



Module 6:

Digital Technology & Your Smallholder Business



Co-funded by the
Erasmus+ Programme
of the European Union

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use, which may be made of the information contained therein.

Module 6

All businesses, no matter how small, can benefit from the power and potential of technology. Smallholders are small operations by definition and in order to maximise income, technology has a key role to play.

In this final Module, you will learn about **Online Marketplaces** and their relevance to you, why it is important to have your own **Website**, and how **Social Media** can help your smallholder business grow. Finally, we will give you an overview of Big Data and the role it is starting to play in Agriculture.

- 1 **The Power of Collective – Online Marketplaces**
- 2 **The Importance of having your Own Website**
- 3 **The Benefit of using Social Media**
- 4 **Big Data in Agriculture**

01

The Power of Collective – **Online Marketplaces**



What is an Online Marketplace?

An online marketplace is an e-commerce site (a digital middleman) that brings sellers and buyers together in one place.



What does an online marketplace do?

An online marketplace is an e-commerce site that connects sellers with buyers.

It's often known as an **electronic marketplace** and all transactions are managed by the website owner.

Companies and farm businesses can use online marketplaces to reach customers who want to purchase their products and services.

Examples of global online marketplaces include Amazon, eBay, and Etsy, but some food specific sites are following the format of online marketplaces with great success.



Online Farmers' Marketplaces

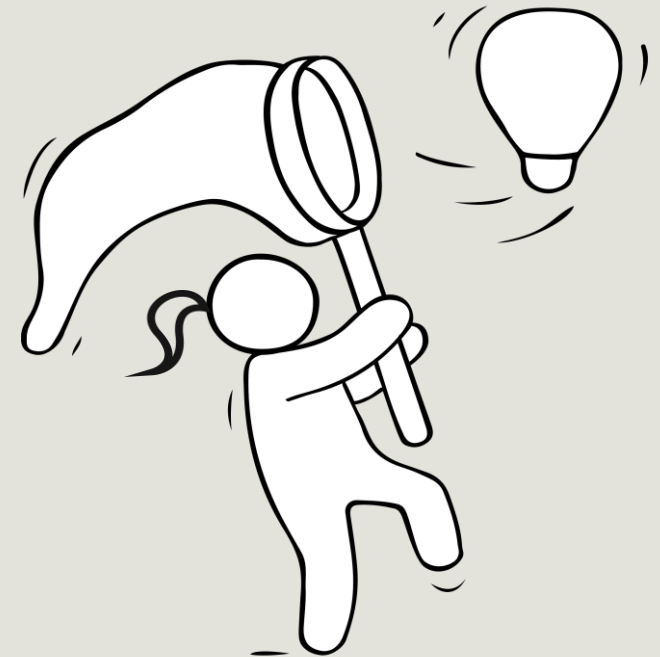
We are living in an amazing age of global information sharing and marketing.

The COVID-19 pandemic rocked the food and grocery industry. Food producers around the world had to rethink their operations. Many begin offering delivery or Click'n'Collect services.

Farmers' markets and food networks shared a similar need to pivot, and some have chosen the route of e-commerce marketplaces.

Let's explore this world of opportunity through

Online Marketplaces.



Online Marketplaces

Many businesses use online marketplaces as a first step when starting to sell online. It is really important you choose the online marketplace most suited to your smallholder business...

In this section, you will:

- Learn what is an Online Marketplace
- Explore the benefits of Online Marketplaces and how they differ from independent ecommerce sites.
- Spotlight on the main Online Marketplaces and the Pros/Cons of each
- What you need to sell through an Online Marketplace



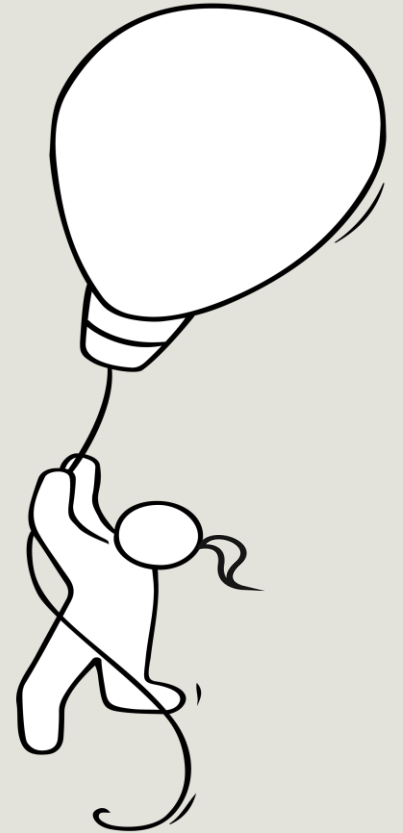
Understanding Online Marketplaces & why they might work for you?

A marketplace is a multi-seller online store that enables consumers to shop for a variety of products from multiple vendors across multiple locations. Thinking of it as renting a place online.

The main reason for choosing an online marketplace is the large audiences that these sites attract.

Think of it like this: if you were given the choice would you set up a stall in a major farmers market or on a hard-to-find side street?

Let's look at a case study of an Irish online marketplace that has transformed the sales of many smallholders.



Benefits of Online Marketplaces

According to [Eurostat](#), farmers receive a mere 21% of the retail price that customers pay in supermarkets. Keeping this in mind, the ~20% commission fee that online marketplaces charge is much fairer for the farmers and leaves them with a much bigger share.

If digital farmers' markets really become more commonplace in the future, it seems they could bring:

- **higher incomes for farmers,**
- **access to fresh, regional and seasonal products for consumers,**
- **shorter transport distances,**
- **less packaging, and greater social cohesion at the local level.**



**MAKING THEM A
VIABLE
ALTERNATIVE TO
SUPERMARKETS!**

Benefits of Online Marketplaces

Marketplaces make it convenient for your farm as a business to list and sell your products:

- People recognise and trust the well-known marketplaces and can buy in the reassurance of their strong customer protection
- Online marketplaces can help quickly reach a wider audience with a smaller investment
- By using a marketplace, you avoid the need to set up your own shopping cart and payment process
- Marketplaces build a community around the common needs of retailers and consumers

While we suggest you set up your shop on an online marketplace, the benefits of having your own website should not be overlooked. **A website will help you build your brand, personalise your offerings, and drive customer relationships and experience.**

Be Inspired... NEIGHBOURFOOD

Brands like Neighbour-FOOD offer fresh produce, meat, eggs, and other mainstays of the neighborhood farmers market, all in an online setting. They offer in-person pickup at a local venue to people in their selected regions and utilise local vendors and producers just like they did when they had booths set up in the town square. Except now, it's even more convenient for consumers.

All of the products listed in a NeighbourFood market are grown or produced by local smallholder farmers or artisan producers. The sale of any large-scale commercially grown vegetables, non-organic imported fruit or vegetables, genetically modified products, intensively reared meat, imported fish or battery eggs are not permitted to be sold at a NeighbourFood market.



Exercise - Selling on Marketplaces

Find the best marketplace to sell your products online

Many smallholders are successfully selling through online marketplaces. There are many online sales platforms and it is important to find the one that's right for you:

NeighbourFood in Ireland and the UK

Markta in Austria

Italian Farmers Market

Farmsy in Ireland

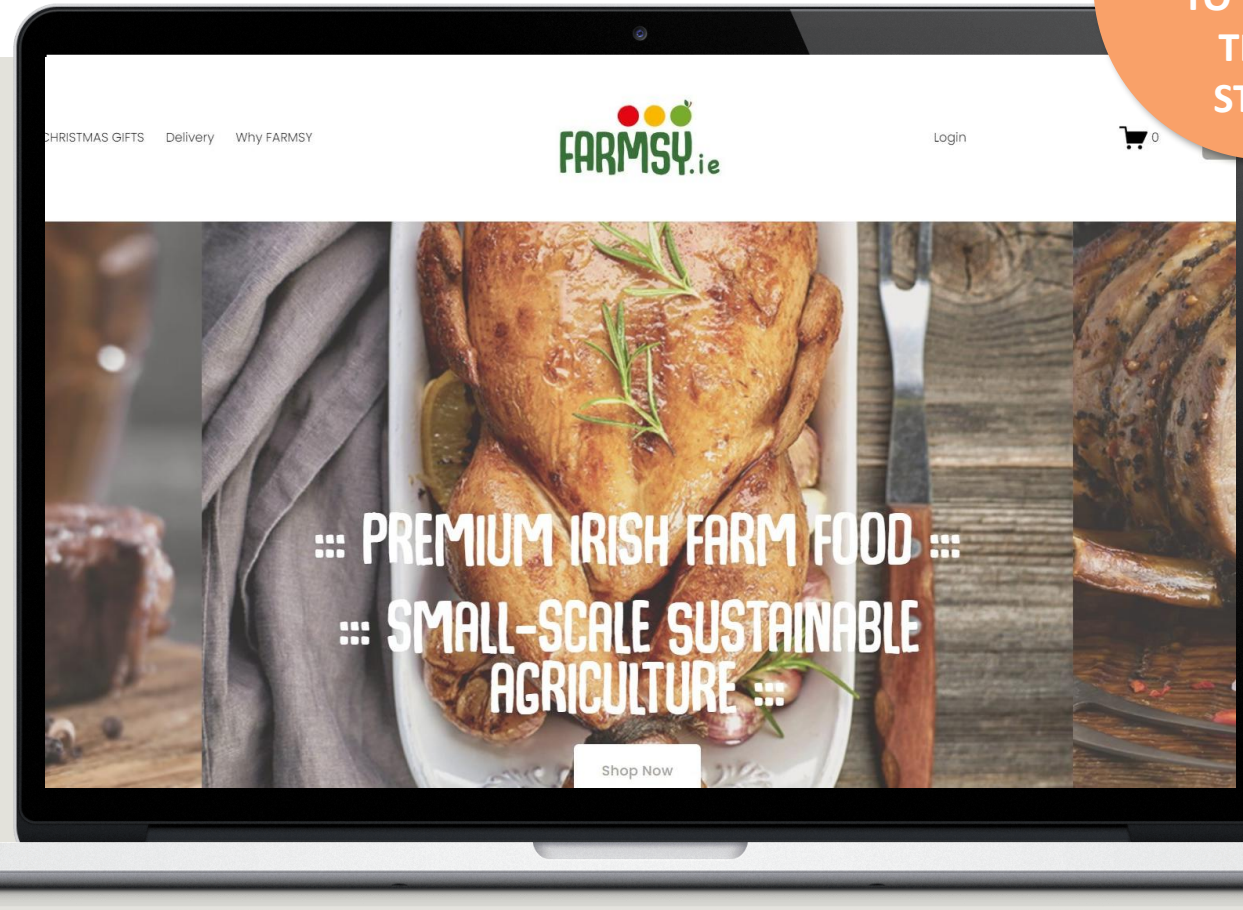
Facebook Marketplace for Business is available in certain countries

