

# [Information technology research paper](https://assignbuster.com/information-technology-research-paper/)

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## Impact of Implementing Intelligence Community Information Technology Enterprise (IC ITE) within the Intelligence Community

Chapter I: INTRODUCTION:

The purpose of this paper is to explore how the Director of National Intelligence (DNI) can improve intelligence information sharing and integration. The Intelligence Community Information Technology Enterprise (IC ITE) is one way the DNI could improve intelligence information sharing and integration. Through the development and deployment of IC ITE services, the DNI has potential to provide to the Intelligence Community (IC) an automated, collaborative, secure, and dynamic environment with the necessary tools for IC integration and collaboration not previously experienced. The IC ITE operates under a blueprint of the National Intelligence Strategy (NIS) shaping priorities for IC agencies[1].  IC ITE services will be used by analysts, mission support users, and consumers of intelligence products. The majority of users have little or no knowledge of how IC ITE will impact mission, daily operations, funding, human resources, contracts, and acquisition practices. Some traditional methods currently used within the IC to assist analysis will change such as data access, programs, applications, and use of technology in the completion of daily activities.

This change will require new policies, agreements, and improvements in how users’ access disseminates, and store data. In addition to those above, a culture shift and change in mindset are essential for full integration and collaboration. The full implementation of IC ITE will improve analysis for IC members, and consumers of Information

Technology (IT) services. The IC IT Enterprise is the DNIs transformative workforce which is involved in crafting, projecting and orienting the vision based on the existing intelligence model. IC ITE moves seventeen disperse IC agencies into a single-centric IT architecture working on a common platform where the community quickly and securely shares technology, information, and resources[2]. By managing and providing the community’s IT infrastructure and services as a single enterprise, the IC will not only be more efficient but will also establish a robust platform to deliver more innovative and secure technology to desktops at all levels across the intelligence enterprise. I The result is seamless sharing and integration process is more of a procedure of improving collaboration between various intelligence departments[3]

The former Director shared his vision by moving most security organizations to to an entirely digital enterprise. The DNI wants to deliver all- intelligence analysis products anywhere and at any time in a digital format. IC ITE is essential in providing this capability in facilitating IC integration and collaboration.

## 1. 1 IC ITE Background

(U) IC ITE is a major IT Enterprise program that encompasses eleven large projects with a goal of bringing seventeen IC agencies into a dynamic and collaborative information services environment which will be explained below[4]:

The eleven projects that fall under the IC ITE are:

|  |  |
| --- | --- |
| information Transport  (ITS) |  |
| ; | Cloud Solution |
| IC Government  CIOud  (IC GOVCLOUD) | ; |
| Identific; tion,  Authorization,  ; Authentication  (IAA) | ; |
| ; | Network  Requirements  ; Engineering  (NRE) |
| ; |
| IC Security  Coordination  Center  (SCC) | ; |

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ;   |  | | --- | | identification,  Authorization,  Authentication (IAA) |   ; | ;   |  | | --- | | Applications  Store (AST) |   ; | ; | ;   |  | | --- | | Desktop Environment DTE) |   ; | ; | ; | ;   |  | | --- | | Applications | |  | |  | | --- | | Enterprise  Management  (EMT) | |

The IT enterprise consists of hardware, software, database management, relationship management, and coordinated resources designed to meet mission needs[5]. An IT enterprise also has greater requirements for availability compatibility, reliability, scalability, performance, security, and collaboration. 2 An IT industry, for the most part, provides IT services. IT services refer to the application of business and technical expertise to enable an organization in the creation, management, and optimization of access to information and business processes. The public sector plays a huge role in equipping the DNI with the appropriate staff of engineers, security officials, operators and clerks. As evidenced in Sawyer, there are various departments that require information shared to them by the DNI, of which the Navy plays a crucial role in having the information properly integrated[6]. Administrative procedures and is an important area of the defense industry. Providing high quality IT services requires an efficient and effective IT support staff. This support mandates the requirements be accurate to correct processes that ultimately transform requirements into IT solutions. 3

The DNI caters for the opportunities and challenges for various security professionals. Some of the problems are standardization of applications and tool, speed, data access, data aggregation, data ownership, and storage. Outside of the challenges, the benefits are only hindered by imagination, creativity, and datasets- The final implementation of all IC ITE services moves the IC closer to Narrow mission gaps and realizing the full benefits of services intelligence information sharing and integration.

## 2. 1 Information Technology Research Paper Topic

This study will explore the Impact of Implementing Intelligence Community Information Technology Enterprise (IC ITE) within the Intelligence Community.  IC ITE is a major Information Technology (IT) program that encompasses ten large projects with a goal of bringing seventeen Intelligence Community (IC) agencies into a dynamic and collaborative information services environment.  The central focus is dedicated to IC ITE, the Analyst community, and the analytic mission. A few of the proposed benefits not yet and potentially never to be realized are Intelligence Integration, mobility, collaboration, and cost savings.  There are several driving forces behind IC ITE implementation they are the Commission on the Intelligence of the United States Regarding Weapons of Mass Destruction (WMD Report)[7], Intelligence Community Information Technology Enterprise Strategy 2012 – 2017, and Intelligence Community Directive (ICD) 503.  Eleven years ago following the second invasion of Iraq, many within and outside of the IC pointed to the failures following the 911 terrorist attacks.  The WMD report, the IC Technology Enterprise Strategy 2012-2107 and ICD 503 all point to the IC Implementing a community information technology enterprise.

