



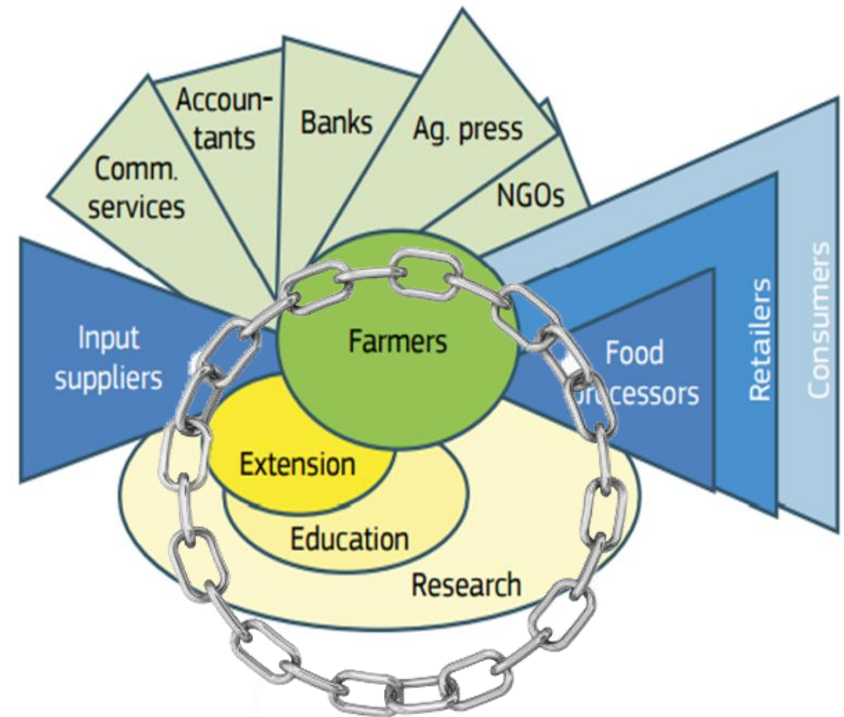
DIGIPIG: Visual & digital tools for pig industry KT

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Background & rationale

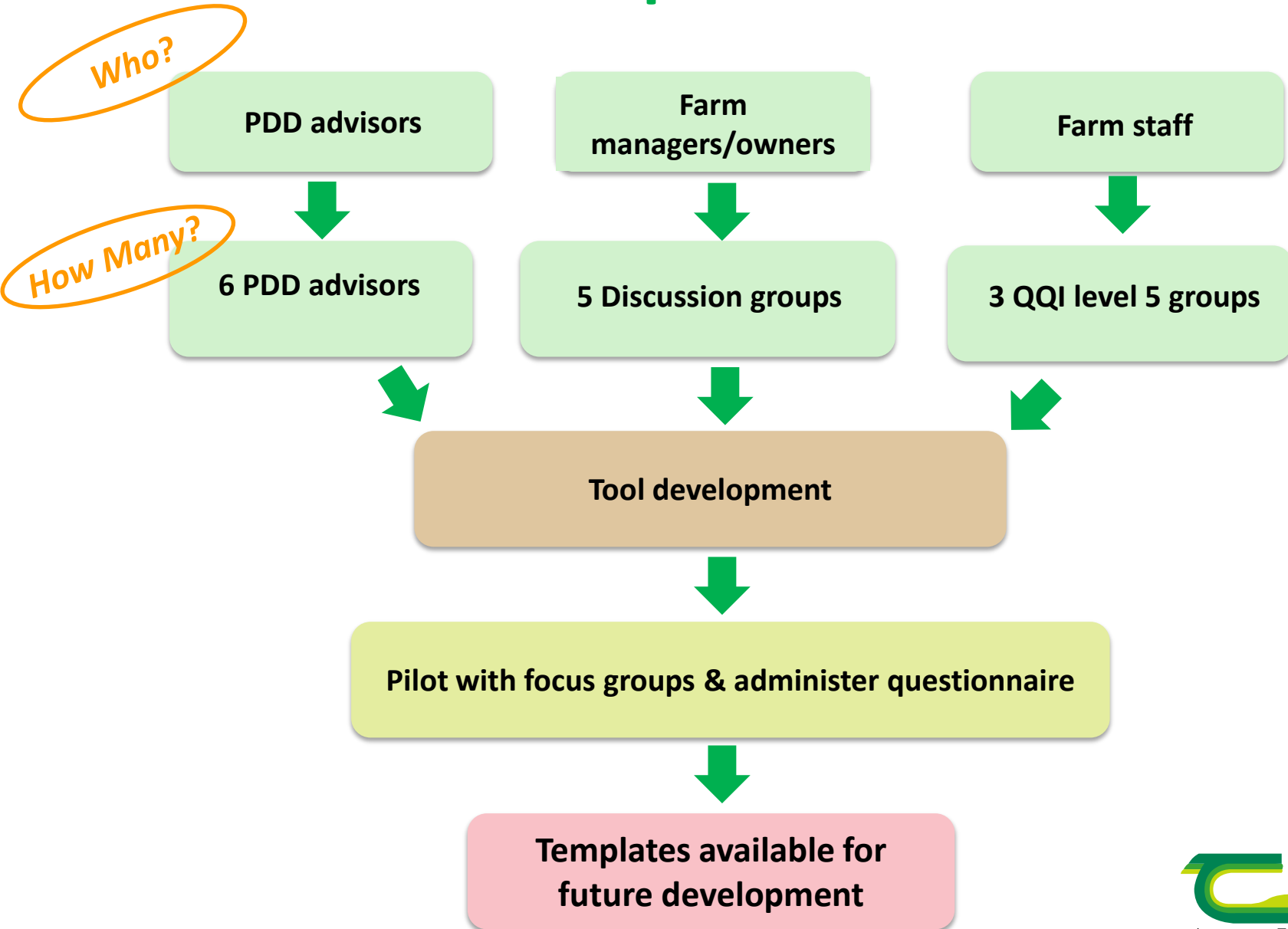
- Teagasc MAIS project
- Maximise KT reach
- Strengthen Links
- Overcome KT barriers
 - Biosecurity, Geographical distribution, Varied audience
- Could digital & visual tools help??
 - Digital = easy, instant, continual access
 - Visual = appeal to a broader audience & wider range of learning styles

