

10 tips on how to go digital in the fresh fruit and vegetable sector

Last updated:
07 August 2024

The supply chain of fresh fruit and vegetables is becoming more digital. Digital technology can facilitate aspects of each stage in the chain. It allows you to improve product quality and safety, increase efficiency and transparency, and get better access to finance and buyers. Digital tools can even help make your business more sustainable. When digitalising your business, you must carefully select the technologies you invest in, to ensure that the benefits outweigh the costs.

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1. Explore digital solutions from farm to fork

In the fresh fruit and vegetable trade, your service must be accurate. This means you must offer reliable and consistent quality, timely delivery and quick solutions for anticipated issues. Digital technologies that facilitate this are increasingly common at each stage of the supply chain, including:

- Farming – drones, sensors and other robotics support precision agriculture and sustainability
- Post-harvest processing – digital tools and equipment improve transparency and control over quality and food safety
- Sales – online platforms provide access to new potential buyers
- Consumption – QR codes allow for storytelling

Throughout the supply chain, agricultural and market data can improve business decisions. Software solutions can make business processes run more efficiently. [Blockchain](#) technology facilitates traceability, and there are even [digital solutions for access to finance and trade](#). While digital solutions may offer great added value, they also come at a cost. Before deciding whether to invest, you must carefully balance the costs and benefits.

[Precision Development \(PxD\)](#) is a non-profit organisation that provides customised digital information and

services via a digital platform to increase productivity, profitability and environmental sustainability. With their model for digital development they are providing smallholder farmers and other users personalised advice on their mobile phones. For example, their MoA-INFO service has helped Kenyan farmers navigate new and escalating climate-related threats.

Figure 1: PxD's MoA-INFO service

Source: [Precision Development @ YouTube](#)

Tips:

Start with the easy wins and digital solutions that are most suitable and accessible for your business. Expand from there by selecting more advanced technologies. The demand for digitalisation in dealings with large retail chains is ahead of the spot trade.

Find solutions that integrate various aspects of your business, from agricultural data and advice to access to finance and markets. Solution providers may cover more than one aspect of your business, from agriculture to processing to international sales.

For more information on digitalisation, see the World Bank's publication [Digital Transformation of the Agrifood System](#).

Stay updated on new digital applications in the fresh fruit and vegetable industry via sources like [Freshplaza](#).

2. Employ smart agriculture

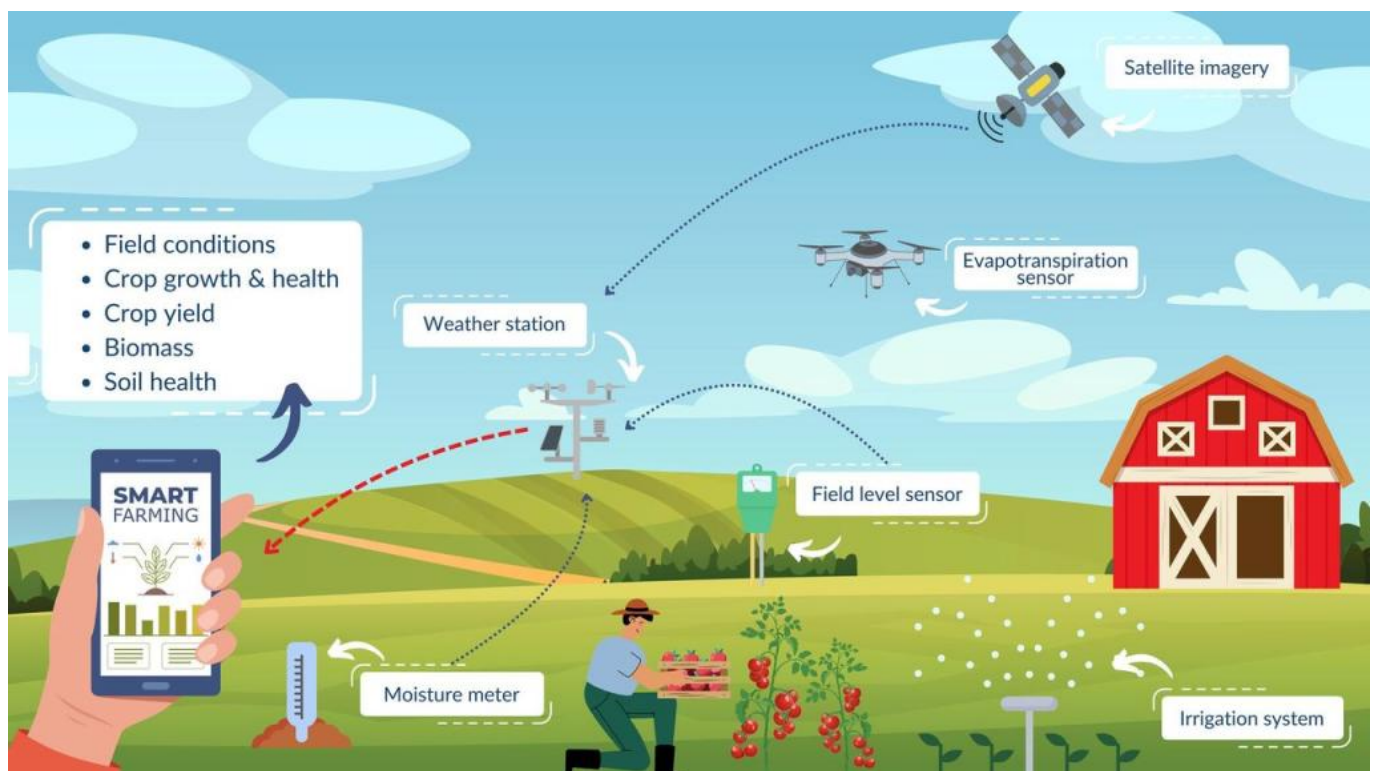
Smart agriculture uses digital technology to make farming more accurate, efficient and sustainable. Many farmers already use smartphones, sensors, drones and satellite imagery to improve various aspects of farming – from soil condition monitoring to crop health assessment. Mobile technology is a precondition for many of the available solutions.

