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**THESIS**

**KNOWLEDGE MANAGEMENT WITHIN RECRUITING  
COMMANDS**

by

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**KNOWLEDGE MANAGEMENT WITHIN RECRUITING COMMANDS**

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## **ABSTRACT**

Tacit knowledge is at risk of loss when personnel leave a command, whether it be for retirement, transfer, or transition. The environment of Navy recruiting is unique in that the transference of knowledge takes place at a rapid rate due to the turnover nature of the workforce. Tacit knowledge loss is of even greater value from recruiters that were highly successful during their tenure. How can tacit knowledge be collected and managed for future use in training new recruiters?

The purpose of this research is to capture and leverage tacit knowledge from Navy Recruiting Command (NRC) functions and apply knowledge management (KM) fundamentals into an accessible and transferable platform to train future recruiters. Supporting a larger research effort to research viable Navy KM strategy, the method of research used is qualitative to include literature reviews on KM, organizational change, policy and manual reviews on NRC operations, observations, and data collection from interviews. Conceptual modeling was researched and utilized to analyze tacit knowledge resources within Navy Talent Acquisition Groups. A simplified version of the Mercer Delta Congruence Model was utilized to show improved organizational performance. Lastly, this research provides the unique opportunity for future research in applications that can be applied across all Navy commands.

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# TABLE OF CONTENTS

<b>I.</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>A.</b>	<b>BACKGROUND .....</b>	<b>1</b>
<b>B.</b>	<b>PURPOSE.....</b>	<b>2</b>
<b>C.</b>	<b>SCOPE .....</b>	<b>4</b>
<b>D.</b>	<b>ORGANIZATION OF RESEARCH .....</b>	<b>4</b>
<b>E.</b>	<b>BENEFITS OF STUDY.....</b>	<b>5</b>
<b>II.</b>	<b>LITERATURE REVIEW / BACKGROUND.....</b>	<b>7</b>
<b>A.</b>	<b>WHAT IS KNOWLEDGE MANAGEMENT (KM)? .....</b>	<b>7</b>
<b>1.</b>	<b>Explicit Knowledge .....</b>	<b>8</b>
<b>2.</b>	<b>Tacit Knowledge.....</b>	<b>9</b>
<b>3.</b>	<b>Knowledge Management Fundamentals.....</b>	<b>10</b>
<b>4.</b>	<b>Knowledge Management Wrap-up .....</b>	<b>11</b>
<b>B.</b>	<b>RECRUITING COMMAND BACKGROUND / FORCE MAKEUP .....</b>	<b>12</b>
<b>1.</b>	<b>Recruiting Model: Legacy .....</b>	<b>13</b>
<b>2.</b>	<b>Recruiting Model: Transformation.....</b>	<b>16</b>
<b>III.</b>	<b>METHODOLOGY .....</b>	<b>17</b>
<b>A.</b>	<b>QUESTIONNAIRE / FOCUS GROUPS .....</b>	<b>17</b>
<b>B.</b>	<b>IDEF0 MODEL.....</b>	<b>20</b>
<b>C.</b>	<b>CONGRUENCE MODEL.....</b>	<b>21</b>
<b>1.</b>	<b>Mercer Delta Congruence Model .....</b>	<b>21</b>
<b>2.</b>	<b>Simplified Congruence Model .....</b>	<b>23</b>
<b>IV.</b>	<b>ANALYSIS .....</b>	<b>25</b>
<b>A.</b>	<b>FOUR-PILLAR RECRUITING MODEL.....</b>	<b>25</b>
<b>B.</b>	<b>IDEF0 MODEL.....</b>	<b>29</b>
<b>C.</b>	<b>RESOURCE ANALYSIS.....</b>	<b>32</b>
<b>1.</b>	<b>Word .....</b>	<b>35</b>
<b>2.</b>	<b>Recruiter.....</b>	<b>35</b>
<b>3.</b>	<b>Informal Recruiting Organization.....</b>	<b>35</b>
<b>4.</b>	<b>Formal Recruiting Organization.....</b>	<b>36</b>
<b>D.</b>	<b>SUMMARY .....</b>	<b>36</b>
<b>V.</b>	<b>CONCLUSION .....</b>	<b>39</b>
<b>A.</b>	<b>RECOMMENDATIONS.....</b>	<b>40</b>

1.	Elicitation Methods.....	40
2.	Repository Capability.....	41
3.	Information Management .....	42
B.	LIMITATIONS.....	43
C.	FUTURE STUDY.....	44
D.	CONCLUSION .....	45
LIST OF REFERENCES.....		47
INITIAL DISTRIBUTION LIST .....		51

## LIST OF FIGURES

Figure 1.	NTAG Recruiting Model. Source: CNRC Navy Talent Acquisition Groups (2018).....	13
Figure 2.	Map of Legacy Recruiting Districts. Source: Ficker (2015).....	15
Figure 3.	Navy Recruiting Visual of Legacy and Transformed Model. Source: CNRC (2019).....	15
Figure 4.	Questionnaire for NTAG San Diego and NTAG Rocky Mountain.....	19
Figure 5.	IDEF0 Model for Four-Pillar Model.....	21
Figure 6.	Mercer Delta Congruence Model.....	23
Figure 7.	Simplified Congruence Model.....	24
Figure 8.	Four-Pillar Recruiting Model.....	26
Figure 9.	IDEF0 Box and Arrow Graphic. Source: SYQUE (n.d.).....	29
Figure 10.	IDEF0 NRC Four-Pillar Recruiting Model.....	30
Figure 11.	Simplified Congruence Model - Tacit Knowledge Task Gaps.....	36
Figure 12.	Degrees of Tacitness. Source: Kölbel et al. (2017) .....	40

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## LIST OF TABLES

Table 1.	Resource Table.....	33
Table 2.	Sourcing Resource: Talent Scout Interaction .....	33
Table 3.	Sale (Selling) Resource: Talent Scout Interaction .....	34
Table 4.	Assessing Resource: Assessor Interaction .....	34
Table 5.	Onboarding Resource: Onboarder Interaction .....	34

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## LIST OF ACRONYMS AND ABBREVIATIONS

COTS	Commercial-off-the-shelf
CPO	Chief Petty Officer
CRM	Customer Relationship Management
DEP	Delayed Entry Program
FS	Future Sailor
IDEF0	Integrated Computer Aided Manufacturing (ICAM) Definition for Function Modeling
ICT	Information and Communication Technologies
ID	Identification
IM	Information Management
IT	Information Systems Technician
KM	Knowledge Management
KME	Knowledge Management Engineers
KMO	Knowledge Management Officer
MPT&E	Manpower, Personnel, Training, and Education
NC	Navy Counselors
NORU	Navy Orientation Recruiting Unit
NPS	Naval Postgraduate School
NRC	Navy Recruiting Command
NRD	Navy Recruiting District
NRP	Naval Research Project
NRS	Navy Recruiting Station
NTAG	Navy Talent Acquisition Group
OJT	On-the-Job Training
PII	Personal Identifiable Information
SF	Success Factors
TAOC	Talent Acquisition Onboarding Center

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# I. INTRODUCTION

## A. BACKGROUND

The Navy Recruiting Command (NRC) is one of the Navy's oldest bedrock organizations responsible for the recruitment of qualified applicants to become sailors for service in the naval forces. NRC relies on its personnel to be fully capable and able to meet its mission. One significant mechanism to achieve that goal is through the transference of knowledge. Calo (2008) likens knowledge transfer as the most significant resource to an organization's strategy and success. Reliance on this transference in Navy recruiting is twofold: training new recruiters and leveraging that training to recruit new sailors successfully.

Recruiters' individual training and daily job performance comprises transference of both explicit and tacit knowledge. Explicit knowledge is taken from formal and documented resources from recruiting school, NRC policies and instructions, while tacit knowledge typically is informal and undocumented sources garnered from on-the-job training, experience, and adaptation of community practices. Finding the right "fit" or combination of these two types of fundamental knowledge has proven to be effective in the intricate relationships required to manage an applicant through the talent management life-cycle (CNRRC, 2019; Calo, 2008). As gleaned from the CNRC recruiting manual (2019), the structure of recruiting does not change but the recruiters are expected to develop the right approach of using formal training and what they know or have experienced (the tacit) that fits their own individual personality (CNRC, 2019, p.70). For one example, this "fit" is important because the formal training directs how the recruiter processes an applicant for entry into the Navy while the tacit serves as a connection mechanism in that "the recruiter's personal experiences show how the prospects interests can be satisfied in the Navy" (CNRC, 2019, p.70).

The Navy Recruiting Command recently transitioned from a legacy model of recruiting to a four-pillar model platform in December 2020. The legacy model contained the traditional life-cycle management process, where the primary recruiter managed all

phases of the process from initial contact with the applicant to induction (enlistment or commission). The four-pillar model incorporates a hand-off method from the recruiter to administrative support personnel through a four-phase approach of sourcing, sales, accessing, and onboarding. Detailed background information on the recruiting models is provided in Chapter II. The transitioned recruiting platform anticipates a streamlined process with increased proficiency for recruiters.

As with any organization in the civilian or military sector, knowledge is at risk of loss when personnel leave in any capacity. Retirement, transfer, or transition out of the Navy results in inaccessible experience-based expertise if not documented or captured in some reusable manner (Calo, 2008). The environment of Navy recruiting, like most up-tempo organizations, experiences transference of knowledge at a rapid rate. This turnover rate can be attributed to most recruiters completing one tour and foregoing the opportunity to become a career recruiter (Nissen & Gallup, 2021). Knowledge loss is even more significant when losing recruiters that were highly successful during their tenure, and those that have valuable experience in all facets of the older model of recruiting. Tacit knowledge, unlike explicit knowledge that can be codified (as mentioned above), adds an additional deficit due to its informal nature, difficulty to capture, and slower process of sharing (Calo, 2008). As stated by Calo (2008), “tacit knowledge is informal and uncoded, and it exists in the heads of employees and in the experiences of the organization.” While both types of knowledge are invaluable to the process, tacit knowledge is an underexplored area of knowledge management. It is important to understand the value it holds in an organization and its impact on strategic competitiveness (Johannessen, Olaisen, & Olsen, 2001).