Etsy for farm crafts?



Be Inspired...Check our Farmsy!!

At Farmsy, they make it easier for local farmers, growers and artisan food producers to sell their produce within the local community, helping to protect a way of life and protect jobs in their community.



CLICK
HERE
TO LEARN
THEIR
STORY

They pride themselves on knowing their suppliers personally, and ensure you know them too by providing transparency on provenance for every product.

Be Inspired .. An Alternative Sales Channel...

CLICK
[HERE](#)
TO LEARN
THEIR
STORY

A similar, but an alternative option to joining an online marketplace would be to sell your produce in a wholesale capacity (B2B).

The demand for locally produced food is increasing for health and environmental reasons and as a consequence businesses are popping up across Europe to meet this need. These businesses are often online and source from a range of local producers and then they fulfill online orders.

They may use subscription models or direct ordering and they often deliver straight to the consumer.

One example is The Fruit Brothers based in Galway, Ireland.



02

The Importance of having your Own Website



The Importance of having your own Website...

The importance of your own website for sales cannot be overstated. By having an online presence through your website, you are able to reach more consumers. But developing a website doesn't automatically bring paying customers to your business and that is why we started this module with Online Marketplaces.



When you can afford to, set up your own website.

Your own website gives you the freedom to be much more extensive and engaging since it allows for the inclusion of photos, produce samples, and testimonials from happy customers.

Why Every Business Needs a Website

A business's online presence, regardless of size, can have a massive impact on its success.

Even now in a very digital world, some small businesses still don't realise that most of their customers will visit their website before making a purchase.

Having a strong online presence/website, particularly a website, can be a make or break for generating more sales.



Don't be AFRAID...

Some farmers and business owners are hesitant to get online because they feel they are not tech-savvy enough and don't understand how to manage a website. Other times, they are concerned about the cost of being online.

The good news is that there's a solution out there that will work for you. If you still need convincing, here are the top reasons it's important for your smallholder business to have a website:



1. **Credibility & Trust**
2. **Brand**
3. **New Leads/ Opportunities**
4. **Organic Traffic**
5. **Time Saving**
6. **Updates & Announcements**
7. **Digital Marketing**

1. Credibility & Trust

One of the main reasons you should have a website for your business is to increase your smallholder business's credibility. Chances are there are several producers offering a similar product to yours. One way you can stand out is by having a website that looks good and clearly communicates quality information to your consumers.

Without a website, people may question your legitimacy as a business. Having a website is an opportunity to make a great first impression and give people comfort that you're a real business it also can demonstrate trust and transparency which is sought after now, by the consumer.

Pictures can speak a thousand words and a website allows you to showcase your produce and farm



2. Brand

Showcasing your brand to prospective customers is one of the most important things that you can do. By clearly establishing who you are, what you represent and what you stand for, you increase the chances of customers buying from you.

We discussed a brand story in Module 4 your website is the most ideal platform to share YOUR STORY.

Branding is something that can set you apart from your competitors. Without a website, it can be incredibly challenging to do this because people can't easily find quality and reliable information on your business.

Use your website to share your story and build your Brand – Adding Videos is a great way of doing this.



3. New Leads/ Opportunities

Perhaps one of the most intriguing reasons to have a website for your smallholder business is because it can increase your chances of getting sales leads.

Once people find you online, become interested in your product or service and want to know more, they'll know how to contact you (or make purchases) thanks to the information on your website, which gives you the opportunity to increase your sales.

Even though websites have a cost, when used correctly, they have a positive return on investment (ROI).

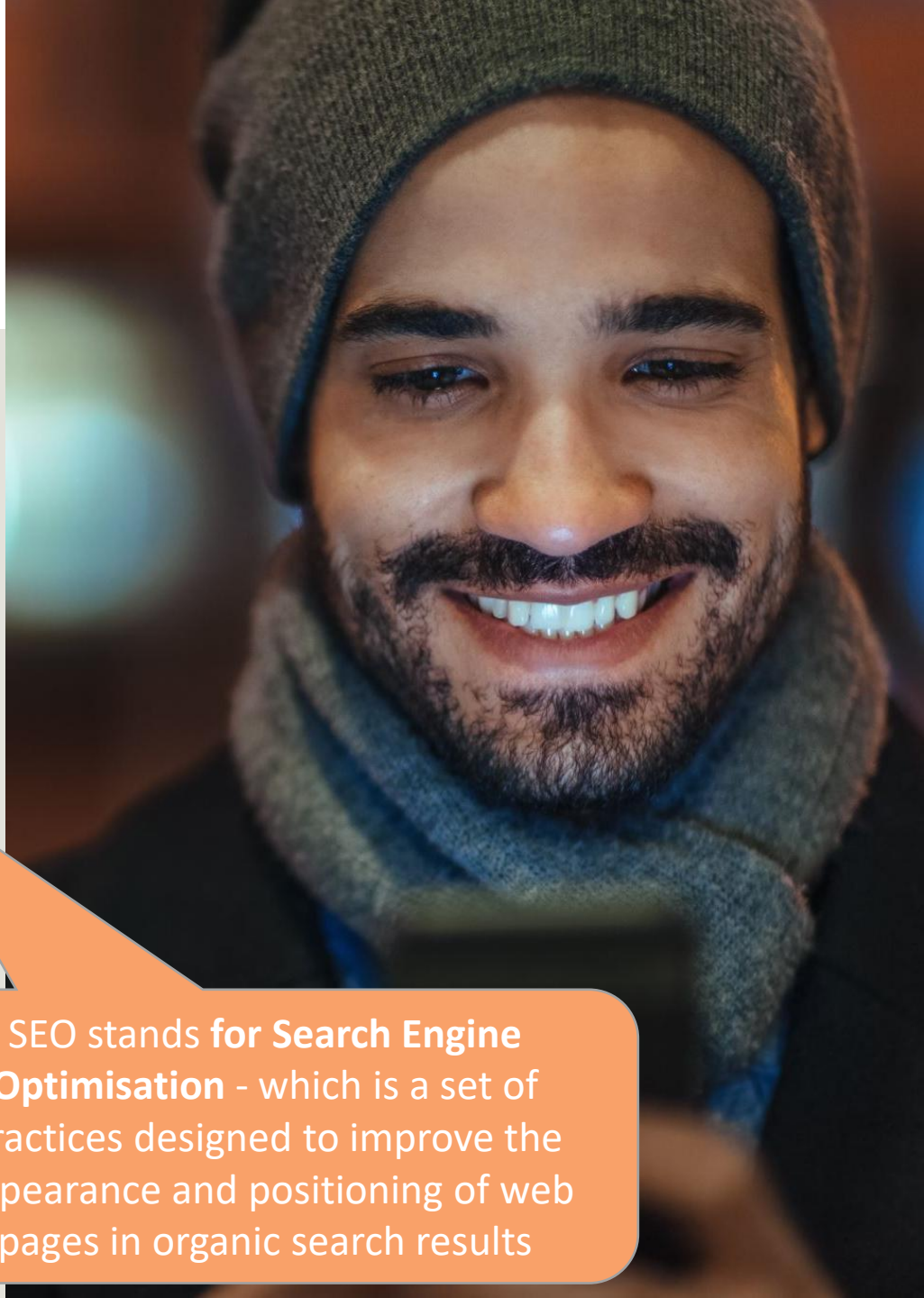


A website can OPEN DOORS
for you and your
Smallholding

4. Organic Traffic

Once you're online and have an SEO-optimised website, you have a chance of showing up in Google search results.