Precision farming

To optimise production and reduce costs, precision farming solutions use real-time data from satellite navigation, sensors and drones to guide precision irrigation, fertilisation and pest management. They enable farmers to apply the exact amount of water and nutrients needed by plants, reducing spoilage and increasing crop yields. This is becoming common practice, both to optimise yield and product quality and to facilitate sustainable production.

With precision agriculture, you can connect different data sources to a crop management system. You can also monitor your crop throughout the supply chain, e.g. in packing houses and during transport. The use of sensors, data loggers and connectivity in the supply chain gives you better control over your product. The generated data can be measured and connected to actions to help you maintain a proper cold chain and storage conditions for your product. For example, sensors in containers can measure temperature, ethylene and 1-Methylcyclopropene.

Figure 2: Precision farming makes farming smart



Source: [Globally Cool](#)

Precision farming has been a very dynamic development in the past decade. In Morocco, for example, the company [SupPlant](#) introduced the SupPlant precision farming technology in 2022. The analysis of live plant and soil data takes place with an advanced algorithm based on artificial intelligence (AI).

Irrigation forecasts and other crop management advices are based on:

- actual weather conditions;
- real-time sensor data from fruit, leaf, stem, trunk and soil;
- algorithms derived from a database of billions of data points collected over an agricultural region of over 25 thousand hectares and over 30 crops.

Figure 3: SupPlant precision farming management system

Source: [SupPlant @ YouTube](#)

Even for smallholders, there are suitable digital tools to improve production. [Africa Goes Digital](#) has united several digital operators who contribute to such digital solutions. An interesting tool for smallholders is [Plantix](#), a free app for crop diagnosis and treatment.

Figure 4: Plantix - Easy plant open-source diagnostic tool on your phone

Source: [Plantix @ YouTube](#)

Tips:

Read about the benefits and application of digital technologies in [Big Data for Agriculture](#) and [Drones for Agriculture](#) in the FAO publications of E-Agriculture in Action.

Identify the main problems in your production (such as climate or pests) and see if you can start measuring relevant data with sensors. Ideally, combine satellite data, remote sensing data and sensor data for a detailed analysis of your field.

Explore apps and tools in precision farming and decision support that are relevant to your crop and region. Find data technology suppliers that can help you gather and analyse data, e.g. via [Africa Goes Digital](#).