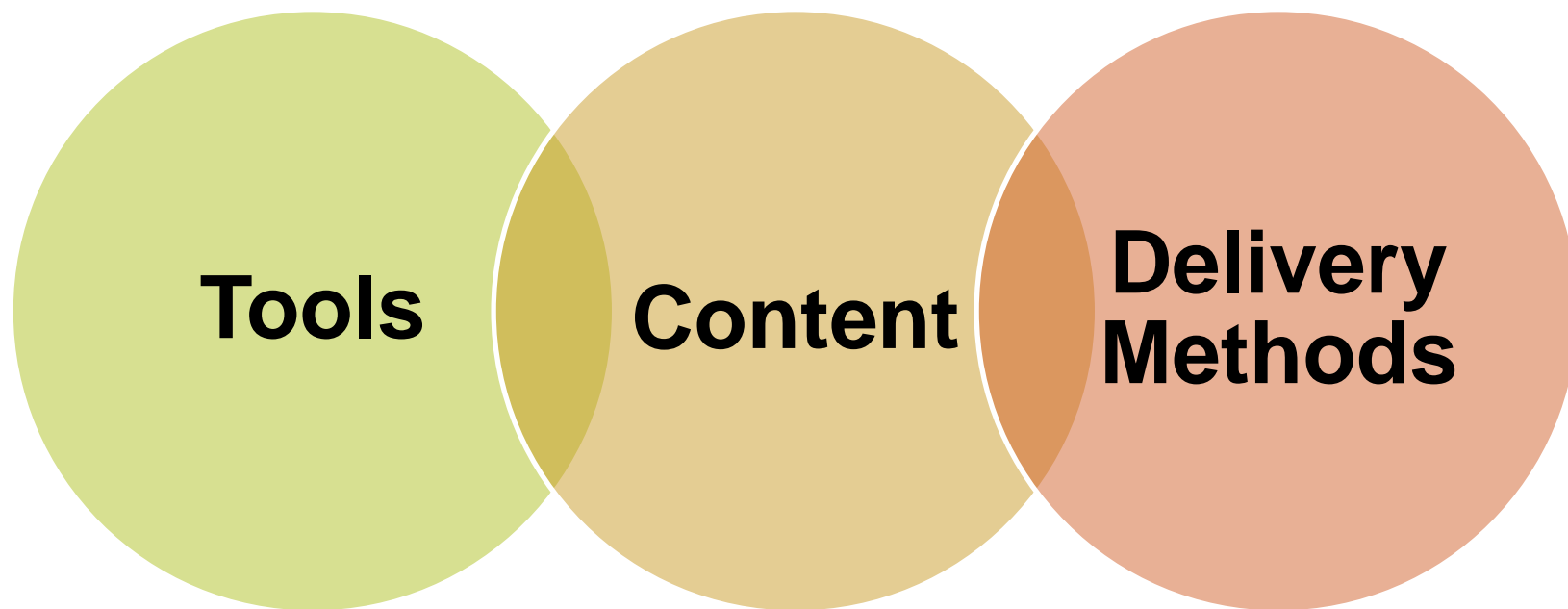


Objectives

- 1. Identify requirements of Teagasc advisors & clients**
- 2. Develop tools for use in pig advisory & pig education services**
