

**IS4416: Advanced Topics in IS**

***Data Value Map***

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# Describe the Focus of the Data Value Map

The focus of my Data Value Map is to create a Data Strategy around the subject of my Final Year Project. My Final Year Project will provide a solution which will allow the data subjects to tailor and refine their Curriculum Vitae quickly and painlessly to meet the criteria outlined in a’ Job Description’ and ‘Person Specification’. The Data Subjects in question are:

## Data Subjects

* **The students of courses which require students to complete an Industrial Placement** where students may be interested in applying for a diverse selection of roles in a number of companies and industries such as Accounting and Consultancy with the “Big Four” (PwC, EY, KPMG and Deloitte), Software Development, IT Support or Marketing. For the ‘As is’ analysis of my project I am focusing on BIS students with a view to expanding the solution as described in the ‘Integration’ section.
* **Students in the Final Year of their degree seeking Graduate roles upon completion of their degree** where the student has similarly diverse interests and preferences to work in a number of industries in many different roles.

Drawing from personal experience in the past two years of applying for Industrial Placement roles and now looking towards Graduate role opportunities as well as consulting with students in both 3rd and 4th Year Business Information Systems who are currently seeking Industrial Placements and Graduate roles, updating your Curriculum Vitae to appear more desirable to the hiring company can be a time-consuming and laborious process. My solution aims to help students to differentiate themselves whilst hitting the core key requirements outlined in Job Descriptions. The market for Industrial Placements and Graduate roles has become overcrowded and mostly homogenous. My solution will create value for the user by giving them a helping hand in getting past automatic screeners, meaning that their CV will be read by an actual human being and give them a higher likelihood of reaching the interview process and securing their dream role. An updated data strategy as explored with this Data Value Map will help to inform me, the developer, as well as the other stakeholders (the data subjects) of the factors involved in the handling, processing and leveraging of data to create value for the end user as well as addressing other considerations such as data governance.

# Describe the method of how you used the Data Value Map

As part of my analysis I have used the Data Value Map framework to investigate the use of data in my project ‘As Is’ and represent the value I would like to get from data in the finished ‘To Be’ version of my solution.

I have split my analysis into the core components of the Data Value Map, namely; ‘Business Value’ ‘Acquisition’. ‘Integration’, ‘Analysis’, ‘Delivery’ and ‘Governance’.

## Business Value

Data plays a crucial role in providing value to the end user and is key to the creation, processing, formatting and output of CV’s. Data flows between all stages of the system from inputting the profile information to categorising it into sections such as Educational Background, Work Experience, Skills and Certifications, to outputting a fully formatted Curriculum Vitae, ready to be uploaded to whatever role the user intends to apply for. The value this provides is:

### Tailoring CV for each Specific Job Application

Data allows the system to tag the key words found in the Job Description and Person Specification and match them against the attributes specified in the User Profile. This streamlines the job application process and allows users to spend their time more effectively.

### Higher Chance of Progression to Interview

Since each Curriculum Vitae is a bespoke creation which marries the skills and experiences of the user with the subset of each outlined in the specified Job Description and Person Specification. As the CV is tailored for the specific role there is a higher chance of getting past automatic screeners and stand a chance of being viewed by an actual person. This will give users a higher chance of progressing to the interview stage of the application process, one step closer to securing their dream Placement or Graduate role with minimum effort.

### Reduce Time Spent Tailoring CV for each role

Having compiled a survey for my Final Year Project, I have gathered that the expected time that it takes a student to tailor their Curriculum Vitae for each role they are applying to is 24 minutes and 25 seconds. The median time spent by students tailoring their CV is 22 minutes and 30 seconds. My solution aims to reduce this to 1 to 2 minutes by harnessing the power of the data.

## Acquisition

In this section I will discuss the data subjects and the various sources that I will acquire my data from.

### ‘As Is’ Strategy

As part of my ‘As Is’ data strategy data will be aggregated from a number of sources, both structured and unstructured.

#### Structured

The structured data that my system will deal with is ‘Student Profiles’ and ‘LinkedIn Profiles’. In ‘Student Profiles’ students will provide information that would be found on their Curriculum Vitae such as Name, Address, contact details as well as Educational Background, Work Experience, Certifications completed and any additional skills that they may possess.

Students will also have the option to provide this information from their LinkedIn profiles. LinkedIn is a professional Networking site where users complete a profile similar to that provided in my solution outlining key professional aspects such as outlined above. This allows users to create a profile in a fraction of the time it would take them to input data themselves.

### ‘To Be’ Strategy

As part of my ‘To Be’ data strategy I will be acquiring additional external data sources. These will come from numerous structured data sources such as:

#### Business Information Systems Department

My solution will deal with students of Business Information Systems who are intending to complete an Industrial Placement as part of Third Year. A requirement set out by the BIS department for students who wish to undertake an Industrial Placement is for students to have at least 80% attendance across First and Second Year. The BIS Department will disclose attendance figures to Placement Partners that request this data. As part of my ‘To Be’ solution I will acquire attendance data from the department to confirm whether or not students meet the 80% Information Systems lecture and lab attendance constraint that is put on Industry Placement. This ensures that the attendance figure for students who utilise my system has been verified and approved by the department, saving companies from having to request this information for every student that they select for interview.

#### Hiring Managers

As part of my ‘To Be’ solution I will consult with a number of ‘Hiring Managers’ across a number of companies that engage with Placement and Graduate Students to seek their knowledge around what they look in a CV that would merit the candidate progressing to the interview stage of the hiring process. This data will allow me to tune the system to have a higher success rate, weighting the desired attributes higher than others.

#### Successful Candidates

Similarly, in my ‘To Be’ solution I will consult with a focus group of students who were successful in securing their role and attempt to extrapolate the reasons behind their success in getting called for interview. This data too will feed back into the system and allow me to tune the system to a higher accuracy, resulting in a higher success rate.

## Integration

In this section I will discuss the integration of disparate data sources involved in both my ‘As Is’ and ‘To Be’ data strategy:

### ‘As Is’

In my ‘As Is’ data strategy data is integrated between the Student’s Profile on the system and their LinkedIn profile. These are both structured data sources and the integration of which allows the system to pull key data about the user such as their Educational Background, Work Experience, Certifications and Skills from their LinkedIn profile and integrate it with their profile on the system.

### ‘To Be’

In my ‘To Be’ data strategy I will look to grow my data sources by expanding my system to similar courses across UCC and CIT which have similar requirements and processes around Industrial Placements such as Commerce and Law & Business in UCC and Business and Marketing in CIT.

Another consideration in my ‘To Be’ data strategy is how the system is to handle incomplete datasets. This is manageable at a smaller scale but as the strategy grows to account for hundreds, burgeoning on thousands of users then a decision has to be made regarding this.

Most importantly, the system must be able to **assess** what parts of the data set are crucial, meaning that if they were not complete then the data could not be transformed to a usable form and ultimately converted to value for the user.

In my ‘To Be’ data strategy the system will classify certain information as ‘Essential’ such as Name, Contact Details, Educational Background, Work Experience, Skills and References reject datasets that do not contain essential information. Users may not have previously completed Certifications which would be classified as ‘Optional’ and would not be grounds for eradicating an incomplete dataset.

## Analysis

In this section I will discuss how data will be analysed and processed to provide value to the user in both the ‘As Is’ and ‘To Be’ data strategy:

### ‘As Is’

As part of my ‘As Is’ data strategy users will be provided with a tailored CV for each role they apply for. The system will use ‘Keyword Matching’ to

# Create a Visual of the Analysis

# Describe the Resulting Impact