Begin with simpler tools that address your most immediate needs, and teach your team basic digital skills before moving on to more sophisticated software and equipment.

Stay updated on digital innovations in agriculture. Browse the [European Digital Innovation Hubs Database](#) (EDIH) to find digitalisation projects in Europe. Select 'Agriculture and Food' or 'Manufacture of Food Products, beverages and tobacco' to refine your search.

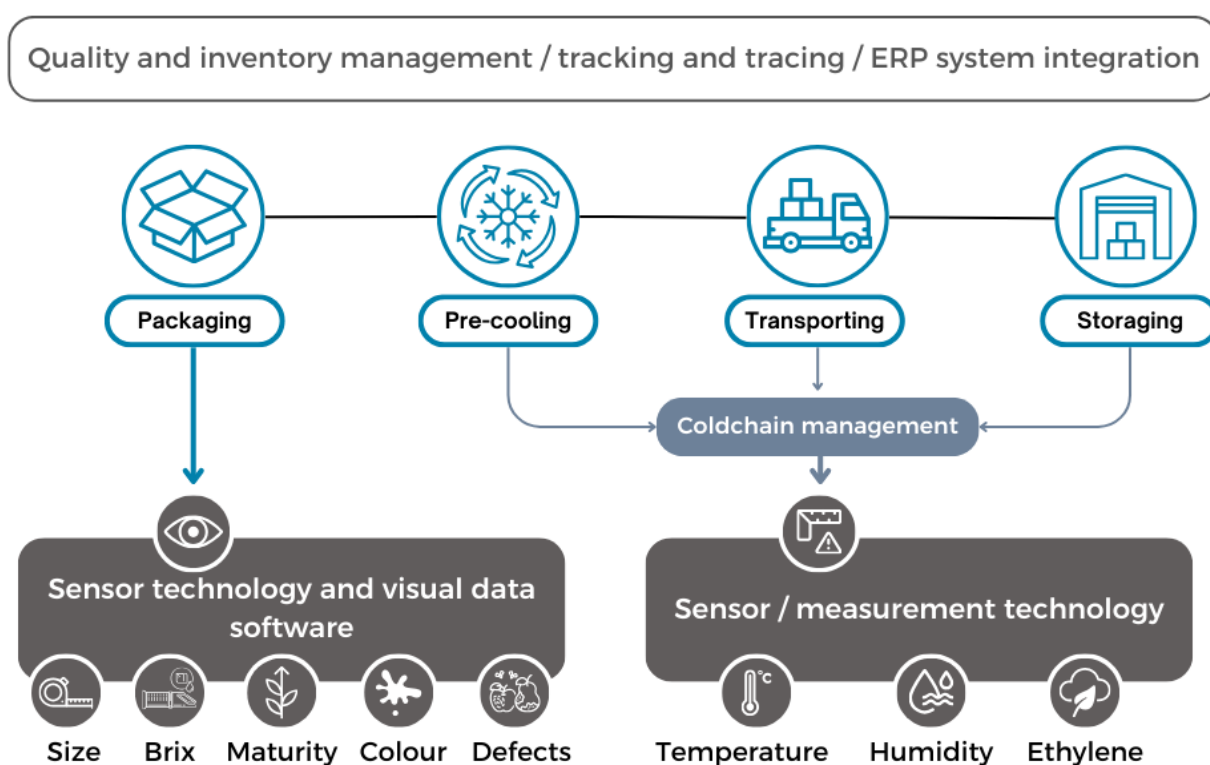
3. Use post-harvest technology

Fruit packers and exporters often use measuring technology and automation to improve external and internal product quality and consistency. An accurate post-harvest process, a carefully managed cold chain, and tailored quality can help you meet Europe's strict quality requirements and reach bigger, more demanding customers. Consistency is key for major fresh fruit and vegetable brands – for their brand recognition, they need a product

that always offers the same consumer experience.

As a supplier, you need to know what you can deliver and get the right product to the right customer. You can use digital post-harvest technologies in your packhouse to optimise your grading and sorting, packing and labelling, and warehousing. Sensor technology, including laser and near infrared (NIR) spectroscopy, forms the basis of this important phase of post-harvest treatment. AI and machine learning are increasingly incorporated to automatically filter out products with defects at an early stage.

