

IFA Digital

Adoption & Attitudes Report



IFA



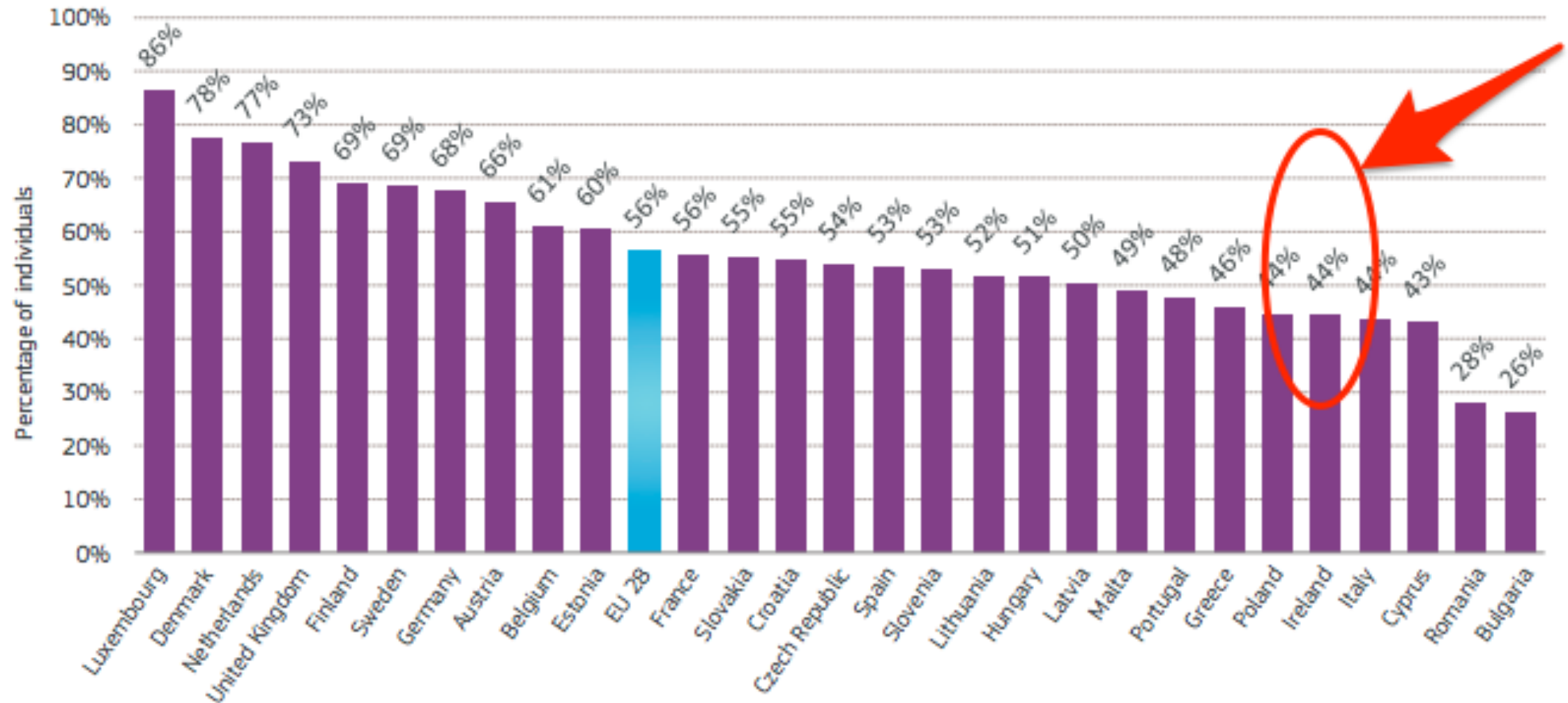
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**Access for every farmer to the
digital skills and technologies
they need to participate in the
digital economy**

“Only 44% of Irish people have **basic** digital skills”



Source: The Digital Skills Gap in Europe, October 2017, European Commission

In the near future, 90% of jobs will require digital skills

Source: The Digital Skills Gap in Europe, October 2017, European Commission



9bn world population by
2050 translating into 70%
required growth in global food
production.

Global agriculture is increasingly becoming more technologically advanced.

A core objective of **IFA & Farm Business Skillnet** is to:

- equip farmers with the **skills & knowledge** of how to use this technology
- and in turn **increase technological adoption** on farms in **Ireland**.

Farm Business Skillnet

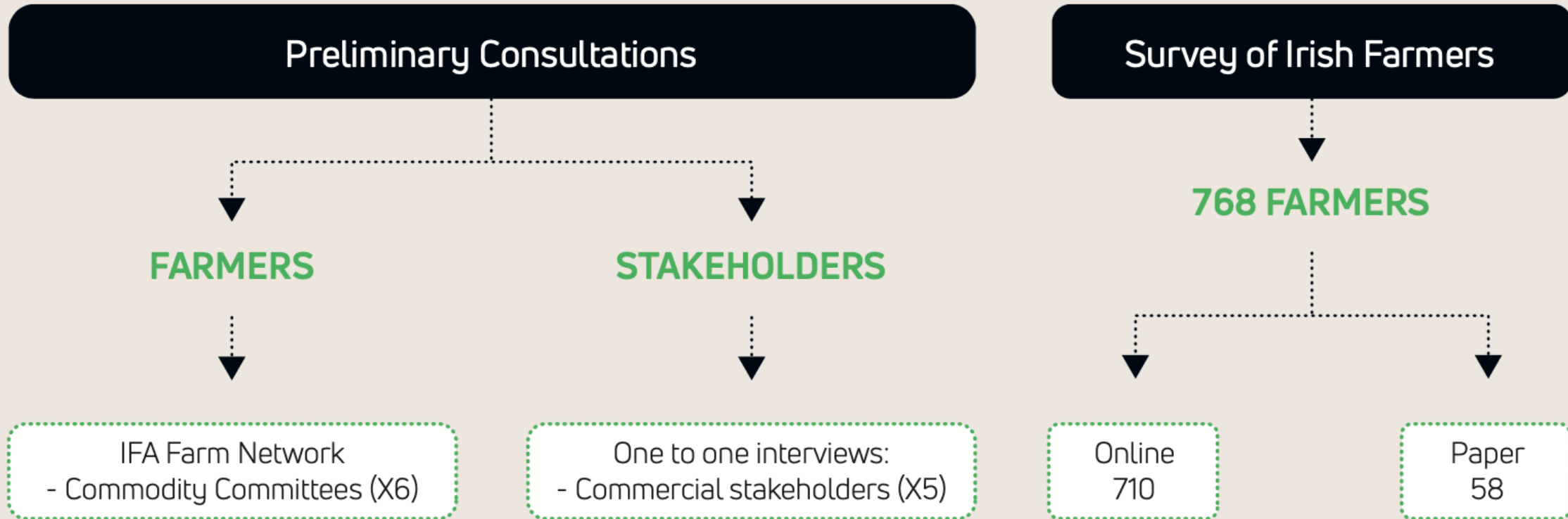
undertook a research project with **Amárach Research** to survey farmers and relevant stakeholders in Ireland.