## **B. PURPOSE**

There is currently a lack of formal Knowledge Management (KM) fundamentals in use within NRC to train future recruiters. Specifically, the larger gap is related to tacit knowledge. How do you capture “know how” and best practices that were developed individually or collectively from varying skill levels, experiences, and applications based

on the interpretation of explicit knowledge that is readily available, formalized, and structured according to the organizational standard?

This challenge led two primary research questions:

1. Can tacit knowledge be identified within the recruiting environment?
2. How can tacit knowledge be captured in a reusable and accessible model for use within NRC?

In support of this thesis, informal telephone conversations were had with community leaders, the NRC Analytics System Integration Office, and the National Officer Programs Department as part of the initial information gathering phase to determine the way forward for this thesis. The conversations highlighted the organization's awareness of the intrinsic value of tacit knowledge and its potential to directly impact the functions of what would be considered successful recruiting practices. The analytics team's focus is on quantifiable metrics to feed varying reporting requirements on systems and the monetary cost of recruiting business practices whereas tacit knowledge analysis falls in the qualitative realm. The gaps specific to recruiter orientation and training, and capturing tacit knowledge has not been successfully addressed in a documented and viable workflow. Particularly, a workflow that is accessible and leverageable by the formal training mechanism of NRC as well as by the individual recruiter throughout their tenure. This is significant because a vital component to a recruiter's success is their adaptation to the environment (CNRC, 2019).

Recruitment is a fast-paced and high energy environment with set goals and deadlines. The more quickly a new recruiter can phase out from the anticipated lag of on-the-job training and trial and error, the more time can be spent on actual recruitment. Successful integration of tacit knowledge and explicit knowledge could assist in an immediate and significant impact on lessening recruiters' learning curves, and time and production management challenges.

## **C. SCOPE**

The scope of this study is a qualitative based thesis to determine the intrinsic value of and the types of tacit knowledge resources integral to a successful recruiting process. Secondly, how these tacit knowledge resources can be broken down and input into recommend knowledge management (KM) models. By design, this research goal is capturing these skills in a realized process that can be transferable for use in various stages of the recruiter life cycle as well as in support of improved organizational performance.

This thesis is supported through the Naval Postgraduate School (NPS) as one sub-project in a Naval Research Program (NRP) portfolio sponsored by OPNAV N1-Manpower, Personnel, Training, and Education (MPT&E) focused study on Developing a Formal Knowledge Management (KM) Process by Dr. Nissen and Dr. Gallup. For purpose of continuity and integration into the larger study, this thesis utilized the same NRC subcommand Navy Recruiting Districts (NRD), rebranded as Navy Talent Acquisition Groups (NTAG), as the focal organizations for data collection and analysis. The methods are detailed in Chapter III.

## **D. ORGANIZATION OF RESEARCH**

Chapter II is the literature review which examines the scholarly studies and conceptual framework of KM and presents NRC background and force makeup information. This review supports this research by examining organizational change related to knowledge management, and the applicable frameworks and their viability of incorporation into the NRC environment.

Chapter III incorporates and applies the understanding of information from Chapter II. This chapter outlines the methodology used in the collection of the data for the analysis portion of the study using a simplified version of the Mercer Delta Congruence Model as the primary framework.

Chapter IV reports the results of the analysis of the data captured in Chapter II and answers the first research question. The focus of the chapter is to interpret the human aspect of documenting knowledge grown from the extrapolation of best practices. These practices

gleaned from interactions, experience, and observations honed outside of or in addition to the explicit knowledge gained from structured learning platforms and mandated processes.

Chapter V presents the recommendations for areas of immediate use and future study as well as identifying the limitations of gathering tacit knowledge within this study. This chapter also answers the second research question.

#### **E. BENEFITS OF STUDY**

This study will present the viability of applying KM fundamentals in an accessible framework, expanding the ability to move tacit knowledge into a transferable and reusable platform within NRC. Additional benefits of this study examine commonalities as they relate to the generic nature of talent management building as well as sustaining relationships across skill levels and centers of influences. Lastly, this research provides the unique opportunity for future research in applications that can be applied to other Navy commands outside the recruiting realm—leveraging and extracting universal and/or platform specific KM best practices.

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## **II. LITERATURE REVIEW / BACKGROUND**

### **A. WHAT IS KNOWLEDGE MANAGEMENT (KM)?**

The Department of the Navy defines knowledge management as “the integration of people and processes, enabled by technology, to facilitate the exchange of operationally relevant information and expertise to increase organizational performance” (DON CIO, 2014, sec, “Background). The goal of KM is to ensure that people/workforce are provided with the knowledge that they need at the right time and place as well as utilizing portions of knowledge that are relevant or essential to the success of the organization (Servin, n.d.). Technology plays the role of facilitating the information exchange. For example, using email or secure phone lines to communicate crucial information to personnel helping them to better execute their mission. According to Subashini et al., (2011) information and communication technologies (ICTs) play a prominent role in the KM initiatives. Knowledge sharing is made possible by communication technologies such as computers, telephones, emails, databases, etc. (Subashini et al., 2011). Ultimately, the value of KM is realized when information is shared with the right people at the right time.

As revealed in the ABC of Knowledge Management article, Servin (n.d.) explains that KM seeks to make minute changes to the way everyone in the organization works and is not about getting new computers or creating new department. There are varied approaches that organizations use to manage knowledge. Generally, KM involves changing the values and culture of an organization, influencing and changing the behaviors of people’s work patterns, and ensuring that people have easy access to relevant information and resources to achieve a set of goals. In his article he suggests that the key processes of KM include giving training to recruits or staff members; conduct exit interviews so that the staff organization does not lose valuable knowledge; have a database that stores all publications (e.g., instructions, notices, training, manuals, etc.) produced by the organization and making it accessible to the staff; and having an environment that allows for ongoing learning. The article also states another step in KM is to encourage people with shared interests to network with each other. He also states other processes that can be implemented in KM include redesigning the office space to an open plan to encourage

visibility and communication. The overarching goal is to make it possible for people to share knowledge.

## **1. Explicit Knowledge**

According to Nissen (2014) an important dimension of knowledge uniqueness is its explicitness. Explicit knowledge is knowledge that is present in its fundamental form and be easily delivered. Such knowledge is information written down such as organizational manuals or processes. Generally, explicit knowledge and information share many properties. The difference between explicit knowledge and information is rather subtle, but knowledge tends to be more informative and actionable (Nissen, 2014). For example, according to Nissen (2014), a recipe in a cookbook will have the list of ingredients and quantity plus how the food should be prepared. In this case, the list of ingredients is simply informative. In other words, knowing the ingredients and quantity required to prepare a certain dish will not be sufficient for a person to prepare the meal. On the other hand, the procedures provide a sequence of steps that the cook should follow to prepare the meal. In this case, the procedure, rather than providing information, provides actionable steps that can be used in preparing the meal. Thus, explicit knowledge enables the action, while the list of ingredients is simply information that cannot support action.

Essentially, explicit knowledge should be able to be expressed and shared through writing, charts, or other representations. Explicit knowledge differs markedly from tacit knowledge because the latter cannot be copied, written, or shared easily. For example, the ability of the expert chef to prepare a quality meal without checking the recipe is tacit knowledge and is difficult to share because the chef has mastered the steps through experience (Nissen, 2014). That said, a novice chef may have difficulty preparing a quality meal without referring to the recipe. In this case, the explicit knowledge shared through the recipe is essential to helping the novice prepare a quality meal. KM concerns sharing explicit knowledge so that work processes become easy for people to master, delivering quality services or products to the customers. Such consistency in the quality of services or products can provide an organization with a competitive advantage.

## **2. Tacit Knowledge**

Tacit knowledge is knowledge that a person has gathered throughout their life through their personal experience, insights, emotions, observations and circumstances (S.S, 2020). Codification of knowledge into explicit and tacit knowledge is fundamental to KM (Frappaolo, 2008). Frappaolo (2008) explains that through dedicated and focused efforts, organizations can transform tacit knowledge into explicit knowledge. Generally, organizations can leverage tacit knowledge to increase value and improve performance. The difficulty, however, is how to transform the tacit knowledge held by people in the organization into a shareable form. Frappaolo (2008) details that organizations could take difficult steps of evaluating all the tacit knowledge resources to see whether it could be codified through mining or translation processes.

Generally, KM in the organization is focused on explicit knowledge. However, the majority of the knowledge in the organization is presumed to be tacit. This knowledge can be held by the employees in the form of experience accumulated over the years, intuitiveness in performing tasks, among other things. If the organization were to harness this tacit knowledge, it could use it to improve performance. Frappaolo (2008) explains that the goal of tacit KM should be to enhance the intelligence of the organization rather than seek to automate. Instead, the focus of tacit KM is to employ tools that can help capture elusive thought processes so that they are made available to the organization. These thought processes can then be used by the organization as an asset to achieve leverage and competitive advantage.

The key to tacit KM is to conduct interviews with the goal of transforming the tacit knowledge of the experts into steps or actionable thought processes. In this regard, it is important that the person conducting the interview has an open mind and decant all assumptions that may cloud their judgment. This can be done by using structured methods and techniques that help to capture the thought processes of the people. One method that has successfully been utilized by an organization such as Abbott Laboratories, Dow Chemical Company BP Amoco, and Buckman laboratories is knowledge harvesting (Frappaolo, 2008). The method involves interviewing experts to document and share their tacit knowledge.