This means that when people are searching for a product or service, there is a chance your website will show up in the results. This gives you the opportunity to drastically increase your customer base. Having a good quality website and making a good first impression will keep their attention and whet their appetite to learn more about you.

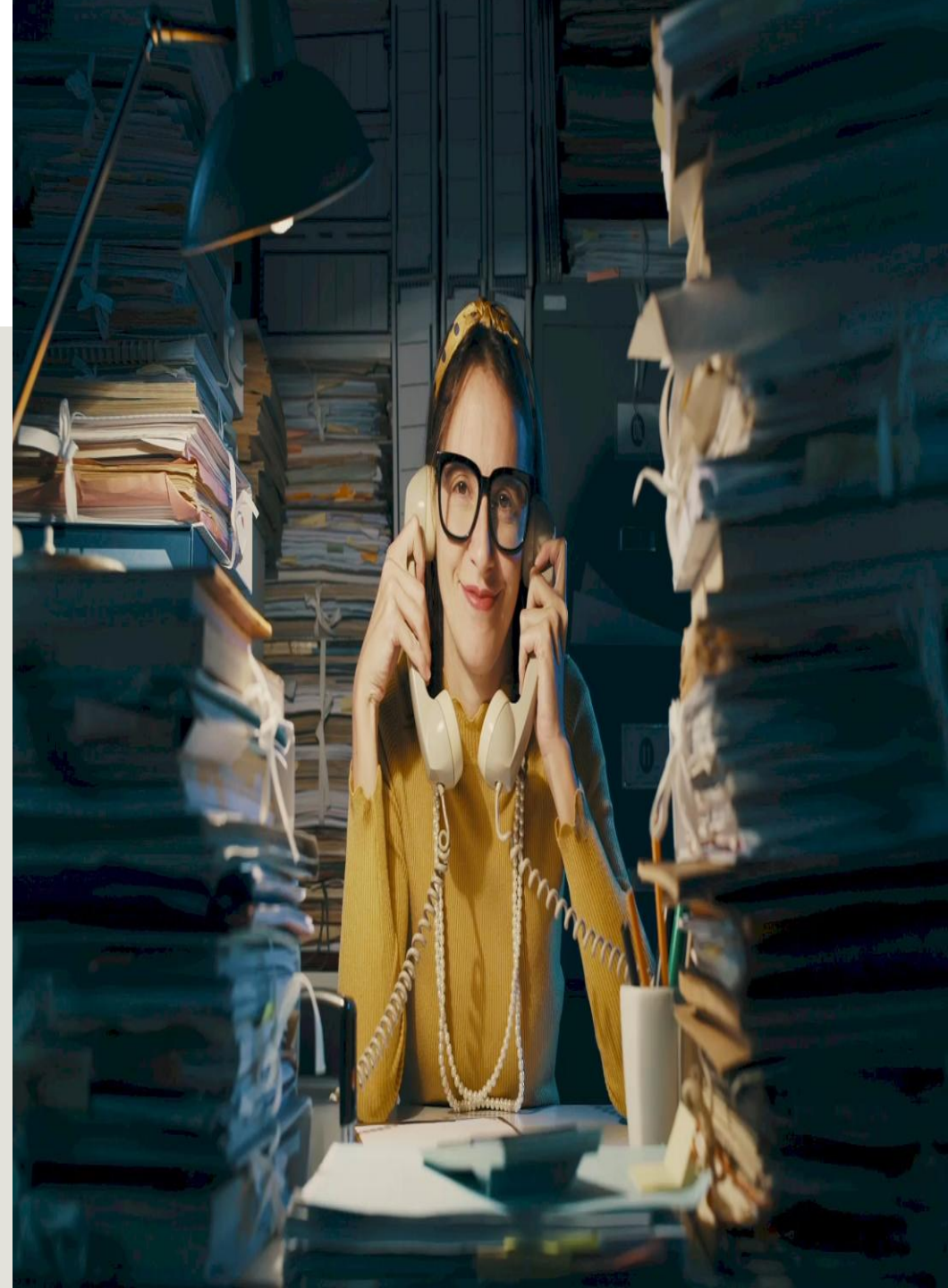


SEO stands for **Search Engine Optimisation** - which is a set of practices designed to improve the appearance and positioning of web pages in organic search results

5. Time Saving

Many businesses get calls from prospective customers asking simple questions about location and hours of operation. If you miss a call, the customer is left unhappy. Calls can also distract you from focusing on the most important parts of your business. Usually, as a smallholder, you are a one-person show and don't have time to act as a secretary, a website can reduce these calls and increase productivity.

At the same time, it helps customers find useful information without needing to call, which ultimately provides an all-around better user experience.



6. Updates & Announcements

Since your website is on and available 24/7, it's easy to post updates and announcements to your customers.

Creating blog posts or regular updates is a way to keep them informed on everything that you're doing, growing or producing. When something is particularly relevant to them, it increases the chance of you being able to upsell them.


Social media updates are good but past posts are rarely any use, whereas your website posts are always there and always available.



6. Digital Marketing

If you plan on leveraging digital marketing to grow your business, you'll want to drive traffic to a website or landing page. To do this effectively, lever key information on traffic that has been going to your website so you can target the most qualified customers and get the best ROI on your investment . SEM is something that can't be set up retroactively, so it is best to get your website running early even if you're not planning on online advertising at the moment. There is help and advice out there to help you with your digital marketing.

[The Ultimate Guide to Digital Marketing](#)

A person is holding a tablet in a grocery store, with their finger touching the screen. The background shows shelves of produce, including a large display of red tomatoes in the foreground. An orange speech bubble points to the text on the left.

SEM stands for **Search Engine Marketing** - leverages paid online advertising to increase website visibility within search engines.

Digital marketing is a broad term that encompasses many different channels for promoting business interests to prospective customers. That being said, there are several common methods for conducting digital marketing, including:

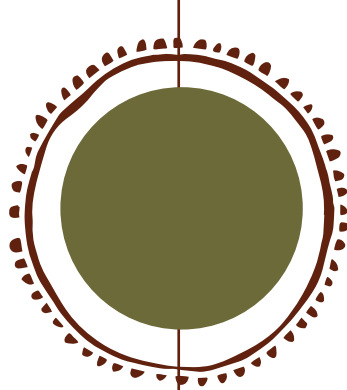
- **Pay-Per-Click (PPC)** — PPC is an online method for advertising where a business only pays for its ads when a person clicks on them.
- **Social Media Marketing (SMM)** — SMM is the practice of using social media channels to promote business products or services.
- **Email Marketing** — Email marketing enables businesses to send branded, promotional content directly to prospective customers via email. The use of automated newsletters is common in this context.
- **Affiliate Marketing** — Affiliate marketing is a performance-based exercise that enables revenue sharing and pay-per-sale (PPS) compensation within a common network.
- **Content Marketing** — Content marketing refers to the publishing and distribution of text, video or audio materials to customers online. Blogs, videos and podcasts are common ways for businesses to engage in content marketing.
- **Native Advertising** — Native advertising involves blending marketing materials into a medium, making the underlying message and marketing purposes equally important. Sponsored content, in which one business posts its own content on a different website, is a common method of native advertising.

Remember...

A laptop with a silver finish is shown from a front-facing perspective. The screen is open and displays a solid orange background with handwritten text in a black, cursive script. The text reads: "You can improve a WEBSITE over time, but the key is to START creating one." The laptop is centered on a light gray surface.

You can improve a
WEBSITE over time, but
the key is to START
creating one.

Setting up your own Website



Use a website builder.

Create your website or online store using drag-n-drop templates.

This is an excellent review of the top 10 website builders that you can use. They cover all levels of technical ability...you are sure to find one to suit your needs



Website Builders Comparison: Find the Best Site Builder (top10bestwebsitebuilders.com)**Builders of 2021**

Hire a professional.

If you have the budget, you may prefer to subcontract the creation of your website to a professional web designer.

For example, in Ireland there are grants or Trading Online Voucher Schemes available in some countries to assist financially with the cost involved.

This article sets out 8 tips for hiring a web designer for your business

8 tips for hiring a Web designer for your business | CIO

Why SHOPIFY may work for you...



Shopify is a unique online marketplace because it's also a website builder, but for e-commerce businesses, that want to sell directly to consumers.

For a monthly fee, the advantages of selling on Shopify are:-

- **Sell on your website versus a marketplace**

With Shopify, you get a website built for e-commerce. For example, you can choose from e-commerce web design templates, which make creating a website and transitioning to selling on your site easier.

- **Create an online store fast, without a development background**

The design templates, both free and paid, available from Shopify make it possible for anyone to launch an online store. Even if you don't have a development background, you can confidently create and publish a store for your farm business.

- **Launch Google and Facebook ads from within the platform**

Shopify also includes a built-in feature for advertising your products. Whether you want to launch ads on Facebook or Google, you can do it from within Shopify.