- **Current awareness** and usage of farm technology.
- **Barriers** and **positives** to using farm technology.
- **Training** and **education**.



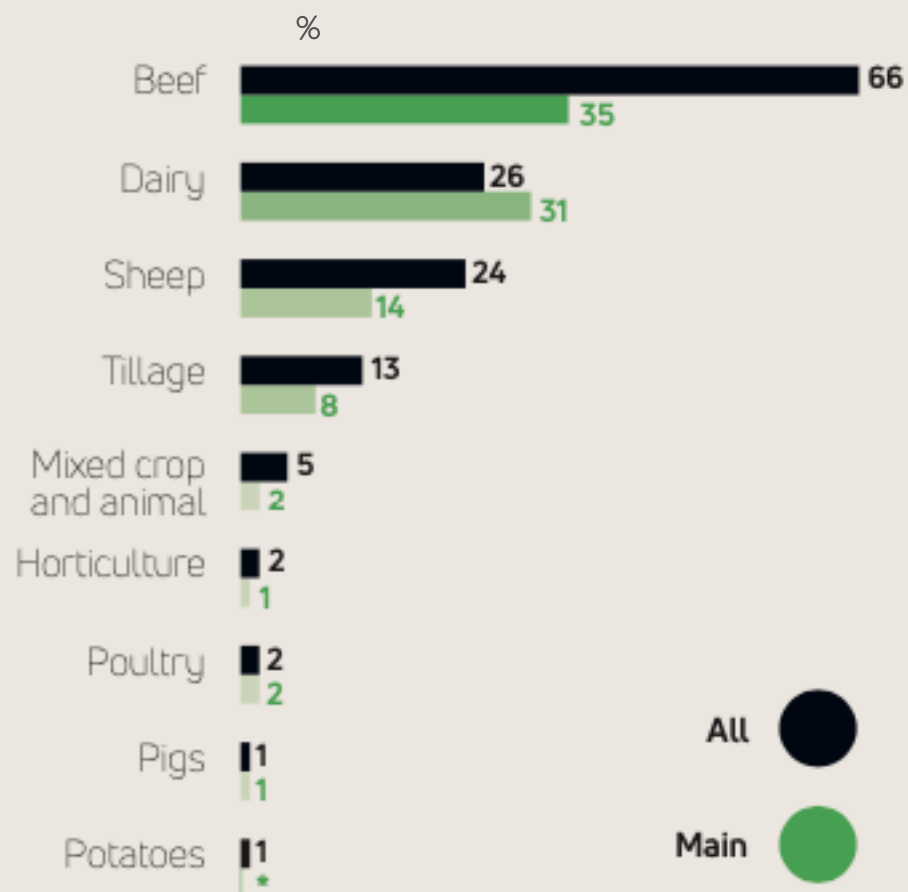
“Those working in the industry are of the view that advocacy and communication will be paramount in developing and maintaining technological adoption on farms.”