### **3. Knowledge Management Fundamentals**

As stated in the 2011 paper *The Role of ICTs in Knowledge Management (KM) for Organizational Effectiveness*, Subashini et al., states that “knowledge is a fluid mix of framed experiences, values, contextual information, expert insights, and grounded intuition, that provides an environment and framework for evaluating new experiences and information.” In the era of the information age, knowledge has become crucial to the success of organizations just as other resources like capital, labor, and material have been (Cha et al., 2015). However, what gives one organization a competitive edge over the other? Two organizations can have the same IT, labor, capital, and land; but what will make one organization more competitive than the other is the knowledge of what combinations can produce the best performance (Nissen, 2014). This suggests that knowledge rather than other resources is key to organizations gaining a competitive advantage.

Nissen (2014) argues that just like natural resources (e.g., minerals) which are not dispersed evenly (e.g., geographically), knowledge is also not consistently distributed. This would imply that different organizations will have different levels of knowledge. Ultimately, it is this differential distribution of knowledge between organizations or regions which gives them a competitive advantage. Overall, it would appear that knowledge is power and can be the key to the success of an organization.

Nissen (2014) discusses principles that can be used in developing knowledge power. Nissen (2014) states that the first power principle is “distinguishing knowledge from information is important” (p. 9). The key distinguishing feature of knowledge is that it enables action, whereas information is used to provide meaning and context for the action. For example, if two surgeons are provided with the same charts and books, but one has 20 years of experience while the other is only starting, the one with more experience would be expected to fare better in the execution of the surgery compared to the novice. This suggests that although the information is the same, the success of the execution of the surgery is dependent on the knowledge of the surgeon on how to conduct the surgery.

Nissen’s (2014) second principle is “knowledge clumps in particular people, organizations, regions and times of application” (p. 9). In particular, tacit knowledge is

very difficult to share and tends to clump in people and organizations. For organizations that want to be global and competitive, identifying these knowledge clumps is crucial because they inhibit knowledge flow and could potentially reduce the competitive advantage of the organization.

Nissen's (2014) third knowledge power principle is focused on "differentiating between different kinds of knowledge" (p. 10). Essentially, knowledge can be tacit and explicit. For example, explicit knowledge can be articulated, making it easier to share, but because tacit knowledge is accumulated slowly through experience, it is more difficult to share. This means that when organizations lose experienced employees, they lose tacit knowledge, which could potentially put an organization at a disadvantage. As such, there is a need to conduct an exit interview to measure the tacit knowledge of the departing employee and ensure that organizations are not losing the competitive advantage brought about by this knowledge.

Nissen's (2014) fourth principle is "not all knowledge, not even tacit knowledge, is of equal value, and not all knowledge needs to be shared to effect performance" (p. 10). Understanding this value of each type of knowledge can greatly improve an organization's ability to keep a competitive advantage.

Nissen's (2014) fifth principle is "it is known well that organizational personnel, work processes, structures and technologies are interconnected tightly and interact closely" (p. 10). Essentially, for the knowledge to flow, the work processes, the organization personnel, and technologies need to be connected and closely interacting.

#### **4. Knowledge Management Wrap-up**

KM is very important to an organization. KM involves capturing and sharing knowledge within the organization. Both explicit knowledge and tacit knowledge is important to the success of an organization. For example, an expert can articulate through writing how to ride a bicycle so that all the steps required to successfully ride the bicycle safely are accomplished. (Nissen, 2014). However, a person who has never ridden a bicycle before is unlikely to succeed by simply reading the book. The reader will need an expert to guide them on how to ride a bicycle. This shows that sharing explicit knowledge among

the employees is not enough. The tacit knowledge of the experts in the field will be required to offer guidance in successfully implementing the tasks. Nissen (2014) argues that in the knowledge hierarchy, explicit knowledge is scarce. However, tacit knowledge held by people is abundant. The difficulty, however, is how to share the tacit knowledge to enable action. Explicit and tacit knowledge are thus important to the success of the organization. The experts have to guide the inexperienced in order to improve the performance of the organization. To understand how an organization can do, this we first must know and understand the organization itself.

## **B. RECRUITING COMMAND BACKGROUND / FORCE MAKEUP**

Located in Millington, TN, the NRC is the United States Navy's talent acquisition enterprise responsible for the recruitment of qualified applicants for service in the United States Navy. Since 1775, with the assignment of the first Navy recruiters under the Marine Committee—the business of recruiting and the personnel that comprised recruiters—have been an integral part of both the Navy and the nation's ability to provide military forces in direct support of national security (Navy Recruiting Command, 2017).

NRC is responsible for over 6000 employees encompassing leadership, recruiters, and civilian support staff. As seen in Figure 1, the area of command is composed of 3 Regions (West, Central, East), Navy Recruiter Orientation Unit (NORU), 26 NTAG sub-commands with 63 Talent Acquisition Operation Centers (TAOC), and over 1300 Navy Recruiting Stations (NRS), ((Navy Recruiting Command, 2017). Senior leadership are assigned according to area of responsibility and rank requirements set forth by NRC policy. Civilian support staff are hired via the Navy human resources process.

The bulk of the staff and the genesis of the recruiting mission is the recruiter. As of 2018, the official NRC website statistics report over 4000 recruiters are assigned yearly goal of more than 35,000 covering 50 states, U.S. territories of Puerto Rico, Guam, and the U.S. Virgin Islands, as well as stations in Japan, Germany, and Italy (CNRC, 2018). Recruiters are screened for fitness for the assignment (duty) and are selected from sea and shore duty sailors that vary in ranks from both officer and enlisted as well as from active

and reserve components. Typical ranks range from enlisted E4-E8 and Officer O1-O4. Diversity is present across racial, cultural, gender, age, and education backgrounds.

Recruiters receive their initial formal training via the recruiter schoolhouse at NORU. Post NORU training is comprised of explicit and tacit knowledge sources. Upon graduation and assignment to their duty area, recruiters receive their most critical training through on-going command specific education mechanisms and an onboarding period.

The continuous influx and transfer of recruiters is managed to meet assignment rotation dates and staffing requirements. The typical tour of duty (time in job) averages 36 months (depending on accession source or program) and can offer the successful recruiter the opportunity to convert to permanent recruiter status. Recruiters use numerous sources of technology, applications, and traditional means to carry out their daily duties and process applicants.



Figure 1. NTAG Recruiting Model. Source: CNRC Navy Talent Acquisition Groups (2018)

## 1. Recruiting Model: Legacy

For the past several decades, NRC recruiting model fit under a legacy style of full life cycle talent management (Smith, 2020). This model was directed by NRC headquarters with day-to-day business processes and leadership split between two national regions (East and West). The two regions were further subdivided into 26 locations specific (see Figure

2) NRDs responsible for the operation and management of the recruiters assigned to operation workspaces known as NRSs. The primary recruiter that initiated first contact with a potential applicant would go on to administer and manage the applicant throughout the process. This process flow can be summarized as prospect, process, and placement. The recruiter would guide the member through the initial vetting (prospecting), application and information gathering, medical and requirements testing (processing), and monitoring process until the member was “shipped” or placed to travel for the formal Navy training pipeline that starts with the initial training source. This legacy model operated under the one-size-fits-all concept concerning recruiters fit for the job - their skill sets and strengths for the various responsibilities (Jarret, 2019). Considering staffing issues or the unsuccessful recruiter, leadership was faced with inflexibility in their ability to restructure as required to meet the demands of their markets or modifications to yearly goals. Lastly, but not least, leadership also faced inflexibility to improve the quality of life of recruiters that may carry more of the load or miss opportunities to excel in areas that are a better fit for their skillsets (Peterson, 2017). While this model proved successful in meeting national goaling missions, NRC leadership looked to transition to a model that addressed the inflexibilities. As stated by Gary Person, former NRS Executive Director, “Transformation means that we are adjusting our culture, our processes, and our organizational structure (priorities in that order) to have greater capacity and successfully recruit in future market conditions that in the past would have been extremely challenging and a hardship on our people” (Peterson, 2017).

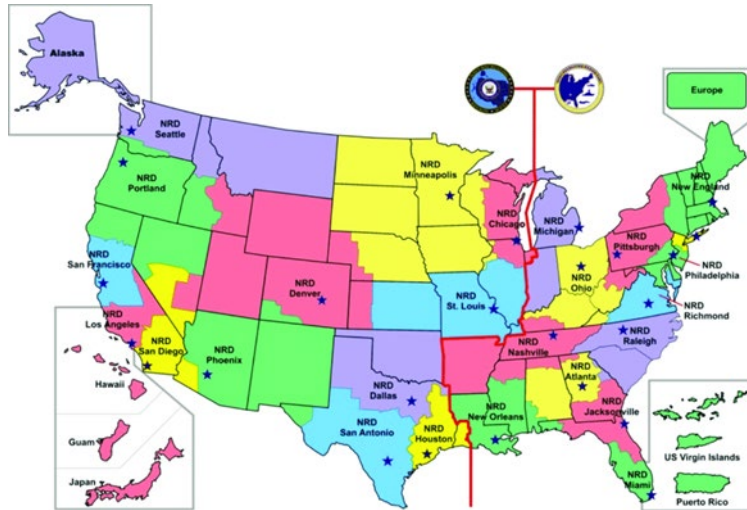


Figure 2. Map of Legacy Recruiting Districts. Source: Ficker (2015).



Figure 3. Navy Recruiting Visual of Legacy and Transformed Model. Source: CNRC (2019).

## **2. Recruiting Model: Transformation**

Starting in 2016, NRC began the transition to the current recruiting model. With full integration as of December 2020, the transformation model uses a Four-Pillar concept comprised of Sourcing (prospecting) Sales, Accessing (processing), and Onboarding (placement) (Tiongco, 2017). NRC continues as the headquarters with three regions (East, Central, West, see Figure 1). The NRDs have been rebranded as NTAGs responsible for the assigned area under their respective region command and the local authority of TAOC subordinate commands charged with the day-to-day operations and management of the recruiting process and goal attainment through the NRS. The rebranding of names follows NRC initiatives to incorporate contemporary business terminology and best human resources practices that may be more familiar with current and future demographics (Peterson, 2017).