## 2. 2 Technology and Intelligence Problem or Issue:

This research will address the potential Impact of Implementing the Intelligence Community Information Technology Enterprise (IC ITE).  How do IC ITE services support analysts, mission support users, and consumers of Intelligence products. The majority of users have little or no knowledge of how IC ITE will impact their mission and daily operations.  How will IC ITE change the traditional processes currently used within the Intelligence Community (IC) related to data access, application availability, and the acquisition of new software & hardware[8].

## 2. 3 Information Technology Objective:

The research intent is to discover new datasets or use existing datasets to solve current and future intelligence gaps.  The expectation is to explore new or advanced computing technologies and the application of the technology to answer inevitable intelligence questions. This thesis will help to identify the importance of information cataloging specific to each intelligence collection and the datasets associated with each intelligence discipline, and each intelligence agency[9].

## 2. 4 Relevance to the Intelligence Community:

Why is this topic of potential interest to the Intelligence Community? The importance of this question to the Intelligence Community will be to expand upon existing body of knowledge and identify new information to fill current knowledge gaps related to IC ITE and the capability it provides to Analysts.  Gaps revolve around the measurable benefits, risk, and opportunities. The research will also provide scenario based examples for cognitive visuals of how Intelligence products and services via IC ITE has and will help to close mission gaps and improve mission efficiency.

1.                  Scope: This study covers, lessons learned from other large-scale government Information Technology Enterprise initiatives, current use of technology application for problem-solving, business intelligence, and data analytics to determine or predict outcomes. The alternative future analysis will look five years out examining the capability of IC ITE enterprise. The focus will be directed towards the Combats Support Intelligence Agencies.

2.                  Definitions:  The above chart explains some different definitions that are important for the researcher’s audience to understand to facilitate comprehension of the topic.

|  |  |  |
| --- | --- | --- |
| TERM | DEFINITION |  |
| Information Technology (IT) Enterprise | Hardware, software, database management, relationship management, and coordinated resources designed to meet mission needs. An information technology company also has greater requirements for availability, compatibility, reliability, scalability, performance, security, and collaboration. |  |
| IT Services | Refers to the application of business and technical expertise to enable organization in the creation, management and optimization of or access to information and business processes. |  |
|  |
| Integrity | Is ensuring the data is in the same state as originally stored, assurance the data has no compromise of structure or format. |  |
|  |
| Authentication | Is the verification of credentials specific to the connection attempt, such as sending credentials (username and password). |  |
|  |
| Authorization | The verification that a connection attempt is allowed.  Authorization occurs after successful authentication. |  |
|  |
| Utility | Refers to ow the data is used, purpose or function. (Data owners sharing datasets with others can open doors for new usage or new services. |  |
|  |

## 2. 5 Information Technology Strategy Assumptions:

The first assumption is the majority of Intelligence analysts are proponents of an Information Technology Enterprise. The second assumption is a favorable belief that most analysts approve of sharing datasets and knowledge related to the utility of the data housed in their collections and or in databases. Besides, a final assumption is most analysts have an idea as to what tools, information sources, data aggregation and data discovery techniques are most useful in their daily activities. Ultimately full implementation of IC ITE will narrow knowledge gaps and aid in answering a request for information faster.

## 2. 6 Information Technology Research Questions:

What measurable benefits will IC ITE provide to analysts, users, policy makers, and consumers of Intelligence products and IT services?

1.                  Do analysts believe they have the tools and datasets necessary to meet mission needs?

2.                  Is there a combat support agency or IC-wide data catalog specifying (data types, data use, data dictionary)?

3.                  What if any additional resources, tools, datasets are needed to improve intelligence production?

4.                  Does the IC enable decentralization of datasets to facilitate cross-agency data search?

5.                  What are the positive and negative affects IC ITE has introduced to Analyst and collection?

6.                  What challenges or information gaps will IC ITE help to close or narrow?

## 2. 7 Information Technology Research Methodology:

Research Design: The use of an Alternative Future Analysis for documenting current state and forecasting the potential capabilities offered through IC ITE (5-7 years out).

## 2. 8 Information Technology Acronyms

DCI: Director of Central Intelligence

IC ITE: Intelligence Community Information Technology Enterprise

NSA: National Security Agency

DEA: Drugs Enforcement Authority

DNI:  Director of National Intelligence

ODNI: Office of Director of National Intelligence

FBI: Federal Bureau of Investigation

EO: Executive Order

ONI/FTAC: Office Naval Intelligence/ Farragut Technical Analysis Center

MSIC: Mission Space Intelligence Center

DTS: Diplomatic Telecommunication Service

ARPA: Advanced Research Projects Activity

NATO: North Atlantic Treaty Organization

DOD: Department of Defense

NIP: National Intelligence Program

NITTF: National Insider Threat Task Force

MIP: Military Intelligence Program

GEOINT (Geospatial Intelligence

NGIA: National Geospatial-Intelligence Agency

CIA: Central Intelligence Agency

AFCEA: Armed Forces Communications and Electronics Association

INSA: The Intelligence National Security Alliance

NGA: National Geospatial-Intelligence Agency