Research Methodology

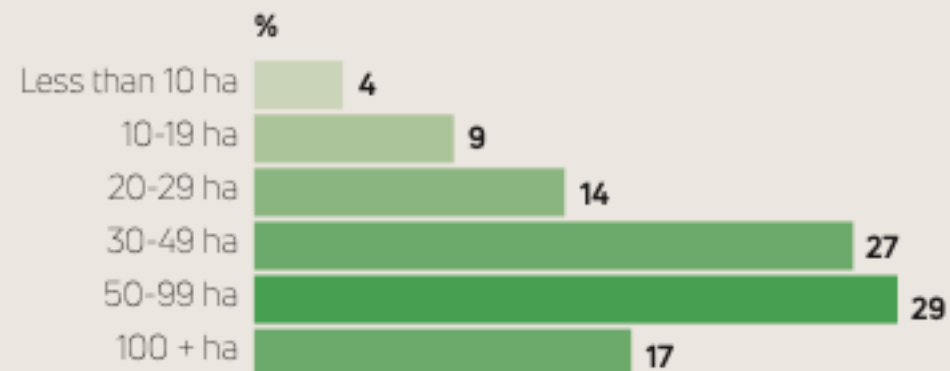


Overall Profile

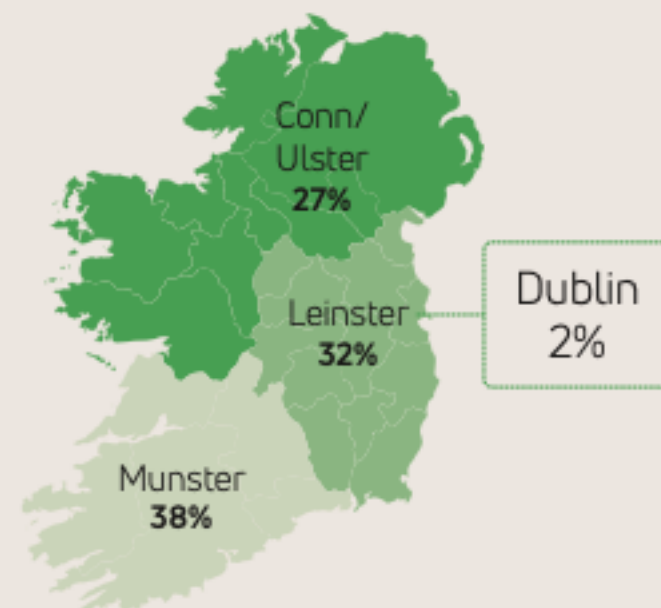
FARM ENTREPRISE



FARM SIZE

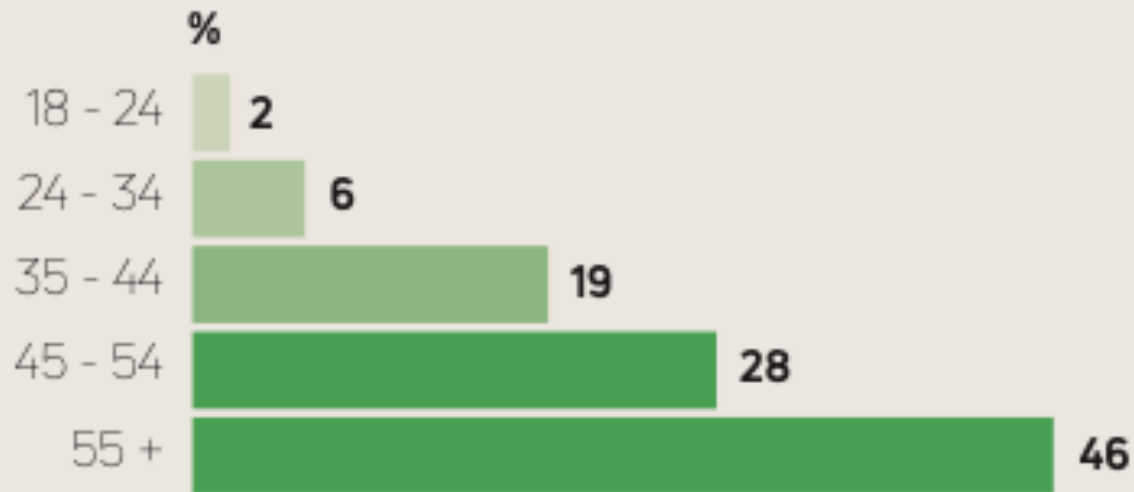


REGION

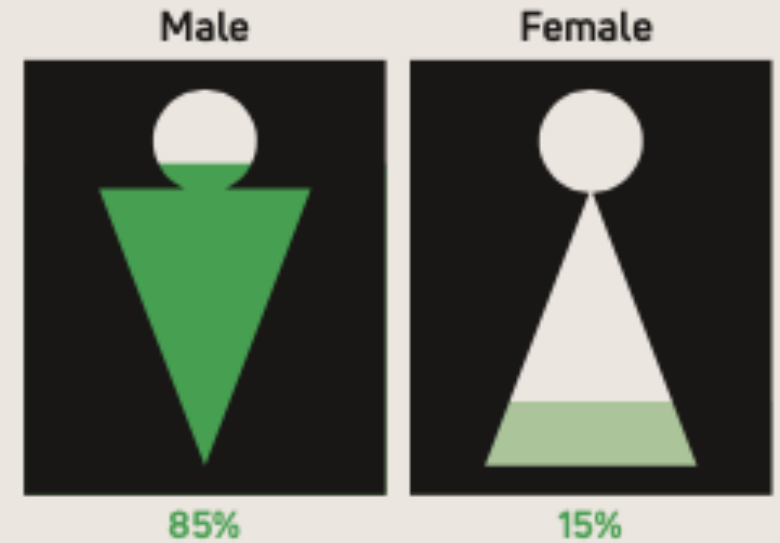


Overall Profile

AGE



GENDER



Key Takeaways

The background of the slide is a photograph of a John Deere tractor, specifically a model with 'ARMSTRONG MACHINERY' and 'DEMONSTRATOR' written on the hood. The tractor is partially visible through a semi-transparent green overlay that covers the entire image. The text 'Key Takeaways' is centered in a large, white, sans-serif font.



Technology Confidence

There is a strong use of **technology** among a widespread group of those surveyed.

The **majority** have a **smartphone (84%)** and a **laptop (69%)**.

70% use farming related apps with **dairy** and **tillage** farmers most likely to use **farming apps**.

Unsurprisingly **younger cohorts** are more **confident** in tech.

Confidence in everyday tech and **likelihood to invest** in tech go hand in hand.


There is a **positive attitude** towards tech:

- **46%** of farmers claim to be **already using** tech on-farm
- **40%** **plan** to embrace in the future

BUT lots of work to do!

Only **two systems** have **over 75%** adoption in a relevant sector:

- **Calf registration system** in **Dairy** with **86%**
- **GPS** machine guidance in **Tillage** with **77%**



**Current
Technology
Usage**

Current Technology Usage

Used/Using
(All heard of - 736)

Plan to use
(Not currently using - 643)

Calf registration system **56 %**

8 %

Camera monitoring in barn **33%**

19 %

Herd management system **28 %**

14 %

Remedy recording system **31 %**

16 %

Gps used for machine guidance and steering **15 %**

5 %

Weather stations **12 %**

7 %

Milking robot **2 %**

2 %

Health monitoring **9 %**

12 %

Satellite imagery **7 %**

5 %

Parcel boundary mapping with GPS **10 %**

6 %



Barriers to Adoption

55% identify the lack of, or quality of, **broadband** as the **main barrier**.

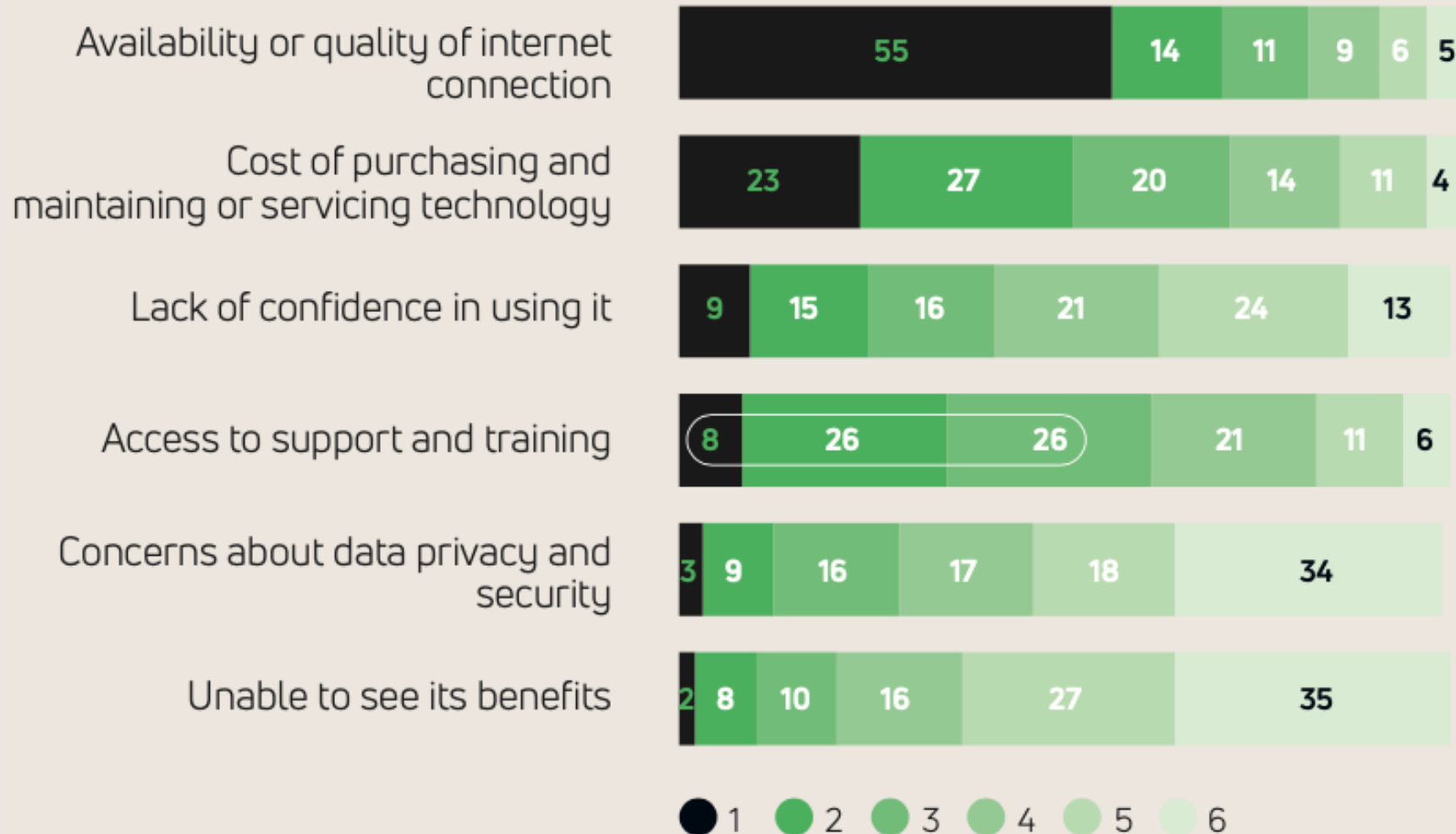
This is followed by the **cost of the initial investment** and the **support and maintenance costs of technology**.

