Examining an Employee Awards Information System: A Qualitative Study

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Abstract

The U.S. military is an organization that uses an automated system to process its members’ awards for approval, similar to other organization. Awarding members for performance has been identified as a great way to escalate job motivation and increase the feeling of inclusion and loyalty to organization and even lead to job retention. In the midst of the current environment and COVID-19 working conditions, it is even more important to show appreciation and gratitude. The U.S. military uses what is known as Global Electronic Approval Routing System (GEARS) to process these awards. Notwithstanding the perceived advantages of utilizing the type of framework, people have communicated uncertainties about its ability to process the administrative documentation effectively and sufficiently, and in turn leading to the opposite effect, decreased motivation and job satisfaction. The study examines the effect that the GEARS has on processing awards on time while applying three theories that set the conceptual framework: Herzberg’s Two Factory theory, Technology Acceptance Model, and Task Technology Fit Theory. The study used the qualitative descriptive method in its overall approach to answer research questions regarding how GEARS is affecting the submission and approval of service members’ awards for commendable performance and behavior and how GEARS is perceived to fit the requirement to complete tasks and activities associated with processing awards.

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The researchers used three instruments to gather data. Data were collected from 15 participants using a questionnaire and interviews. Relevant information was also gathered from archived data and five themes emerged from the analysis of the data, which support the theories and help to provide recommendations for future success.

**Keywords:** Global Electronic Approval Routing System (GEARS); Herzberg’s Two-Factory Theory; Technology Acceptance Model (TAM); Task Technology Fit (TTF) Theory; Employee Awards; Motivation.

1. **Introduction**

Service members of the United States military exemplify a level of performance and behavior both in combat and non-combat related instance that often warrants recognition. The recognition that many have received is a specific award. Each U.S. Armed Forces branch has regulations, instructions, and guidelines that establish the prerequisites for a military award.

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<th>Branch</th>
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<tr>
<td>Army</td>
<td>Army Regulation (AR) 600-8-22, <em>Military Awards</em></td>
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As most modern-day business, the U.S. military has created specific processes supported by technology to process the awards. The awards are processed through an IT System known as the Global Electronic Approval Routing System (GEARS), developed by the Defense Information Systems Agency as part of the Department of Defense Enterprise Portal System [4]. The GEARS is a method used by organizations to submit, track, and monitor awards throughout the entire approval process [5]. Supervisors, both military and Department of Defense civilians, employ GEARS daily. Thus, is why it is of the utmost importance for military branches to have an effective military award approval process in place that enable recommenders, reviewers, and approving officials to recognize, process, and approve awards in a timely manner. However, some individuals expressed concerns about the manner to which the GEARS has affected the processing of documents such as awards. The nature of such impactful recognition or lack thereof, could possibly lower employee will to do their job. Therefore, the purpose of this qualitative descriptive study was to provide knowledge to practitioners, so that employers embrace employee motivation, make processes efficient, and make better use of automated systems. This is of the upmost importance due to the impacts of social distance from COVID-19 and in the current environment in which virtual communication and telework is occurring more and more. Additionally, businesses
have begun to focus and build strategy around building feelings of inclusion within their organization. Having a means to recognize all members can help to support this strategy. The remainder of the paper is structured as follows. First, it provides a brief theoretical background of literature pertaining to variables that affect an employee motivation and job satisfaction, and clients’ acceptance of IT systems based on the Technology Acceptance Model and Task Technology Fit Theory. Next, using the qualitative descriptive research methodology, one confirmed that the GEARS, which was used to process awards for approval, was perceived to be useful, fit users' needs to perform their job, increases effectiveness, and improved job satisfaction. Lastly, the paper concludes with recommendations and practical implications.

2. Methods

This study's research method was qualitative descriptive to examine the military award approval process that uses information technology such as GEARS to route, monitor, and track awards. The qualitative research method was chosen because of the research questions:

Q1. How is the Global Electronic Approval Routing System affecting the submission and approval of service members awards for commendable performance and behavior?

Q2. How is the Global Electronic Approval Routing System perceived to fit the requirement to complete tasks and activities associated with processing awards?

In an effort to help justify the overall approach of this study and answer the research questions, a theoretical framework supporting three existing theories was established: Herzberg’s Two-Factor Theory, Technology Acceptance Model, and the Task Technology Fit Theory.

