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MODULE 7: USING TECHNOLOGY TO HELP YOUR BUSINESS



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Module 7: Using Technology to help your Business

OBJECTIVE: This Module will help Trainers to guide entrepreneurs in understanding the potential value of IT and Digital Resources. The module will address new digital technologies, Industry 4.0, big data analytics, key trends and information (cyber) security to scientifically optimize business choices. Business oriented digital management such as web, predictive, statistical, marketing and talent analytics will be considered while augmented, virtual and mixed reality will also be considered.

Module 7: Using Technology to help your Business

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1. BACKGROUND

From concept to commercialisation, IT can significantly impact business. Whether it is using IT to help research a business opportunity, to developing and refining an innovation or to managing day-to-day activities, technology plays a key role. Entrepreneurs need to consider how IT and Digital Resources can support their business and, given the rate of technological development today, they need to do this on a regular basis.

You should seek to guide and support entrepreneurs in examining and investigating important issues to do with the business including:

- New digital technologies,
- Industry 4.0,
- Big data analytics
- Key trends
- Information (cyber) security
- Business oriented digital management such as:
 - web analytics,
 - predictive analytics,
 - statistical analytics,
 - marketing analytics and
 - talent analytics
- Augmented, Virtual and Mixed reality (Immersive Technologies)

Having completed the **BIC for SME** Diagnostic evaluation with the entrepreneur, and having identified their knowledge gaps in terms of IT and Digital Resources, this module provides a template whereby you can address issues relevant to the business such as those noted above.

2. MODULE GOALS (MODULE DIAGNOSTIC, ROADMAP & DELIVERY)

2.1 Module Goals

In Section 3 below, a detailed breakdown of the Module content is provided. However, the broad objectives of this Module are to support your knowledge, basic competencies and information on tools to support entrepreneurs in the use of IT and Digital resources. In this way you can help them develop their business idea, develop a practical plan for its establishment and manage it effectively. At the end of the Module you should be able to:

1. Know and understand, at a broad level, the essential elements of new IT technologies and....
2. Understand the importance of data related to business

2.2 Plan the Module Training Process

2.2.1 Undertake a Diagnostic Assessment / Baseline Survey

In order to identify your level of knowledge and competencies on key aspects around using technology to help your business, you should complete the **BIC for SME** Diagnostic Tool for Trainers. It will highlight areas of strength and weakness in terms of your knowledge and competencies in this topic and will provide a Roadmap in terms of the actions to be undertaken to enhance knowledge and competencies. This Roadmap is supported by a visual Concept Map (see Section 3), which provides a visual representation of the Module which will highlight key areas to address.

Alternatively, or in support of the **BIC for SME** Diagnostic Tool, you can use simple problem-analysis tools to diagnose challenges or problem issues faced by entrepreneurs and businesses such as:

- **Fishbone Diagram** - The fishbone diagram or Ishikawa diagram is a cause-and-effect diagram that helps users to track down the reasons for imperfections, variations, defects, or failures in a business or business idea. The diagram looks just like a fish's skeleton with the challenge or problem at its head and the causes for the problem / related issues feeding into the spine. Once

all the causes that underlie the challenge have been identified, you can propose solutions to ensure that the problem doesn't become a recurring one.

- **Five whys** - The primary goal of the technique is to determine the root cause of a defect or problem by repeating the question "Why?". Each answer forms the basis of the next question. The "five" in the name derives from an anecdotal observation on the number of iterations needed to resolve the problem.
- Etc.

2.2.2 Develop a Training Roadmap & Action Plan

Following the initial Diagnostic or Baseline Evaluation, and in order to make the training intervention effective, it is important for the Trainer / Mentor / Consultant to:

1. Select the elements of the IT & Digital Resources Module to be covered and set timelines for same.
2. Set the training sequence (Trainers to organize topics based on importance (as per the Diagnostic evaluation), impact, interactions, etc.).
3. Select the pedagogy (how the selected elements of the Module are to be covered in terms of practical work, reading material, exercises, etc., and linking them with other relevant **BIC for SME** Modules).
4. Set Action plan and Milestones to be achieved – KPI (see Section 5).
5. Determine Outputs - assess the result achieved (see Section 5).

2.2.3 Delivery of the IT and Digital Resources Module

The delivery of the Module should take approximately 20 Hours (including supported and (primarily) independent learning).