60% included access to **support and training** in their top **three barriers**.

Confidence in usage is key for many — those who are **not confident** in everyday technology are more likely to **see access to support and training** as a **barrier**.

“Aside from broadband, increased support on training would have one of the most positive effects.”

Barriers to Adoption



Base: All respondents - 732


Agricultural media has a strong influence on farmers' ag tech adoption **(42%)**

- This rose to **52%** for the **35s**

Close collaboration and buy-in from **farm advisors** is important – a key channel to increase adoption.

Social relationships should be leveraged where farmers get the opportunity to see how **peers** are using tech and **learn** from one another.

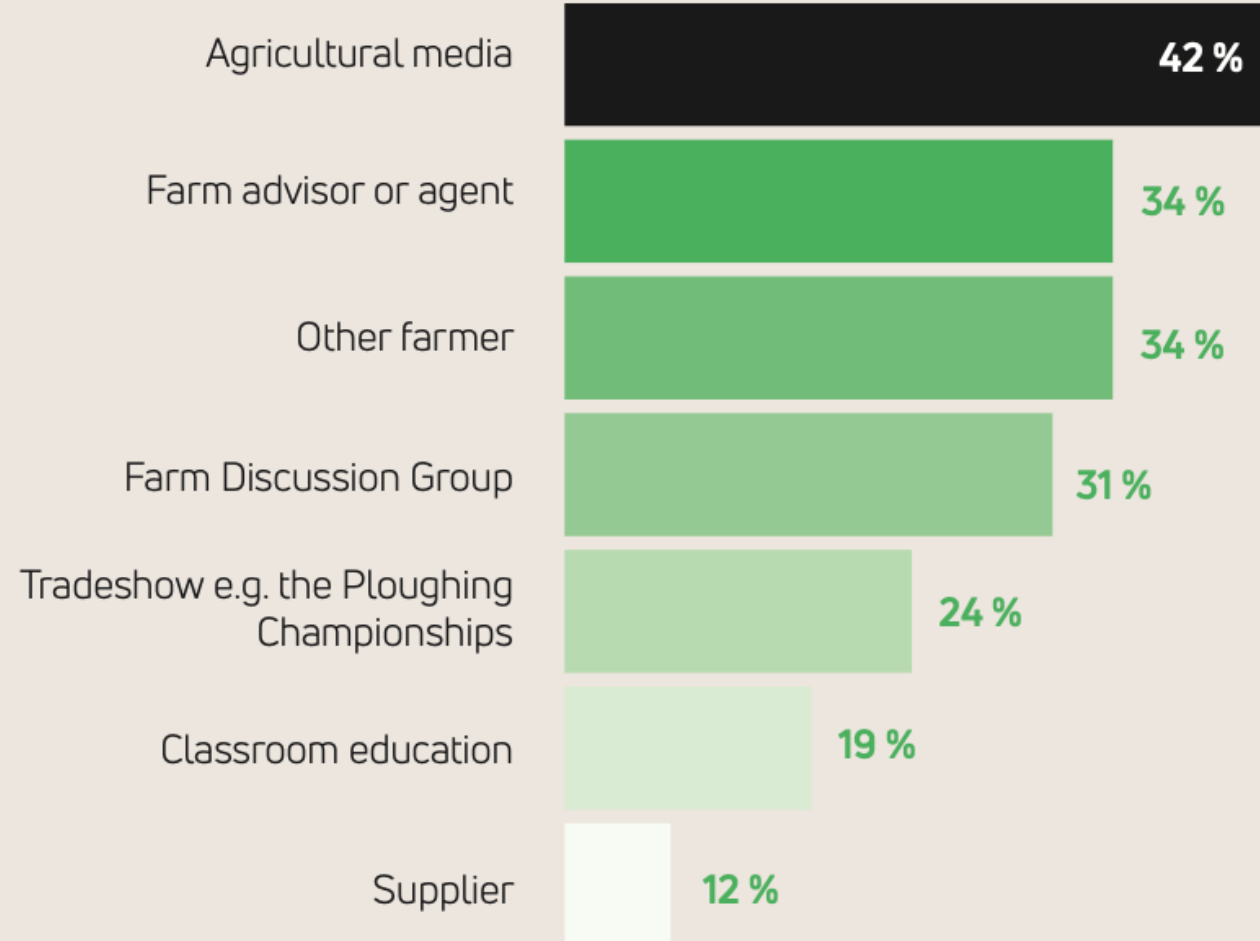
Leveraging Current Farmer Experiences

A photograph of a farmer on a tractor herding a flock of sheep on a green, rolling hillside. The scene is captured from a low angle, showing the sheep in the foreground and the farmer on the tractor in the background. The entire image is overlaid with a semi-transparent green filter.

“There is an acceptance that farmers will need to see first-hand evidence of technology working and of claims made by software providers.”