- 3. Pilot & evaluate tools with farmers & advisors**
- 4. Create templates for future development**

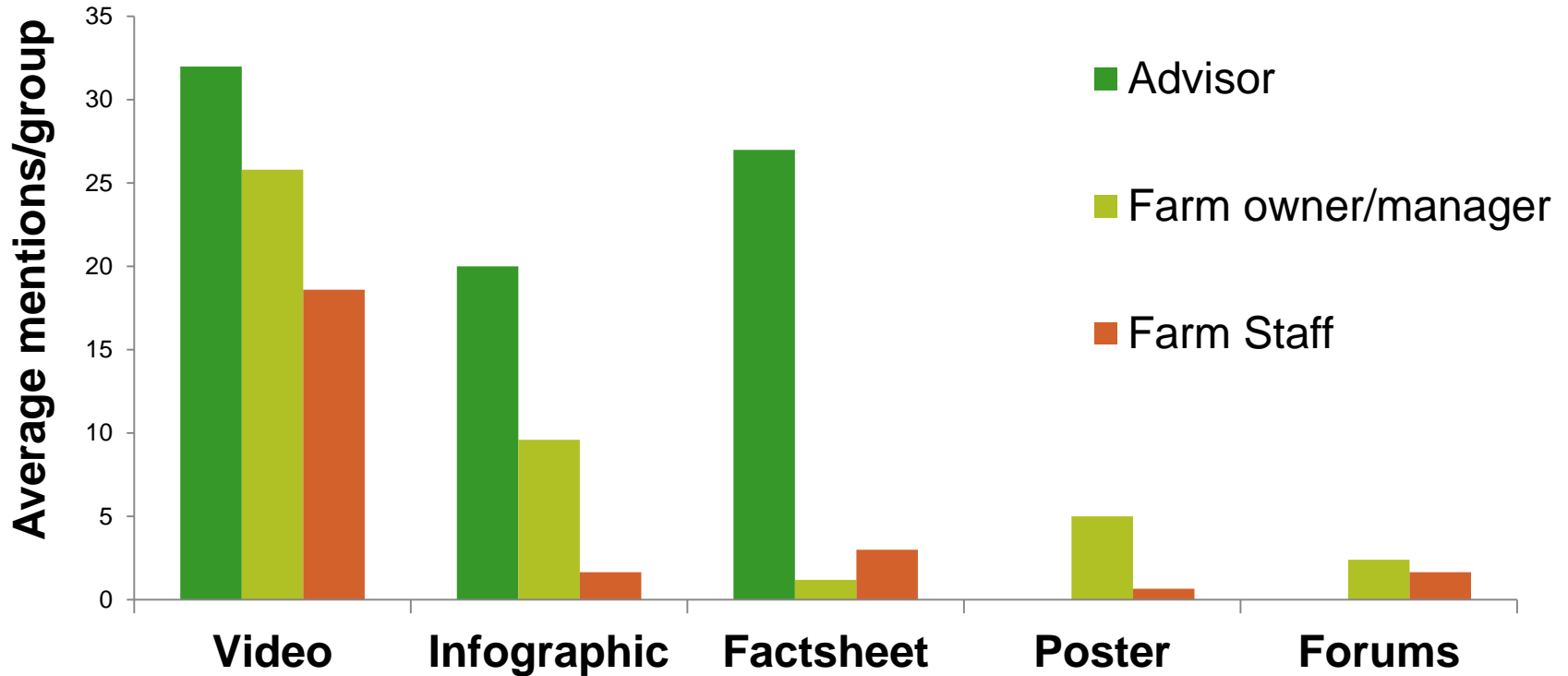
Steps taken ...