The transformation model is designed to put recruiting talent in “best fit” assignments within the Four-Pillars. Within the Four-Pillars, NRC introduces the “People-First” discipline. “People-First” aims to incorporate best practices to discover talent within a recruiter that may have been overlooked in the previous model due to the restrictions of the talent management ingrained in the previous model (Smith, 2020). This discipline gives NRC flexibility with job placement, improved quality of life, and morale for the recruiters. “People First” also encourages efficient people management for the applicant with an emphasis on positive customer service experience throughout the process. Quality customer service could have an inverse affect in lowering applicant declination rates. (Peterson, 2017). Leveraging technology and fostering team collaboration over silo work practices can increase recruiter’s response time at any stage of the process and lessen process bottlenecks as well as recruiter burnout. (Jarret, 2019).

### **III. METHODOLOGY**

This chapter details the research method used in the analysis of our data. Qualitative methods are used to better understand Navy KM. The commands, NTAG San Diego and NTAG Rocky Mountain, were used to gather the data for this study. The leadership of both commands were included to help administer a questionnaire to 21 personnel from each command.

The 21 personnel selected consisted of a mix of all available ratings, ranks, and experience levels. Rates included career recruiters or Navy Career Counselors (NC) and non-career recruiters (other Navy ratings). The ranks varied from E-5 to O-4 with recruiting experience levels ranging from less than one year to more than three years. The questionnaire was created in a Microsoft Word document and emailed to each participant. At the beginning of each questionnaire personnel were asked for general information such as their command, rank, years of experience, recruiting type, and gender (optional). Eight questions specific to KM and recruiting were asked. Once the questionnaires were completed and returned virtual focus groups were conducted via Microsoft TEAMS questionnaire to clarify the received data received from the questionnaires and to see if any additional information could be gathered. The data collected was in pursuit of answering our two research questions:

1. Can tacit knowledge be identified within the recruiting environment?
2. How can tacit knowledge be captured in a reusable and accessible model for use within NRC?

#### **A. QUESTIONNAIRE / FOCUS GROUPS**

In addition to the general information asked at the beginning of the questionnaire (Figure 4) eight questions were asked:

1. How does formal recruiting training differ from reality?
2. What factors has your organization documented that impact knowledge gained from OJT?

3. How does your organization share OJT?
4. What characteristics has your organization determined successful recruiters to have in common?
5. Describe a successful recruiting instance your organization has documented?
6. Describe a failed recruiting instance your organization has documented?
7. What lessons learned does your organization share with future recruiters?
8. What type of training has your organization found had the most impact, OJT, formal, or a combination? How/why?

THESIS QUESTIONNAIRE: KNOWLEDGE MANAGEMENT (KM) TO NAVY RECRUITING COMMANDS

Form # 1



**This questionnaire is anonymous and does not track any names or PII nor will the form be associated with the sender's email once archived.**

**Instructions:**

1. Please click on input areas for drop down menu to select appropriate response for each section in *general information* and *questions/input* sections. \*Indicates required fields.
2. If any questions, please contact us by the given email and phone numbers outlined in the email that accompanied this form.
3. There is no right or wrong answers, please feel free to provide input at will. Wrap Text is enabled for additional space as necessary.

**General Information**

<b>*Command</b>	Choose an item.	<b>*Rank</b>	Choose an item.
<b>*Years of Experience</b>	Choose an item.	<b>Gender</b>	Choose an item.
<b>*Recruiting Duty Type</b>	Choose an item.		

**Questions/Input**

1. How does formal recruiting training differ from reality? Click or tap here to enter text.
2. What factors has your organization documented that impact knowledge gained from OJT? Click or tap here to enter text.
3. How does your organization share OJT? Click or tap here to enter text.
4. What characteristics has your organization determined successful recruiters to have in common? Click or tap here to enter text.
5. Describe a successful recruiting instance your organization has documented? Click or tap here to enter text.
6. Describe a failed recruiting instance your organization has documented? Click or tap here to enter text.
7. What lessons learned does your organization share with future recruiters? Click or tap here to enter text.

THESIS QUESTIONNAIRE: KNOWLEDGE MANAGEMENT (KM) TO NAVY RECRUITING COMMANDS

Form # 1

8. What type of training has your organization found had the most impact, OJT, formal, or a combination? How/why?

Click or tap here to enter text.

Figure 4. Questionnaire for NTAG San Diego and NTAG Rocky Mountain

The questionnaire was anonymous, did not track any names or Personal Identifiable Information (PII), and was designed to only take 10–15 minutes to complete. Each person was asked to provide answers to all eight questions to the best of their ability. Both commands, NRD San Diego and NTAG Rocky Mountain, provided these questionnaires back prior to the scheduled focus groups.

The focus groups from each command were to consist of the same number of personnel (14 enlisted and seven officers) and broken down into four separate groups per command:

- Group 1: E-6 and Below Non-Career Recruiters
- Group 2: E-6 and Below Career Recruiters
- Group 3: Chief Petty Officers (CPO)
- Group 4: Junior Officers (O1-O4)

The focus groups lasted approximately 60 minutes per group. Even though personnel from each group joined using their TEAMS account no PII was included in this thesis. The focus groups were organized so the participants could speak freely among their peers.

## **B. IDEF0 MODEL**

An IDEF0 (Integrated Computer Aided Manufacturing (ICAM) Definition for Function Modeling) model (Figure 5) was used to capture the inputs, controls, resources, and outputs for each part of the Four-Pillar model (Sourcing, Sale(selling), Assessing, and Onboarding).

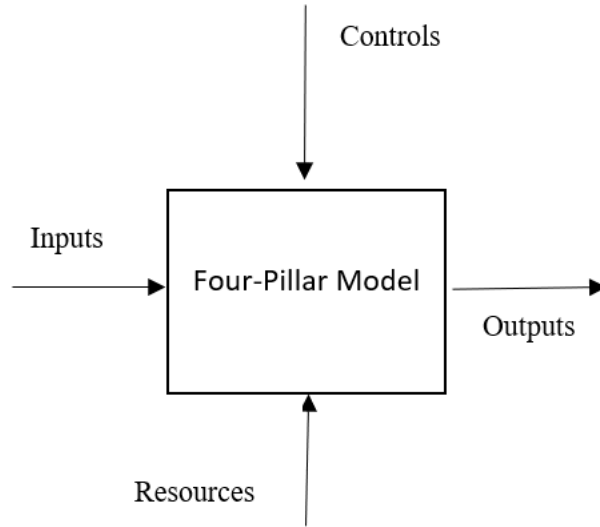


Figure 5. IDEF0 Model for Four-Pillar Model

The inputs, controls, resources, and outputs for each part of the Four-Pillar model are described in Chapter 4 as a part of our analysis. The focus of the analysis is to determine the resources that can be broken down into tacit knowledge tasks. This is accomplished using the Four-Pillar model and overlaying it onto an organizational analytic model (Congruence Model).

### C. CONGRUENCE MODEL

The congruence model used in this thesis is a simplified version (Figure 7) of one developed by Mercer Delta (Figure 6) (Mercer Delta, 1998).

#### 1. Mercer Delta Congruence Model

The input for the Mercer Delta model is broken down into three categories; environment, resources, and history, each of which has a different effect on the organization. The environment consists of people, other organization, social and economic forces, etc. Each of which can have an influence on the organization. Resources include the organizations assets, employees, technology, capital, and information. History is the organizations development over time and how it operated over the years (Mercer Delta, 1998).

Strategy within the Mercer Delta model is broken down into two different types: corporate and business. Corporate strategy focuses on legislative mandates, or public policy objectives, and priorities specific to the organization. Business strategy which focuses on the configuration of the organization's resources. These two strategies create a "business design" that Mercer Delta use (Mercer Delta, 1998).

The middle section of the Mercer Delta model is known as the organization transformation process. Inside are four elements: work, people, formal organization, and informal organization. Work pertains to the basic activities that the organization engages in. People refers to the knowledge, skills, perceptions, and characteristic of the personnel working in the organization. Formal organization is structures, systems, and processes that make up the organization. The informal organization exists alongside the formal organization as unwritten guidelines or processes that help improve the organization through values, beliefs, and acceptable behavior from the personnel that work there. All four elements work fit together in the transformation process to produce and output (Mercer Delta, 1998).

The output of the Mercer Delta Model is broken down into three elements; system, unit and individual, and refers to the organizations ability to create products, services, and achieve a certain level of individual and group performance. The system refers to goods, services, revenues and other marketable aspects within the organization. Units are the performance levels of teams and/or departments within the organization. Individuals refers to the people within the organization and their behavior and performances (Mercer Delta, 1998).



Figure 6. Mercer Delta Congruence Model

## 2. Simplified Congruence Model

The simplified congruence model works similarly to the Mercer Delta model but on a much smaller scale. It only focuses on a single resource for each section of the Four-Pillar model. These resources are fed into the middle of the model where it undergoes a type of transformation process that identifies tacit knowledge tasks that play a part in each of the four components (Work, Recruiter, Informal Recruiting Organization, and Formal Recruiting Organization). Work in this model is defined the same as the Mercer Delta model. A Recruiter, similar to people in Mercer Delta model, is defined as the person responsible for taking on this tacit knowledge task. The formal and informal recruiting organization is very similar to the ones in the Mercer Delta model however, they focus solely on the already defined structures, processes, and systems of NRC, the associated NTAGs and their unwritten guidelines and processes that are used by recruiters and other staff members. The output of this model shows the tacit knowledge tasks for each part of the transformation process.