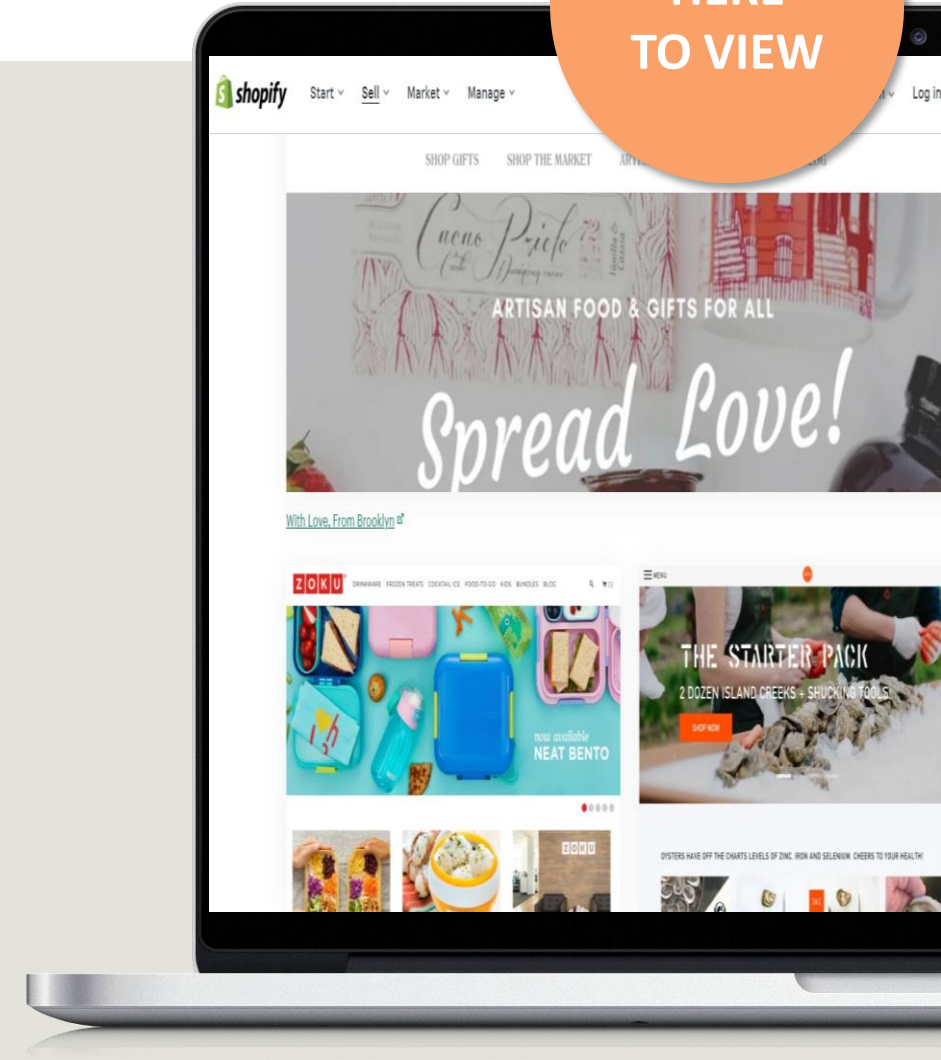
SHOPIFY



CLICK
HERE
TO VIEW

Online Stores can be built on Shopify handling everything from marketing and payments, to secure checkout and shipping. Costs from €9/month.

www.shopify.com/examples - here are some examples of Shopify online stores with e-commerce template designs.

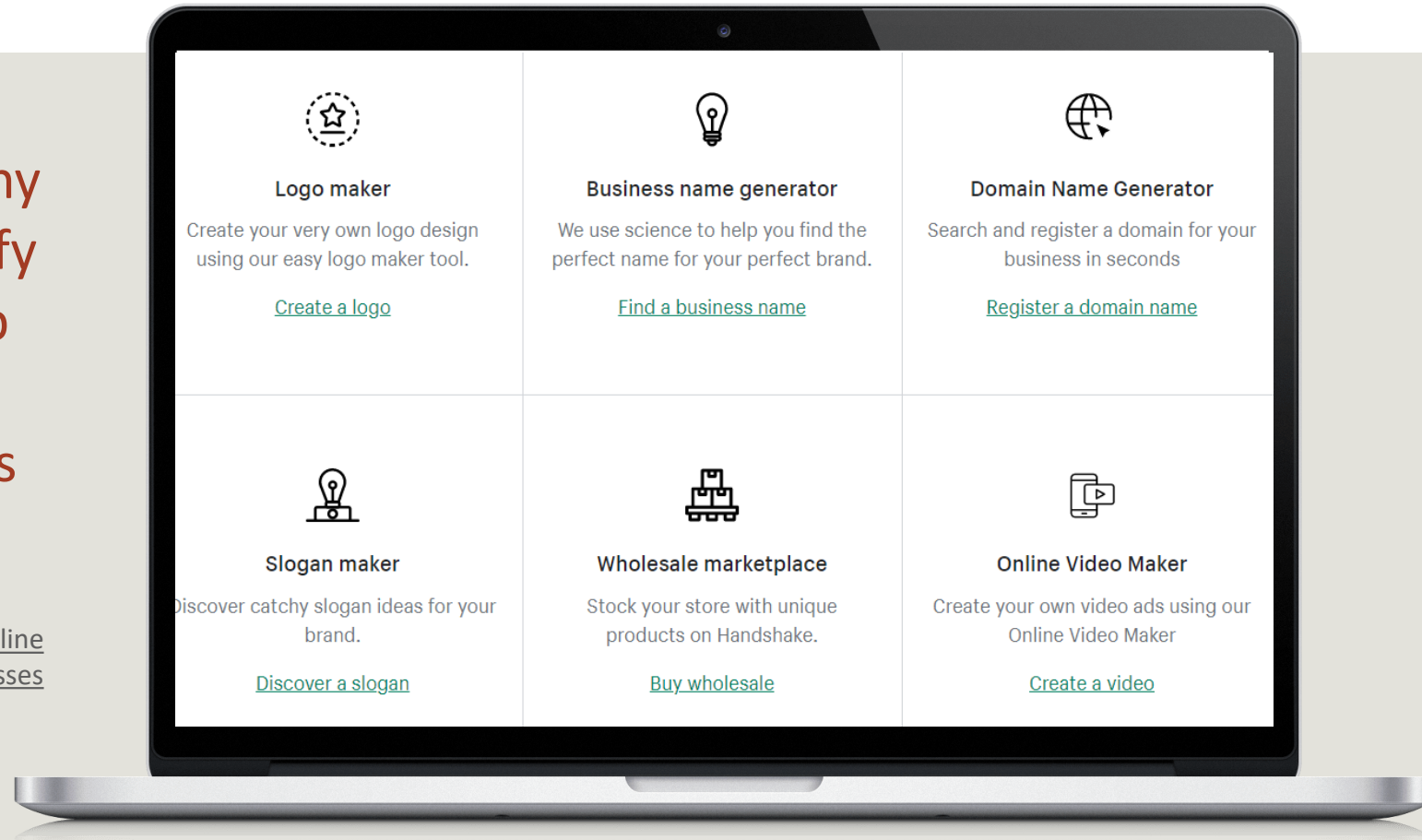


SHOPIFY



There are many
tools in Shopify
that will help
you launch
your business
ONLINE!