Note: IT and Digital Resources are constantly changing and these issues should be regularly reviewed to ensure that you are knowledgeable on them so that you can best guide entrepreneurs and business owners.

This Module aims to provide you with knowledge, basic competencies, and information on tools to support entrepreneurs in using IT and Digital resources to assess their business idea, develop a practical plan for its establishment and knowledge in how to manage it effectively. At the end of the Module you should be able to:

1. Know and understand, at a broad level, the essential elements of new IT technologies and....
2. Understand the importance of data related to business

You need to understand these issues in a practical sense so as to effectively support your clients.

Following your Training / Mentoring / Coaching intervention, you can use the **BIC for SME** Diagnostic Tool for Entrepreneurs and Trainers a second time and assess the progress you have made in terms of enhanced knowledge, competencies and skills.

3. CONTENT OF THE MODULE

3.1: Module Content

This Module looks at a number of IT and Digital Resource issues including:

3.1.1: Key Market Trends and New Digital Technologies, Industry 4.0

3.1.2: Business oriented digital management such as:

- web analytics,
- predictive analytics,
- statistical analytics,
- marketing analytics and
- talent analytics

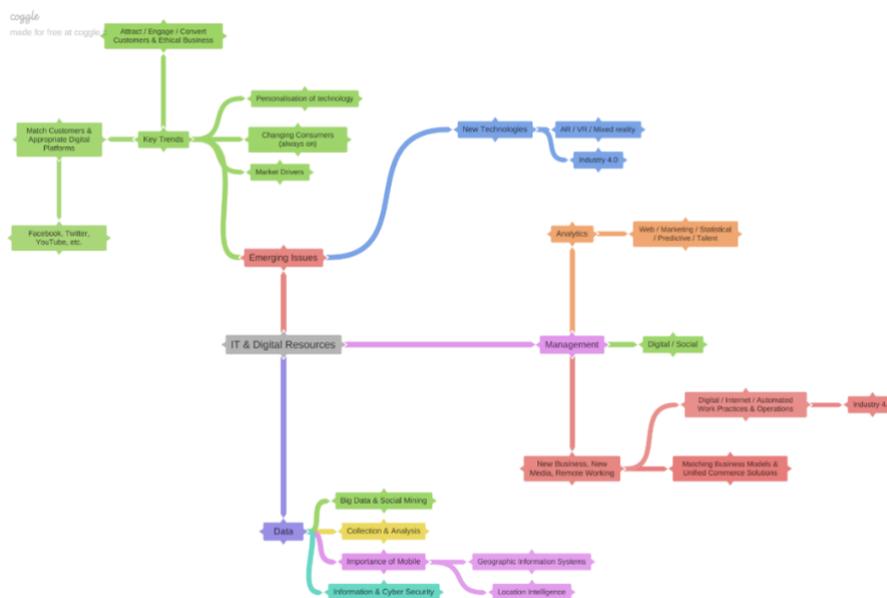
3.1.3: Big data analytics

3.1.4: Information (cyber) security

3.1.5: Augmented, Virtual and Mixed reality (Immersive Technologies)

An overview of the Module Content is provided below and can also be found in The Diagnostic Tool in the Roadmap Worksheet.

