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Topic (i): How IT can contribute to changing organizational culture

Information Technology Centralization and Modernization Efforts and the Impact on Organizational Culture at a Federal Statistical Agency

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I. Introduction

1. NASS conducts hundreds of surveys every year and prepares reports covering virtually every aspect of agriculture in the United States. Our mission is to provide timely, accurate, and useful statistics in service to U.S. agriculture. The surveys and related work are conducted mainly in twelve Regional Field Offices and five call centers across the United States. Our main calling center is also our new National Operations Center that conducts frames maintenance, training, and survey instrument development. Traditionally a decentralized organization, NASS embarked on a modernization effort in 2009. In addition to an overall restructuring of the organization, the goal was to centralize and modernize NASS's network, applications, and databases (Nealson, 2013). These efforts have had a distinct effect on how NASS employees work and interact as well the overall culture of the organization.
2. In this paper, we will discuss organizational change and culture and its relationship to information technology. We will present case studies of information technology changes from our recent efforts based on a particular academic framework on change and offer observations on how those efforts affected the culture and norms of our organization. We conclude with observations on how to mitigate, manage, and leverage the current culture and norms of the organization in order to effectively implement IT changes and shape the culture going forward.
3. Beginning in 2009, NASS started a journey to pursue three architectural transformations, primarily to provide savings in staff resource costs and improve the quality of our statistical products by enabling the centralization or regionalization of survey operations. The transformational initiatives involved: (1) centralizing and consolidating network services from 48 locations (Parsons and Gleaton, 2011); (2) standardizing survey metadata and integrating survey data into easily accessible databases across all surveys; and (3) consolidating and generalizing survey applications for the agency's diverse survey

program (Nealon, 2013). During this same time period, NASS reorganized its headquarters operations, opened a national operating center and consolidated the vast majority of its field staff into twelve regional offices. In addition, NASS exists within a large federal department that is focused on identifying and leveraging shared information technology services to drive business efficiencies.

II. Organizational Culture and IT

4. The business and information technology changes NASS has undertaken are at various points of maturity. We posit that organizational culture affects how and how successfully changes are implemented in an organization. Similarly, changes in business processes, including information technology processes, affect the culture of an organization. Taking into consideration this relationship between change and organizational culture can influence the success rate and overall adoption of IT endeavors. In order for these ideas to be relevant in daily decisions, we need a working definition of organizational culture and its application to information technology.
5. Culture is a challenging construct to research and discuss because of the divergent definitions and measures associated with the idea. Most IT initiatives operationalize a business imperative or change effort. Many of these efforts, if transformational, are rooted in an effort to change the fundamental aspect of how the organization operates. As a result, their ultimate success almost always depends on some shift in corporate culture. Various estimates suggest that the failure rate of IT projects is unacceptably high. Under the restrictive definition of not fully meeting the constraints of cost, time, and quality nearly 75 percent of projects fail (Gartner). Even under less restrictive definitions, approximately 25 percent of projects are not deemed a success.
6. Leidner and Kayworth (2006) discuss the concept of culture stating that it is often framed as a coherent set of beliefs, basic assumptions, shared sets of core values, important understandings, and collective will. This construct may exist on many levels including a national and organizational level. They argue that culture is manifested through artifacts and creations which are the most visible expressions of culture. These artifacts may include technology as well as heroes, language, rituals, and ceremony. In fact, IT symbolizes, in some cases, a host of different values driven by underlying assumptions and their meaning, use, and consequences. They believe that culture is a critical variable in explaining how groups interact and accept IT. For example, organizations or groups vary on dimensions such as: concern for efficiency; risk-taking; precision; competition; approval, dependency, and avoidance; individual conformity as opposed to voluntary participation; emphasis on processes, routine, work standardization, and correctly following procedure (Leidner and Kayworth, 2006). In short, culture is a unique set of shared values which may exist at a national, organizational, or subunit level. Dissonance between stakeholder groups and their respective value sets may affect an IT implementation. Risk management should include a deliberate consideration and management of cultural effects in IT implementation.
7. Leidner and Kayworth (2006) describe three dimensions of cultural IT conflict – system, contribution and vision. We offer a brief description of their framework of cultural IT conflict to present some case studies of how we have attempted to manage these potential areas of conflict.
8. System conflict occurs when the values held by a user group are in conflict with the values assumed by a particular technology: Leidner and Kayworth (2006) posit the following with regard to system conflict:
 - The greater the cultural distance between the group responsible for championing the IT and the group adopting the IT, the greater the system conflict experienced by the group adopting the IT.
 - The greater the breadth of IT implementation across groups, the greater the system conflict experienced by the organization (e.g. The value and importance of pilot tests, examples, scaled deployment, and agile development)

