

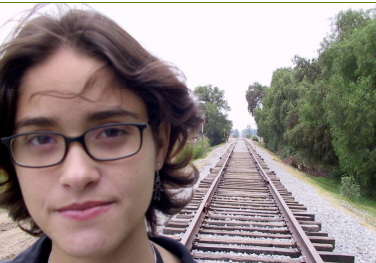




Summary Table

	Explorer Evie	Basic Bob	Detailed Dawn	Layered Larry	Work-around Walter
					
Quote	<i>"I'm not exactly sure what I need."</i>	<i>"I need to annotate a map to put in my report."</i>	<i>"I'm creating a 3D view of my building design and its environment."</i>	<i>"I know the type of data I need and how to visualise it in GIS."</i>	<i>"I use a map of my project area from Digimap to create data."</i>
Headline	Exploring the data to see what is available	Creating a basic annotated map	Needs a detailed, large-scale map	Layering data to perform spatial analysis	Using a workaround to achieve his goal
Degree	BSc Sustainability and Environmental Management	MSc Zoology	PhD Architecture & Development	MSc Civil Engineering	BSc Architecture
Summary	<ul style="list-style-type: none"> <li>Has an end goal for her project in mind</li> <li>Is gathering data; not sure how she will use it yet</li> <li>Some limited knowledge of GIS software</li> </ul>	<ul style="list-style-type: none"> <li>Takes a map to a location to write on</li> <li>Recreates the map digitally on his return</li> <li>Uses PowerPoint to add annotations to the map</li> </ul>	<ul style="list-style-type: none"> <li>Knows exactly what she needs from her data</li> <li>Imports data into CAD packages</li> <li>Also uses Digimap when teaching undergrad students</li> </ul>	<ul style="list-style-type: none"> <li>Has a working knowledge of spatial data formats</li> <li>Understands digital map data types</li> <li>Uses GIS to layer data to run spatial analysis</li> </ul>	<ul style="list-style-type: none"> <li>Is an AutoCAD user</li> <li>Uses Digimap to create maps which he then converts to vectors</li> <li>Limited knowledge of vector data formats</li> </ul>
Goals	<ul style="list-style-type: none"> <li>See what data is available</li> <li>Download the most suitable data for her research needs</li> <li>Create and print a map of the area she is interested in to use in her field work</li> </ul>	<ul style="list-style-type: none"> <li>Create and print a map of the area he is interested in for his field work</li> <li>Download a map of the same area, which he then imports into PowerPoint to annotate</li> </ul>	<ul style="list-style-type: none"> <li>Download a detailed map (1:1000 or 1:2000) of a small area, which she will then import into AutoCAD</li> <li>Take screenshots of the download facility, to incorporate into learning materials for her students</li> </ul>	<ul style="list-style-type: none"> <li>Download DTM, raster and boundary data for project area</li> </ul>	<ul style="list-style-type: none"> <li>Create a map of project area</li> <li>Access vector data for import to AutoCAD</li> </ul>

## Explorer Evie

Exploring, to see what is available



*“I’m not exactly sure what I need.”*

- Has an end goal for her project in mind
- Is gathering data; not sure how she will use it yet
- Some limited knowledge of GIS software

### Profile

Evie loves being outdoors and cares about the environment, so her degree is a real passion for her. Although not a geographer, Evie has used OS maps when walking, and is comfortable with map symbols, coordinates and scales, though she finds grid references confusing. Her degree has involved several fieldwork projects, in which she has gone to a location and collected data. For each of these projects she has used Digimap Roam to print a base map of the area she was going to, which she would refer to when collecting data.

Evie has recently started work on her **final year project**, in which she has to identify fire damaged areas from aerial photography. The project represents 40% of her final year mark, and she is determined to get meaningful results within three months. She understands the objectives of the project well, but is not quite sure how to achieve them. She knows that she will need to **collect data from a number of sources**, including RCHAMS and SEPA, and will **combine the data using ArcGIS**. This will be the first time she has done a project like this, and she feels a little nervous as she **can’t quite remember how the GIS software works**, or which data formats it can use.

