al., 1986; Robey & Farrow, 1982); decreasing user resistance to change and committing users to the system (Markus, 1983).

In a general sense, user participation is one way to foster the involvement, appreciation, and mutual understanding (Swanson, 1974). It is articulated as the ‘silver bullet’ that will provide employees who are motivated and trained to initiate their own decisions, yet work effectively within a team when required (Strauss, 1998). Thus, accountants’ support for AIS implementation in any organization is more likely to be won if they participate in the early stages (see also Ginzberg, 1981).

There has been some concern that integration and the centralisation of new AIS can cause loss of control over the delivery of accounting information and thus reduce reliance on accountants for information that they previously supplied. These lead to situations where accountants resist the implementation of new AIS in their organizations. Ainsworth (1977) claimed that the underlying causes of resistance are lack of understanding and fear of job loss. Thus, Brignall et al. (1999b) discovered that management accountants were relatively uninvolved in change programmes and were little used to drive or even support process improvements in organizations. There are also cases where the accountants were often directly involved in the design and maintenance of
information systems (Burns & Scapen, 2000), highlighting the emergence of ‘hybrid accountants’ – who have both accounting knowledge and in depth understanding of the operating functions or commercial processes of the business.

Barki and Hartwick (1989) noted that participation that occurs during one or several stages of the problem solving process can take variety of forms and can also vary in scope, occurring during one or several stages of the problem solving process. Mumford in 1997 proposed three types of participation, from least to most direct: consultative; representative; and consensus. However, there is a lack of empirical evidence in the literature about how accountants’ participation can improve management control in organizations experiencing change, such as new AIS implementation.

Control, in general, is a process in which one party intentionally influence the behaviour of another. Management control has been defined and debated elsewhere in the literature. Following Richbell (1983), this paper adopts an internal focus of an organization (micro level) and its prime concern is with management control. Admittedly, management control is not the only form of control within an organization but since accountants’ participation in management is an essential element in many organizations, it is imperative to examine how the accountants’ participation can improve management control so that ultimately, human resources can be used effectively to achieve organizational objectives.

Howcroft & Wilson (2003) claimed that managers employ a variety of tactics for employees to participate yet, with no intention of genuine influence sharing. According to them, despite the potential shortcomings in end-user ability to participate fully in the process, they will nevertheless be expected to comply with the sign-off process undertaken by the management. They informed that it is a managerial decision as to what type of approach is used in the first place, and this will be instrumental in prescribing the level of involvement desired (p. 10). Mumford (1997, p. 310) explicitly states that if user participation is to be adopted in industry it “must be seen to reduce risk by contributing to organizational stability in ways that are recognised by management”.

Researchers have different opinions as to the impact of participation on management control. For an example, Etzioni (1961) suggests that participation would result in less of control systems in the form of rewards such as higher pay/promotion as the development of a greater commitment to the organization generated its own propensity to meet organizational objectives without the inducement of rewards. Others argue that change in the worker-management relationship from the one that imposes decision on others to the one that allows unanimity, can result in greater control as all concerned are committed to a
common activity is changing from one that is imposing decisions on the workers to one of sharing in the same decisions, then the possibility of increasing the total amount of control exists as they are united in a common activity (Richbell, 1983). Thus, by sharing in the managerial process they have become part of management and form, a larger ‘new management’. Consequently, this leads to a larger consensus across the organization and thus, an increase of management control over the human resources. This might be claimed by some as an attempt to change the social order currently existing within the organization. It can also be a ‘dressing window’ to shadow the current imbalance of power within the organization by promoting participation in management process for the sake of securing better control over the human resources.

Tannenbaum & Kahn’s (1957) Polyarchic Model of Control & Hierarchical Levels a (Figure 1) anticipates greater management control by securing participation among workers in organizations. This model implies that the introduction of worker participation in management may lead to an increase in management control over human resources. It argues for more concentration on increasing the total amount of control rather than concern with its distribution within organizations.