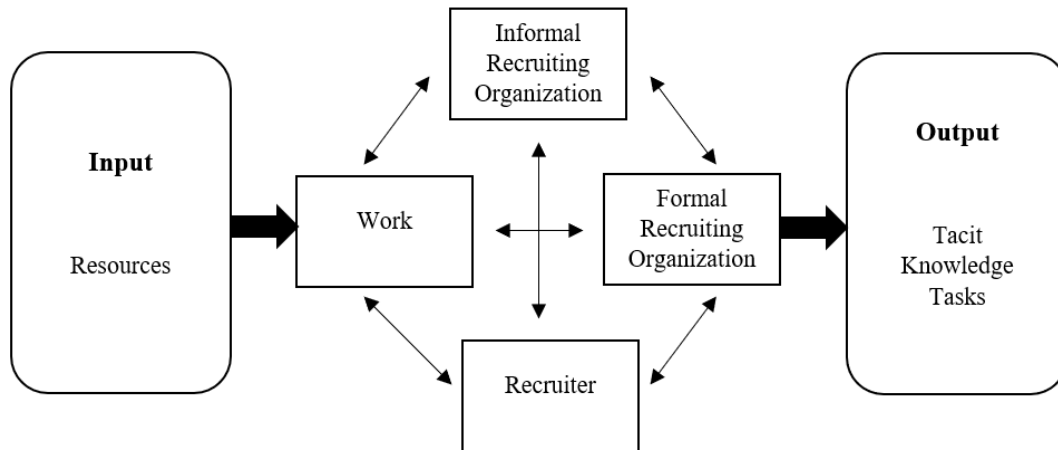


Figure 7. Simplified Congruence Model

## IV. ANALYSIS

The research findings presented in this chapter are the result of the analysis of the data collected from the questionnaires and focus groups. The first portion of the analysis provides a detailed description of the Four-Pillar model components and the recruiter functions summarized in Chapter II. The second part of the analysis gives an overview of a basic function model and the modified model for recruiting with definitions and descriptions of the respective elements. The final area is the analysis of the collected data inputted into our resources tables to identify tacit knowledge tasks needed for each source in the four-pillar model.

### A. FOUR-PILLAR RECRUITING MODEL

As summarized in Chapter II, the Four-Pillar recruiting model is the current standard in use by NRC as of 2020 (Figure 8). The transformation from the legacy recruiting model to this model has leveraged the functions of a typical recruiter and branched these tasks out into four functional pillars comprised of Sourcing, Sales, Assessing, and Onboarding (Tiangco, 2017). What were once functions conducted by a single recruiter operation for the life-cycle management, are now accomplished by three recruiters (Smith, 2020). The recruiters have been rebranded as Talent Scouts, Assessors, and Onboarders (Tiangco, 2017). The Talent Scout is responsible for the first two pillars, Sourcing and Sales. The rebranded titles are full functioning recruiters for the purpose of pay and allowances as well as sourcing (in varying scale) of civilians interested in Naval service. Due to the legacy of recruiters, the rebranded titles are colloquially referred to as recruiters and can be used interchangeably. For the purpose of this research:

- The formal titles will be used for consistency and delineation of duties and will refer to both enlisted and officer recruiting.
- There will be a Talent Scout for Sourcing and Sales. Assessor will be used for Assessing, and Onboarder for Onboarding.

- The scope of the Four-Pillar model will only address recruiting for active duty service (i.e., not reserve duty).

The listed descriptors of the Pillar functions and the supporting primary task as seen in the IDEF0 are summations of official definitions and designations outlined in the Commander, NRC Navy Recruiting Manual Enlisted and Officer manuals and subsequent supporting documents (CNRC, 2018, CNRC, 2019, NORU, n.d.).

## FOUR-PILLAR MODEL: SOURCING → SALES → ASSESSING → ONBOARDING

Figure 8. Four-Pillar Recruiting Model

**Sourcing:** Sourcing is performed by the Talent Scout and is the rebranded prospecting arm of the recruiting process. The recruiting manuals describe prospecting as the methods the Talent Scout uses to “place themselves face to face with as many potentially qualified applicants as possible” (CNRC, 2019. Page 70.) This action has been deemed the most important aspect of success in recruiting (CNRC, 2019). Without people to process, the organizational function of recruiting cannot meet the goals and mission. Market identification (ID) and Prospecting (the action) have been identified and grouped together as two of the major inputs that follow a logical relationship related to Sourcing.

- **Market ID** consists of analyzing the demographics and territory of the assigned area of responsibility. The Talent Scout must understand where they are recruiting and how they are going to recruit to find leads that will possess the mixture of characteristics that will make a viable person of interest (a lead).
- **Prospecting** is the activity of putting into action the Market ID analysis and using numerous tools to contact the leads, conduct preliminary screenings, and determine pre-eligibility for scheduling an interview. If the lead is viable for the next phase they are considered a prospect for

scheduling an interview. Some methods include phone calls, texts, and social media. There is also the possibility of referrals and personally developed contacts. Sourcing requires the Talent Scout to use the explicit structure of recruiting along with their tacit based personal experiences and personality to work within the boundaries of the available demographics, programs, and territory.

**Sales:** Through the action of selling, the Talent Scout works to determine a prospect's eligibility to move to the next step, Assessing. Eligibility requirements are explored in greater detail to determine fit for processing as an applicant. Interviewing and Prospect Management have been identified and grouped together as two of the major inputs that follow a logical relationship to Sales.

- **Interviewing** is officially meeting with the prospect to discuss the detailed procedures of the recruiting process and to reveal the prospect's motivation for wanting to join the Navy. The prospect is screened per the recruiting policy to ensure they are of legal age to join (18 or older) without parental consent. The Talent scout then uses presentations of the full recruiting process as well as relating benefits, available jobs, and programs to the candidate.
- **Prospect Management** is the process of proper time management for the applicants in relation to appointments and the recruiting process prior to transfer to the Assessing phase, and to address any changes in the prospect's expectations, intent, or commitment to the process. If the prospect is viable for the next phase, the prospect is considered an applicant for scheduling of an official screening.

Similar to Sourcing, Sales requires the Talent Scout to combine the explicit structure of prescribed selling techniques with their own tacit personal experiences, personality, and best practices to find the right fit for the Navy and the prospect's personal goals.

**Assessing:** Managed by the Assessor, this is the processing branch of the recruiting system; the applicant completes all requirements necessary for induction into the Navy. Processing and Applicant Management have been identified and grouped together as the two major inputs that follow the logical relationship to Assessing.

- **Processing** is the means by which the official screenings are conducted. The screenings include aptitude testing, medical exams, criminal background checks, and classification for jobs or programs.
- **Applicant Management** is time management related to scheduling the testing, exams, and other administrative functions as well as effectively addressing any changes in the prospect's expectations, intent, or commitment to the process. Upon completion of the assessing and induction into the Navy, the applicant is considered a Future Sailor (FS).

Like the Talent Scout, the Assessor must also use the explicit structure of the prescribed eligibility protocols and regulations along with their tacit personal experiences, personality, and best practices to find the right fit for the Navy and the continued support of the prospect's personal goals.

**Onboarding:** Onboarding, managed by the Onboarder, is the management of inductees into service to ensure the member is mentored, trained, and meets supervised schedules before they are able to attend any required follow-on training or begin service. In addition, Onboarders are responsible for effectively addressing any changes in the prospect's expectations, intent, or commitment to the process. Management of the Delayed Entry Program (DEP) has been identified as the major input that follows the logical relationship to Onboarding.

- **The Delayed Entry Program (DEP)** is a formal program for inductees that have a delay between the time they are inducted into service and their date to attend initial training or service on active duty. DEP encompasses the major responsibilities of the overall Onboarding function. Successful completion of DEP results in the Future Sailor being ready for the

scheduled travel date (called a Shipper) for initial training and ends the major functions of the recruiting process.

Aligned with the earlier three functions, the Onboarder must also use the explicit structure of the prescribed DEP management protocols and regulations along with their tacit personal experiences, personality, and best practices to find the right fit for the recruiting mission and the prospect’s personal goals (CNRC, 2018, CNRC, 2019, NORU, n.d.).

## B. IDEF0 MODEL

The IDEF0 is a simple model of blocks and directional arrows that give a visual graphic, as stated by the IDEF0 website “the decisions, actions, and activities of an organization or a system” (IDEF0, n.d.). Figure 9 is provided as a high level refresher of the basic components. The model has been adopted and modified to show the functional flow of the life cycle processes in relation to recruiting applicants for Naval service through the Four-Pillar model. Figure 10 is the modified model. The modified model definitions of the basic components to describe the specific recruiting environment are addressed following Figure 10.

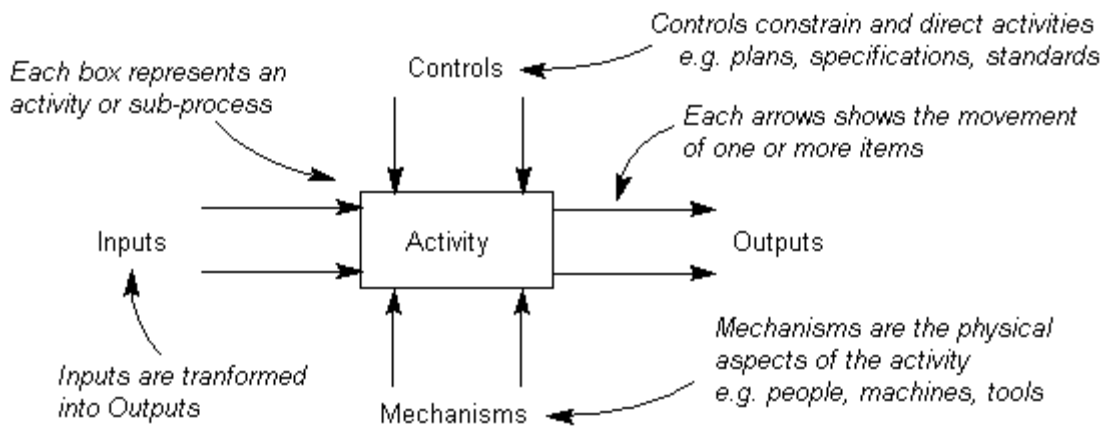


Figure 9. IDEF0 Box and Arrow Graphic. Source: SYQUE (n.d.)