Evie has some idea of what she wants, but is **unsure about file formats and map names**, and finds the Digimap’s use of **terminology confusing**. She downloads several data sets which she thinks may be useful, which she then examines further in ArcGIS to see if they are what she needs.

### Evie wants to...

- See what data is available
- Download the most suitable data for her research needs
- Create and print a map of the area she is interested in to use in her field work

### We want Evie to...

- Identify and download the most appropriate data for her project
- Learn about data terminology and products through using the Downloader
- Become a confident user over time, knowing what data is available, how to access it and what it could add to her projects.

### Personal Information

**Degree:** BSc Sustainability and Environmental Management

**Year of Study:** Third (Final) Year

**Future Plans:** Not too sure yet – would like a job in environmental management.

### Use of Technology

**Computer:** Desktop PC. She has a laptop but it is a bit old and too heavy to lug around.

**Work Environment:** Geosciences lab, because computers are faster than her laptop and have GIS software installed on them.

**Spatial Data/Software Experience:** Limited, has taken a beginner GIS course.

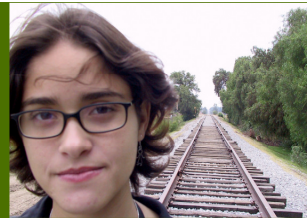
### Use of Maps and Data

Has used paper maps in the previous years of her degree, and Google maps in her personal life. She has used Digimap Roam and is aware of OS online.

**Frustrations:** Evie does not understand the different file formats and names of the digital maps available, and finds the terminology confusing.

## Detailed Dawn

Needs a detailed, large-scale map



*"I'm creating a 3D view of my building design and its environment."*

- Knows exactly what she needs from her data
- Imports data into CAD packages
- Also uses Digimap when teaching undergrad students

### Profile

Dawn is an **experienced architect**, who has chosen to do a PhD to explore the historic development of buildings. In both her undergraduate degree and whilst working as an architect. She has used maps (both physical and digital) in combination with other data such as site photographs (and more recently Google Streetview and Bing Bird's eye view) to understand the area in which the building she is designing will be located. She will often supplement this understanding with a site visit.

For Dawn's research project, she needs to create a 3D model of a site. She has done similar exercises before, and **understands map scales and file formats**. She is confident in her ability to use the relevant tools and software, which include Google Warehouse and terrain models. She struggles to find the section in Digimap from which she can download detailed maps, but eventually finds it. She **expects it to work like Google Maps**, and finds the experience to be a little clunky, but manages to request a Mastermap vector file.. She also wants to download DTMs and historical maps of the same area, and feels **frustrated that she needs to go through the whole process for each data type**.

During the academic year, Dawn also needs to **teach undergraduate students how to view maps and get data from Digimap**, and create project briefs (including a detailed map) for them to use in coursework.

### Dawn wants to...

- Download a detailed map (1:1000 or 1:2000) of a small area, which she will then import into AutoCAD.
- Take screenshots of the download facility, to incorporate into learning materials for her students.

### We want her to...

- Quickly navigate to her study area and identify the best data for her project
- To gain confidence in the system and evolve into a "power users" capable of teaching others to use the Downloader.

### Personal Information

**Degree:** PhD Architecture & Development

**Year of Study:** Second Year

**Future Plans:** Has previously worked as an architect and expects to return to practice.

### Use of Technology

**Computer:** Has a desktop PC and a Mac laptop.

**Work Environment:** Studio space provided by the University, where she has better desk space. Also does some work on her laptop at home.

**Spatial Data/Software Experience:** Confident user of AutoCAD and MasterMap.

### Use of Maps and Data

Experienced in creating and using detailed maps of a building's footprint and the surrounding area. Uses Google (Maps, Streetview and Earth), Bing (Bird's eye view), and Digimap to virtually 'survey' a building and its surroundings.