Figure 5: Digital technologies support of post-harvest processes



Source: [Globally Cool](#)

Post-harvest solutions from companies like [Aweta](#) and [TOMRA](#) can automate your grading, sorting and packing processes. [Consus](#) has software to verify the accuracy and quality of your labels. Companies like [Besseling Group](#) offer tailored solutions for controlled cold storage atmosphere.

Figure 6: Automated blueberry packhouse

Source: [TOMRA @ YouTube](#)

Implementing post-harvest technologies is a big investment. When to invest depends mainly on the costs of manual labour and the type of clients you supply. Alternatively, you can work with a local packing house that offers the post-harvest process(es) you need.

Tips:

If you pack your products: make sure the basic design of your packing house is right before implementing digital technologies. Use FAO's [Good Practice in the Design, Management and Operation of a Fresh Produce Packing-House](#) as a guide.

If you outsource your packing: carefully select a packing house, based on criteria such as food safety certification, level of organisation, efficiency and the availability of modern technologies.

Read this post of [Felix instruments](#) on how NIR spectroscopy can make the fresh produce supply more transparent and reduce food waste.

4. Implement business software

Business management software like [Enterprise Resource Planning](#) (ERP) can help you work more efficiently and eliminate human error. ERP tools integrate the management of the main business processes to increase productivity and lower costs. They often combine applications to collect, store, manage and interpret data from various activities. This can help with processes like invoicing, order processing, certification management, product documentation and traceability, customs and shipping documentation, and customer relationship management.

This is especially relevant when you are building relations in Europe. As the fresh fruit and vegetable sector

requires more and more documentation, buyers are encouraging suppliers to digitalise. You can link your systems with theirs and show you are a professional organisation that can respond fast and accurately. However, many public entities in supply countries – such as food safety authorities and customs – do not (yet) provide digital documentation.

Demand for digital processes is highest at the end of the supply chain – especially among large retailers, who often work with thousands of products. One way to do this is by integrating digital systems through the supply chain. The closer you operate to the retail sector, the higher the chances that you must adapt to the digital processes of your buyer. This often requires the implementation of software solutions such as ERP.

Selecting ERP software

Selecting ERP software can be difficult. There are many options, each with a different structure and coverage. For small exporters, implementation costs can be a barrier. Nevertheless, once functional it will likely save your company time and prevent expensive mistakes. You should explore which application best fits the scale of your business. Large companies may use [SAP](#) or [Microsoft Dynamics 365](#).

For smallholders, tools like [AUXFIN](#)'s eService ecosystems are particularly useful. They combine ERP software, a banking platform and digital eCoaches to facilitate the management of (outgrower) farmer groups. [Proagrica](#) shows how to utilise data by integrating ERP into a greater network of data and connecting to other organisations. This can improve supply chain management and customer engagement. For exporters that work with multiple smallholder farms, suitable applications include [eProd](#) and [Farmforce](#).

Figure 7: AUXFIN's AgriCoach

To select your ERP software, you should:

1. Streamline your processes: make sure your business processes are well-organised and documented before you explore ERP solutions.
2. Define your criteria: list your criteria and requirements – which business processes do you want to include?
3. Compare: compare ERP software solutions on how well they meet your needs, as well as on complexity, implementation and durability.
4. Integrate: check which systems your main buyers use and how you can connect to them.
5. Make the decision yourself: you can consult advisors and specialists, but you know your company best.

Tips:

Explore which software and smartphone applications are suitable for your needs. You can compare ERP software for the fresh food industry via [ERP Focus](#) or [Software Connect](#).

If you think your company is too small to implement ERP software, at least make sure you document your processes in a simple way. Use a decent backup system, like cloud service providers [Dropbox](#) or [Google Drive](#).

5. Measure your sustainable performance

Sustainability has become a must in the trade of fresh fruit and vegetables. European ‘green’ legislation is becoming stricter and verification is key. Digital technologies can help you measure the environmental and social impact of your company. Measuring this impact can identify specific improvement points for you to focus on. It also allows you to share concrete data with your buyers and demonstrate your commitment to running a sustainable business. In addition, it can help you apply for sustainable certification.

Environmental impact

To produce and export your fresh fruit and vegetables, you need agricultural inputs, water, packaging material, logistic services and so on. These can all have a negative impact on the environment.