Figure 7.1: Concept Map for Module 7, IT & Digital Resources

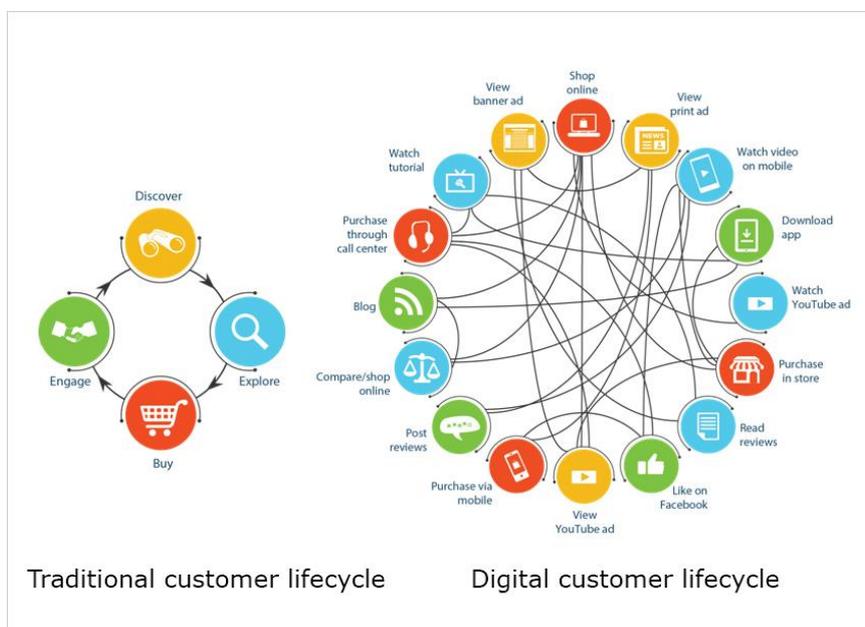


Note: given the breadth and depth of this topic it is likely that you may need to involve expert advice or training in some areas.

Section 3.1.1 Key Market Trends and New Digital Technologies, Industry 4.0

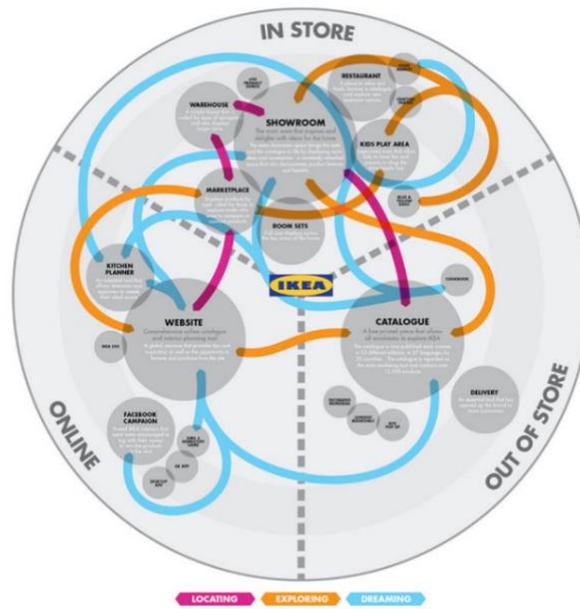
The traditional customer life-cycle process is very different to today's, which has many more facets as demonstrated in the image below.

Figure 7.2: Customer Life-cycle Processes



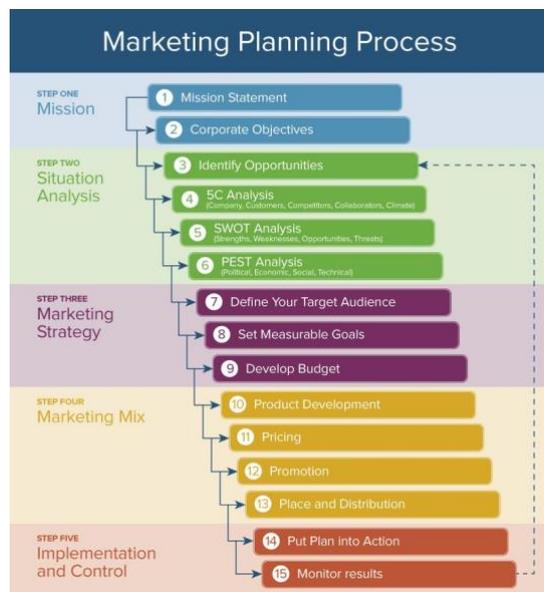
Consider the apparent complexity of the IKEA customer journey map and the 'always-on' customer:

Figure 7.3: IKEA Customer Journey Map



In addition to traditional marketing approaches you must also consider digital marketing and retail as well as ecommerce.

Figure 7.4: Marketing Planning Process



Step 3 in the image above is important, as consumers can engage with a business or brand in very many ways. Entrepreneurs need to know their target audience. With this information they can create accurate target customer profiles or 'persons' (see below) so that they can consider and plan their digital marketing mix in order to effectively engage with their customers. Such tech enabled personalisation is key.

Figure 7.5: Developing Target Market Personas



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Question:

How can entrepreneurs get to know their target audience?

Answer:

There are a number of ways to gather information and conduct research on your target audience. Some of this can be offline:

- Focus Groups
- Face-to-Face or [Depth Interview](#)

Some of this can be online:

- Surveys (e.g. [SurveyMonkey](#), SoGoSurvey, Typeform, Google Forms, Client Heartbeat, Zoho Survey, Survey Gizmo, Survey Planet)
- Reviews (e.g. [Google reviews](#), [TripAdvisor](#), etc.)
- Hotjar - [Hotjar](#) allows businesses to visualize how users engage with websites and [how](#) they use them.