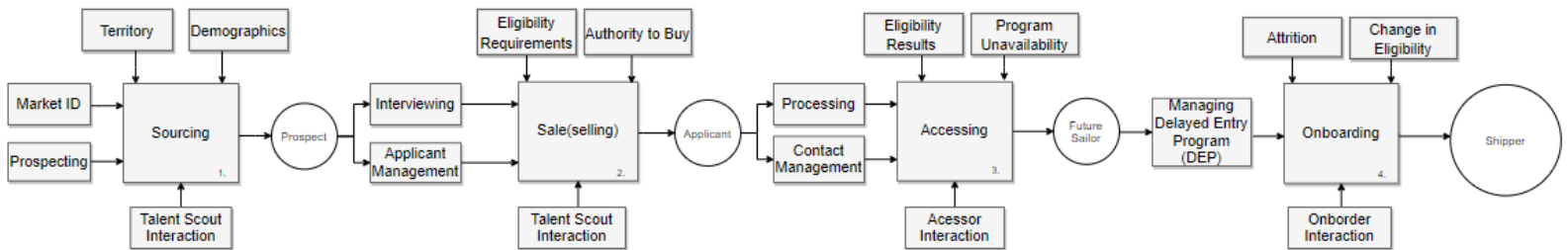


Figure 10. IDEF0 NRC Four-Pillar Recruiting Model

- **Arrow:** One or more guided lines with the arrowhead showing the directional flow of an influence and connects the boxes (SYQUE, n.d.). For example, transformation from a source to an output represents a subprocess that has influence on the output. Market ID and Prospecting are the two of the primary tasks that are inputs flowing into to the function of Sourcing.
- **Box:** The large center boxes, for example Sourcing, which is the first function of the Four-Pillar Model, are used to represent a named solo function or a subprocess within a larger organizational process (SYQUE, n.d.). The number in the lower right corner shows the sequence of the functions. The smaller boxes house the influencers (i.e., inputs, controls, and mechanisms) of the function box (SYQUE, n.d.).
- **Circles:** The circles, both large and small, are modifications of the basic shapes only for the ease of differentiation from the often used box. The smaller circles represent an output that is the activity to move to the next set of inputs for the next function of the model. The large circle represents the final output of the overall process. For example, the small circle housing the Prospect represents the output from completing the function Sourcing. This Prospect will now influence the inputs of Interview and Prospect Management. Without a Prospect, the function of Sales cannot proceed.
- **Inputs, Controls, Outputs, Mechanisms (ICOM):**
  - **Inputs:** Activities that become outputs (SYQUE, n.d.). If the activities are completed the result should lead to a desired output represented by the circles. For example, Market ID and Prospecting are two of the primary tasks that must be completed by the Talent Scout in order to transform a Lead into a Prospect.

- **Controls:** Activities that do not change but have an influence on how an output is completed such as rules, policies, forms, authority (SYQUE, n.d.). For example, a contact may be ready to become a Prospect but does not qualify to go further in the process because the member has an identified issue that will legally keep them from joining the Navy, or the contact may not be old enough to legally commit to the process without parental consent.
- **Outputs:** The results or desired transformation of the inputs influenced by the mechanisms and controls working together through the connected function (SYQUE, n.d.). For example, the small circle representing a Future Sailor is an output of the functions of Sourcing, Selling, and Assessing. This an individual that was able to qualify through of the processes of functions 1-3. Once the member makes it through process of function 4, Onboarding, the member will be represented by the large circle indicating a soon to be inducted Shipper at the end of the Four-Pillar model.
- **Mechanism:** The physical or interaction aspect of the activities that is required to complete the connected function (SYQUE, n.d.). For example, the interaction is the physical or experienced driven motions of the Talent Scout-Sourcing to get the Prospect to agree to meet for an Interview.

### C. RESOURCE ANALYSIS

Tables were created using information from the resources of the IDEF0 model in Figure 10 (Tables 2, 3, 4, and 5). The tables break down each resource to identify tacit knowledge tasks within an organization as it pertains to each of the resources needed for a recruiter to complete the sections of the Four-Pillar model. The tables only focus on tacit knowledge. There are explicit knowledge requirements and tasks that need to be

completed, however, the sole focus of this analysis is on the concept of tacit knowledge within an organization. Table 1 shows the structure of each resource analysis table.

- Left Column: Tacit Knowledge Requirement needed to complete the associated resource from Figure 10. Those tacit knowledge requirement(s) also match the input(s) for each part of the four-pillar model.
- Top Row: The middle four sections (transformation process) of the simplified congruence model (Figure 7).
- Inside Table: These are the tacit knowledge tasks generated from the cumulative responses to the interview questions and the focus groups.

Table 1. Resource Table

	Work	Recruiter	Informal Recruiting Org	Formal Recruiting Org
Tacit Knowledge Requirement(s)	Tacit Knowledge Task	Tacit Knowledge Task	Tacit Knowledge Task	Tacit Knowledge Task

Table 2. Sourcing Resource: Talent Scout Interaction

	Work	Recruiter	Informal Recruiting Org	Formal Recruiting Org
Market Identification	Recruiter's interpretations of Market ID analysis	Skills used to complete Market ID	Leveraging recruiter's best practices	Experienced recruiters teaching new recruiters to optimize Market ID
Prospecting	Recruiter's interpretations of prospecting	Skills used to schedule an interview	Leveraging recruiter's best practices	Experienced recruiters teaching new recruiters to optimize Prospecting

Table 3. Sale (Selling) Resource: Talent Scout Interaction

	Work	Recruiter	Informal Recruiting Org	Formal Recruiting Org
Interview	Recruiter's interpretations of interview techniques/processes	Skills and personal experience used during interview to sell Navy to applicant	Leveraging pertinent skill sets of other recruiters	Experienced recruiters teaching new recruiters how to optimize interview process
Prospect Management	Recruiter's interpretation of applicant process	Recruiter's dictating time management of applicant and process	Leveraging other recruiter's schedules	Experienced recruiters teaching new recruiters how to optimize Prospect Management

Table 4. Assessing Resource: Assessor Interaction

	Work	Recruiter	Informal Recruiting Org	Formal Recruiting Org
Processing	No Tacit task	No Tacit task	No Tacit task	No Tacit task
Applicant Management	Recruiter's interpretations of applicant indicators	Skills and personal experience to keep applicant committed to screening process	Leveraging recruiter's best practices	Experienced recruiters teaching new recruiters how to optimize Applicant Management

Table 5. Onboarding Resource: Onboarder Interaction

	Work	Recruiter	Informal Recruiting Org	Formal Recruiting Org
Management of Delayed Entry Program (DEP)	Recruiter's interpretations of applicant's ability to stay committed to the program	Skills and personal experience to keep applicant committed to DEP	Leveraging recruiter's best practices	Experienced recruiters teaching new recruiters how to optimize Management of DEP

## **1. Work**

In Tables 2, 3, 4, and 5 the tacit knowledge task for each tacit knowledge requirement is the recruiter's interpretation of how to complete or conduct the work required within that requirement. These interpretations are taken from each of their personal backgrounds and knowledge of the process. From the data collection (interview questionnaire and focus groups) it was found that many individuals understood these requirements but how each person conducted this work was different. Even with explicit guidelines to follow there was different ideas of how to complete the work. For example, in market identification recruiters knew their area of responsibility or territory but how they each found leads that possess the mixture of characteristics needed to be a viable person of interest for contact was different.

## **2. Recruiter**

In Tables 2, 3, 4, and 5 the tacit knowledge task for each tacit knowledge requirement is the skills and personal experience of each recruiter used to complete each requirement. From the data collected each recruiter had their own experiences that they referred to in order to help with completing each requirement. These skills were either self-taught or learned from time spent doing the job. For example, in the interview process a recruiter not only has to understand the basics of what the Navy has to offer but they need to be able to portray it in a different manner for each applicant as each person wants to join the Navy for different reasons. These learned skills and experiences are unique to each recruiter.

## **3. Informal Recruiting Organization**

In Tables 2, 3, 4, and 5 the tacit knowledge task for each tacit knowledge requirement is the recruiter leveraging the best practices and skill sets of other recruiters in their organization to complete each requirement. Some recruiters received a quick pass down and a place to find information on a shared drive while others were told to shadow a more experienced recruiter. This can lead to different paths for a recruiter to leverage best practices. When left to figure it out on their own, they eventually found a more experienced recruiter to shadow or a mentor within their organization. This tacit knowledge task was

where the bulk of the data pointed to issues where a lot of junior recruiters were unable to succeed in certain areas of their job alone and having a more experienced recruiter to help ensured their success.

#### 4. Formal Recruiting Organization

In Tables 2, 3, 4, and 5 the tacit knowledge task for each tacit knowledge requirement is having more experienced recruiters teaching new or junior recruiters how to optimize their skills and abilities to complete each requirement. While there are the explicit and formal training processes that a recruiter goes through, the tacit knowledge that experienced recruiters have is invaluable to a new or junior recruiter. This need to capture this tacit knowledge task in an explicit manner would be one of the most beneficial actions in ensuring a new or junior recruiter succeeds.

#### D. SUMMARY

Figure 11 is a graphical representation of the gaps that have been discovered during the transformation process within the simplified congruence model.