The [Cool Farm Tool](#) allows you to quantify greenhouse gas emissions, measure your water footprint and see how well your farm management supports biodiversity. It ‘equips farmers and businesses with metrics to communicate about sustainability, to show benefits of regenerative practices and carbon sequestration, and to report against reduction targets’. Relatively low-cost crop monitoring technology like [AquaSpy’s Crophesy](#) or [FutureWater’s flying sensors](#) helps you increase efficiency, save time in the fields, and optimise the application of expensive or scarce resources like nutrients and water.

Figure 8: AquaSpy’s Crophesy soil moisture measuring system

Source: [AquaSpy @ YouTube](#)

Social impact

The social impact of your value chain is also important. Social responsibility is becoming the norm in the fresh fruit and vegetable trade. Key issues include living wages, decent labour conditions and gender equality.

The online [MVO - CSR Risk Checker](#) provides an analysis of the risks at a country and sectoral level and suggests solutions to manage them. You can use the [IDH Roadmap on Living Wages](#) to calculate wage gaps and bring wage transparency to your supply chains.

Figure 9: IDH Roadmap on Living Wages

Source: [IDH Transforming Markets @ YouTube](#)

Tips:

Make the most of the digital solutions you implement. When you collect data to improve your efficiency and product quality, you can also use this data to measure your environmental impact. For example, measure and communicate how much less water or pesticides you are using thanks to precision farming.

For more information on improving your sustainability, see our tips to [go green](#) and [become socially responsible](#).

For more information on European legislation and sustainable certifications and standards, see our study on [what requirements your product must comply with](#).

6. Support your production and sales with big data

Big data involves collecting and analysing large volumes of information to uncover patterns, trends and insights that can inform strategic decisions. By strategically applying big data analytics, you can enhance your product quality and safety. You can also use it to make informed decisions on market entry/expansion, as well as product development and marketing strategies.

Practical applications include:

- Food safety monitoring – the EU's Rapid Alert System for Food and Feed ([RASFF](#)) Window keeps track of food

safety issues to facilitate a quick response when risks to public health are detected in the food chain.

- International trade analysis – tools such as ITC's [Trade Map](#) and [Access2Markets' trade statistics portal](#) offer valuable insights into the global fresh fruit and vegetable market by transforming big trade data into accessible formats, which can help you identify demand, trends and competition levels.
- Market research – large retail sales datasets from research companies like [Intel](#) and [Innova Market Insights](#) identify consumer behaviour and trends. Direct access to such datasets may be costly.
- Agricultural data platforms – free platforms like [Global Open Data for Agriculture and Nutrition](#) (GODAN) offer resources to tackle agricultural challenges.

Tips:

Explore free data tools to gain insights without a significant investment. You can also look for industry reports that use big data, providing a cost-effective way to benefit from these insights without direct access to expensive databases.

Focus on relevant data that directly impacts your business, such as market trends for specific fruits or vegetables you produce, to make your analysis manageable and actionable.

Use the tutorials for [Trade Map](#) and [Access2Markets](#) to learn how to effectively navigate and interpret trade data relevant to your products.

See our [market information for the fresh fruit and vegetables sector](#) for information on topics such as trade flows, trends, requirements and market segments.

7. Use online platforms to find potential buyers

The international fresh fruit and vegetable trade is mainly an offline business. Online business-to-business (B2B) platforms are primarily used to connect suppliers in developing countries with buyers in destination markets, allowing you to reach a wider audience.

Relevant online platforms are:

- Online B2B marketplaces – besides well-known players like [Alibaba](#), platforms like [Selina Wamucii](#) and [Producers Market](#) cater specifically to the agricultural produce industry.
- Digital trade event tools – leading trade fairs like Fruit Attraction ([LIVE Connect](#)), [Biofach](#) (organic) and [Anuga](#) have developed digital matchmaking tools that facilitate connections between suppliers and buyers before, during and after the trade fair.
- Supplier directories – platforms like [Saladplate](#) and [Greentrade](#) (organic) list suppliers and their offers, allowing buyers and sellers to connect based on specific criteria.
- Local initiatives – for example, [Lima Links](#) in Zambia provides farmers access to live market prices and connects them to buyers, and [TruTrade Africa](#) provides smallholders with a reliable route to market and fair prices.