Leveraging Current Farmer Experiences

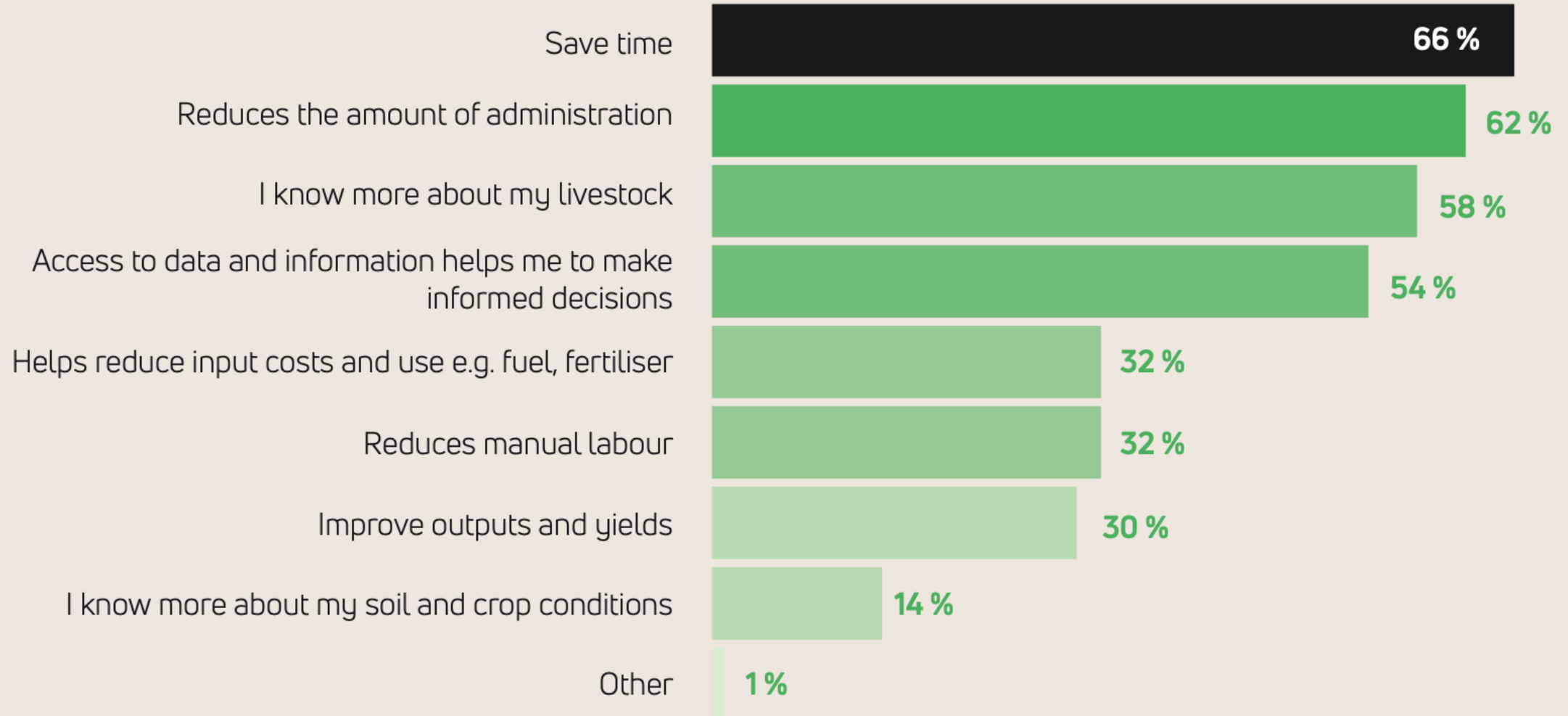
What or who influenced your decision to use farming technologies?



Base: All that have or are using some - 581

Leveraging Current Farmer Experiences

How does using technology help you in your daily work on the farm?



A woman wearing a dark long-sleeved shirt and jeans is sitting in a field of large green leafy plants. She is holding a tablet computer and looking down at it. The entire image has a green tint.

Education & Training

“One of the core aims of this report is to analyse and define the digital skills gaps and requirements.”

25% of those who have completed training, have **completed courses** in **digital farming technology**.

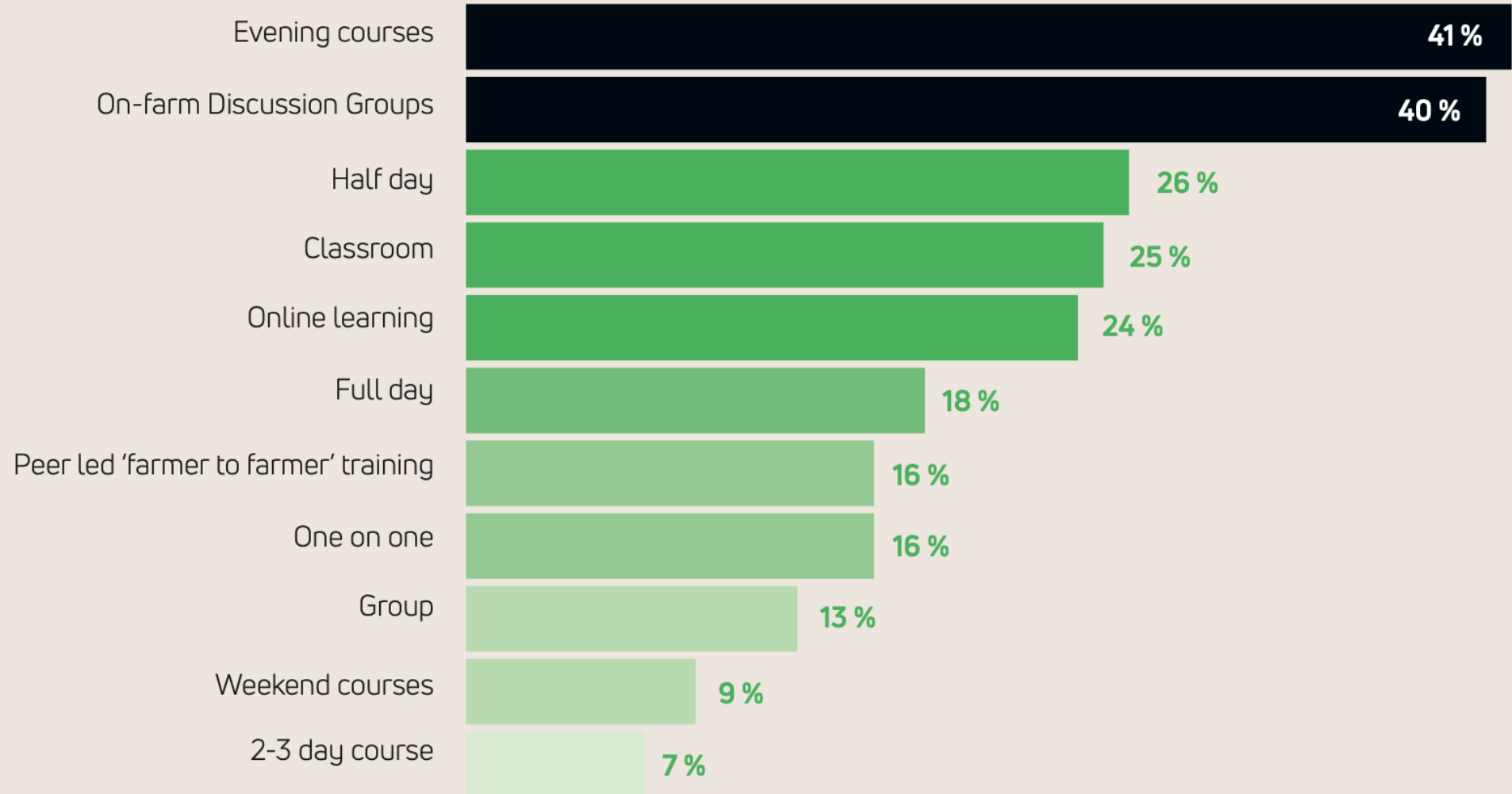
Those who have **completed digital training** courses are more **likely to invest in technology** in the future.