Tannenbaum and Kahn define the graph of the polyarchic model as a curve which remains high (i.e. control is high) for all hierarchical levels and the contrasting curve under the autocratic model which is described as a curve which falls (i.e. control decreases with descent of the hierarchy). The coloured area represents the amount of control in each model. They question the traditional concept of a ‘fixed’ amount of control within an organization. They put forward the idea of a variable amount of control and emphasise the possibility of increasing the total amount of control within an organization by sharing the decision-making process among different organizational members (Richbell, 1983). This is in contrast to autocratic model where formal or legitimate control is allocated according to position in the organizational hierarchy with the most control being at the top and the amount decreasing with descent of the hierarchy.
According to Tannenbaum, participation may increase the total amount of control within an organization as it can create attitudes of involvement and commitment to the organization among all members. The argument is that individuals will feel more responsibility for carrying out decisions in which they have been involved and from this will stem a form of self-generated control at both the group and the individual level. Management surrenders its right to unilateral decisions which may be disregarded by the workforce and shares the decision making process to increase the likelihood that the decisions made are carried out. This leads to uniting diverse groups through a common role in decision making through participation. However, the empirical evidences from case studies conducted in four public sector organizations in Malaysia suggested that multilevel conflicts in the organizations constrained the successful operation of participation and need to be resolved first.

In a huge national project such as the Electronic Government of Malaysia, there are many ways that the management adopts in securing the participation of the accountants in its AIS implementation project. The accountants can be appointed as change agents, change champions or change sponsors in AIS implementation in their Finance Department. In the four organizations studied, two accountants were appointed as change agents and the other five are appointed as the change champions. When accountants are appointed as change agents they will be at the front line to make the necessary changes and exert a strong influence for the success of the change initiative. When accountants are appointed as change champions, they have bigger responsibilities at higher level and their reputations are always at stake. In most cases, they are the intermediaries between the top management and the change agents. They carry out management’s orders and instructions and at the same time, ensuring that the change agents’ interests are also will be taken care.

In performing their roles either as change agents, change champions or change sponsors, the accountants would normally encounter issues of conflicts that need to be addressed, acknowledged and resolved immediately. Organizations are always seen as sites of conflict (Howcroft & Wilson, 2003, p. 17). This can be due to the unequal distribution of power and the irreconcilability of management and workers’ needs. According to Ackoff (1981, p. 94), conflicts exist when two or more desires interact in such a way that progress toward one produces retrogression from the other or others. Conflicting desires may lie within an individual or organization or between them.

Where corporate development is concerned, a number of different types of conflict may be involved:
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- within individuals who are part of the corporation; between such individuals; between individuals and the corporation or parts of it (units)
- within units; between units at the same level of the corporation and between units at different levels or between units and the corporation
- within the corporation as a whole; between the corporation and external groups, organizations, institutions and society.

The empirical evidences demonstrated that the following three type of conflicts emerged from the case studies:

“Conflict within the management”; “Conflict within the employees’ group”; and “Conflict between the management’s group and the employees’ group”.

As highlighted by Brignall & Modell (2000), senior managers in public sector organizations seem to have a propensity to ally themselves with politically elected bodies: a tendency being reinforced by dependence on the public purse indicating an evidence of coercive isomorphism. The organizations studied were governed by their respective ministries, the Treasury and the Accountant’s General Department. The management of the organizations depends on the Treasury for funding yet is required to submit a performance report to the Accountant’s General Department on monthly basis. The management is also to carry out the vision and mission of their respective Ministry. The rules and regulations among the authorities are always in conflict and the management was always having difficult times in complying will all rules and regulations of the regulators.

For example, Case 1 is intended to be the first paperless hospital in the country. The hospital developed its own integrated accounting system in order to realise the vision. Unfortunately, the accountants were not initially invited to be part of the implementation team as the team members thought that the accountants were not needed at the design stage.

“They are too ‘functional’ to be part of the team…..” said one of the team members.