- The greater the system conflict experienced by a group, the less likely the group is to be a forerunner in the adoption of the system.
 - The greater the system conflict experienced by a group, the greater the modification of use to support the group's values. Note that modification itself reduces conflict and can result in greater adoption rates.
9. Contribution conflict describes instances when the values of members of a group conflict with the values the group associates with IT in general (IT values).
- The lower the contribution conflict experienced by the most powerful actors within a group, the lower the contribution conflict experienced by the group. (Do key players in an organization see IT as a strategic asset?)
 - The lower the contribution conflict in a group to which another group aspires, the lower the contribution conflict in the aspiring group. (e.g. If key players see IT as a strategic asset then those aspiring to be key players probably will too.)
 - The greater the contribution conflict experienced by a group, the less strategic a role that IT will play in that group.
 - The greater the contribution conflict experienced by a group, the less likely the innovative uses of IT by the group.
10. Vision conflict occurs when the values the members of a group have with respect to technology in general conflict with the values embedded within a specific technology.
- The greater the difference in the IT values between the champion group and the user group, the greater the vision conflict experienced by the user group. (Two worlds collide.)
 - The lesser the involvement of the most powerful within a user group in development, the greater the vision conflict experienced by the user group. (The attention of those who are important is important.)
 - The higher the vision conflict a group has with respect to a system, the lower the adoption rate of the system by the group. (...not my system!)
 - The greater the vision conflict experienced by a group, the greater the potential change to the group's IT values. (I do like green eggs and ham!)
11. Leidner and Kayworth (2006) argue that the emergence and resolution of the three types of conflict will, over time, result in cultural changes. We see this point as a very positive message. These inevitable conflicts are here for us as IT professionals to orchestrate and manage so that projects can be successfully implemented and create business value.
12. While this paper draws heavily from the Leidner and Kayworth article, the literature pertaining to conflict in IT projects and organizational change in general is vast. The work of John Kotter, considered to be one of the foremost authorities on organizational change, shapes our views on change management. Kotter posits eight criteria that must be satisfied for a transformational change to be successful. These include: establishing a sense of urgency; forming a powerful guiding coalition; creating a vision; communicating a vision; empowering others to act on the vision; planning for and achieving short term wins; consolidating wins and producing yet more change; and institutionalizing the new approaches (Kotter, 2008). Similarly, Leidner and Kayworth and Kotter both discuss the importance of vision, key stakeholders and achieving short term gains.
13. NASS's, like other national statistical organizations, business model roughly follows the Generalized Business Process Model (United Nations Economic Commission for Europe, 2013). Many of our recent efforts have focused on modernizing or enhancing a service or application within a specific part of our business process. In the following section we discuss four separate IT modernization efforts focused on a specific business process. We share with you the efforts that the champions of these initiatives leveraged to manage conflict and facilitate organizational change within the frameworks of Leidner, Kayworth and Kotter.