- Treejack - helps users evaluate the findability of topics on a website and identifies where users get 'stuck' or log out. [Treejack](#) is a useful tool to get the insights on building an effective website.

Question:

Once a target market is known, what are the main components of a Digital Marketing strategy?

Answer:

Key components of a Digital Marketing Strategy include:

- SEO / SEM
- PPC Adwords
- Email
- Display Advertising
- Social Media
- Content Marketing

Question:

What are Key Market Trends, New Digital Technologies and Industry 4.0?

Answer:

Some **Key Market Trends / Themes** include:

Unified Commerce: "The practice of providing flexibility, continuity and consistency across digital and physical channels to deliver a superior customer experience. This consistency includes multiple phases of the customer's buying journey, including when a customer is searching, browsing for, transacting, acquiring and consuming a product or service." E.g. Customers search on-line for product information, buy on-line and then collect instore (such as Argos). Entrepreneurs need to understand that: 'Customers are Always On'; they need to 'Meet Customers where They're At' and... they need to 'Adapt or Die'.

Figure 7.6: Example of part of a Unified Commerce approach at Dublin Airport

(Travellers can shop from the 'wall' and they can collect on return).



Subscription Business Models: The benefit of [subscription business models](#) for entrepreneurs is that they receive monthly or yearly recurring subscription revenue and can focus on customer retention more than customer acquisition. E.g. www.mymilkman.ie, [Amazon Subscribe & Save](#).

Conscious Consumerism: is important today because consumers make purchase decisions that have a positive social, economic, environmental, and political impact. One example is [Rent the Runway](#).

Delivery on Demand: An Irish example includes Buymie.ie and the recent Covid pandemic could see a rise in this type of business. Do opportunities exist for your clients?

Voice & Visual: For example [Alexa Voice Shopping](#), which allows consumers to quickly place orders with a voice command. Consumers with Alexa-enabled products, can simply tell Alexa what they want to buy.

Industry 4.0: is “a name for the current trend of automation and data exchange in manufacturing technologies, including cyber-physical systems, the Internet of things, cloud computing and cognitive computing and creating the smart factory”.

See a Boston Consulting Group article [here](#) which outlines nine technologies transforming industrial production. This may be more relevant for larger businesses but it is important for entrepreneurs to be aware of that it means.

- Ireland's Industry 4.0 Strategy 2020 – 2025 is available [here](#)
- Deloitte Global's annual survey on business's preparedness for a connected era is available [here](#)
- BBC feature a series of [articles](#) on a Better Connected World

Note: by clicking on the links above you will be able to find more information on the highlighted topics or specific examples which will help you better understand key concepts.

3.1.2: Business Oriented Digital Management

Business oriented digital management tools can provide significant benefits to small and medium businesses as well as larger ones. Google Small Business Community have many videos on related [issues](#). Examples of such tools include:

- [Web analytics](#) - the collection, reporting, and analysis of website data. It can provide insights and data that can be used to create a better user experience for website visitors. Understanding customer behaviour is also key to optimizing a website for sales conversions. (see a Google Small Business Community video on Google Analytics [here](#) and a web analytics dashboard example [here](#)). Google Analytics Academy and tutorials are available [here](#) while another video on accessing Google Analytics Demo Accounts is available [here](#).
- [Predictive analytics](#) – brings together huge inflows of data with historical records to forecast activity, behaviour and trends in the future. It can be used for pricing; stock management, revenue prediction, promotions, behaviour analytics, fraud detection, [etc](#). There are a wide range of predictive analytics apps [available](#).
- [Statistical analytics](#) - the science of collecting data and uncovering patterns and trends.
- [Marketing analytics](#) - involves measuring, managing and analysing marketing performance in order to maximise its effectiveness and optimise return on investment (ROI). Understanding marketing analytics allows entrepreneurs to be more efficient at their jobs and minimise wasted web marketing time and money. SAS Analytics have demonstration videos [here](#).