This perception, according to Hislop et al. (2000) was due to the structural position of management that creates a potential power asymmetry (see also Richbell, 1983). The decision not to include the accountants was claimed to avoid the tendency of the accountants adopting a functional perspective as compared to a more ‘holistic’ approach and hence potential conflict within the group. However, it was when the system was tested for full run that the team realised there were so many flaws in the accounting system and these had affected the information systems of other departments as well. The imperfections
in the systems took six months to be rectified with the help of the accountants who were initially being denied of their participation. When the integrated accounting system was ready to be used fully, the management received a new instruction from the Treasury Department to start using a new accounting system (MAYA) to ensure that all government agencies had the same platform for communicating and reporting. At the end, the whole development of the integrated system of the hospital was later disintegrated by taking out the accounting component and replaced by MAYA. Unfortunately, MAYA could not communicate with the other systems within the integrated system framework.

Brewster et al. (1981) have shown that potential conflict may arise when implementers are presented with policies without prior consultation and/or which they find difficult to accept. The management of the organization need to share a common understanding of the meaning of participation and internalise its values (Richbell, 1983, p.172) in ensuring the success of an organizational change agenda such as the AIS implementation.

In their review of the participative decision making literature, Dachler & Wilpert (1978) identify individual differences as the most important set of conditions affecting the outcomes of participative efforts and perhaps, the most important factor in determining the level of involvement and subsequent outcomes (Doll & Torkzadeh, 1989, p.1153; Zmud, 1979). They note that people differ widely in their reaction to computers as some enjoy getting involved while others, concerned about the complexity of the technology, suffer from computer anxiety. These differences might lead to conflict within the group of the employees. The head of IT department in Case 3 said,

“... to convince those who have complacent is difficult. We need the management’s help. They will not do until they are instructed to do so…”

For example, an accountant in Case 1 who was very senior was quite reluctant to contribute and participate in AIS implementation perceiving that the new AIS would not benefit him as he was retiring soon. Doll & Torkzadeh (1989) claim that among those ‘reluctant users’, their computing skill levels tend to asymptote at relatively mediocre levels and less likely to enhance effectiveness of subsequent involvement episodes. In Case 4, the chief accountant complained about his subordinate accountant,

“she always kept on comparing the two different systems and sided with the one that she’s comfortable with. That of course, the old method.”

Stiff competition for promotion and recognition can also lead to conflict within the employees’ group and this will inhibit organization to realise the
benefits of accountants’ participation in AIS implementation. For example, in Case 4, the new accountant brought with him new AIS to be implemented in the organization. The assistant accountant who had been aiming to become the next accountant opposed to the idea and proposed a different system instead. When the management decided to switch to the new system as proposed by the new accountant, the assistant accountant gave reason indicating her reluctance to participate though it was for the benefit of the organization as a whole.

The evidence showed that individual differences and competition can give rises to conflict among the employees’ group which might inhibit full participation in AIS implementation.

Historically, there is always an element of suspicion exists between the management and the employees either explicitly or implicitly. Management sometimes perceive participation of employees as a threat to their capability as this process allows employees to influence some decision-making of the organization.

Similarly, employees would normally feel suspicious of the management’s real intention in making them participate in any drafting and designing of management policy. For example, in Case 2, the accountant said,

“I can see that the implementation project is a vendor’s politic to the management and management’s politic to change our working culture. We are working in an established organization; it’s very difficult to change”.

At the same time, they were also afraid of being seen as traitors by fellow employees who were opposing to the new AIS and became “silent” on the whole matter.

In summary, the conflict among the management’s group and the employees’ group was due to suspicion of each other’s real intention and feeling threatened of the other party’s participation.

Conflicts need to be resolved so that participation can be safely secured from the intended organizational members. The organizations can resolve these conflicts by many ways such as the use of language power, customer specification, change champion and rewards of change.
Ashmos et al. (1997) suggest that the frame that a manager gives to an issue alters the way the manager as well as others process information related to making choices about that issue. Wilmott (1993) showed that there is a dissonance among managers’ use of empowerment language, their utilitarian concerns and powerful manipulations. O’connor (1995) has highlighted the paradoxical nature of the word empowerment itself, showing how managers often refer to empowering others, yet if one depends on someone else to be the giver of that power then the receiver has no power at all in his/her capacity.