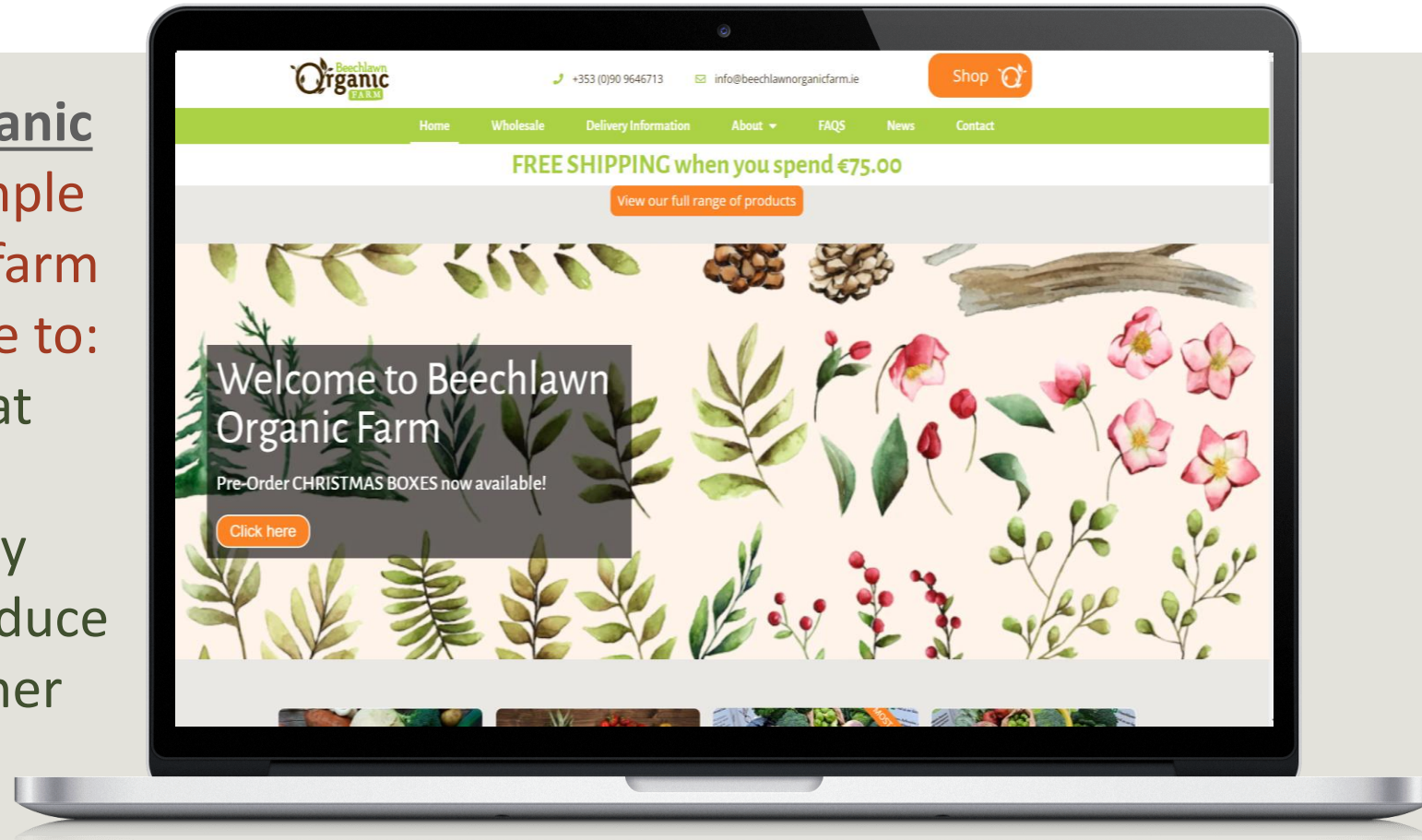
Free Business Tools - Online
Tools for Small Businesses
(shopify.com)



Be Inspired...An Irish Farm's Website

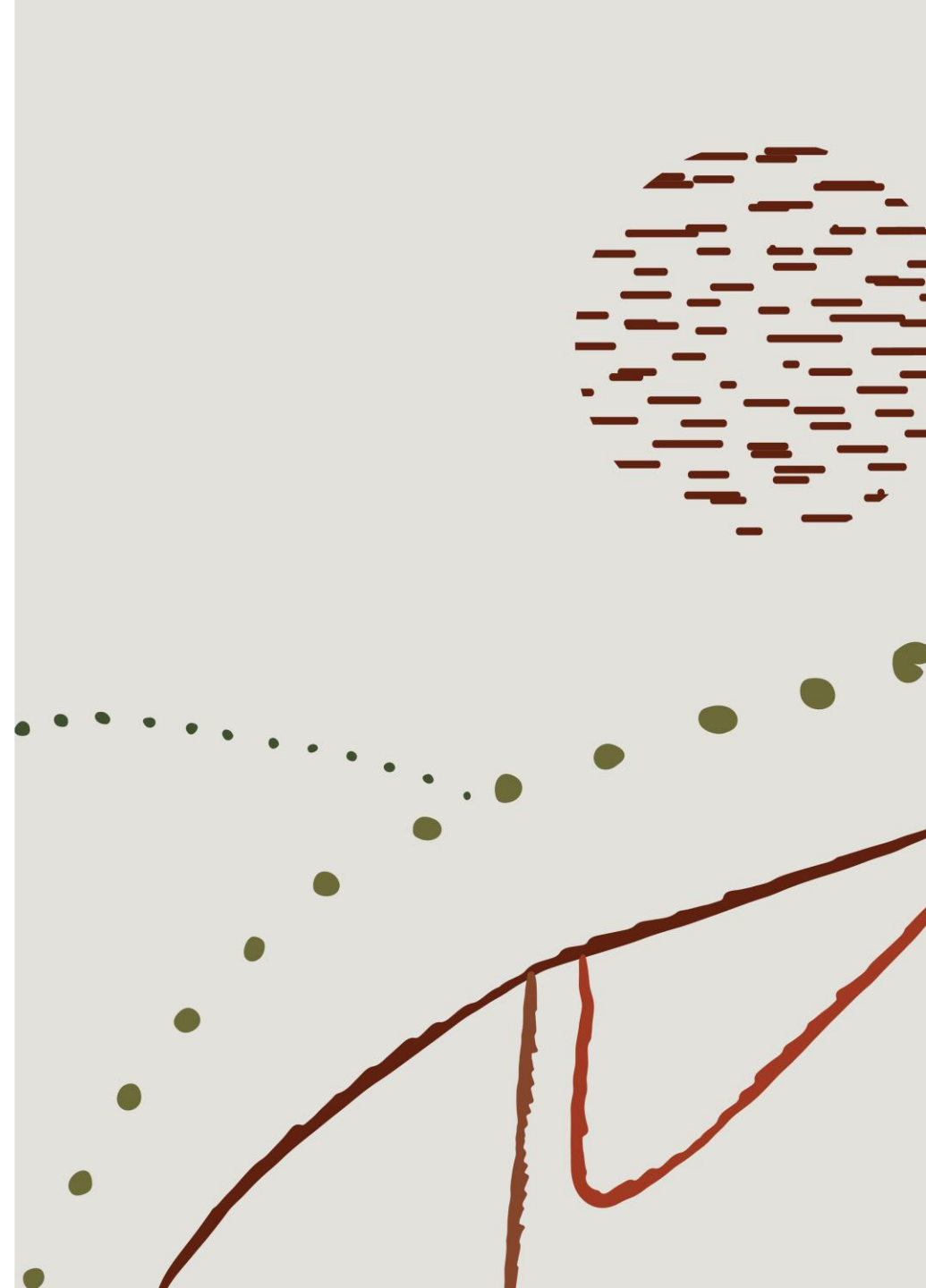
Beechlawn Organic Farm is an example of a Small Irish farm using its website to:

- highlight what they do
- tell their story
- sell their produce
- Build consumer trust



03

The Benefit of using Social Media Channels for your Smallholding



Social Media

Social media platforms have become very important. They are used as a resource in building a bridge between products and customers.

Social media has become an essential part of all food business marketing strategies. Everyone needs to eat and is interested in food so as the producer you have an advantage already.

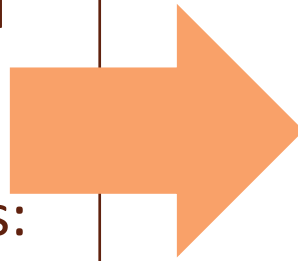
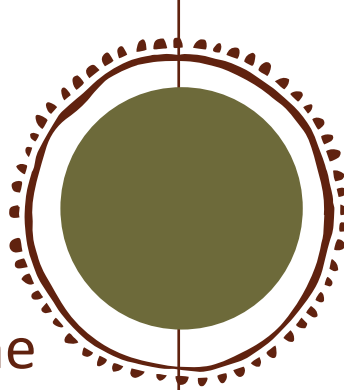
Due to the social nature of dining and food experiences, typically shared with friends and family, encouraging consumers to engage with social media is an important way of attracting new customers.



Social Media's Role...

Social media has revolutionised the way we interact with one another and how food businesses conduct business and **communicate with their customers in new and exciting ways.**

Here are some examples of how food businesses are utilising social media platforms such as Facebook, Instagram, TikTok, Twitter, and others:



It allows them to Post-high-quality images of food items and new products – Food is a visual thing!

They can share promotional news & offers – creating new interest and/or brand loyalty

Showcase customer-generated content

Recipes ideas or new produce launches can be shared

Key personnel can be highlighted, building emotional connections

They can show photos and videos from behind the scenes.



Click here for 14 tips on how to use social media for food marketing in 2022

Social Media Platforms

[Facebook](#) is a very effective platform for social media activities in the food sector according to [Celimli and Adanacioglu \(2021\)](#).

But you can also be successful on [Instagram](#)

On Instagram, there is the opportunity to implement innovative marketing campaigns that enhance the customer experience. The social media platform provides the opportunity to increase the depth of **storytelling** and **sharing of success stories**.