2.1. Herzberg’s Two-Factor Theory

With regards to Herzberg’s Two-Factor Theory, it states that motivation is the variable that most unequivocally corresponded with job satisfaction [6]. Herzberg’s and his partners contended that to expand employees’ job satisfaction, the motivation factors must be improved [6]. According to Herzberg’s theory, motivation factors, or motivators, are intrinsic to the job and lead to positive attitudes towards the job because they satisfy the ‘need for growth or self-actualization’ [7]. Motivation factors are related to a person’s job satisfaction and include advancement, the work itself, possibility of growth, responsibility, recognition and achievement [7]. Ultimately, Herzberg’s primary hypothesis was that specific factors lead to optimistic attitudes towards work, and others lead to negative attitudes [7]. The concept is true today. Thus, are reasons why industries, like the U.S. military, acknowledge service members who perform or produce excellent work. Many times, recognition within the U.S. military comes in the form of an award for a service member. The award may be processed for approval using an IT system known as GEARS. This study reveals that the GEARS plays a prevalent role in processing an award that employers present to recognize individuals for exemplary performance or behavior appropriately. The ability to recognize individuals through a process that improved submission and approval was motivating and positively contributed to job satisfaction.
2.2. Technology Acceptance Model

Additionally, users of technology must perceive it to be easy to use and useful for end client users to accept the technology. The author [8] explained that the Technology Acceptance Model alludes to such a concept. As Fred Davis described, there are two key characteristics associated with a user’s acceptance of computer-based IT systems designed to improve processes are perceived usefulness and perceived ease of use [8]. Participants expressed that the GEARS was very easy to use, and it allowed them to perform their job more effectively. This study suggests that if users consider the GEARS to be useful and improve their abilities to process an award for approval, then they will be more likely to continue using it.

2.3. Task technology Fit Theory

Furthermore, the Task Technology Fit theory expounds upon the technology acceptance. Goodhue and Thompson [9] characterized the theory by stating that information technology has a greater chance of acceptance and utilization when it positively affects a person’s performance and its capabilities fit the tasks that the client must execute [10]. Participants stated that GEARS allowed them to track, monitor, route, notify individuals of actions that must be completed, and correct actions without removing the document from the system. The current study further indicates that as long as the GEARS fit users’ needs to perform a specific task related to their job, it is more likely to be accepted by the users. Figure 1 shows the relevance and connection to the theoretical framework and research problem.

![Figure 1: Relevance and Connection to the Theoretical Framework (TF) and Research Question](image)

By using the qualitative method, the researcher tried to find out how and why a phenomenon, or behavior, acts as it does in a particular context [11]. The descriptive design, which, as indicated by [12], is a scientific method which includes watching and describing the conduct of a subject without affecting it in any capacity, was chosen. This is because there is a great chance of identifying important and constructive suggestions for improving the awards approval process, integrating similar technology to GEARS, and further expanding the
TAM and TTF Theory. The method and design also allowed one to address the “how” aspect of the research question in its environment and use multiple techniques to collect data from a population [13].

3. Material

3.1. Data Collection

The participants were selected using the snowball sampling method [14]. Participation in the study included 24 U.S. military, retired, and civil service participants that expressed interest in taking part in the study. However, only 15 participated in the study. Fifteen of the 24 participants participated in the written questionnaire. Five of the 15 participants agreed to participate in the unstructured interviews. Eighteen threaded comments from the archival source, were used for this study.

3.2. Written questionnaire

Before the written questionnaire was administered to the participants, it underwent a review by an expert panel of four individuals. The expert panel validated the questions’ content and structure to ensure the questions would be understood by the target audience and generated reliable response data [15]. The written questionnaire consisted of eight questions and required no more than 15 minutes to complete, which led to better response and completion rates. Three participants indicated interest within the first three days of soliciting participants for the study and were emailed the questionnaire. They returned the completed questionnaire within the same week. Written questionnaires that were returned with unclear data or illegible data were carefully chosen for the unstructured interview protocol to gain clarity and interpret their responses verbally. It took a total of four weeks to receive all 15 questionnaires.