III. Case Studies

A. Review, Estimates, Comments, Approval, and Publish (RECAP)

14. RECAP is a tool which aids in step six (analyze) of UNECE's Generic Statistical Business Process Model. The RECAP system originated when Microsoft announced it would no longer support FoxPro, the database that supported the previous system known as ACER. NASS recognized this as an opportunity to centralize its data that was no longer dependent on a stand-alone application. RECAP ultimately consolidates all NASS commodity estimation programs within a single system. The centralization of data allows the agency to enhance analysis, use standard metadata, and increase the efficiency of managing, supporting, and maintaining data and the system. RECAP also allows summarized data to be loaded into web-based software, charts, and graphs and allows headquarters and regional field offices to review data and establish official estimates prior to publication.
15. An instance of system conflict arose during the RECAP project when a user group did not agree with the implementation and commodity priority order. They believed the old system worked well and wanted to implement commodities that did not already have a standardized process. Because project managers were unable to immediately sell RECAP to this group, the project was not initially a success. Conversely, another user group recognized the project as an opportunity to improve the review and estimation processes. The users actively contributed to the design of the system, allowing the developers to create a more useful tool.
16. Since FoxPro was no longer going to be supported, the conversion to RECAP was inevitable. While many users were happy with ACER, the IT department knew the existing process had to be updated and reformatted. During the designing and building phases of the tool, many discussions were held between the business and IT groups. The users sometimes asked for something that IT could not support. For example, one group asked that a data series be implemented into the process right away. Since the particular data series influenced several other data products and the supporting pieces had not yet been incorporated, the project team decided it would create strategic and operational difficulties. This led to contribution conflict in that users did not see the project as having high value since it would not immediately support all of their needs. Because RECAP was unable to improve upon the functions of ACER immediately, users believed there should not have been a new program to begin with. They viewed the change in technology as burdensome to their overarching goals.
17. Vision conflict was seen in that one person was attempting to manage both the IT and business sides of the project. Because both sides were not equally represented, there was some conflict in establishing a common set of migration priorities. The multiple groups on the business side were unable to establish a common vision on how to migrate commodities to RECAP. IT, as a result, did not receive a unified, prioritized plan from the users to know what should be included in the RECAP system. The lone project manager was dealing with issues from both groups which ultimately led to slower progress being made.
18. Another form of vision conflict that was experienced during the RECAP project, and one that will remain an issue, was deciding whether to incorporate model-based or conventional analysis. Because RECAP was going to affect the way commodity values were estimated, there were many people who weighed in for each type of analysis. Model-based analysis required fewer employees and would, in theory, produce more consistent results but could not account for special situations outside of the dataset. Conventional analysis required a group of experts to review survey indications, charts, and tables and then create their own estimates. While RECAP is capable of accommodating both types of analysis, this debate is still an ongoing form of conflict.
19. These conflicts were dealt with in a number of ways. First, a business project manager was brought in to work with the users to identify needs and manage communication with all stakeholders, including contracted resources. This helped in easing fears that a single project manager would overlook certain aspects of the project. A staff member from each business group was also assigned to focus on RECAP

migration issues which allowed for better communication of needs. Second, IT and business project managers attempted to get in front of issues by holding discussions with supervisors of subject matter groups and providing a sense of urgency so that people would finish their tasks on time. Finally, a plan was laid out so both users and developers would understand the possible conflicts, what was to be expected of them, and the ultimate benefits of the project.

20. Those steps taken to mitigate the effects of conflict impacted organizational change. Many users were so accustomed to how the legacy system worked that they could not imagine improving upon it and were hesitant in adopting RECAP. In order to gain support, the project managers tested the new program in ten states for one commodity. As more people used it and realized the benefits of RECAP, more users came on board with the idea of transitioning from the legacy system. Because RECAP is still being migrated to the field offices, there are still members within certain groups who are reluctant to make the transition. Despite the few holdouts, NASS seems to have become a victim of RECAP's success. The demand to migrate commodities currently exceeds staff resources. The remaining system conflict is expected to diminish as more data series are converted to RECAP.

B. Database Integrated County Estimates (DICE)

21. NASS provides small, county-area estimates for several data series. Work on the (DICE) system began when NASS began centralizing its data. DICE was intended to centralize the database, standardize the business rules of county estimates, and create a more efficient enterprise system. The previous system was file-based meaning that the information was stored on local servers. An agile development strategy was applied to the project. By employing this strategy, an application was developed, feedback was collected, and then changes were made quickly.
22. While very little system conflict was experienced during the development of DICE, there was a large amount of contribution conflict. Even though there were things about the old system the users disliked, they still had a history with it. They knew what to expect from the old system and were afraid any changes would make their work more difficult. However, unlike the users of RECAP, those affected by DICE were open to try the new approaches. If changes were made that they did not like, they viewed it as a negative change and were against the update. Conversely, if a change was made that they viewed as an improvement they accepted it. The willingness of users to use the new application gave the development team much more flexibility. They were able to garner feedback and make changes as necessary in order to provide the users with a more efficient tool.
23. Many examples of vision conflict came out of the DICE development project. The first experience came when members of the senior staff argued why both DICE and RECAP were needed. Because both applications set estimates, some staff members were skeptical why two separate systems were needed. RECAP was still being developed at the time and to use it, each commodity required its own template and view. With DICE, all commodities were being handled programmatically within one template. This allowed commodity estimates to be established in a more timely and consistent manner. The future of DICE, however, is unclear. Although senior management have concluded that DICE is currently a useful tool, once RECAP is completed the debate over utilizing two systems which do essentially the same work will be rekindled. Nonetheless DICE serves an important role until its unique functionality can be performed elsewhere.
24. Another form of vision conflict appeared when, like RECAP, there was only one project manager assigned to manage both the business and IT groups. This combined with the fast-paced agile development strategy provided little time to ensure that the IT employees had the best skill set for what the project required. As a result, the most appropriate IT team was not assembled. There was a lack of communication between the business and IT groups. The business side provided a list of what was needed and then left it up to IT to build the application. The failure to form an integrated project team resulted in the ultimate failure of the first iteration of the project.