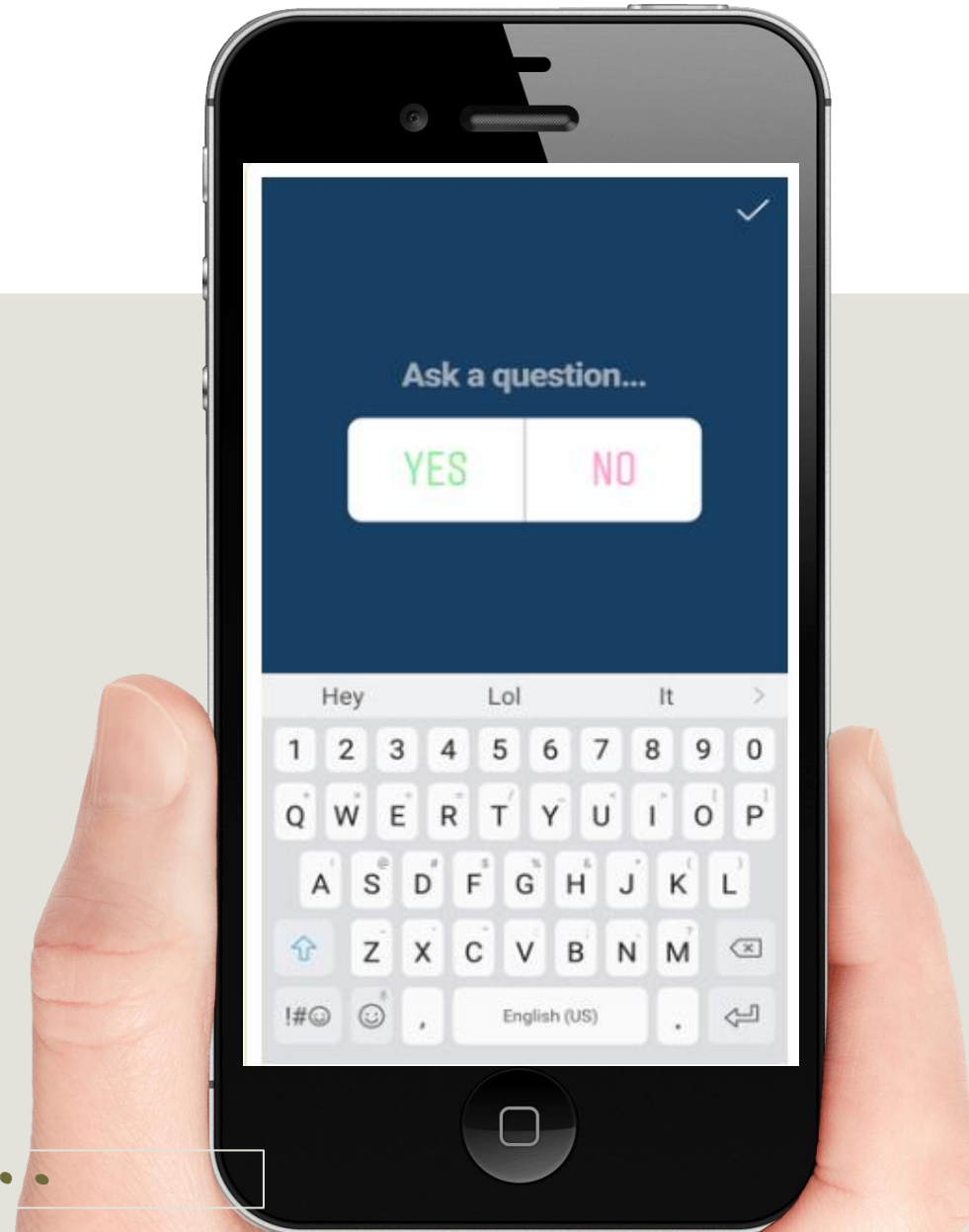
Even **personalised content** is displayed through the 'Explore' feature, and a video recording feature is a great tool for creating time-lapse videos.



The Power of Instagram

Over 500 million users look at Instagram Stories every day. From influencers to large businesses, a substantial number of Instagrammers are now using the Story polls feature, not only **to interact** with their audience but also to bring them in on **decision-making** and use this crowd-sourced information for future brand activities. Why not use these tools to help you decide on menu options?

[How to use Instagram polls for your business](#)
[| The Social Journal \(zoho.com\)](#)



Using technology to show your expertise...

No one knows your farm and produce better than YOU. When trying to gain customers and build your farm as a viable business it is advantageous to position yourself as an **expert** in the field (no pun intended). Not only in terms of the years of experience you have but also the history of the farm. It is good to use your website or social media channels to demonstrate this experience or try →

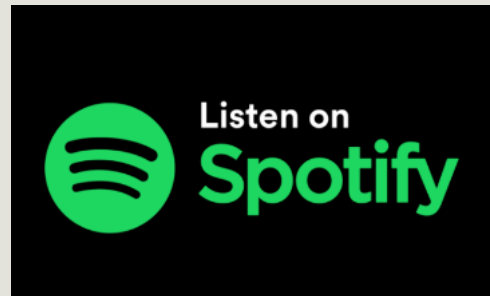


- 1 Write a **blog**, try **social media**, speak at (agri-food) **events**
- 2 Use **podcasts** for your business. It represents an innovative passive way to make the customers aware of you
- 3 Get involved in **webinars** (e.g. with Co-ops or National agencies) to create brand awareness for a wider audience

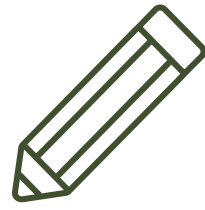
See what's out there – One example...

The Farmers Journal podcast series is a regular discussion on agricultural news and rural affairs from Ireland's leading farming and agri-business newspaper, the Irish Farmers' Journal. Every Wednesday.

CLICK TO LISTEN



Learner exercise



It has been discussed how the importance of Social media in business is increasing:

A simple pen and paper exercise

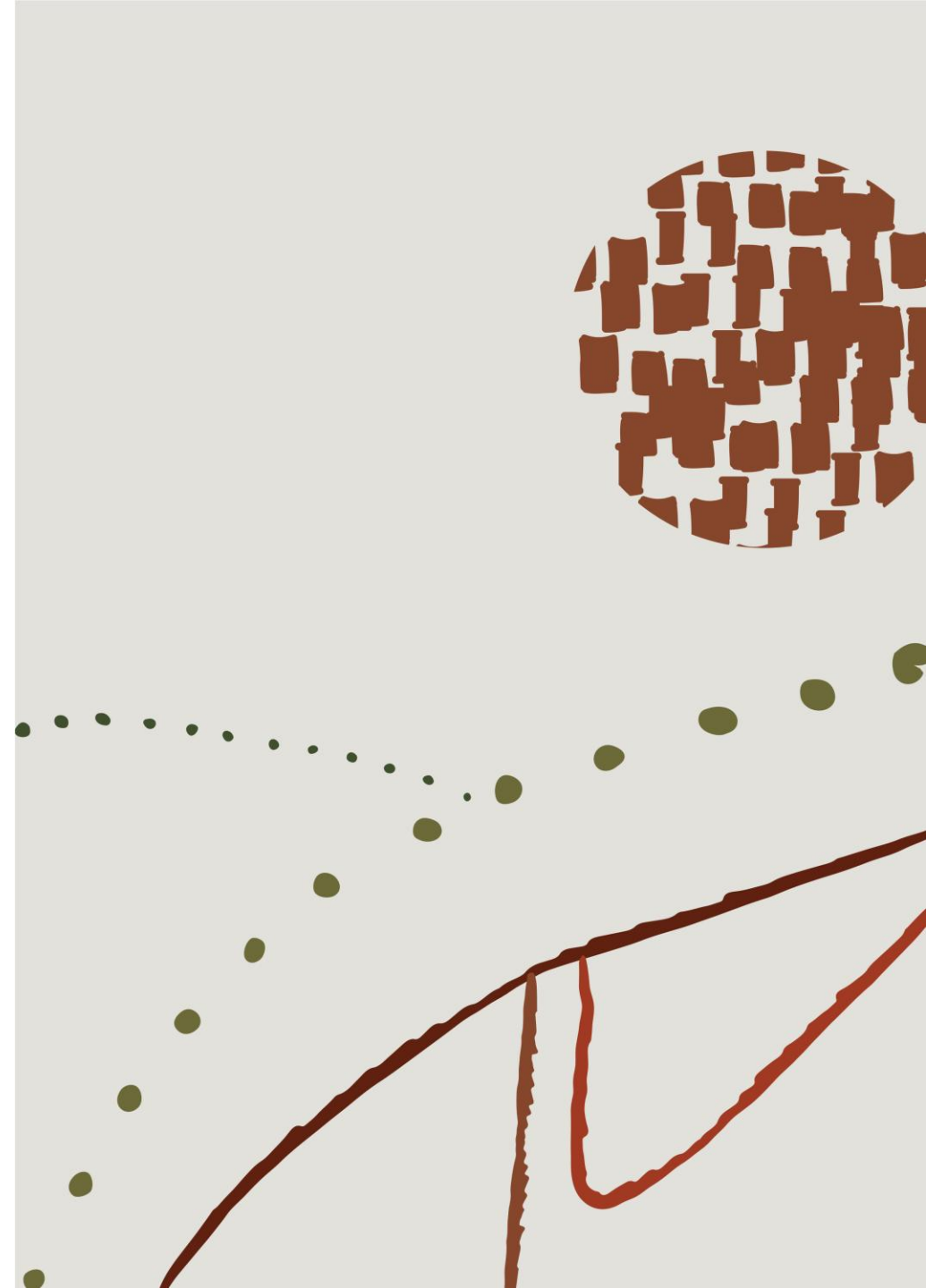
LIST:

1. How many platforms your smallholder business has a presence on?
2. How frequently do you post?
3. Could you interact more frequently?
4. Are you tracking the activity of your accounts and where can you improve?



