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WOMEN GET READY

Learner Handout
- Big Data Specialist

Avatar 	
Job Profile:	• *Education: bachelor's degree in management information systems, computer science, or a related discipline* • *Relevant work experience in programming or coding* • *Data mining skills to examine large pre-existing databases to generate new information* • *Data auditing skills to profile data and assess the impact of poor-quality data on the organisation's performance and profits* • *Testing skills to carry out A/B testing based on different hypotheses* • *Statistical skills to select the right approach while dealing with a particular situation* • *Machine learning skills on methods like Decision Tress and K-Means* • *Data visualization skills to present data in a pictorial or graphical format that is easy to understand*
Role Description:	*A Big Data Specialist manages, analyses and communicates large and complex data sets. They are also responsible for:* • *Collecting large sets of structured and unstructured data from different sources.* • *Cleaning and processing data using tools like Hadoop, Spark, or NoSQL databases.* • *Analysing data to identify patterns and insights, and creating predictive models using tools like R, Python, or SAS.*

	• *Creating visual representations of data to communicate insights to stakeholders, using tools like Tableau, D3.js, or ggplot2.* • *Ensuring data security and privacy and maintaining the integrity of data.* • *Collaborating with cross-functional teams including developers, data engineers, business analysts, and other stakeholders.* • *Communicating insights and findings to non-technical stakeholders in an understandable manner.*
Competences Addressed:	*Curiosity; strategic problem-solving; agility; learnability; virtual collaboration; digital communication; mental endurance.*
Key Skills:	*Data analysis skills; programming skills; data visualisation skills; business acumen; communication; critical thinking; attention to detail; continuous learning.*

Personal Action Plan:

Individual's Name: _____

G: Goal - The Goal is the endpoint, where you want to be. The goal has to be defined in such a way that it is clear to you when you have achieved it.

_____
_____
_____
_____
_____
_____

R: Reality - This is how far you are from their goal. If you were to look at all the steps you need to take in order to achieve the goal, the Reality would be the number of those steps you have completed so far.

Where do I want to be? – Long Term Goal

_____
_____
_____
_____
_____
_____

Where am I now? – Reality

***Education/Training History:**

***Career History:**

O: Obstacles - There will be Obstacles stopping you from getting where you are now to where you want to go. If there were no Obstacles, you would already have reached your goal.

Options, once the Obstacles have been identified, the ways of dealing with them are the Options.
***What is stopping me from getting where I want to be? – Obstacles**
What could I do? – Options

W: Way Forward - The Options then need to be converted into action steps which will take you to your goal. These are the Way Forward.

Next Steps:

How can I get there? – Way Forward Action Points

Additional Learning Resources

Title: What Skills Are Needed by the Big Data Specialist?	Link: www.edc.org/what-skills-are-needed-big-data-specialist
Title: So You Want to be a Big Data Analyst?	Link: www.dataversity.net/want-big-data-analyst/#
Title: Why is big data analytics important?	Link:www.techtarget.com/searchbusinessanalytics/definition/big-data-analytics
Title: Big Data In 5 Minutes	Link: www.youtube.com/watch?v=bAyrObl7TYE
Title: Beyond the Numbers: A Data Analyst Journey | Anna Leach | TEDxPSU	Link: www.youtube.com/watch?v=t2oOFs4WgI0