The management power can be channelled through management’s instruction requiring participation from the accountants. This management’s instruction can be considered as conditional power (Galbraith, 1983) as it was intended to effect belief to the organizational members how serious the management was with the implementation project and this would affect the kind of perception of the accountants in considering their extent of participation. This instruction had a measure of control over those who had access to conditioned power through memo or circulars. For example, in Case 4, the new accountant influenced the top management for a special instruction to be issued to all staff requesting them to start using the new AIS immediately by transferring all balances from the old system to the new system.

In Case 3, the IT Department used a customer specification to secure commitment and participation from the finance department. The accountants were advised to have smaller groups of project team members within the department who would be responsible for small parts of the new AIS design and specification. The IT Department head explains,

“now we are smarter and required that every specification needed from the users group must be communicated. We issue a document and we call it a ‘customer requirement specification’ and should be signed by the head of core users (an accountant). An additional specification will have to be decided whether it is going to affect the project schedule or timing. If it’s just operational modification (minor) we will normally include it into the project. But if it’s going to affect the project schedule or the overall design then we have to put aside first - depending on the criticality. If they still insist then everyone must agree that the project duration will be expanded.”

The customer specification form can resolve conflicts between the employees’ group because the employees need to discuss extensively and reach an agreement before they could submit the specification form to their
leader. This indirectly would induce the employees to participate in AIS implementation.

In some organizations, a change champion will be appointed to overlook the whole progress of the AIS implementation. In Case 1, a manager explained that,

“Previously, they (the employees) couldn’t see the benefit of the new AIS. Our strategy is to get the core person and the rest is history. A knowledgeable core person with accounting and MIS knowledge is the best. When he talks he can convince his people because he knows the stuff. In most cases, he’s the pioneer user and his subordinates will then follow.”

In Case 3, a manager informed,

“In cases or departments where strong resistance is felt, we will normally ‘bait’ the ‘head’ of employees to be involved in our meetings, keep him informed from time to time, give him some responsibilities and make him feel important. In this organization, it is much easier to win the employees by targeting the head as our approach is always from top to down. The employees will eventually follow the head... though it sometimes take a bit longer than we expect.”

In most cases, a change champion is normally appointed from someone who earns the highest respect within the employees’ group. This is critical to convince other employees to participate in the implementation.

Employees may not want to participate with no rewards or physical benefits to compensate for the additional burden in spending their time. In Case 1, Minah, a finance staff explained,

“….we are already exhausted with our daily work and our involvement with the consultant for the implementation project just makes it worst”.

In Case 3, the IT Department Head explained how he tried to persuade the accountants to involve, “…..we have to make them understand and told them that they will be the process owners and that their daily work will become much easier........ then only they will eventually get involved.”

Management and employees must be made well aware of the potential benefits to be derived from the new AIS. This would motivate them to accept and participate in the implementation.
It is generally accepted that first, whether an organization chooses to adopt participation or not is based on value judgements (Richbell, 1983). If an organisation chooses participation it must in the first instance acknowledge the fact that it is not free from problems and limitations even though the adverse effect of such shortcomings can be eliminated. Richbell (1983) lists some potential constraints on participation and hence its capacity to increase management control over human resources: the degree to which there is a willingness to participate among organizational members; the degree to which organizational members have the ability to participate; and the degree to which it is possible to develop an organizational perspective which organizational members will bring to bear in the shared, decision making process (p. 171).

Theoretically, Tannenbaum and Khan’s (1957) polyarchic model implies that the introduction of worker participation in management may lead to an increase in management control over human resources. In reality, it is not a straightforward process. Empirical evidences have shown that conflicts between and within groups of management and employees can constraint the successful operation of employees’ participation. Thus, it is important to consider at the outset how the conflicts could be resolved so that the extent of participation required from the two groups can be materialised.

Evidences have also demonstrated that conflicts may arise from group diversity – within management, within employees or between management and employees group. In addition to these groups, there are also informal groups exists within and outside the groups. Thus exploring how group diversity can influence management control merits further investigation. Further exploration on how organizational members overcome this diversity and eventually participate in management process is worth pursuing as it will reveal more exciting facts. This is critical as for participation to increase management control depend on the extent to which various groups involved perceive themselves as having the opportunity to influence the managerial decision-making process (Richbell, 1983).

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