[Selina Wamucii](#) is an end-to-end trading platform for food and agricultural produce, primarily from smallholder cooperatives and other reliable producers from all over the world. They also offer price analysis data and digital tools for farmers to enhance their productivity and decision-making capabilities.

Figure 10: Selina Wamucii

Source: [Selina Wamucii @ YouTube](#)

Tips:

Regularly check the websites of leading trade fairs for digital events and matchmaking opportunities. These can be excellent low-cost platforms for networking and finding new buyers year-round.

Register with existing international or national platforms to boost your company's visibility, and try to keep up to date with new digital trade initiatives that focus on market connection.

Before subscribing to paid B2B marketplaces, inquire about the number of relevant buyers on the platform and ask for a trial period to assess the suitability for your business.

Follow the latest e-commerce developments in Europe on [Ecommerce News Europe](#). Explore the situation in different EU countries in the Freshfel/OECD report on [online sales of fruit and vegetables in Europe](#).

8. Connect to digital payment and trade finance technologies

Access to finance is one of the main challenges for smallholders in developing countries. However, there is a growing number of mobile applications that give smallholders a digital identity. Such a digital identity helps them get a credit score and receive trade finance. In an increasingly digitalised market, with digital contracts and supply chains, mobile connectivity will become crucial.

Stay on top of developments in digital trade

A lot of progress has been made since the first pilots with digital agricultural commodity trade in 2012-2018. The share of digital food commodity trade is increasing slowly but gradually, also due to several initiatives launched in the past, such as the general trade platform [Easy Trade Connect](#).

The International Chamber of Commerce (ICC) Banking Commission has supported this development with a set of electronic rules (eRules) for the digitalisation of trade finance practices – [eUCP 2.1](#). This is a supplement to UCP 600, the private rules for trade and letters of credit. eUCP 2.1 sets guidelines for the digitalised version of these trade practices.

Get access to finance by creating a digital profile

Digital profiles and a credit score can greatly help in getting access to finance for agricultural inputs or trade, like [One Acre Fund successfully digitised loan repayments for farmers in Kenya](#) in partnership with Citi Inclusive Finance. Through greater transparency and efficiency they successfully lowered repayment collection times from 12-16 days to just 4 days, and cut costs by 80%.

There are many digital solutions available for the agricultural sector. Some focus on a specific product group, others are more general. Most focus on the country where they were developed.

Tools available for the fresh fruit and vegetable sector include:

- [Apollo Agriculture](#) – a Kenyan FinTech startup that uses satellite data and machine learning to make informed credit decisions. Farmers in remote areas can access affordable credit for seeds, fertilisers and crop insurance to increase their yields. They can also use their phones to access voice-based training and make payments. Apollo partners with more than 1,000 agricultural Kenyan distributors to ensure good availability of physical inputs.
- [TruTrade Africa](#) – an online trading and payment platform in Kenya that lets small farmers connect to buyers. It digitalises informal agriculture value chains by providing digital trading records and giving smallholders credentials to trade.
- [Agri-wallet](#) – a fintech solution that uses pre-financing to allow collectors to postpone their mobile payment to farmers, while farmers can keep buying agricultural inputs. It works with a virtual currency based on blockchain technology. A part of the farmers' income is paid out in blockchain tokens via their mobile phones, which they can spend with affiliated suppliers of farm inputs such as seeds and fertilisers.
- [Farmerline](#) – gives farmers in West Africa a digital identity to improve their access to finance for agricultural inputs. It also provides training and market information.
- [UMVA platform](#) (by [AUXFIN](#)) – makes financial transactions possible via an eBanking platform. It facilitates transactions in the local currency, between currencies, or in 'product'. This enables farmers to sell their produce or get credit based on stock that has not yet been sold.
- [DiMuto](#) – tags fruit and vegetables with a QR label to document the product as an asset, making the product traceable and improving access to trade finance.

Figure 11: DiMuto Food Traceability - Track and Trace Fresh Produce

Source: [DiMuto @ YouTube](#)

Tips:

Make your company bankable by improving its credit rating and credentials. Regardless of your company's size, financiers will grade your credit profile. Learn [what your business credit score means and how to improve it](#), or build your credentials through new digital applications like [TruTrade Africa](#).