25. Lessons were learned from that iteration of DICE and a second attempt began. This time two project managers were assigned, one for both the business and IT groups. An IT team with the correct skill set was also assembled allowing for the agile development strategy to be effective. With a proper team formed, prototypes of the new application were developed. Once users were able to access the system, a debate between the field offices and headquarters began over the ownership of DICE. The previous system was controlled by the field offices and, ultimately, managed several different ways by various field offices. Management in headquarters would ensure the work would be conducted in a standard and consistent manner. While the conflict ensued for some time, the field offices ultimately realized that they were able to complete their work more efficiently when headquarters initiated the management of estimates.
26. The first iteration of DICE failed in its early stages. With only one project manager, a clear vision could not be identified and communicated. While a sense of urgency was implied by the agile development strategy, the lack of a guiding union made the creation of an application nearly impossible. As mentioned previously, these shortcomings were quickly identified. The second iteration saw that two project managers were assigned resulting in more user involvement and feedback from both the business and IT sides.
27. Where at first DICE may have been viewed by the users as an frustrating tool, the development team was able to make useful updates through constructive feedback. Once a satisfactory application was developed, more users came on board with the change. Where NASS originally had field offices doing the same task many different ways, there was now structure and uniformity. Employees who inherited projects no longer had to guess how things were done. Even though some had to adapt to less control, the process became more efficient and consistent. This all led to DICE no longer being viewed as an inconvenient tool but rather the new, standard way of operation.

C. Survey Management System (SMS)

28. Unlike RECAP and DICE, SMS is still in the development phase of the project lifecycle. When completed, SMS will hold all the data collection information and allow NASS to control output to mailing and editing systems, Computer Automated Personal Interview (CAPI), Electronic Data Reporting (EDR), and other systems. Centralization is the key update from the legacy tool, allowing for data to be managed both nationally and regionally rather than at individual field offices. This update will allow NASS to manage surveys, determine how to collect data, assign supervisors and enumerators, and transfers individual datasets to one centralized location. It will also pull information from the business register to identify who should be targeted for specific surveys.
29. System conflict was seen early in the SMS process. Senior management recognized that a new SMS would allow for centralization of the agency's survey data which would make the management of it more streamlined and efficient. The user group did not see the benefits of transitioning to a web-based tool with a centralized database when the local file system was working just fine. Many users viewed the shift as a burden, requiring a complete change in how surveys were administered. This system conflict led to both contribution and vision conflicts. However, as field offices have been centralized, there is now a great demand for centralizing SMS as it will greatly simplify activities for the regionalized offices.
30. Another setback included the ongoing development of CAPI. Because both projects required the use of similar resources, only one could be focused on. There was more pressure being put on the CAPI project so senior management made the decision to complete CAPI prior to working on SMS. Because all focus and resources were diverted to CAPI, SMS was put on hold. It was not until field offices began pushing for the new SMS later that updates to CAPI were slowed and attention returned to SMS.
31. The project delay led to senior management wanting to complete SMS on a quicker timeline than originally planned. The project managers felt like the expectations were unrealistic and could not be

completed on time. In order to stay on schedule, they were forced to drastically reduce the scope of SMS. Even though the accelerated timeframe instilled a sense of urgency in the project, it ultimately proved too demanding for the team to complete. The high expectations of senior staff led to vision conflict with the project managers and resulted in pushing completion dates back to more realistic deadlines.