3.3. Unstructured interview

A time was scheduled with five participants to conduct an unstructured interview. Before the interview was conducted, each participant received a consent form providing them with information about their rights, the purpose of the study, the procedures, and the potential risks and benefits of participation. The researcher also read some basic information about the study and requested the consent of participation before beginning the interview. The participants were made aware that the study was strictly voluntary, and they could stop the interview at any time. A phone call to each participant was conducted as a way of administering the interviews. The speakerphone was turned on to allow the audio to be recorded using an iPad with the Voice Memos app [16]. At the completion of the interview, the researcher reviewed the participant’s information to ensure clarity of data and proper interpretation. The audio file was saved in an mp4 format and emailed to the researcher’s email address. The research data was placed in a folder on a computer that was password-protected to ensure the dignity, welfare, privacy of individual research subjects was safeguarded, and that data about a participant stay confidential. Furthermore, the password was strong, meaning that it consisted of eight characters with a minimum of three of the following features: lower-case, upper-case, special characters. Ultimately, the data was transcribed in Otter Voice note and uploaded into the Dedoose software for analysis [17].

3.4. Archived Data
Archival data were used to gather information related to this study from online comment threads. Using available electronic archival data helped develop understandings of the research topic, rather than inform the development of concepts and theories [18]. Archival data was collected from online archive material [19]. For example, Reddit, a blog site, provided information related to the research questions. Eighteen individuals made comments about the question Are your units using GEARS [20]. By obtaining this information, the researcher was able to gain more awareness as to who is using GEARS, users’ thoughts about its usage, and technical issues that operators have experienced while utilizing the IT system. Ultimately, the quality of data played a significant role in the study. Data collection, processing, and analysis were considered paramount as well.

3.5. Data Analysis

The collected data were analyzed following a thematic content analysis approach, which the authors [21, 22] explained occur in six phases. The phases are listed in Figure 2.

![Figure 2: Six Phases in Thematic Analysis [21]](image)

3.6. Limitations and Constraints

The researcher had apprehensions about using the snowball sampling method to recruit military service members, DoD Civilians, and retires with knowledge and experience with using the GEARS. This is because the GEARS is a relatively new technology used by the military to process awards for approval. Additionally, most data indicated that the GEARS is mainly used by Army personnel. Nevertheless, this is not a problem because enough participants met all the criteria and were able to provide valuable input. Sample participation was another limitation. The total sample size that expressed interest was 24 participants, with a goal of 15 participants. The goal was to have all participants take part in the written questionnaires and the unstructured interviews. The written questionnaire returned in increments of three to four participants per week for four weeks, and only five participants agreed to participate in the interviews. After receiving 15 written questionnaires, five interviews, and archived data, an analysis of the data was conducted, which clearly defined themes emerged. Triangulation of the data from the questionnaire, interviews, and archived data sources further
helped with the aspect of this study's trustworthiness and credibility. Lastly, one of the research questions probed the participants to describe some of the challenges they faced with using the GEARS to process an award for approval. Participants believe that the human factor of procrastination or laziness is relevant, but it is not determined if this is a system problem or an actual fact. Right now, it is a perception, but at least GEARS motivate one not to be lazy because everyone knows the bottleneck.

4. Results

![Figure 2: Comparisons of Participants Data Sets](image-url)

The Commissioned Officers’ population represented in the study (20%) was very close to the number of active-duty U.S. Army Commissioned Officers (19%) serving in 2019. Still, the Noncommissioned Officers’
population represented in the study (80%) was not close to the total population of Noncommissioned Officers currently serving in the U.S. Army (38%). Although there was a low sample size, the DoD Civilian employee’s population with knowledge and experience with GEARS represented in the study accounted for 7%, which is really close to the percentage of DoD Civilians working for the U.S. Army (6%). It is unclear exactly how many Commissioned Officers, Noncommissioned Officers, DoD Civilians, and retirees have ever utilized the GEARS to process an award. Nevertheless, the participants’ data for this study revealed that the two Commissioned Officers (13%) served as an approving official, 12 Noncommissioned Officers (80%) served as a recommender, and one retiree (7%) served as a reviewer. Additionally, Figures 2 and 3 provide a more in-depth comparison of the participants’ data set within this study. All participants were affiliated with the Army branch of service, even if they were a retiree. The participants also filled the role of either a recommender, reviewer, and/or an approving official.

![ROLE IN THE AWARD WORKFLOW](image)

**Figure 3: Participants Role in GEARS Workflow**

Furthermore, the data analysis results for this study were presented and sorted by the research questions, which guided the development of the theme. All themes were supported with feedback provided in the form of a direct quotation from the data. Results associated with research question 1 depicted the Global Electronic Approval Routing System’s effect on the submission and approval of service members awards for commendable performance and behavior. In regards to research question 2, results indicated how the Global Electronic Approval Routing System is perceived by participants to fit the requirement to complete tasks and activities associated with processing awards.