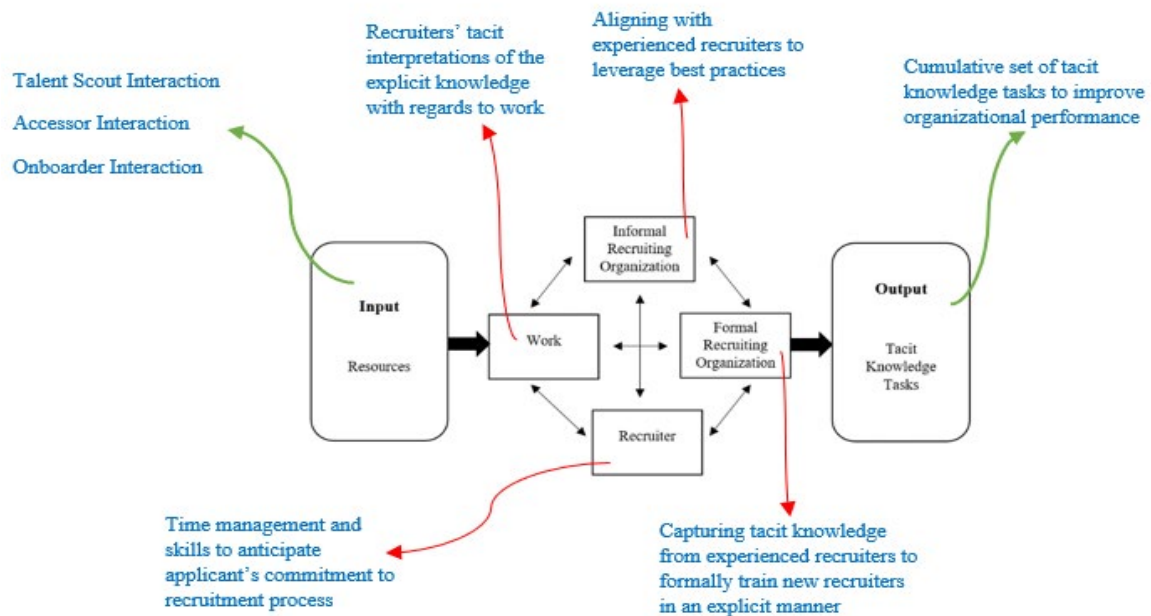


Figure 11. Simplified Congruence Model - Tacit Knowledge Task Gaps

The green arrow from the input points to the three resources used to identify the tacit knowledge tasks. The green arrow from the output identifies the outcome from the transformation process. This being the cumulative set tacit knowledge tasks identified in the resource Tables 2, 3, 4, and 5 that can be used to help improve organizational performance. The red arrows point to the four cumulative gaps that have been identified from the tacit knowledge tasks within the resource tables as they apply to part of the middle transformation process. These gaps help to shape the recommendations in Chapter V.

To answer the first research question— can tacit knowledge be identified within the recruiting environment?—yes, tacit knowledge can be identified within the recruiting environment. The resource tables and descriptions identify the tacit knowledge that is capturable within both Navy Talent Acquisition Groups (NTAGs). The only exception to these tables is Processing (Table 4) where it was determined to have no tacit knowledge task associated with it. This means that the tasks needed to complete it were strictly explicit and formal in nature. From analyzing the data there were two commonalities from both NTAGs with respect to tacit knowledge. OJT was identified as being more beneficial than any formal training. Learning from more experienced recruiters firsthand for OJT was the preferred method of training. Locating specific job information and forms was hard to find within the command’s specific information management structure. Chapter V details recommendations to ensure these two commonalties are captured in a way that will benefit the organization.

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## V. CONCLUSION

Three recommendations are presented in this chapter in support of the second thesis question: How can tacit knowledge be captured in a reusable and accessible model for use within NRC?

As explored in Chapter II, tacit knowledge is harder to capture than explicit knowledge due to its innate intangibility (Ambrosini & Bowman, 2001). Personnel at all levels of experience will possess some level of skills and “know how” that has not been captured in a reusable way. Some tacit experience may be unattainable due to limitations in the ability to verbally express it. Other instances may not be capturable because the person is not fully aware they are doing something that should be captured. Finally, some personnel have never been asked to capture this type of information (Ambrosini & Bowman, 2001).

Ambrosini and Bowman (2001), refer to these different ranges of tacit knowledge as degrees of tacit knowledge. The range is from a low degree expected from explicit knowledge-based skills to a high degree reflective of deeply imbedded tacit knowledge that cannot be expressed in a capturable form. Kölbel, Ossadnik, and Gergeleit (2017) capture these degrees in their more detailed version of the model seen in Figure 12. Degrees B and C are workable for a codifiable form through methods of elicitation such as interviews and questionnaires. While degree C is not as easily captured with conventional wording, it can be accessible via storytelling (Ambrosini & Bowman, 2001.) In today’s technological savvy environments, some skill processes may be video recordable or staged as reenactments. These degrees of tacit knowledge such as degree B “becomes less obvious over time, because the knowledge carriers have not been mentally concerned with it and no third party has demanded for it” (Kölbel et al., 2017, para. 9) and degree C “can only be captured incompletely” (Kölbel et al., 2017, para. 9).

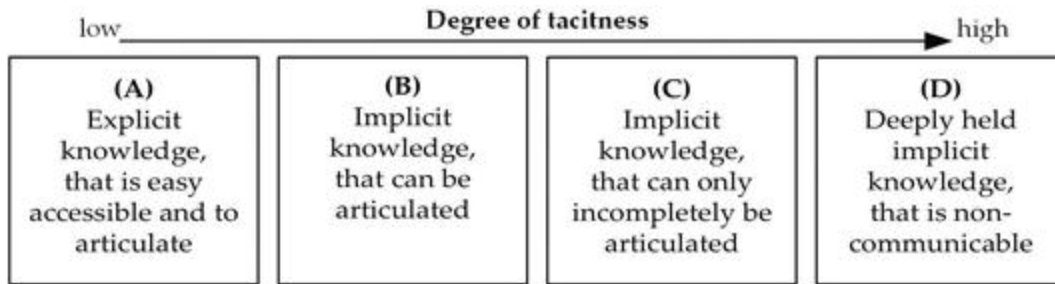


Figure 12. Degrees of Tacitness. Source: Kölbel et al. (2017)

## A. RECOMMENDATIONS

### 1. Elicitation Methods

Cognitive and casual elicitation techniques are two of the least complicated methods that can be used over time or in a more immediate capacity in relation to the frequency of turnover. These types of approaches can be used to reveal data that has aggregable attributes of commonalities or trends that can transform into best practices. For example, one way to aggregate these attributes is to set organizational success factors (SF). These SFs are uniform indicators developed to express attributes considered instrumental or impactful to the overall success of the organization (Kölbel et al., 2017).

#### a. Cognitive

Cognitive methods of information gathering focus on the individual's perception or beliefs on the how go about their actions related to a topic of interest. It is their personal interpretations of the ways their skills, knowledge, and experiences work to produce a desired outcome (Ambrosini & Bowman (2001). For NRC and the process of recruiting, exit interviews or questionnaires can be readily added to the procedures required for recruiters leaving the command. As expressed in Chapter IV, Sourcing (prospecting) is considered the most important aspect of the recruiting process (CNRC, 2019). For example, as a part of the exit interview NRC administers the questionnaires to recruiters, that were deemed successful based on the organization SFs for Sourcing. Using an arbitrary sample size for illustration purposes only, 7 out of 10 successful recruiters reveal that using the technique of phone canvassing during Sourcing, people that did not qualify for service tended to have a marked hesitation when answering eligibility questions of a sensitive nature (e.g., weight, criminal

background). Could this hesitation be compared to the immediate answering of the same questions by those deemed qualified? A new recruiter (or a struggling recruiter) may be prompted to ask follow-on questions to get as much information as they can before determining if a person is within the eligibility requirements before scheduling a face-to-face interview — interviews that are time consuming both in real time and in availability on the recruiter's schedule. This frequent practice may be a trend that is worth recording as a best practice and can be weighted for impact against other SFs.

***b. Casual***

Casual methods by group discussion are another way of information gathering. This method elicits the how and why of what a recruiter does and the relationship on how these actions link to schedules and other events related to making NRC goal. This method will focus on the action of how a process is carried out and can be “useful for eliciting factors that are context dependent.” (Ambrosini & Bowman, p. 818). Kölbl et al. (2017), referencing work by Akkermans and van Helden (2002), discussed that group casual information gathering can be used to construct a unified view of the group interpretations of the targeted process. (Kölbl et al., 2017). Casual methods within a group format may also help to provide means of structuring vague procedures that are not easily translatable (level C of degrees of tacitness). Storytelling may be a viable method in this scenario to help identify or piece together tacit knowledge from fragmented expressions. Lastly, the nature of group interactions may encourage additional knowledge that would not be as easily uncovered in individual discussions (Shffiman & Kanuk, 1991) as referenced by Ambrosini & Bowman (2001). The example of phone canvassing given in the previous segment can be used in this casual dynamic as well.

**2. Repository Capability**

Aggerated data, as previously described, or any form of tacit knowledge the organization codifies can be placed into a knowledge management repository. The repository should be an accessible mechanism available to the organization irrespective of title or experience of personnel. The Salesforce application is one example. Salesforce is one of NRC’s integral web-based utilities that is used in the automated functions of the

recruiting process (NRC Analytics System integration Office, phone conversations, 2021). This Software is a commercial-off-the-shelf (COTS) product that serves as the application builder for customer relationship management (CRM). There are numerous utilities and plug-ins available for modification to fit NRC organizational needs. NRC is leveraging the collaboration and sharing capability (NRC Analytics System integration Office, phone conversations, 2021). This collaboration and sharing capability can be used as a capturing tool for tacit knowledge. For example, for collaboration, the tacit knowledge can be captured via the chatter (messaging) feature. For the sharing feature, tacit knowledge can be captured via fillable templates or questionnaires modeled after the SFs-driven exit interviews. These fillable templates or questionnaires can be populated and submitted by any recruiter or staff member at any time to provide updated best practices and answers to frequently asked questions. The analytical capability of Salesforce can be used to aggregate report trending topics to all levels of leadership. It can also serve as a source for training topics and in the administration of archivable records for historical reporting.