32. Like RECAP and DICE, the SMS project began with only one project manager. Originally assigned to the business side, the project manager transitioned to an IT role, causing some concern among stakeholders that business needs would be overlooked. There was also a smaller specification team at the beginning which made users wonder if the project manager would be dictating the direction of the project rather than getting feedback from others. In order to ease those fears, another project manager was assigned to the business side. Even though there were two managers on the project, trust in management and the project as a whole had declined, leading to further conflict.
33. A major form of conflict currently being experienced is that many users have not initially accepted the IT. While groups managing large, national surveys see the benefits of centralized data, those groups managing regional- or state-level surveys have been more concerned. They are unclear how the preliminary management step at headquarters will affect their work and are unsure if the technology will be an asset to the agency. As the project has moved forward, field office employees are realizing that their workload will become lighter. However, that workload will be transferred to employees working at headquarters, causing more vision conflict. Because SMS is still in the implementation phase, there has been pushback from some users at headquarters. Since they are not able to use the system, they have not yet realized the benefits of SMS and are resisting the transition.
34. That transfer of responsibility has also caused conflict for both groups. Employees at headquarters, as mentioned before, will have more work placed on them. Where before they believed centralization would allow them to see what the field offices were doing, they did not realize it would lead to them taking over work from the field offices. This shift increased anxiety at headquarters, making employees wonder just how exactly their workloads will be affected. Conversely, the field offices feel like they are losing control of their work. Where before they were able to make decisions affecting their own survey administration, preliminary work on surveys would be the responsibility of headquarters. Even though centralized SMS will lessen the burden of work placed on field offices, they will also have to relinquish some control and responsibility.
35. The agency has taken many steps to mitigate those conflicts. The first step was to assign a project manager to the business side. While this move has helped to alleviate fears of one person running the project, there is still some distrust of the project management team. There has also been an effort to gain more feedback from the user group and to put any new information in front of them in order to keep them updated. Multiple, frequent training sessions are being planned so that users will know what to expect when a useable version is complete. Management will also roll out SMS in phases, beginning with a pilot test at headquarters and one regional office.
36. The SMS project managers have also learned from past mistakes of other projects. The most significant change has been seen in communication. The project managers have been communicating the sense of urgency placed on them by senior management. This has kept the customers informed of progress and updates to the project. Even though there have been some fears concerning workload and control of that work, the high level of communication is easing those concerns and keeping the customers informed of how their roles will be affected by centralized SMS.

D. Operational Efficiency #1

37. OE1 was the first of a set of key initiatives designed to improve NASS's everyday operations. OE1 specifically deals with the centralization of servers and data. Previously, each state field office had its

own servers. This meant that a single application or update not only had to be installed 46 times but was also installed 46 different ways by each network administrator. OE1's major goal was to centralize those 46 servers into two server farms; one for both the western and eastern United States. The benefits of centralization included: reducing server footprints, sharing of data among field offices without having to physically travel to other states, creating a more streamlined process to update applications, allowing for agency reorganization and improved business continuity of operations. Another added benefit was that there was no longer an IT-driven need for staff to be in any particular location to perform certain tasks.

38. System and contribution conflict were high throughout the OE1 life cycle. First, the IT operations personnel did not initially accept the IT. The group that designed and built the centralized network turned the project over to the system administrators after being installed. Because the administrators were not involved with the design, they did not understand the system and were reluctant to support it. The new system also required a skill set that most of the IT staff did not have at the time. This resulted in the administrators having a difficult time repairing errors and performing standard maintenance. Poor performance from the IT side also impacted the users. Since the new system was sensitive to disruptions, a consistent network service was not available. Users were then unable to perform their assigned duties leading to zero tolerance for any glitches. This ultimately resulted in both users and IT blaming the project for impacted productivity.
39. The move to a centralized network also acted as a harbinger of things to come. There had been discussions of converting NASS's state field offices to regional field offices. Field offices could become more centralized soon after the network became operational. The conversion would involve a major realignment of storage and server resources in terms of hardware, software, and personnel. The idea of restructuring made field office employees nervous which resulted in even more pushback from the user group.
40. Two similar issues also stemmed from centralizing the network. First, it required centralized management and a more advanced skill set to effectively administer the new environment. All updates were then performed centrally at headquarters. The previous LAN administrators, however, no longer had administrator rights over the data. While NASS was able to create a more efficient and standardized workflow when updating applications and data across the nation, contribution conflict arose when those previous administrators saw their responsibilities transferred to headquarters.
41. Second, other resources became available due to centralization. Whereas field office staff previously had more responsibility in a decentralized structure, the completion of OE1 resulted in a transfer of those roles to headquarters. The transfer left many field office staff members with fewer responsibilities. New roles and responsibilities were identified in order to replace the work transferred from them. While the creation of new positions aided in removing some fears of being phased out, many new jobs required a move to a new location.
42. Project managers on both sides found implementing OE1 to be challenging. The OE1 project offered new technology for the operations staff. A team with the correct skill set was formed in order to address the technical issues being experienced. IT staff with backgrounds in storage, virtualization, applications, and data were brought together to address issues. This IT team was able to train the operations staff and assist individual field offices with the migration. As the operations staff completed conversions, they learned the technology which ultimately led to relieving the pain felt by the users.
43. On the business side, the project manager was forced to ramp up communication with the field offices. Each office was told when to expect to be converted. They were also given a fact sheet describing common issues that had been experienced and how they were addressed. Easing the fears of converting to centralized data storage proved to be more difficult. The project manager ultimately told the field offices that centralization was going to happen. This approach made the users accept that the change