### 4.1. Theme 1: Training required for inexperienced personnel

Participants with more years of experience appeared to have a better understanding of the processing of awards in the GEARS. In contrast, the users with little to no experience recommended that the organization provide training before utilizing GEARS. In doing so, there is a great chance that decision-makers can improve job satisfaction through proper awareness, training all employees on the GEARS, and increasing users’ knowledge about the IT framework.
Table 2: Summary of Research Questions, Themes, and Findings [24]

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<tr>
<th>Research Questions #</th>
<th>Themes#</th>
<th>Findings #</th>
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<tr>
<td>Research Question 1:</td>
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<tr>
<td>How is the Global Electronic Approval Routing System affecting the submission and approval of service members’ awards for commendable performance and behavior?</td>
<td>Theme 1: Training required for inexperienced personnel.</td>
<td>Finding 1: The results presented in the study confirmed that there is a great chance that decision-makers can improve job satisfaction when they possess a keen level of understanding through proper training and acquired years of experience, knowledge about an IT system, and performed key roles in the award approval process.</td>
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<td>Theme 2: Technical Challenges are associated with GEARS.</td>
<td>Finding 2: The results of the findings confirmed that participants’ main challenges were server issues, glitches, lag, no notifications, packets dropping out of the system, confusion between which version of GEARS to use, and people not processing the award correctly, which all lead to individuals not being recognized in a timely manner.</td>
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<td>Theme 3: Efficient business processes can improve users’ motivation to do their job.</td>
<td>Finding 3: Indicated that users are motivated when technological solutions reinforce factors that positively contribute to job satisfactions.</td>
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<td>Research Question 2:</td>
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<td>How is the Global Electronic Approval Routing System perceived to fit the requirement to complete tasks and activities associated with processing awards?</td>
<td>Theme 4: Fit between GEARS and the various tasks influenced participants’ decision of acceptance. Theme 5: Acceptance of process automation technology</td>
<td>Findings 1: Demonstrated that users’ performance is enhanced when an IT system provides features and support, which fit the requirements of the task.</td>
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<td>Findings 2: This study revealed that both perceived usefulness and ease of use greatly impact users’ behavior intention to utilize technology.</td>
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4.2. Theme 2: Technical challenges are associated with GEARS

Participants are aware that modern technology has been integrated into business processes as a means of creating capabilities that enhanced business processes, such as the routing of an award. Yet participants explained that they had experienced technical difficulties such as server issues, glitches, lag, no notifications, and packets dropping out of the system, confusion between which version of GEARS to use, and people not processing the award correctly. The system's technical challenges have contributed to the delay in the approval of awards and acknowledgment of employees.

4.3. Theme 3: Efficient business processes can improve users’ motivation to do their job

Participants indicated that the GEARS enhanced administrative processes, held people responsible for doing their work, and helped recognize employees who performed the job assigned to them in an exemplifying manner, which are motivating factors. Several of the participants alluded to the fact that GEARS should be the only system used to process an award. Ultimately, participants viewed the GEARS as a valuable innovation that could positively influence an employee’s ability to perform their assigned task, thereby contributing to job satisfaction and motivation.
4.4. Theme 4: Fit between GEARS and the various tasks influenced participants’ decision of acceptance

Participants commented that the capabilities, features, functionality, and fit between tasks and requirements had a profound effect on their decision to accept the GEARS as a viable tool. Numerous participants responded with personal examples of how the GEARS allowed them to track, monitor, route, make changes to awards within the system. This benefitted the user and the business because it improved productivity and flexibility for both the user and the organization.

4.5. Theme 5: Acceptance of process automation technology

Most participants believed that the GEARS was perceived to be easy to use and useful. Thereby, notably influencing their behavioral intention to utilize it and accept it. This was not expected initially. Simply because before the data analysis, the researcher thought that the lack of training and technical issues reported by participants would negatively impact their decision of acceptance.