### **3. Information Management**

From the data collection process, it was discovered that most recruiters, especially new ones, had a difficult time not only locating the correct form to use at different points in an applicant's process but also ensuring they had the right version of said form. Creating and maintaining a single repository for all commands that fall under NRC to reach back to for command wide training, processes, forms, etc., would alleviate the issue of confusion as to what form or process is current. One recommendation would be to have dedicated team for Information Management (IM) at NRC. This team could consist of a Knowledge Management Officer (KMO), an Information Manager, and a small team of Knowledge Management Engineers (KME) and Information Systems Technicians (IT). The KMO and KME's focus is on knowledge discovery, knowledge capture, knowledge sharing, and knowledge application (Brooks, 2020). The information manager and the IT's focus is primarily on the organizations' required structure for maintaining the information or data collected (Brooks, 2020). These personnel would work together to ensure information is readily and easily available to NRC and all subordinate commands. As previously mentioned, Salesforce is an option as a possible repository for some information such as,

lessons learned, best practices, or even group discussions. SharePoint is also a great tool for collecting, storing, and managing information. It is highly customizable to meet the needs of an organization.

## **B. LIMITATIONS**

The purpose of this study was to assess the feasibility of identifying tacit knowledge within the recruiting process and if identified, could this knowledge be captured into an accessible and reusable model for use in NRC. Although this research was conducted with diligence and thoroughness, the listed limitations were expected while conducting this research. These points are shared in the expectation that they will be taken into consideration if this subject is explored by additional researchers. The format for writing this limitations segment was influenced by guidance presented by Avishek, M. and Chetty, P. (2019).

- It was anticipated that the COVID travel restrictions and working protocols would limit the researcher's ability to have face-to-face interactions with the respondents as well observe the recruiting process in real-time environments. These types of interactions could aid in the interpretations and identification of tacit knowledge.
- Methodology limitations were expected. While there is a robust collection of literature addressing tacit knowledge in theory of importance, there are limited case studies with instrumentation to compare viable KM models in a recruiting environment.
- Impact related limitations were expected in that the sample size was regulated to two districts within the same region as well and taking in to account the inherent reluctance to answer questionnaires or participate in interviews. A larger sample population will aid in a more robust comparison of tacit knowledge gaps across the enterprise.
- As mentioned in the thesis proposal, it was anticipated that tacit knowledge is indeed difficult to capture in a formal KM framework. In

addition, there may be limitations or undesirable aspects of captured knowledge due to its personal nature and the persons' willingness to share their "best practices" with others in a competitive environment.

- Collection and assessment of a prospect's experiences can be used to triangulate the data collected from the recruiter's point of view. This is now common in everything from one's experience with a banking transaction to satisfaction of one's experience with car service. By comparing these satisfaction surveys with tacit experience and knowledge of recruiters, the organization could gain a much more refined understanding of where to create better organizational "fitness."

### **C. FUTURE STUDY**

While this thesis only touched on the area of tacit knowledge within recruiting commands it has the potential to be vastly expanded on. Some considerations for future study are:

- Qualitative study on the deeper psychology of a recruiter (e.g., incentives)
- Similar thesis/study using recruiting commands from areas across the continental United States
- Similar thesis/study on other operational or non-operational Navy commands to compare results
- A study on the viability of using the data gathered from the elicitation methods into cognitive and casual mapping of the data (Ambrosini & Bowman, 2001)
- A study on the dynamic shift into what is considered essential to the recruiting process

## **D. CONCLUSION**

Can tacit knowledge be identified within the recruiting environment? Yes, as explained in Chapter IV, this can be done. How can tacit knowledge be captured in a reusable and accessible model for use within NRC? All the recommendations presented in this chapter can be used individually or together to capture and create a model or repository for tacit knowledge. This can be done at NRC or modified for each operating command under NRC for use, as needed, to capture the unique operating environment—influenced by demographics, terrain, and cultural norms. On a small scale this thesis adds to the body of knowledge with regard to real-world examples of identifying tacit knowledge within an organization and the practice of the implementation of the theories surrounding the methods of how to extract tacit knowledge from a specific environment.

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## LIST OF REFERENCES

- Ambrosini V, & Bowman C. (2001) Tacit knowledge: Some suggestions for operationalization. *Journal of Management Studies*38(6):811-829. DOI: 10.1111/1467-6486.00260A
- Avishek, M, & Chetty, P (2019). How to write the “limitations or shortcomings of the study” in a research paper? Project Guru. <https://www.projectguru.in/limitations-study-thesis/>
- Brooks, R. (2020, October 14). Difference between Information Management and Knowledge Management. Netwrix. <https://blog.netwrix.com/2020/01/21/information-management-vs-knowledge-management/>.
- Calo, T. J. (2008). Talent management in the era of the aging workforce: The critical role of knowledge transfer. *Public Personnel Management*, 37(4), 403–416. <http://search.proquest.com/docview/215944987/abstract/188757F1C3EB4E0APQ/1>
- Cha, K. J., Kim, Y. S., Park, B., & Lee, C. K. (2015). Knowledge management technologies for collaborative intelligence: A study of case company in Korea, *International Journal of Distributed Sensor Networks*, 11(9), 368273.
- Commander Navy Recruiting Command (CNRC). (2019). *Navy Recruiting Manual-Enlisted* (COMNAVRESCUITCOMINST 1130.8K, Ch-3). <https://www.navyband.navy.mil/documents/comnavcruitcominst-11308k.pdf>
- Commander Navy Recruiting Command (CNRC). (2018, October 1). *Navy Talent Acquisition Groups Regions Map*. <https://www.cnrc.navy.mil/pages-nrd/regions/regions-map.html>.
- Department of the Navy Chief Information Officer. (2014, March 7). DON KM strategy. <https://www.doncio.navy.mil/ContentView.aspx?id=4980>
- Ficker, R. (2015). Future Navy recruiting strategies. Research Gate. [https://www.researchgate.net/figure/Map-of-Navy-Recruiting-Command-regions-and-districts-NRC-2014c\\_fig2\\_305213324](https://www.researchgate.net/figure/Map-of-Navy-Recruiting-Command-regions-and-districts-NRC-2014c_fig2_305213324).
- Frappaolo, C. (2008). Implicit knowledge. *Knowledge Management Research & Practice*, 6(1), 23–25.
- Jarret, P. (2019, September 4). Transformation: Evolving the business of Navy recruiting. *Navy Recruiter Magazine*, 67(2), 11. <https://www.cnrc.navy.mil/images/recruiter-mag-images/2019/The%20Spread%20Recruiter%20wo-marks.pdf>.

- Johannessen, J., Olaisen, J., & Olsen, B. (2001). Mismanagement of tacit knowledge: The importance of tacit knowledge, the danger of information technology, and what to do about it. *International Journal of Information Management*, 21(1), 3–20. [https://doi.org/10.1016/S0268-4012\(00\)00047-5](https://doi.org/10.1016/S0268-4012(00)00047-5)
- Kölbel, S., Ossadnik, W., & Gergeleit, S. (2017). Performance management by causal mapping: An application field of knowledge management. In *Knowledge Management Strategies and Applications*. IntechOpen. <https://doi.org/10.5772/intechopen.70297>
- Mercer Delta. 1998. The Congruence Model: A roadmap for understanding organizational performance. Mercer Delta Consulting LLC.
- Navy Recruiting Command. (2017, March 1). Navy Recruiting Facts and Statistics. <https://www.cnrc.navy.mil/pages-nrc-links/nrc-facts-stats.htm>.
- Commander Navy Recruiting Command (CNRC). (2019, September 5). *Navy recruiting manual—Enlisted-Volumes I-V* (COMNAVCRUITCOMINST 1130.8K). Millington, TN
- Commander Navy Recruiting Command (CNRC). (2018, June 14). *Navy recruiting manual—Officer* (COMNAVCRUITCOMINST 1131.2G). Millington, TN
- Command Navy Recruiting Command (CNRC). (2020, March 10). *Navy recruiting command organization transformation 3.0 manual* (SORM) (COMNAVCRUITCOMINST 5400.1H). Millington, TN
- Navy Orientation Recruiting Unit (NORU). (n.d.). *Virtual recruiting training*. Pensacola, FL: <https://www.cnrc.navy.mil/eToolbox/assets/tools/Virtual%20Recruiter%20Training.pdf>
- Nissen, M. (2014). *Harnessing dynamic knowledge principles in the technology-driven world*. IGI Global.
- Nissen, M., & Gallup, S. (2021). *Developing a formal Navy knowledge management process*. Naval Postgraduate School.
- S, S. (2020, July 30). Difference between explicit knowledge and tacit knowledge. Key Differences. <https://keydifferences.com/difference-between-explicit-knowledge-and-tacit-knowledge.html>.
- Servin, G. (n.d.) *ABC of knowledge management*. NHS National Library for Health: Knowledge Management Specialist Library. [http://www.globalbioenergy.org/uploads/media/ABC\\_of\\_KM.pdf](http://www.globalbioenergy.org/uploads/media/ABC_of_KM.pdf)

- Smith, J. (2020). Navy recruiting completes transformation ahead of schedule. *Navy Recruiter Magazine*, 68(4), 4. <https://www.cnrc.navy.mil/images/recruiter-mag-images/2020/spread-recruiter-v68,n4-2020.pdf>.
- Subashini, R., Rita, S., & Vivek, M. (2011, December). The role of ICTs in knowledge management (KM) for organizational effectiveness. In *International Conference on Computing and Communication Systems* (pp. 542–543). Springer, Berlin, Heidelberg. [https://link.springer.com/chapter/10.1007/978-3-642-29216-3\\_59#:~:text=Knowledge%20Management%20\(KM\)%20has%20become,role%20on%20Knowledge%20Management%20initiatives](https://link.springer.com/chapter/10.1007/978-3-642-29216-3_59#:~:text=Knowledge%20Management%20(KM)%20has%20become,role%20on%20Knowledge%20Management%20initiatives).
- SYQUE. (n.d.). IDEF0 - Part 1 (understanding it). [http://syque.com/quality\\_tools/tools/Tools19.htm](http://syque.com/quality_tools/tools/Tools19.htm)
- Tiongco, F. (2017). From the National Chief Recruiter. *Navy Recruiter Magazine*, 65(3), 4. <https://www.cnrc.navy.mil/images/recruiter-mag-images/2017/The%20Future%20of%20the%20Fleet%20Spread%203%202017.pdf>

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