- **Talent / HR analytics** - gathers insights into a company's current workforce and potential employees. It allows companies to understand what motivates their workers and potential hires, and provides a better understanding of employee strengths and weaknesses. Such detail is important for adopting strategies that improve performance and productivity. Microstrategy.com provide more detailed information on [HR analytics](#).
- **Digital Business Models** - A digital business model is a form of creating value based on the development of customer benefits using digital technologies. The aim of the digital solution is to generate a significant advantage for which customers are willing to pay. While it is often referred to in terms of revenue generation, it can be more widely considered to be a way to leverage digital technologies to improve many aspects of an organisation. Some revenue models include Freemium (a type of business model that offers basic features to users at no cost and charges a premium for supplemental or advanced features), Subscription (based on the idea of selling a product or service to receive monthly or yearly recurring subscription revenue. The focus is on customer retention over customer acquisition. In essence, a single customer pays multiple payments for prolonged access to a good or service instead of a large upfront one), E-commerce (Electronic commerce or e-commerce (sometimes written as eCommerce) is a business model that lets firms and individuals buy and sell things over the internet), and Ad-supported (where firms attract an audience by creating content or attracting interaction and engagement, and then sell access to advertisers).
- **Data-Driven Decision-Making** - (sometimes abbreviated as DDDM) is the process of using data to inform your decision-making process and validate a course of action before committing to it. This could include collecting survey responses to identify products, services, and features their customers would like; conduct user testing to observe how customers are inclined to use their product or services and to identify potential issues that should be resolved prior to a full release; launch a new product or service in a test market in order to test the waters and understand how a product might perform in the market; analyse shifts in demographic data to determine business opportunities or threats. [Harvard Business School online](#) provides a lot of interesting reading material on this subject. Whether and how data can be incorporated into the decision-making process will depend on factors such as business goals, the types and quality of data available, etc. While data-driven decision-making has existed in business in one form or another for centuries, it's a truly modern phenomenon.
- **Planning IT** - provides a framework for assessing and improving the practice of information management in organizations. It helps managers to diagnose the situation in their enterprise and generate an appropriate action plan. It requires businesses to plan for, and think strategically about how to distinguish the potential benefits of information technology and information systems.

3.1.3: [Big Data Analytics](#)

Beyond digital management and analytics tools there is the concept of Big Data Analytics. This is the often complex process of examining large and varied data sets, or big data, to uncover information such as hidden patterns, unknown correlations, market trends and customer preferences. This information can help organisations make informed business decisions. For example, Future Farming provides some insights as to how Big Data is impacting on [agriculture](#). Driven by specialized analytics systems and software, as well as high-powered computing systems, big data analytics offers various business benefits, including:

- New revenue opportunities
- More effective marketing
- Better customer service
- Improved operational efficiency
- Competitive advantages over rivals

While the above may seem more relevant to big businesses, big data can also be utilised by [smaller businesses](#).

Useful data sources include traditional in-house data (like sales data and customer service logs), social media, browser logs, text analytics, and large, public data sets (such as census data). Twitter and services such as Trendera and Trend Hunter collate trend data and use it to answer specific questions for businesses. Google Trends can offer insights on the popularity of a brand or product, and social media analysis can illustrate popularity (i.e. how often a company is mentioned) and show what customers are saying.

Supply chain or delivery route optimisation is another business process that is benefitting heavily from big data analytics. Here, GPS and sensors are used to track goods or delivery vehicles and optimise routes by integrating [Geographic Information Systems](#) such as live traffic data, and so on. See [examples](#) of the use of Geographic Information Systems for business and business mapping support tools at [esri.com](#). Also, the Erasmus+ [Get Up](#) project offers a learning platform to provide users with the ability to understand complex phenomena through the use of Geomarketing techniques by creating geographic relationships inherent in relevant spatial data. By learning how to use this concept as a management tool, entrepreneurs can attract investment and new business.

In terms of recruitment, companies can now access so much more data that wasn't available before: data

from recruitment sites, information from sensors in ID badges, social media data, etc.

Big data analytics in small companies can start by simply using all the big data that we are now surrounded by and that other companies give us access to.

3.1.4: Information (cyber) security

While most high-profile victims of cyber threats have typically been large corporations, small businesses and even individual entrepreneurs are targeted because they have more finances than ordinary people do, and less cyber protection than large corporations do. Most small business owners underestimate the threat they are under and do not pay enough attention to cyber protection of their resources.

Question:

What simple steps you advise entrepreneurs to take to protect their business from cyber attacks?

Answer:

- Ensure there are strong password protocols.
- Minimise the number of attempts for entering passwords.
- Consider 'Password Manager'. However, if this is hacked then all passwords are accessible.
- Regularly back-up information and encrypt back-up copies or use additional passwords.
- Update antivirus software and do regular check-up's.
- Educate employees about cyber threats and how to avoid them.
- Document cyber security policies.
- Secure mobile devices as well as those in the office.
- Use multifactor identification practices.
- Invest in a good firewall.