would occur, even if they were still not convinced it was necessary. Once they understood that centralization was a reality, they were offered training sessions to get better acquainted with the system.

IV. Discussion

44. These case studies provide multiple examples of conflict, how that conflict was dealt with, and the level of success in terms of organizational change. Although they differ in scope and outcome, certain trends were realized when comparing them with each other. First, system conflict appeared in all four case studies. With every IT implementation, there seems to be some level of conflict among users with accepting the new system or application. A cohesive, leading group with strong business stakeholder representation can play a pivotal role in reducing customer uncertainty when introducing a new technology. Similarly, scaled implementation and pilot tests can reduce fears users may have. In all cases, the more information the users had, the more comfortable they felt with the transition to the new IT.
45. Second, high contribution conflict was seen in three of the four case studies. In each case, a champion group formed to lead the development and implementation of the IT. Those groups saw the benefit of the new system or application and pushed its development forward. Other groups, however, did not see the benefits as clearly as the championing group. Those groups were hesitant to adopt the views of the champion groups. While the initiation of these conflicts was the same, the outcomes differed. In the case of OE1, the users were forced to adopt the IT. In RECAP, the resistant headquarters subject matter specialists are coming on board as their field office counterparts advocate for the migration to the new system. For SMS, the result is yet to be determined. As of now, there is still some resistance to its inception.
46. Third, DICE experienced a much lower level of contribution conflict than the other three projects. The project managers for DICE incorporated the customers much more into the development process, gathering feedback throughout the entire process. When this approach was applied to the other projects, there seemed to be more buy-in from the users. This result backs up the premise that the more users are involved in the process and have access to the project, the lower the contribution conflict.
47. Fourth, vision conflict played a major role in three of the four projects. All three projects began with only one project manager. Each project experienced failure until a second project manager was brought in so that both the IT and user groups had a leader. This allowed the business and IT sides to identify their needs and abilities, then work together to create a useable system or application. Once each group was represented, the project was able to develop more efficiently and constructively.
48. Fifth, these IT centralization and modernization efforts occurred over a period of time and allowed us to learn from previous initiatives. For example, the support challenges experienced when Operational Efficiency Initiative #1 transitioned from the implementation to the operational phase informed planning for future application development projects. Additional check points were added such as system design reviews, software code review, user acceptance testing, and a change control board review. We have also expanded use of Agile methodologies for both IT and business projects. These efforts help reduce both system and contribution conflict.
49. Sixth, many organizational, business process, and IT system changes occurred simultaneously. It was often difficult to maintain a consistent sense of priorities amongst so much change. A Multi Criteria Decision Making process was recently adopted to evaluate application development project alternatives in an organized and repeatable fashion. This will allow for periodic review of our application development project portfolio to improve its strategic alignment. Discussions are underway to apply this process at a business initiative level to improve strategic alignment and reduce vision conflict.

50. The lessons learned from these projects have clarified the importance of establishing a business process early on in the project. As such, senior leadership puts an emphasis on following sound procedures for establishing new business initiatives. The Senior Executive Team (SET) discusses and approves new proposals. Once approved, a champion is assigned. The champion appoints a sponsor from middle management who has a large stake in the initiative and together they develop a business case for the project. If approved by SET, the sponsor creates a charter, engages his peers to gain approval for the project, and develops a plan which identifies scope, timing, and resources. For every project with an IT component, an IT-side project manager is assigned to partner with the business-side project manager to ensure IT efforts are effective. The management team is then responsible for implementing the project and providing status reports to both middle and senior leadership. This process was incorporated to varying degrees in each of the projects discussed in this paper. The successes and shortcomings of those projects were largely dependent on the success of this process.
51. Change is not for the faint of heart, and important IT implementations almost always change how organizations work and function. Each change effort has a set of unique challenges and potential for conflict but common themes often emerge. Champions of change are well-advised to include the management of conflict and organizational change in their planning and execution process.

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