In an ideal situation, farmers feel **on-farm Discussion Groups** are a **better learning environment**, with **evening** the most suitable.

Under 35s feel most **comfortable** with **online learning** but still are just as likely to value DG.

Education & Training


What type of learning environment would work best for you?



Tailored face-to-face training, **KT groups** and **ag-tech** advisors are the **preferred** forms of **support** to help farmers **adopt tech**.

An openness to **video-based training** is also evident, particularly amongst **tillage farmers**, and those **under 45**, both of whom are also receptive to **online documentation**.

Supports & Incentives




“ Aside from broadband, increased support on training would have one of the most positive effects. ”

Financial incentives would be the most likely factor to **increase use or adoption.**

Aside from broadband, **increased support on training** would have one of the **most positive effects.**

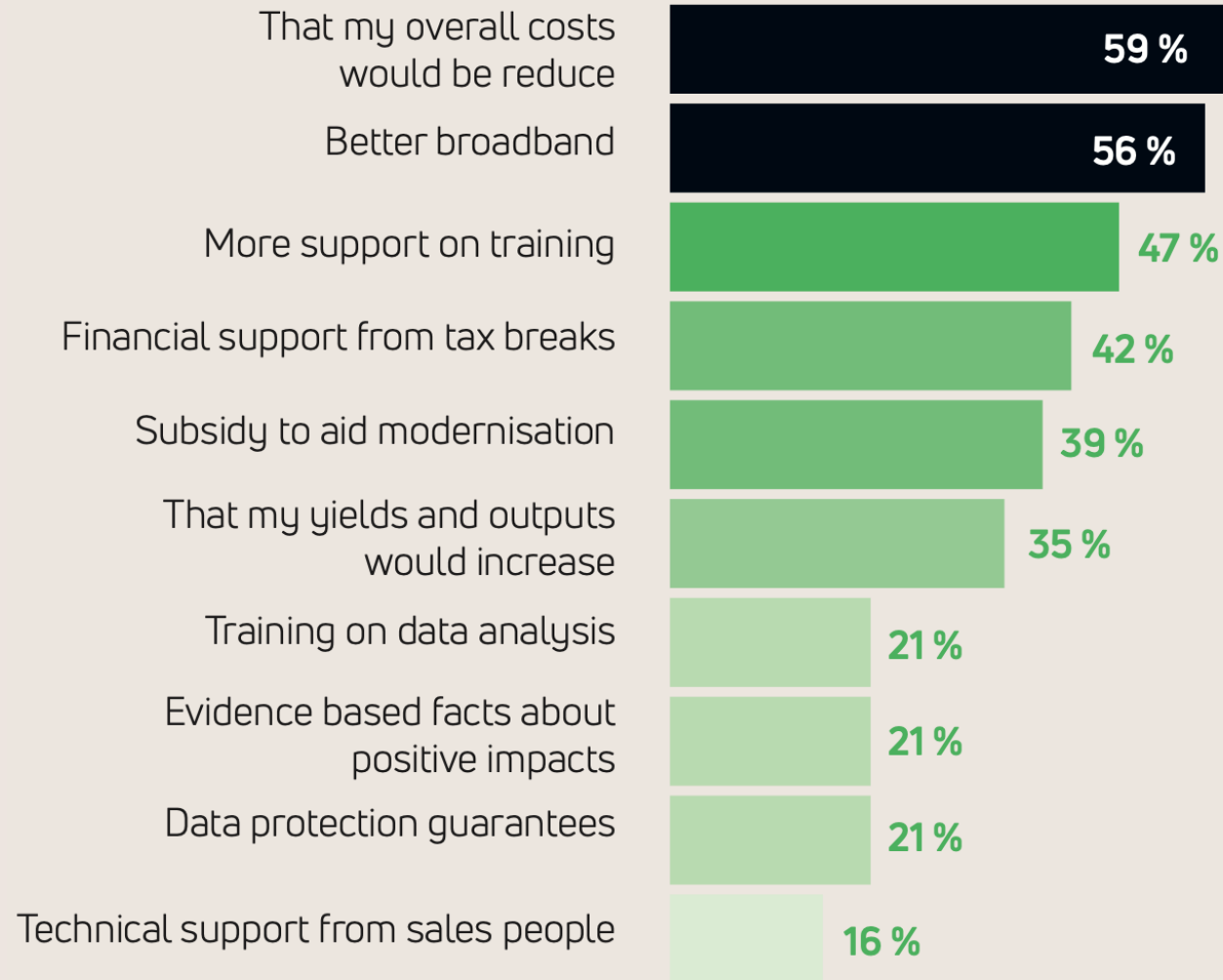
Supports & Incentives



“ Aside from broadband, increased support on training would have one of the most positive effects. ”

Supports & Incentives

What incentives would encourage you to use/ increase use of digital?



Sharing Data

“There should also be a focus on existing users to leverage their positive experiences.”

40% of farmers said they would be **happy** for their **data to be collected** in **exchange** for a reduction in the **cost of on-farm technology**.

A further 44% say more **information** and **assurances** are needed.

60% of farmers said they are likely to **invest in digital technology** in the near future.

The **majority (42%)** are planning to do so within the next **2 years – tillage farmers and under 35s** the most likely to invest in the next **12 months**.