If businesses do not consider these measures then some of the basic risks of cyber-attacks on their business include:

- Loss of customer trust.
- Loss of revenue.
- Day-to-day operations will be stalled.
- Loss of intellectual property.
- Rising insurance costs.
- Loss or damage to electronic data.
- Extra expenses.
- Network security and privacy lawsuits.
- Extortion losses.

Some cyber risk assessment tools are available online such as:

- <https://www.anetworks.com/free-cyber-security-assessment-tool/>
- <https://www.gflesch.com/cybersecurity-risk-assessment>

3.1.5: Augmented, Virtual and Mixed reality (Immersive Technologies)

Immersive technologies is an overall term used to cover technologies such as 360-degree filming and augmented and virtual reality. These are used to create unique storytelling experiences that blur the line between the digital world and the physical world. Using these technologies, businesses can communicate to, and entertain customers, with innovative stories about their business and the product or service they deliver.

Immersive technologies have a host of benefits for business. They let users explore products, processes, and services in the context of how they are used, which helps to create a positive engagement with the brand and deliver content that is tailor-made for individual customers. Creating a high brand value automatically generates more business over time and also helps to retain more customers.

In addition, immersive technologies have the potential to create more precise analytics that track customer data more accurately and reliably, on the basis of which entrepreneurs and businesses can frame their campaigns accordingly. Therefore, having the knowledge and ability to use immersive technologies effectively, can ultimately empower smaller businesses to produce higher quality marketing content at lower

cost. Furthermore, in using these technologies, businesses can communicate to, and entertain customers with innovative stories about their business and the product or service they deliver.

Examples of Immersive Technologies in practice include [Lowe's](#) Home Improvement Store which allows customers to see how products look in their home before you buy them as well as in-store [navigation](#) tools. IKEA have similar [apps](#). VR examples are available in this [video](#).

The **Digi2Market** project, supported by the Interreg Northern Periphery and Artic Programme 2014-2020, provides a [good practice guide](#) for small business on the development of models of storytelling using immersive technology.

3.2 Useful Material & Templates

Links to **Materials and Further Reading** are provided below:

Topics / Useful Links	
<ul style="list-style-type: none"> Unified Commerce 	<ul style="list-style-type: none"> https://www.softwareadvice.com/resources/what-is-unified-commerce/#:~:text=IT%20research%20firm%20Gartner%20defines,delay%20a%20superior%20customer%20experience.
<ul style="list-style-type: none"> Subscription Business Models 	<ul style="list-style-type: none"> https://www.investopedia.com/ask/answers/042715/how-do-subscription-business-models-work.asp
<ul style="list-style-type: none"> Conscious Consumerism 	<ul style="list-style-type: none"> https://startups.co.uk/what-is-conscious-consumerism/
<ul style="list-style-type: none"> Industry 4.0 	<ul style="list-style-type: none"> https://www.forbes.com/sites/bernardmarr/2018/09/02/what-is-industry-4-0-heres-a-super-easy-explanation-for-anyone/#3b55c6c69788
<ul style="list-style-type: none"> Horizontal & Vertical Systems Integration 	<ul style="list-style-type: none"> https://www.mbtmag.com/business-intelligence/article/13251083/horizontal-and-vertical-integration-in-industry-40
<ul style="list-style-type: none"> Focus Groups 	<ul style="list-style-type: none"> https://www.shopify.com/encyclopedia/focus-group