4.6. Key implications to businesses and military organizations

The results have the following implications for businesses and military organizations:

- Businesses and employees have become very dependent on technology to help complete tasks or activities related to their daily operations. This dependency is only predicted to grow as the global community has shifted to telework trends due to the impact of COVID-19.
- Businesses must properly recognize their employees that exemplify outstanding performance and behavior because it motivates them to perform their job and may lead to feelings of inclusion.
- The more reliable the technology is, more likely people will rely on it to make things run more efficient and smoother.
- Users are more willing to accept technology when it is perceived as useful and easy to use.
- Users are more likely to accept technology if it supports the tasks they must accomplish and enhance their job performance.
- Businesses must keep in mind that the best technology has its issues and must be managed in order to reduce downtime, job dissatisfaction, and employee motivation.
- Proper training and development of employees that use the GEARS gives a business a better return on their investment.
- Businesses or military organizations that are employing new technology such as GEARS to accomplish their intent must consider how they will train employees with varying levels of skills.

Businesses and military organizations with this mindset will find the right approach that accommodates specific employees as they learn and adapt to the new technology. This research study does not imply that technology will fix all business processes. Still, businesses need to have a deliberate implementation plan for IT systems, training programs, consider the user and task, and increase award processing effectiveness with the GEARS, which will aid in users’ motivation, job satisfaction, and acceptance of the technology.
5. Conclusion

Modern-day businesses are implementing technology throughout their organization as a way of improving effectiveness, productivity, reducing time, and savings cost. This study cannot irrefutably conceive that all the above aspect was achieved by an organization that uses GEARS because the focus was mainly on the affect the GEARS had on award submission and approval. However, this study does confirm that the GEARS has the aptness to improve the effectiveness and efficiency within the submission and approval process. Nevertheless, the best innovative tools do not come without some technical challenges. Perhaps this research could also be contributory to the technology industry as they design technology that fit the capabilities and task of users to perform their job. Overall, this present qualitative descriptive study wanted to examine the impact that the GEARS had on the submission and approval of individuals award for exemplary performance and behavior. While answering the research questions, using the thematic analysis approach, five major themes emerged [24]:

• Training for inexperienced personnel
• Technical challenges associated with GEARS
• Efficient award processes can improve users’ motivation to do their job
• Fit between GEARS and the various tasks influenced participants’ decision of acceptance
• Acceptance of process automation technology

Furthermore, businesses or military organizations that are utilizing innovation, for example, GEARS, to achieve their goal must think about how they will train individuals with varying degrees of capacities. An organization with this attitude will find the right training approach that obliges specific individuals as they learn and adjust to the innovation. This research study does not infer that technology will fix all business processes, but a deliberate implementation plan, training program, consideration of the user and task, will aid in a users’ acceptance of the technology. In conclusion, the more reliable the technology is, the more likely everyone is to rely on it to make processes run more effectively and efficiently. When this is the case, technology such as GEARS, which is used to process awards for approval, will be accepted by the users, provide employees with motivation to do their job, and improve job satisfaction. However, businesses must keep in mind that the best technology has its problems and must be managed in order to reduce downtime, job dissatisfaction, and employee motivation.

5.1. Recommendations

It is suggested that businesses investigate personnel factors influencing timely processing. Choosing the right person or persons with suitable skills, knowledge, and abilities to investigate is critical. Doing so will enable the organization to gather reliable documentation that can be used to support management actions in rectifying the problem. Organizations should institute a purposeful and appropriate training plan for understanding the application of the GEARS to process an award for approval. Now and again, a basic PowerPoint presentation maybe fitting; in others, it might be ideal for conducting firsthand training within a classroom environment. In different situations, self-study through Standard Operating Procedures, Policies, instructional guides, and online learning may be the chosen training technique. Successful delivery of the training may be of the upmost with
more businesses moving to telework. Nonetheless, the significant point is to fit the training methodology to the technology used and facilitate the users' learning needs [25]. Doing so will help users employ the GEARS with more confidence, less frustration, and reduce the delay of an award because users lack experience and knowledge. It is suggested that any organization planning to implement technology into daily business practices, always consider the fit and requirements of users to perform their job. By doing so, there is a greater chance that users will accept the technology. In addition, it is recommended that businesses explore in significant detail the possibility of enterprise system integration. Integrating the GEARS with other existing applications allow data to flow between systems, simplify administrative processes, aide in bridging the gap with leader notifications of awards, and increase agility throughout the organization. This benefits all personnel involved in the approval process.

Acknowledgement

We want to express our appreciation to all participants involved in the study. Without you all, this study would not have been possible. We would also like to express our appreciation to all family, friends, and colleagues for their continued support.

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