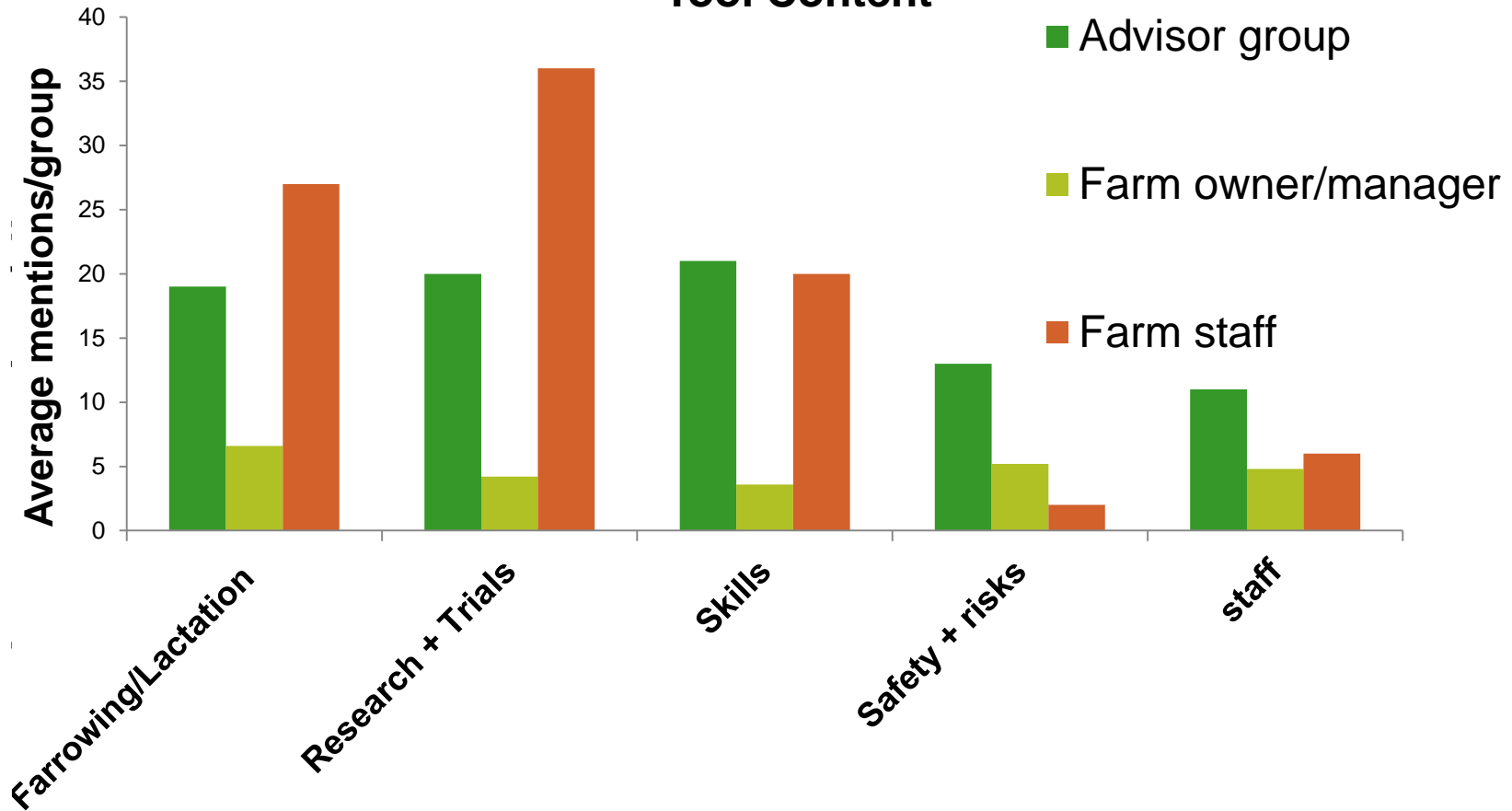
Key findings - tools

Tools

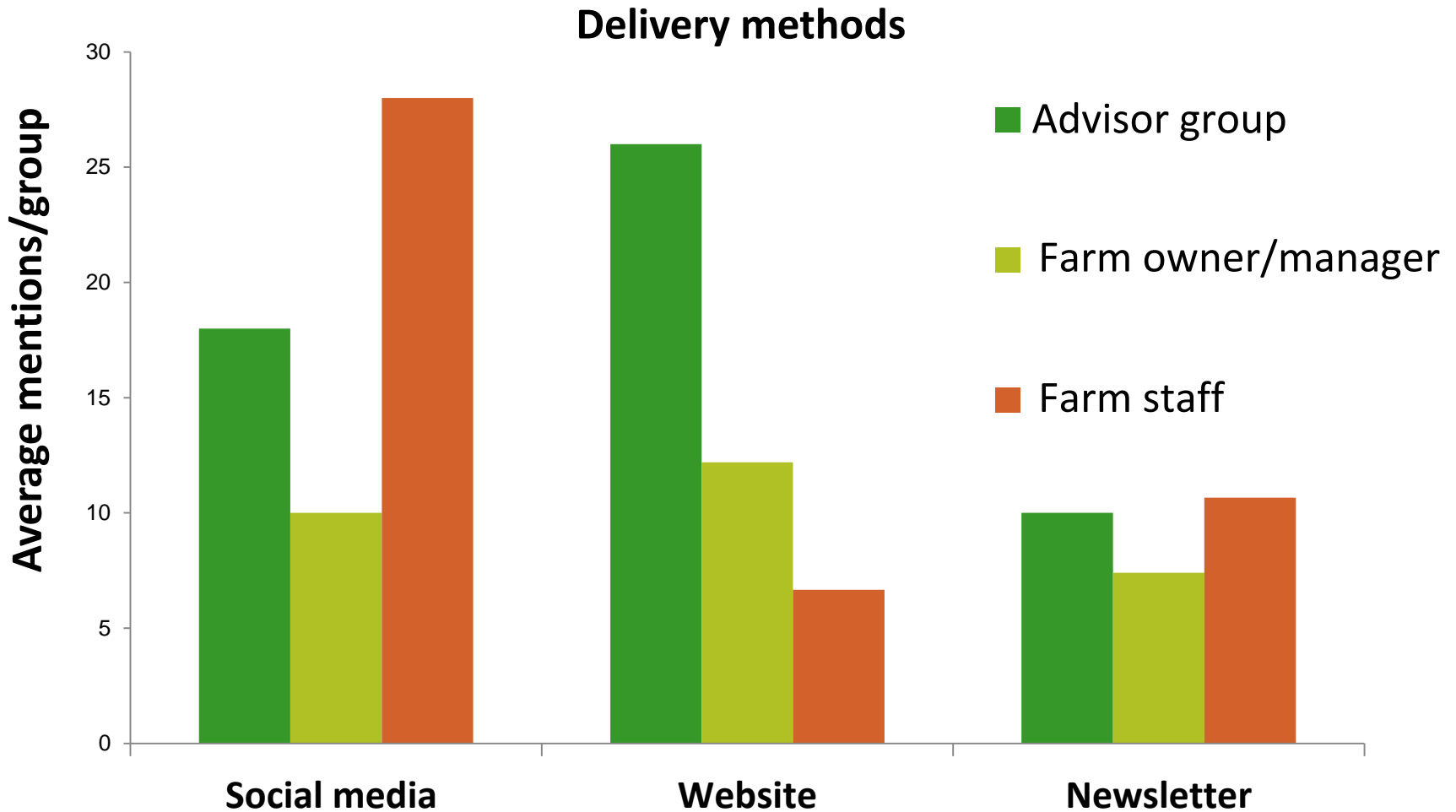


Key findings – tool content

Tool Content



Preferred delivery methods



Comments

- Content linked to appropriate tools
- Skills videos would be *“enough to get someone on the right path”*
- Factsheets useful as *“summary pages”* & *“pull-outs”*
- Content needs to evolve & remain topical

Tool development

- Sample of 3 main tools developed
 - 2 videos
 - » Teeth grinding
 - » Conference promotion



Tool Development

- Sample of 3 main tools developed
 - 2 videos
 - Teeth grinding
 - Conference promotion
 - 2 factsheets
 - Value of colostrum
 - Split suckling

Teagasc Pig Development Department

Timing is everything



- Every piglet needs colostrum in the first **12 to 16 hours**.
- All piglets should preferably consume colostrum from their **own dam** as the level of immunity obtained will be greater.
- A minimum of **200ml** of colostrum is required to ensure an adequate level of immunity is obtained.
- A piglet's **ability to absorb** antibodies begins to decline after 6 hours and will have greatly reduced by 24 hours.
- Colostrum is **continually available** throughout the first **12 hours**, but the quality is dropping.
- Avoid cross fostering in the first 12 hours to give the piglet's time to consume enough colostrum.