Explore the leading international trade finance platform [Trade Finance Global](#) for information on trade finance and digital developments.

9. Improve traceability with blockchain technology

An increasingly popular way to boost transparency and traceability throughout the value chain is the use of [blockchain technology](#). This technology links data or transactions (blocks) in an encrypted ledger (chain) that is stored on many computers in a peer-to-peer network. It collects data at multiple points, stores and 'locks' it, and makes it available to all stakeholders. This data can vary from agricultural and certification information to a transaction or a product shipment history.

Figure 12: The use of blockchain technology in the fresh fruit and vegetable supply chain



Source: ICI Business

As a supplier, blockchain enables you to better control your supply chain and make it transparent and traceable. This helps you improve food safety, reduce food fraud, and manage quality claims quickly. It also facilitates [smart contracts](#), in which transactions are made automatically when your delivery meets the agreed terms. Because blockchain makes all stakeholders accountable for their part in the process, this way of doing business improves your position with financiers, buyers and end clients.

Figure 13: How blockchain can help us transform our agri-food systems

Source: [@UNFAO](#) on YouTube

For blockchain technology to work, all stakeholders in your value chain must participate and be willing to share data. In the fresh fruit and vegetable sector blockchain is still mainly used by large corporations, but this may change in the future.

Smaller companies can already experiment with blockchain solutions: take [AgUnity](#), with its blockchain-based transaction record system for smartphones that provides financial inclusion for rural communities and gives farmers a digital identity. One of their projects explores whether blockchain can be used to [resolve transactional and informational inefficiencies in the value chains of indigenous vegetables in Kenya](#).

Storytelling with QR codes

Storytelling can make your company and products stand out from the competition. You can use [QR codes](#) to add information to your product and tell your story. This facilitates traceability and provides buyers and consumers with background information on your company and product. The generated data that are linked to QR codes can easily be integrated into blockchain traceability.

[Farmer Connect](#) uses the [IBM Sterling Transparent Supply](#) (BTS) platform to make product origins transparent and help build trust in the supply chain. With the mobile app [ThankMyFarmer](#), consumers can scan QR codes, read the story behind a product, and find out where it was made and by whom. [Producers Trust](#) lets branded product producers in North and South America share their stories with consumers via [StoryBird](#) and [Producers Stories](#). They collect traceability data in the StoryBird app, designed to help brands tell real and validated stories.

Figure 14: StoryBird

Source: [Producers Trust @ YouTube](#)

Tips:

Watch [How does a blockchain work - Simply Explained](#) to better understand what blockchain is. [Revolutionizing Agriculture by Leveraging Blockchain Technology](#) and [Blockchain Africa Conference 2022 - Using Blockchain Technology to Change Farming in Africa](#) explore how blockchain can further impact Africa's agricultural sector.

Learn about [smart contracts](#) and how they work.

Get your inspiration from practical applications of blockchain technology, plus their opportunities and risks, in publications like [Beyond the blockchain](#) and [E-Agriculture in Action: Blockchain for Agriculture](#).

Check and compare different technology providers if you are interested in using blockchain. Explore interesting technology startups via sources like StartUs' [8 Blockchain Startups Disrupting the Agricultural Industry](#).

If you are a small company, try to develop a digital identity for storytelling together with a trusted European partner.

10. Know where to look for the right digital solutions

Digital technologies can help your company become future-proof and solve specific issues in the supply chain. You should stay on top of developments and decide which technologies best fit your company and situation. When selecting digital solutions, you must be able to make an informed decision. You can ask for help from experts or a business support office, or ask your peers about their experiences.

Use online marketplaces to find technological equipment

Via AgriExpo you can find [technological equipment for precision agriculture](#), [measuring instruments](#) and [farm management software](#). The products on offer are grouped into categories, such as agricultural drones.

Read tech magazines to keep up to date on digital developments

Read online magazines to stay on top of interesting digital technologies, such as [AgriTech Tomorrow](#), [GlobalAGTech](#) and [CropLife](#).

Search for digital technology providers online and in frontrunning countries

The [Digital Agri Hub](#) has continued the efforts of the Technical Centre for Agricultural and Rural Cooperation (CTA). They have a report called [The Digitalisation of African Agriculture Report, 2018-2019](#), and provide a worldwide database of digital tools for the agricultural value chain in lower- and middle-income countries. The solutions are divided into 25 technology categories, with over 1,100 solutions (January 2024) registered.