<ul style="list-style-type: none"> • Depth Interviews 	<ul style="list-style-type: none"> • https://www.slideshare.net/MohammadAslamShaiekh/in-depth-interview-idi
<ul style="list-style-type: none"> • Personas 	<ul style="list-style-type: none"> • https://www.interaction-design.org/literature/article/personas-why-and-how-you-should-use-them#:~:text=Personas%20are%20fictional%20characters%2C%20which,%2C%20experiences%2C%20behaviours%20and%20goals.
<ul style="list-style-type: none"> • Tech Enabled Personalisation 	<ul style="list-style-type: none"> • https://monetate.com/glossary/personalization/
<ul style="list-style-type: none"> • Web Analytics 	<ul style="list-style-type: none"> • https://blog.alexacom/full-glossary-web-analytics-terms-know/
<ul style="list-style-type: none"> • Predictive Analytics 	<ul style="list-style-type: none"> • https://www.sas.com/en_ie/insights/analytics/predictive-analytics.html
<ul style="list-style-type: none"> • Statistical Analytics 	<ul style="list-style-type: none"> • https://www.sas.com/en_ie/insights/analytics/statistical-analysis.html
<ul style="list-style-type: none"> • Marketing analytics 	<ul style="list-style-type: none"> • https://www.sas.com/en_ie/insights/marketing/marketing-analytics.html
<ul style="list-style-type: none"> • Talent / HR Analytics 	<ul style="list-style-type: none"> • https://www.valamis.com/hub/hr-analytics#:~:text=HR%20analytics%20is%20the%20process,analytics%2C%20or%20even%20workforce%20analytics.
<ul style="list-style-type: none"> • Big Data Analytics 	<ul style="list-style-type: none"> • https://www.sas.com/en_ie/insights/analytics/big-data-analytics.html
<ul style="list-style-type: none"> • Geographic Information Systems 	<ul style="list-style-type: none"> • https://www.esri.com/en-us/what-is-gis/overview
<ul style="list-style-type: none"> • Cybersecurity 	<ul style="list-style-type: none"> • https://www.kaspersky.com/resource-center/definitions/what-is-cyber-security
<ul style="list-style-type: none"> • Augmented Reality 	<ul style="list-style-type: none"> • https://www.macmillandictionary.com/buzzword/entries/augmented-reality.html
<ul style="list-style-type: none"> • Virtual Reality 	<ul style="list-style-type: none"> • https://whatis.techtarget.com/definition/virtual-reality

<ul style="list-style-type: none"> Mixed Reality 	<ul style="list-style-type: none"> https://www.forbes.com/sites/solrogers/2018/12/04/what-is-mixed-reality-and-what-does-it-mean-for-enterprise/#49b575e35df9
<ul style="list-style-type: none"> <u>Immersive Technologies</u> 	<ul style="list-style-type: none"> https://advrtas.com/immersive-technology/

Key Terms

<p>Key Terms</p> <p>See a full glossary of web analytics terms at: https://blog.alexa.com/full-glossary-web-analytics-terms-know/</p>	
Unified Commerce	The practice of providing flexibility, continuity and consistency across digital and physical channels to deliver a superior customer experience. This consistency includes multiple phases of the customer’s buying journey, including when a customer is searching, browsing for, transacting, acquiring and consuming a product or service.
Subscription Business Model	The way revenue is made so that a single customer pays multiple payments for prolonged access to a good or service.
Conscious Consumerism	Purchase decisions that have a positive social, economic, environmental, and political impact.
Industry 4.0	The current trend of automation and data exchange in manufacturing technologies, including cyber-physical systems, the Internet of things, cloud computing and cognitive computing and creating the smart factory
Personas	Fictional characters, created based upon market research in order to represent the different user types that might use a service, product, site, or brand in a similar way.
Tech-enabled Personalisation	Personalization is the practice of creating personal interactions and experiences for existing and prospective customers through the use of digital marketing technologies to grow these customers into your best customers.
Web Analytics	The collection, reporting, and analysis of website data.

Predictive Analytics	Amalgamates huge inflows of data with historical records to forecast activity, behaviour and trends in the future.
Statistical Analytics	The science of collecting data and uncovering patterns and trends.
Marketing Analytics	The practice of measuring, managing and analysing marketing performance in order to maximise its effectiveness and optimise return on investment.
Talent/HR Analytics	Gathers insights into a company's current workforce and potential employees.
Big Data Analytics	The often complex process of examining large and varied data sets, or big data, to uncover information such as hidden patterns, unknown correlations, market trends and customer preferences.
Cybersecurity	Cyber security is the practice of defending computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks.
Augmented Reality	The technology of combining real world images, video, etc. with computer-generated information and/or imagery.
Virtual reality	An artificial environment that is created with software and presented to the user in such a way that the user suspends belief and accepts it as a real environment.
Mixed reality	An advancement of augmented reality (AR) – a “hybrid” environment, interactive virtual objects can be mapped to the physical environment, blending the real and the virtual.
Immersive Technologies	Immersive technologies is an overall term used to cover technologies such as 360-degree filming and augmented and virtual reality, which are used to create unique storytelling experiences that blur the line between the digital world and the physical world.