04

Big Data in Agriculture



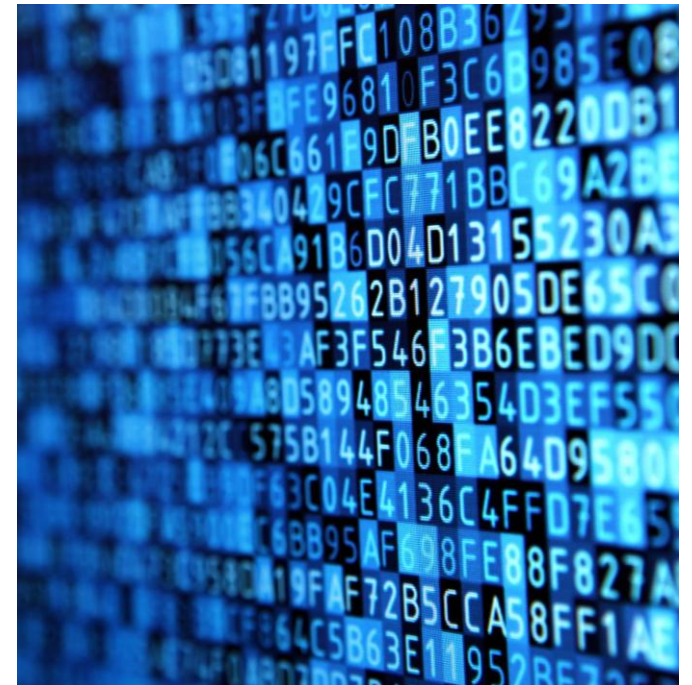
What is Big Data?



In layman's terms, Big Data is basically the science of collecting massive amounts of data and converting it into smaller chunks of manageable information that can be used to gain extensive and relevant insights on a subject and analysed to build predictive systems for better decision-making.

In many cases, farmers don't pay attention to the wealth of information they have on processes, techniques and consumer habits.

We are going to explore how you can utilise this information in order to streamline your farming processes and better meet market needs.



Big data in agriculture...

Big data applications in agriculture are a combination of technology and analytics. It entails the collection, compilation, and timely processing of new data to **help scientists and farmers make better and more informed decisions**. Farming processes are increasingly becoming data-enabled and data-driven, thanks to smart machines and sensors that generate vast amounts of farm data.

Traditional tools are being replaced by sensor-equipped machines that can collect data from their environments to control their behaviour – such as thermostats for temperature regulation or algorithms for implementing crop protection strategies. Technology, combined with external big data sources like weather data, market data, or standards with other farms, is contributing to the rapid development of smart farming.



Big Data in Agriculture...

Big Data applications in agriculture are gaining momentum as technologies like:

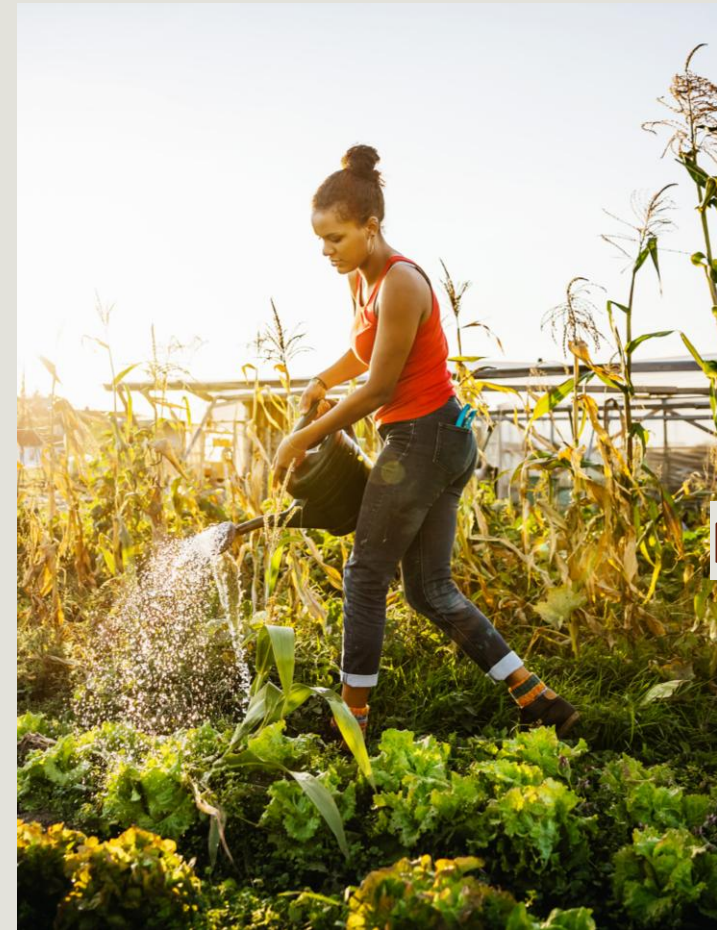
- livestock monitoring gadgets,
- drones, and
- soil sensors

are generating large volumes of data to support data-driven farming. The ultimate goal is to help farmers, agriculturists, and scientists adopt beneficial farming practices.



The Role of Big Data in agriculture

The '**Internet of Things**' (IoT) refers to how a network of interconnected physical smart objects can communicate with each other and collect and exchange information and data over the internet.

A woman in a red tank top and dark jeans is watering plants in a field. She is holding a black watering can and spraying water onto the plants. The field is filled with various green plants, including tall stalks and leafy greens. The background shows a clear sky and some distant structures.

Sustainability, global food security, safety, and improved efficiency are some of the critical issues that are being addressed by big data applications in agriculture. Undoubtedly, these global issues have extended the scope of big data beyond farming and now cover the entire food supply chain. With the development of the **Internet of Things**, various components of agriculture and the supply chain are wirelessly connected, generating data that is accessible in real-time.

Primary sources of data include operations, transactions, and images and videos captured by sensors and robots. However, extracting the full potential of this data repertoire lies in efficient analytics. The development of applications related to risk management, sensor deployment, predictive modeling, and benchmarking, has been possible due to big data.

How is big data analytics transforming agriculture?

- **Boosting productivity** – Data collected from GPS-equipped tractors, soil sensors, and other external sources has helped in better management of seeds, pesticides, and fertilisers while increasing productivity to feed the ever-increasing global population.
- **Access to plant genome information** – has allowed the development of useful agronomic traits.
- **Predicting yields** – Mathematical models and machine learning are used to collate and analyse data obtained from yield, chemicals, weather, and biomass index.
- **Risk management** – Data-driven farming has mitigated crop failures arising due to changing weather patterns.
- **Food safety** – Collection of data relating to temperature, humidity, and chemicals, lowers the risk of food spoilage by early detection of microbes and other contaminants.
- **Savings** – AI and data analytics-driven farming generate significant savings for the agriculture industry.

Big Data in the Agri-Food Sector

Data is a resource in the Digital World. It is said data is the new gold! Big data is information taken from all aspects of life and used to provide better systems and services and even more tailored communications. By engaging with Big Data, agricultural businesses stand to gain in some key areas.



Advantages of Big Data in the Agri-Food Sector



Quality Control

Monitoring the Supply Chain

Improved Shelf-Life prediction



Enhanced Efficiency

Big Data helps the food industry improve processes through better prediction and control



Improved Insights

Improved market fit through predictive analytics

1. Quality Control

The use of Big Data and data analysis is hugely important in ensuring the quality of food reaching the end user.

Smart technologies like Near Field Communication, Radio Frequency Identification, Quick Response codes, artificial intelligence and blockchain technology can be used to track products throughout the supply chain.