From colostrum to milk



So what can I do?

- To play in colostrum intake, e.g. feeding 40% dietary fibre vs. 17% fibre.
- To ensure an increased colostrum intake of 90g.
- To ensure sufficient colostrum immediately after birth.
- To ensure such as split suckling (pictured below) can help to ensure all piglets receive sufficient colostrum.



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The Value of Colostrum

Colostrum

Colostrum is the first secretion from the mammary gland after birth. Colostrum is continually available to the piglets in the first 12 hours. It is essential for the piglets' immunity and as a source of energy and nutrients required by the piglet to continue suckling and compete in the development of a teat order. Management has a key role to play in the piglets' colostrum consumption which will have a positive effect on the pig's lifetime health and productivity.

Key Facts

- Piglets acquire all initial immunity from colostrum.
- Immunity obtained is key to reducing susceptibility to infection later in lactation & post weaning.
- Every piglet born alive but died before weaning has a marginal cost of **€50**.
- Litter size is rising **11.36** in 2006 vs **13.15** in 2016
→ More demand for colostrum than ever.

Composition of colostrum

- Colostrum differs from milk in that it has a higher **protein, dry matter and bioactive content** and a lower fat and lactose content.
- It is an **essential source of energy** for the new-born piglet, with the gross energy remaining almost constant for the first 24 hours.
- It contains a high level of **Immunoglobulin's (IgG)** essential in the provision of **passive immunity** to piglets.
- The **antibodies** contained in colostrum are determined by what infections the sow has been exposed to, providing **farm specific** immunity.

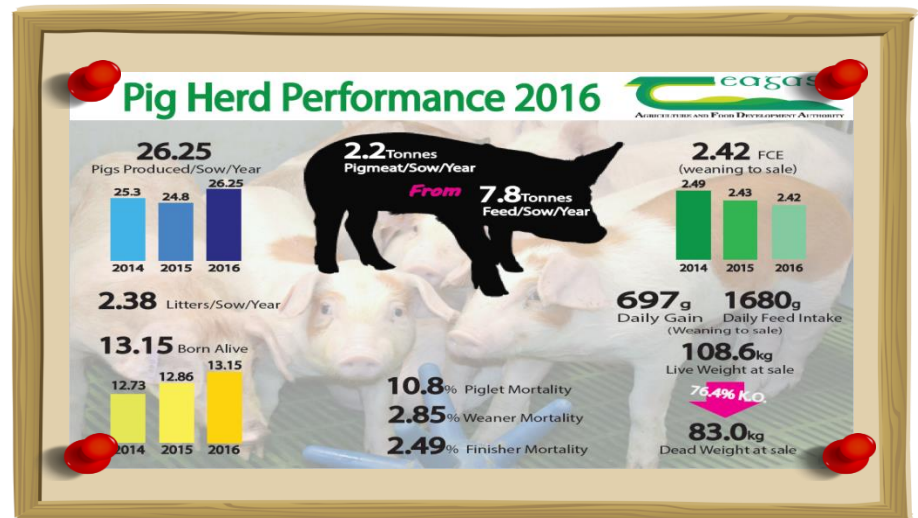


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Tool Development

- Sample of 3 main tools developed
 - 2 videos
 - Teeth grinding
 - Conference promotion
 - 2 factsheets
 - Value of colostrum
 - Split suckling
 - 1 infographic
 - 2016 national pig herd performance



So, did we get it right?

- Questionnaire administered to farm owner/managers & staff
 - 98% rated tools as “good” or “very good”
 - 98% would encourage colleagues or employees to use the tools
 - 99% felt info clearly delivered
 - 92% feel images increase understanding & appeal of factsheets & infographic

Questionnaire recommendations

- Av. 9 recommendations/comments per tool
 - Minor changes to enhance tools developed in the future
 - » *E.g.* Include extra close ups of procedure in video
 - Add more images to the factsheets
 - Space for own farm performance in infographic

- 20% felt level of text in factsheets should be reduced

Next steps ...

- Templates under development
- Advisory service
 - Utilise templates
 - Develop other tools discussed
- Roll out visual & digital tools

Take home messages!

- Owners, managers, staff & advisors all support use of visual & digital tools
- Design of tools developed to date, highly rated by owners, managers & staff
 - e.g. 98% rated tools “good” or “very good” overall
- Results & recommendations given will further enhance templates developed
- Verified templates for future tools under development

Thank you!

