```
\documentclass{article}
\usepackage[utf8]{inputenc}
\usepackage[nottoc]{tocbibind}

%Quoting
\usepackage{csquotes}

%Setup Images Handling
\usepackage{graphicx}

%Move the title position
\usepackage{titling}

\setlength{\droptitle}{-10em} %Up, near the top but not too high

%Setup Citations
\usepackage{natbib}
%Harvard Style Specific use \citep for (Name, year)
\bibliographystyle{abbrvnat}
\setcitestyle{authoryear,open={(},close={)}}}

%titles and stuff
\title{An Investigation into E-Government Services}
\author{Daniel Hannon (19484286) }
\date{October 2019}

\begin{document}

\maketitle
\begin{frame}{}
   \begin{figure}[h!] %h! forces the image to be placed above the table of contents, h is used to make a
figure lie where it is defined and ! forces an override of the latex formatting to ensure that it stays there.
   \centering
   \includegraphics[scale=0.7]{egov.png}
   \caption{Source: https://www.revesoft.com/products/e-governance-solutions}
   \label{fig:my_label}
\end{figure}{}
\tableofcontents
\end{frame}
\newpage
\section{Abstract}
   \begin{quote}
      What are the advantages and disadvantages of a government’s reliance on computing and
Internet access in the implementation of its business (e.g. delivery of social services, delivery and
payment of tax and utility bills (water etc.), electronic voting)
   \end{quote}
   This is going to be explored primarily in the context of security.
\section{Introduction}
```

The internet is a very new thing, it was first introduced at the start of the 1990's but it did not begin to take off until the 2000's with the dot com boom and with the later introduction of smart devices it has only gotten more popular in terms of everyday use. albeit most use is trivial, there is most certainly room for practical use and one of these uses is the idea of an E-Government system. Within this text I aspire to explore the pros and cons of E-Government services.
\section{E-Government}

As previously stated, with the advent of a more connected people, some governments from across the world felt it would be a good idea to implement some vital government services online to make it easier for the consumer and ultimately the government itself. There were several challenges in four key areas such as:
    \begin{enumerate}
        \item Information + Data
        \begin{itemize}
            \item Inaccuracies in Data
            \item Inconsistencies
            \item Incompletedness of Data.
            \item Lack of Data
        \end{itemize}{}
        \item IT Issues
        \begin{itemize}
            \item usability
            \item Security Issues
            \item Technological incompatibility
            \item Complexity
        \end{itemize}{}
        \item Legal
        \begin{itemize}
            \item Laws and Regulations
        \end{itemize}{}
        \item Institutional
        \begin{itemize}
            \item Privacy Concerns
        \end{itemize}{}
    \end{enumerate}{}
    \citep{gil2005government}

Of these, Privacy was deemed very important. \citep{krishnan2013examining} \citep{gil2005government} \citep{macfeely2014joining} \citep{teo2008trust} \\Along with this, various strategies were also proposed to ensure success of the E-Government implementation\\
    \begin{table}[]
    \centering
    \begin{tabular}{|c|c|}
        \hline
        Key Area & Strategy \\
        \hline
        \emph{Information and Data} & Proper Data Structures\\
              & Deal with Inconsistencies as they arise \\
        \hline
        \emph{IT} & Ease of Use\\

```
                & Practicality/Usefulness\\
        \hline
        \emph{legal} & Good IT Implementation\\
        \hline
        \emph{Institutional} & Law Changes\\
        \hline
    \end{tabular}
    \caption{Success Strategies \citep{gil2005government}}
    \label{tab:my_label}
\end{table}
```
The strategies mentioned above will more than likely remain the primary strategies for the time yet to come as technology is a very fast moving industry and the government bodies mentioned will constantly have to update their software to keep up. \\ \\ When it comes to Data protection and consistency initially when the E-Government was being prospected in Ireland, there was an issue with the the fact that the government was divided into three main areas, each with their own sub-groupings

```
\begin{enumerate}
    \item Central Government
    \begin{itemize}
        \item 17 Departments
        \item 35 Agencies
    \end{itemize}{}
    \item Local Government
    \begin{itemize}
        \item 46 Local Authorities
    \end{itemize}
    \item Health Boards
    \begin{itemize}
        \item 10 Health Boards
    \end{itemize}{}
\end{enumerate}
\citep{hughes2006role} \\
```
within the Years that followed there was a restructure of the Health Board system into the now centralized Health Service Executive (HSE) along with the introduction of several new departments. Within the 8 years that followed this report there was a few key changes within the Data structuring within Ireland. \\