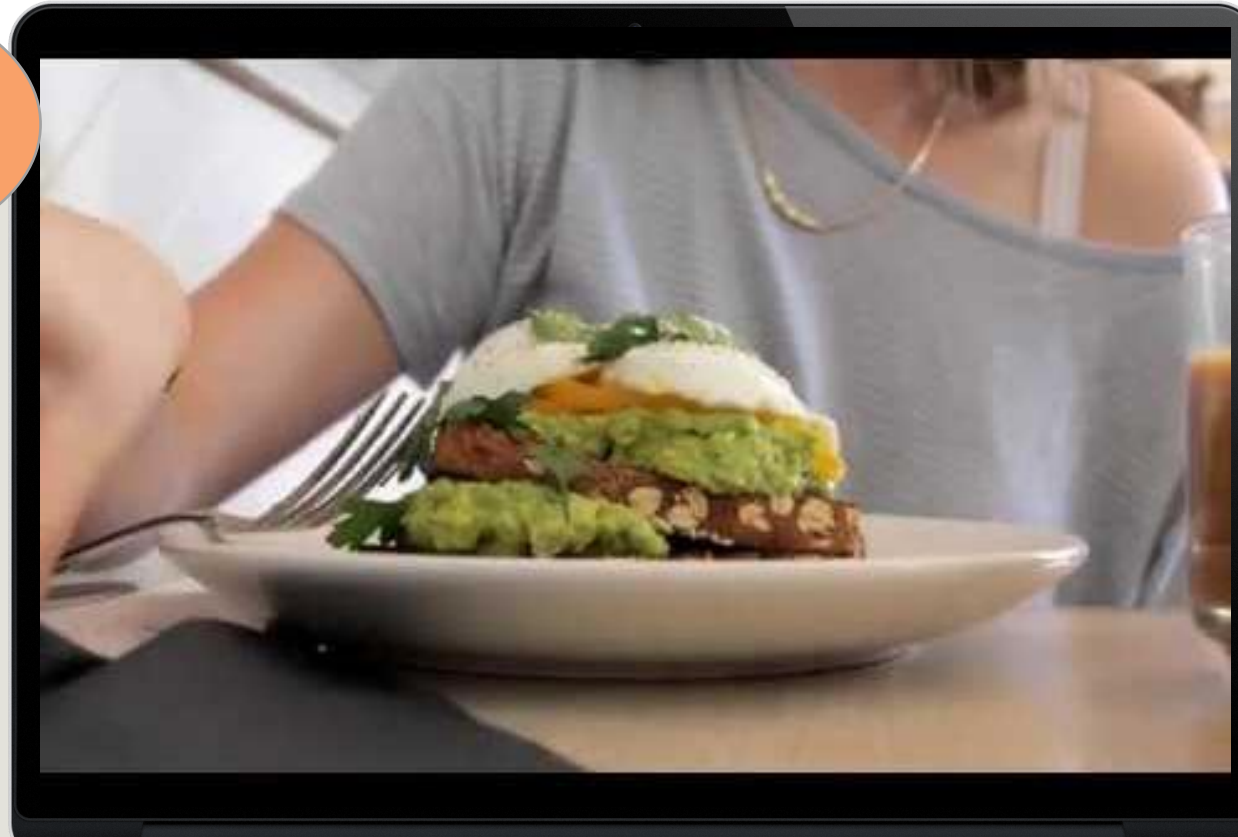
This ensures the authenticity of produce is met and consequently, the best produce reaches the retailers, food service supplier or consumers



Blockchain in the Food Sector Supply Chain

The benefits...

WATCH



In this video, Director of Smartbridge, Matthew DiBona explains the breakdown of the food supply chain & how the integration of blockchain in the food industry can transform the way humans consume.

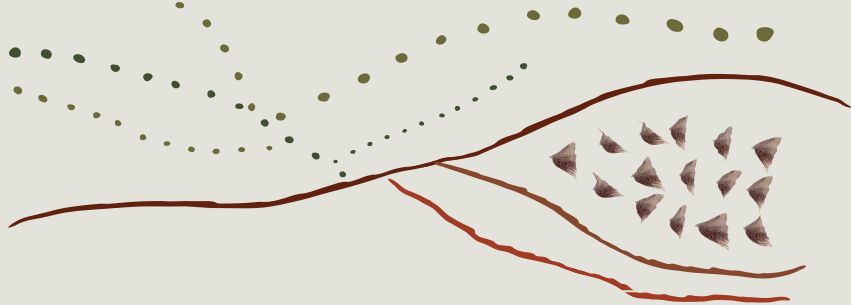
Blockchain in the Food Service Industry -
Blockchain for Business Video Series - YouTube

2. Enhanced Efficiency

Agri-Food SMEs traditionally operate on a tight bottom line and so small gains in business operations are hugely important.

By farmers, retailers & food service businesses utilising smart technologies, they gather information from their operations and feed them back into existing data.

The process of collating and analysing this data is highly complex so technology service providers carry this out and supply the farmers or food SME with concise recommendations on how they can improve.

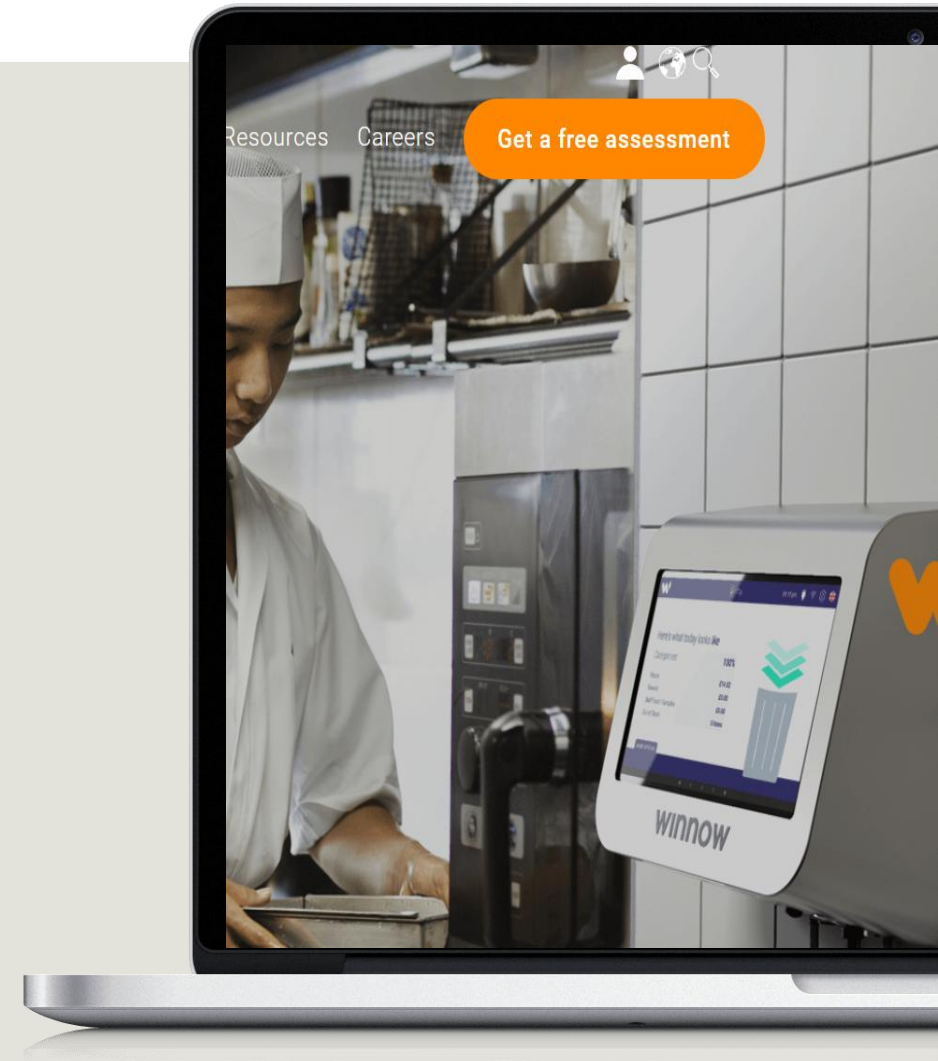


Example: Winnow

One company that promotes the use of technology and big data to improve insights is Winnow.

Winnow uses a smart bin that both weighs waste as it is being disposed of and utilises Artificial Intelligence (AI) to identify the waste source.

Through analytics, Winnow then feeds insights back to the SME on how they can reduce their waste, creating a more sustainable model and reducing inefficiency for the business.



3. Improved Insights

As mentioned earlier in this section, farming is becoming smarter but Point of Sale (POS) services are also a growing area as food service businesses try to incorporate more advanced ICT in their day-to-day activities.

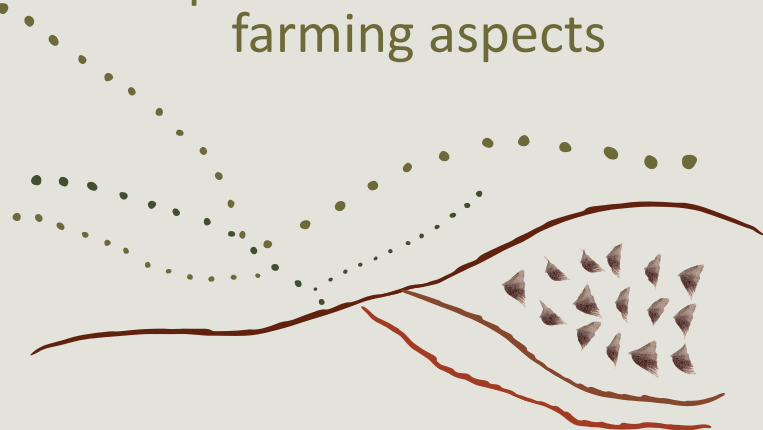
Certain companies are taking this to the next level. Companies such as 'Toast' and 'Avero' are providing integrated software systems that gather data points from throughout operations and provide insights to owners which allow them to optimise their businesses.



In conclusion, it is evident that Digital technology is relevant to all forms of business...even smallholder.

As mentioned, it offers:

- Access to Greater Markets
- Time and cost savings
- Access to customers
- Data Analysis leads to improvements in several farming aspects



We hope this module was an EYE-OPENER for you as to the opportunities that lie within the Digital technology world

Well done!!!

You have just completed our Sustainable Smallholders EU training course. We hope you benefitted from our content, developed specifically equip smallholders (and those who educate/support them) with skills and knowledge to improve the viability of their holdings by championing the local/heritage value of their produce and improving their other basic entrepreneurial skills.

We wish you nothing but success.



www.small-holders.eu

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use, which may be made of the information contained therein.



Co-funded by the
Erasmus+ Programme
of the European Union