**Frustrations:** The maps Dawn downloads contain more information than she needs. Even at the point of download, it's not clear what data she will get.

## Basic Bob

Creating a basic annotated map



*"I need to annotate a map to put in my report."*

- Takes a map to a location to write on
- Recreates the map digitally on his return
- Uses PowerPoint to add annotations to the map

### Profile

Bob sees maps as a tool to help him find things, and they play only a minor role in his studies. He finds that Google Maps fulfils most of his needs in his personal life, but needs more a detailed map for the fieldwork elements of his MSc.

Bob needs to survey an area and note any interesting zoological features. He does this by writing on a paper map which he has printed from Digimap Roam. On his return he considers using Roam to annotate his map, but is unsure how he will then incorporate the map into his report. Also, he finds that he cannot view all of his study area on the appropriate mapping product in Roam so he has to download the map and annotate it in PowerPoint. While he already knows how to use Powerpoint, he finds it difficult accurately lining up the map tiles in Powerpoint.

Bob is sure there is a download facility because he was shown it by the map specialist in the library. However, it takes him some time to find it, he **expects it to work like Google**, which it doesn't. He finds it **difficult to figure out where he is geographically**. He **doesn't understand the different map types, scales or file format** and is **unfamiliar with OS data product names**. He picks a product at random and downloads it. It takes several guesses before he has some suitable data.

### Bob wants to...

- Create and print a map of the area he is interested in for his field work
- Download a map of the same area and annotate it in PowerPoint

### We want him to...

- Select the best tool for the task he is doing?
- Be able to locate and navigate to his study area quickly.
- To find it easy to select and download data without going on a training course.

### Personal Information

**Degree:** MSc Zoology

**Year of Study:** First Year

**Future Plans:** Would like to work in a research environment in industry or academia

### Use of Technology

**Computer:** Desktop PCs in the library. He has a laptop at home but it is very slow.

**Work Environment:** Library, because he can concentrate better there.

**Spatial Data/Software Experience:** None.

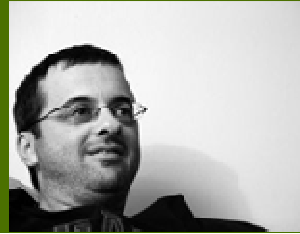
### Use of Maps and Data

Uses Google Maps to find places and plan routes, but these maps are not detailed enough for his studies. He has also used Digimap Roam to create and print annotated maps.

**Frustrations:** Bob is confused by data formats and OS product names. He finds the user interface difficult to navigate and struggles to locate his study area on the map. He uses trial and error to get the data he needed.

## Layered Larry

Layers map data in GIS for complex spatial analysis



*“I know the data I need and how I will use it.”*

- Has a working knowledge of spatial data formats
- Understands digital map data types
- Uses GIS to layer data to run spatial analysis

### Profile

Spatial data is a key component of Larry’s research as a Civil Engineering MSc student. Larry is quite comfortable using spatial data and uses paper OS maps regularly when hill walking. He also likes to use Bing Maps and Google Earth to check aerial and satellite images of study areas or where he has been hiking. He regularly uses the turn-by-turn direction feature of Google maps on his iPhone.

Larry’s MSc thesis aims to model river flows to assess flood risk. Larry **uses multiple datasets** in his research sourced from organisations such as EDINA and the Environment Agency. He manages his data in ArcGIS and feeds data from here into specialist programs to analyse river flow and flooding. The outputs from this are manipulated in ArcGIS to produce figures and diagrams.

Larry used Digimap as an undergraduate and also completed a module in basic GIS. Larry had some problems **transitioning from using the Downloader as an undergraduate**, where he usually followed step-by-step instructions provided by his tutor, to using it independently as an MSc student. Larry has learnt a lot about GIS through reading forums and blog posts, he uses these resources when he gets stuck on a problem. Larry is **not familiar with all the OS products** offered by Digimap. Larry would **like to see all the data made available in the same place** as he sometimes has to hunt through different sections of the site to find the data he wants, it is not always in the place he expected it would be.