Digitisation was just around the corner where they could begin to centralise various facets of government records. Albeit services such as rent allowance were re-designated to local governments. Once the document published in 2006 was mostly fulfilled there was another stepping stone within the digitisation of Irelands Government records/services set out in \citep{macfeely2014joining}. They recommended things such as the introduction of a permanent Identification system for peoples availing of Government services online, this has since been fulfilled but not without controversy. The aforementioned system is called MyGovID, this is an extension on the highly controversial Public Services Card which was introduced in 2011. MyGovID allows you to use a single account to perform tasks such as: Apply for Susi, Check Welfare payments, Submit Tax Returns, Register to vote, and Apply/Renew your drivers license. The centralisation of the documents of each person in the country makes interacting with E-Government services more efficient but at the same time it has not been without controversies. As a security measure it utilises a Two Factor Authentication system (2FA) where it sends the person using it a text to verify that it is indeed them trying to access the service. This text comes from a British phone number (+447781470659) this same number is used by various

multinationals such as Microsoft and PayPal, but that is not without potential trust issues as the end user cannot be certain how much of their data is being held in another country where they entrusted it with the Irish Government. although this is a violation of the GDPR if it happens without your consent, the service has been using it since before the law was implemented so your data from as recently as a year ago could be used in another nation for marketing purposes. \\ \\Although there are some security risks and privacy concerns \citep{macfeely2014joining}, One great benefit of the E-Government system is the introduction of the Eircode. This assigns each house in Ireland a unique Alphanumeric identification tag, this could have not been achieved without the digitisation of government services. In the context of a medical emergency or ongoing crime it can be especially practical as the appropriate authorities can quickly respond to time critical emergencies. Another such benefit is how it has made it easier to stamp out fraud on all degrees as it's easier to reference whether or not your employees are in receipt of a welfare payment. But corruption is still an issue \citep{krishnan2013examining} and will potentially remain as such. \\ \\ Returning to the issue of privacy and security, as the E-Government systems would constantly have to be updated to keep up with the evolution of technology, it can make it a lot more difficult to ensure that the data is safe as if there is any form of hindrance in the updating of the systems it could result in a compromise of the data and potential theft which could then be used to commit various acts of fraud or various other criminal activities. Another such issue with a centralised database is that the data could potentially be easily accessed by a lot of people through entirely legitimate means which in turn does also bring some trust issues, as the GDPR does exist this hopefully is being implemented in such a way that only departments with good reason to access your documents have the right to access them. As a given The HSE, An Garda SÃochana and The Department of Social Protection will have permanent access to your documents but the rest should not where it does not apply. In turn, this centralised database does make the data easier to keep in check as there's one rather than a series of records across various buildings in the country.

\section{Conclusions}
    In Conclusion, there is a lot of benefits and negatives for the use of an E-Government system, The benefits outweigh the downfalls in terms of how many there are but when it comes to issues such as ones personal liberties and privacy it can be a potential risk. \\
  \resizebox{\textwidth{}}{!}{ %Exclamation means force
  \begin{tabular}{|c|c|}
  \hline
  Advantages   &   Disadvantages \\
  \hline
  Easier to provide Accurate information & More difficult to ensure that \\ across all government departments   &   the Information remains \\
                           &   In the right hands \\
  \hline
  Centralised System of Records   &   Centralised System of Records \\
  \hline
  Uses a 2FA system to ensure only you can access your data   &   Uses a British Service, Causing security Concerns \\
  \hline
  Faster for the Consumer to access various government services & \\
  \hline
  \end{tabular}
}
\bibliography{references}
\end{document}

@article{gil2005government,
 title={E-government success factors: Mapping practical tools to theoretical foundations},
 author={Gil-Garc{\'\i}a, J Ram{\'o}n and Pardo, Theresa A},
 journal={Government information quarterly},
 volume={22},
 number={2},
 pages={187--216},
 year={2005},
 publisher={Elsevier}
}

@article{krishnan2013examining,
 title={Examining the relationships among e-government maturity, corruption, economic prosperity and environmental degradation: A cross-country analysis},
 author={Krishnan, Satish and Teo, Thompson SH and Lim, Vivien KG},
 journal={Information \& Management},
 volume={50},
 number={8},
 pages={638--649},
 year={2013},
 publisher={Elsevier}
}

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 title={The role of business process redesign in creating e-government in Ireland},
 author={Hughes, Martin and Scott, Murray and Golden, Willie},
 journal={Business Process Management Journal},
 volume={12},
 number={1},
 pages={76--87},
 year={2006},
 publisher={Emerald Group Publishing Limited}
}

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 title={Joining up public service information: The rationale for a national data infrastructure},
 author={MacFeely, Steve and Dunne, John},
 journal={Administration},
 volume={61},
 number={4},
 pages={93--107},
 year={2014}
}

@article{teo2008trust,
 title={Trust and electronic government success: An empirical study},
 author={Teo, Thompson SH and Srivastava, Shirish C and Jiang, Li},
 journal={Journal of management information systems},

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  volume={25},
  number={3},
  pages={99--132},
  year={2008},
  publisher={Taylor \& Francis}
}
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