Case Studies / Good practices / Exercises

A number of examples of good practice and cases have been outlined throughout the module above including:

- Conducting online surveys / customer research - <https://www.youtube.com/watch?v=7xdCDJxxoRk> (video)
- Tracking your customers online using [Hotjar](#) (testimonial videos) and [cases](#)
- Finding where customers encounter problems on your website using a [Treejack demo](#)
- Web analytics video from Google Small Business Community ([video](#))
- Marketing and Statistical analytics videos are available [here](#)
- Demo [videos](#) on using Geographic Information Systems to benefit business from [esri.com](#)
- Video examples of Immersive Technologies from [Lowe's](#) Home Improvement [Store](#) and [IKEA](#)
- [Best Practice Guide](#) for small business on the development of models of storytelling using immersive technology

4. ROADMAP & ACTION PLAN

Having completed the Diagnostic evaluation, and based on your own previous experience, you will have identified knowledge or competency gaps in terms of how IT and Digital Resources can support a business.

As outlined in Section 2.2.2, the Training roadmap (learning path) is a structured sequence of training activities proposed to teach a topic. While it should be comprehensive, it also needs to be practical, in order to organise the learning over a series of sessions. It will ensure that you do not omit crucial content because lack of time and that you will achieve fluency in key elements of the topic. Steps:

1. Set the goals derived from the **BIC for SME** diagnostic needs check (see Section 2)
2. Set out the Roadmap and Action Plan by selecting the elements of the Module to be covered and timelines (see Section 2)
3. Select pedagogy (how the selected elements of the Module are to be covered in terms of lectures, reading material, exercises, etc.,) (see Section 2)
4. Set sequence: organize topics based on importance (as per the Diagnostic evaluation), impact, interactions, etc.. (see Section 2)
5. Confirm Action plan and Milestones - KPI
6. Output: assess the result achieved

Having understood and practiced how to use the various tools and templates contained in the Module (steps 1 – 4 above), and having demonstrated them to the entrepreneur, the trainer should confirm a set of action items including a timeline indicating: what is to be done, by whom, when and how. Examples are provided below:

4.1 Action Plan

What	Who	When	How
Ensure the business is protected from data breaches and cyber risk via the following: <ul style="list-style-type: none"> • Implement strong password policy • Consider use of 'Password manager' 	Promoter	2 weeks (ongoing)	Trainer may support in the identification of a suitable service provider.

<ul style="list-style-type: none"> • Regularly back-up information with encryption / additional password • Update antivirus software • Educate employees about cyber threats and how to avoid them. • Secure office AND mobile devices • Use multifactor identification practices • Implement a secure firewall. 			
<p>Research new / existing customers via:</p> <ul style="list-style-type: none"> • Focus Groups • Face-to-Face Interview • Do online surveys • Get online reviews • Track user engage with your website. • Evaluate where users get 'stuck' or log out of your website 	Promoter	6-8 weeks	Trainer to support the entrepreneur in the best research approach(es).
<p>Evaluate the benefits of online analytics to a business using:</p> <ul style="list-style-type: none"> • Web analytics • Predictive Analytics • Statistical Analytics • Marketing Analytics • Talent Analytics • Etc. 	Promoter	Etc.	Assess suitable sources with the Trainer.
Etc.			Etc.

The **BIC for SME** Diagnostic / Assessment Tool and Roadmap can provide trainers with a 'take away' which they can give entrepreneurs in the form of a handout thereby providing them a practical guideline on tasks to be completed.

4.2 Countermeasures

Not all Action Items will progress as planned. It is therefore important for the Trainer to consider some Countermeasures.

- Failure to fully implement cyber security measures due to cost - (implement policies around strong passwords, multifactor identification, anti-virus software and basic employee awareness with future plans around incorporating firewalls, in-depth employee training, etc.)
- Failure to research market using online resources - (conduct focus group and depth surveys and develop a plan with timelines for online research)
- Failure to grasp the benefits of online analytics - (engage relevant expertise or mentoring support)
- Etc.

5. FOLLOW-UP & OUTPUTS

It is important for the Trainer / Mentor / Consultant to monitor output achieved against the original Diagnostic evaluation, Roadmap and Action Plan:

Task / Objective	Outcome (Date)
Implement cyber & data security measures	Work in progress (WIP)
Establish the customer journey (online & offline)	Done
Use web / marketing analytics to improve marketing activity	WIP
Etc.	

6. APPENDICES

N/A