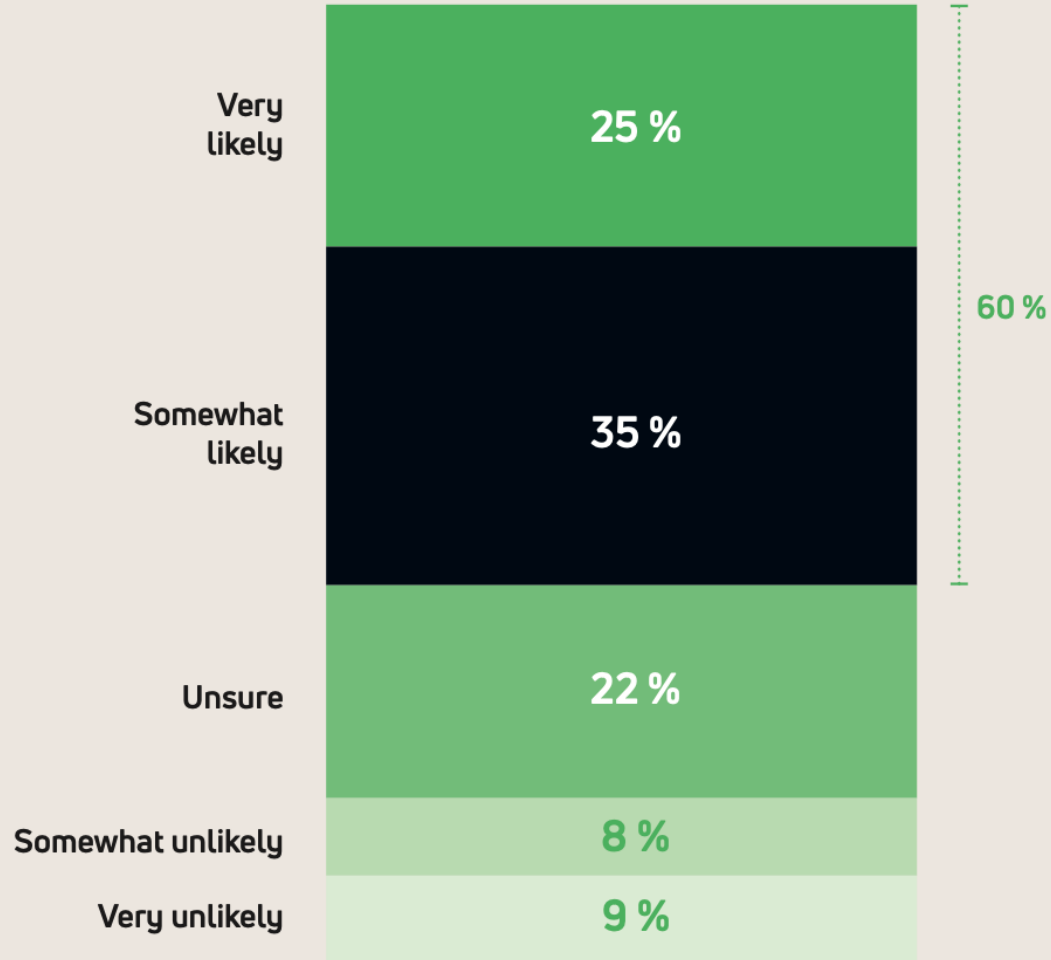


Future Investments

“Dairy farmers are most likely to invest. Those who have completed digital training are more likely to consider investing than those who have not.”

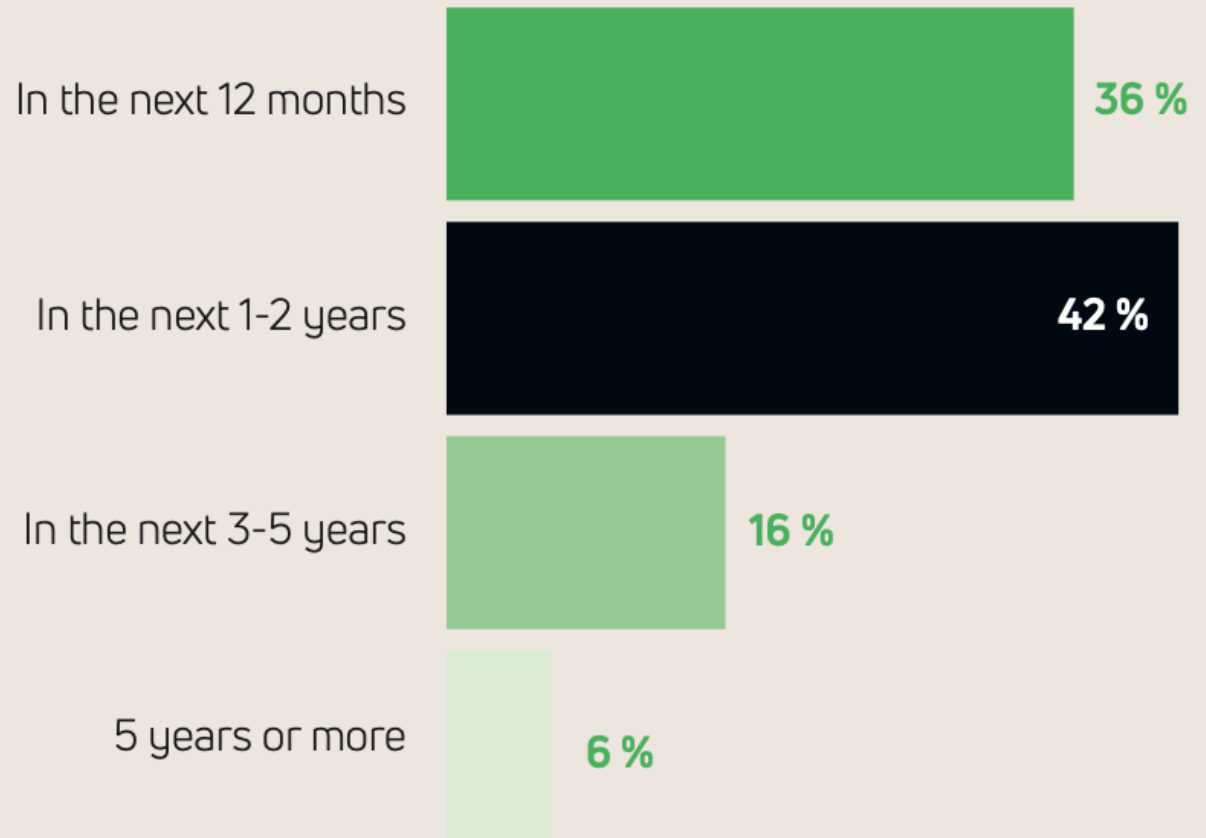
Supports & Incentives

How likely do you think it is that you will invest in digital technology on your farm?