The database classification recognises six use cases:

1. Farm management and advisory – over 750 solutions
2. Market linkage – over 420 solutions
3. Supply chain management – about 300 solutions
4. Finance – about 260 solutions
5. Smart farming – about 260 solutions
6. Ecosystem support – 130 solutions

Countries with the highest number of available solutions are India, Kenya, Nigeria, Ghana, Tanzania and South Africa. These countries are clearly ahead in technological developments. The most-used technologies are ‘data analytics and business intelligence’, ‘artificial intelligence’, ‘big data’, ‘location-based services’ and ‘remote sensing’. The organisations behind the solutions are mostly agritech companies (375), followed by the broader categories of agribusiness (over 280), commercial enterprises (almost 190) and non-governmental organisations (NGOs) (over 120).

You can also find technology providers (called ‘members’) at [Africa Goes Digital](#), the pan-African industry association of digital operators.

Visit trade fairs or conferences for the latest digital trends

New digital technologies are often presented at trade fairs and conferences. These are excellent places for networking. Germany is home to [AgriTechnica](#), the leading global trade fair for agricultural machinery, and the [World Agri-Tech Innovation Summit](#) in London is also an important event for agritech digital technologies. Events outside Europe include [Expo AgroFuturo](#) in Colombia and [Agritec Africa](#).

General fresh fruit and vegetable fairs can also be interesting. [Fruit Logistica](#) usually hosts several exhibitors with digital technologies and events that present new technologies. [Fruit Attraction](#) has also organised conferences about digitalisation in the agri-food chain.

Get support from local organisations

NGOs and private-sector organisations with an active role in agricultural development, like those listed below, will likely have a role in the digitalisation of value chains and companies:

- [One Acre Fund](#) – a non-profit social enterprise that supplies financing and training to smallholders. Its [Insights and data library](#) has several white papers and resources on agricultural innovation.
- [GSMA Foundation](#) – provides resources and support for [GSMA Mobile for Development \(M4D\) programmes](#) and innovations with socio-economic impact. One of the focus sectors is agriculture.

- [Agriterra](#) – assists agricultural cooperatives in developing countries. Their recent [AGRIdigitalización](#) project in cooperation with the [International Fund for Agricultural Development](#) (IFAD) focused on e-trade and digital solutions for producer organisations and community banks.

Join local digitalisation projects

There are many digitalisation projects for agriculture smallholders and small processors. You have to search within your country and contact international development organisations for projects that suit your needs.

Digitalisation projects in fresh fruit and vegetables-producing countries include:

- Mercy Corps' [Agrifin](#) project – supports the introduction of digital technology and innovation services to smallholders in Indonesia and Africa. In 2021 the project conducted in-depth research into the [Landscaping of the Digital Agricultural System of Indonesia](#) and proposed several interventions.
- GIZ' [Agricultural Innovation Project](#) – supports Egyptian smallholders in using digital solutions that improve access to information about input supply, marketing, extension and financial services.
- [Markup](#) – supports producers and processors in Kenya (also in Uganda and Tanzania). This includes the creation of the [East African Community Regional Trade Information Portal](#) and [Info Trade Kenya](#).
- [Technical Centre for Agricultural and Rural Cooperation](#) (CTA) – has developed many digitalisation projects in African agriculture. They promote precision agriculture solutions and support access to new services for farmers in the areas of finance and insurance.

Figure 15: How digitalisation transforms traditional agriculture in Next Generation Agriculture

Source: [CTA @ YouTube](#)

Tips:

Find digital solutions for your company at the [Digital Agri Hub](#). Start your search in the countries with

the highest number of available solutions: India, Kenya, Nigeria, Ghana, Tanzania and South Africa. These countries are clearly ahead in technological developments and hence a logical starting point to look for solutions.

Read our [Tips for doing business](#) and [Tips for organising exports](#), which can help you further understand how to do business with European buyers and what it takes to become a successful exporter to Europe.

Visit relevant digitalisation support project websites, such as the [GLZ digitalisation in development projects](#), and check whether any projects might be suitable for your business.

[Globally Cool](#) carried out this study on behalf of CBI.

Please review our [market information disclaimer](#).