### Larry wants to...

- Download raster, DTM and boundary data
- Look at a project area in Digimap Roam

### We want him to...

- Be able to download multiple datasets of the same area in one go
- Easily identify region of interest
- Apply previous experiences of using the Downloader to new data mining objectives

### Personal Information

**Degree:** MSc Civil Engineering

**Year of Study:** Final year

**Future Plans:** Would like to become a chartered engineer, perhaps working on environmental issues.

### Use of Technology

**Computer:** Desktop PCs in the university lab. Doesn’t have Arc GIS licence for laptop.

**Work Environment:** Currently working at uni lab as needs access to GIS software for dissertation. IT staff have helped install all GIS software and required plugins. Uses library more in term-time.

**Spatial Data/Software Experience:** Expert.

### Use of Maps and Data

Uses Google Maps for directions and to check out places on Street View, e.g. if flat hunting. Uses OS paper maps for walking.

**Frustrations:** Larry struggles to identify the most appropriate data for his needs and finds it frustrating that he has to repeat the download process to get a different data product for his study area.



## Work-around Walter

Using a workaround to get vector data for his project site.



*“I need to merge data and load it into AutoCAD.”*

- Is an AutoCAD user.
- Uses Digimap to create maps which he then converts to vectors.
- Limited knowledge of vector data formats.

### Profile

Spatial data is an important part of Walter’s architecture degree as he has to work with plans in AutoCAD. Walter didn’t take geography at school and isn’t very confident working with maps. He has however used Google Street view and Bing Bird’s Eye view and has used these to plan holidays to visit cities with interesting architecture such as Barcelona and Berlin. These tools are also useful when investigating development sites in his course work.

Walter usually has to get a map that shows an accurate “footprint” of a building that is to be redesigned. He sometimes needs to get other spatial data, such as contours or a background map, to support a project. Walter was told about Digimap by his lecturers, but was given no guidance or tuition on how he might use it. He has had to figure it out for himself and while he has managed to get the data he wanted, he struggled to identify the data he needed.

Walter needs to combine two datasets to create the map he needs and he is currently doing this by tracing contour lines from PDF maps and merging data in graphics packages. This is time consuming and Walter thinks there must be a better way to do this, but doesn’t know what might save himself time. Walter’s knowledge of spatial data products and formats is limited, he knows the formats he needs but that is it. Sometimes he struggles to find tools that work on his MacBook.

### Walter wants to...

- Create a customised map in Carto for his project area, showing specific features, such as contour lines and building outlines.
- Use vector data (contours, building outlines) in AutoCAD.

### We want him to...

We want Walter to...

- Use the service that best fits his needs
- Discover datasets that might be useful in his studies
- Save time through using tools that are available through Digimap

### Personal Information

**Degree:** BSc Architecture

**Year of Study:** Second year

**Future Plans:** Work in architecture or another area of design

### Use of Technology:

**Computer:** Macbook Pro running OSx

**Work Environment:** Works in university studio with course mates.

**Spatial Data/Software Experience:** No GIS experience, Intermediate AutoCAD user.



### Use of Maps and Data

Uses Google Maps and Bing Maps for directions. Has some awareness of map scale, but as an architect many of the maps in Digimap do not have sufficient detail for his purposes.

**Frustrations:** Walter would like to be able to combine more than one dataset in Carto, in order to view contour lines with detailed building outlines. No map in Digimap that meets Walter’s requirements.

**Notes:**

The personas described in this document were created in September 2011 and attempt to describe users of EDINA's Digimap Data Download Service. The persona's were created as part of the Usability Service Enhancements to Digimap (USeD) project which was funded by JISC under the Research Infrastructure Programme.

	This document is made available under the Creative Commons Attribution 3.0 license whose full text can be found at: <a href="http://creativecommons.org/licenses/by/3.0/legalcode">http://creativecommons.org/licenses/by/3.0/legalcode</a>	
---	--	---