Base: All respondents - 761

If you are going to invest in technology, when do you plan to begin?



Base: All that are unsure or likely that they will invest in digital technology on the farm - 624

Key Drivers

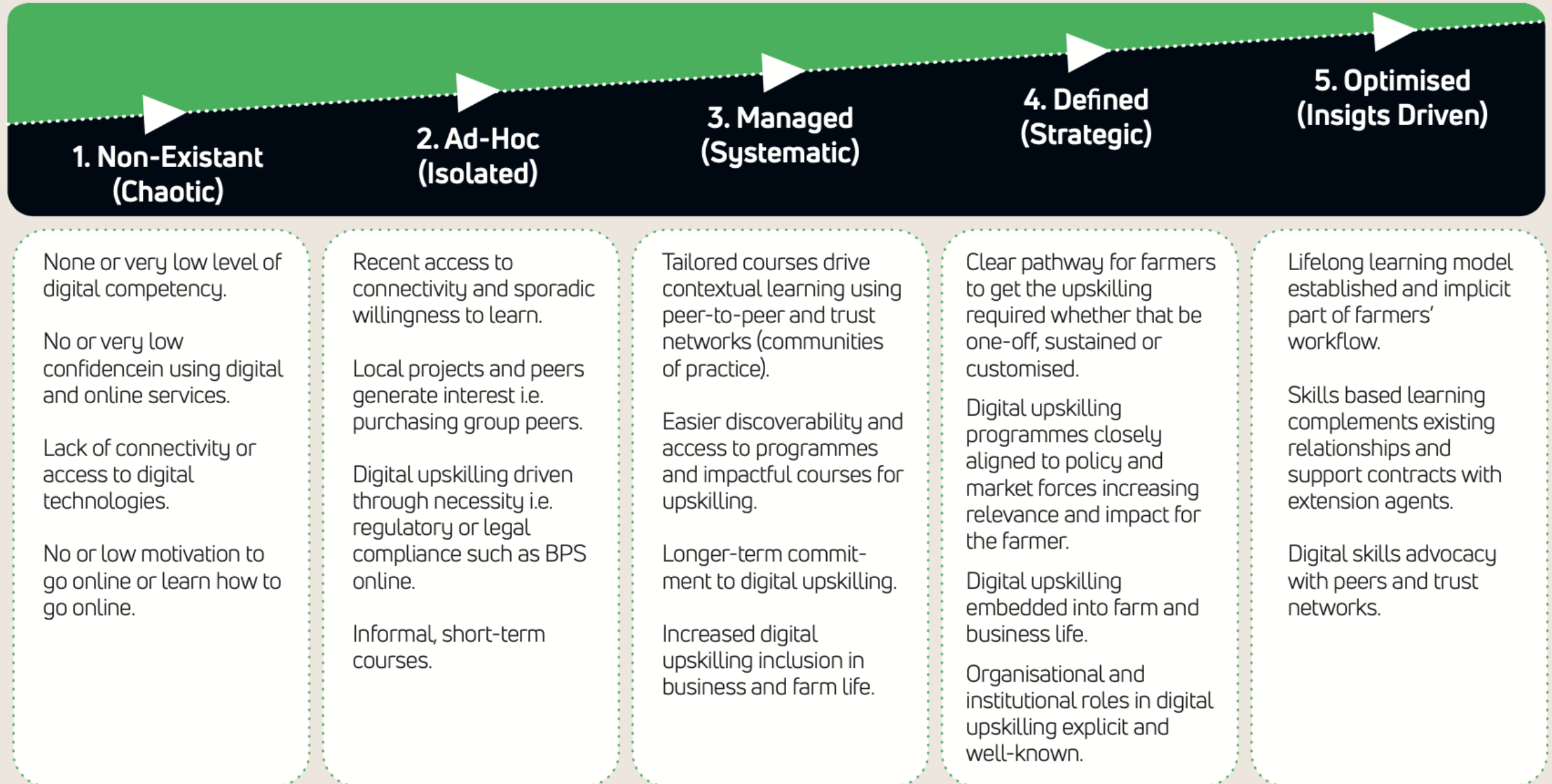
“A smartphone is a farmer's office computer - software/apps and other technologies should be designed and managed through the smartphone.”

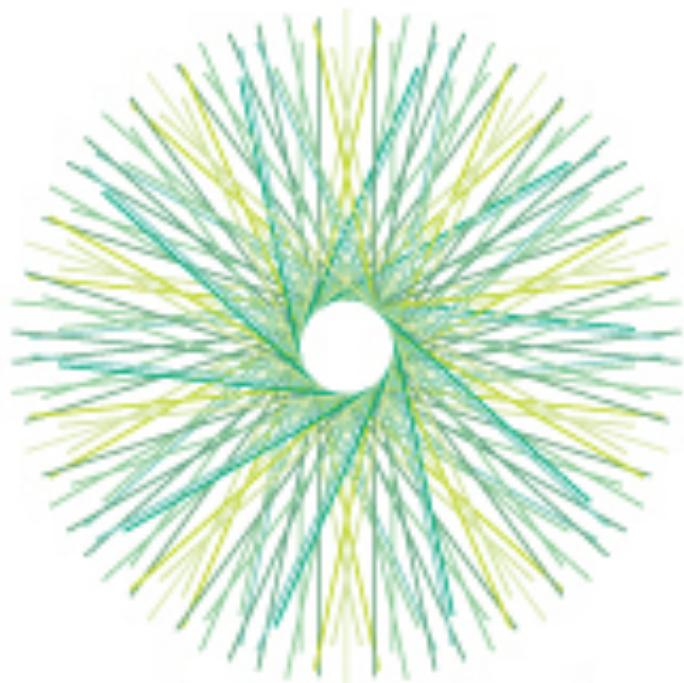
- 1 Increase confidence
- 2 Build appreciation of **cost vs benefits**
- 3 Provide **hands-on practical** and **peer-led** approach to **learning** and **support**
- 4 **Support** through **financial incentives** are **valued**
- 5 **Support** for **training & development**
- 6 **Rural broadband** accessibility is **key**

A hand holding a smartphone in a field with mountains in the background, overlaid with a green filter.

So, What Next?

Roadmap for Digital Skills Development





eip-agri
AGRICULTURE & INNOVATION

EIP-AGRI Seminar

‘New Skills for Digital Farming’

February 2020

The seminar aims to contribute to the design and implementation of approaches and tools that can help farmers and farm advisers develop the skills required for the digital transition in agriculture.

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digital skills and technologies
they need to participate in the
digital economy**