

# AHDB Learning Styles Research



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# Background

- AHDB has developed a broad range of communication channels and resources as part of an increasing project toolkit but have identified a need to further understand **how users feel or perceive they would rather view these resources.**
  - The Honey and Mumford learning styles model (developed by Peter Honey and Alan Mumford and based upon the work of Kolb), identified four distinct learning styles or preferences: **Activist**; **Theorist**; **Pragmatist** and **Reflector** that people use to learn something new.
  - Those that show a dominant learning style have a clear preference and tend to always enter the learning in that style but to truly learn something they will move through the other preferences.
  - Some individuals have moderate preferences for all learning styles, having no specific preference means they will adapt based on the situation.

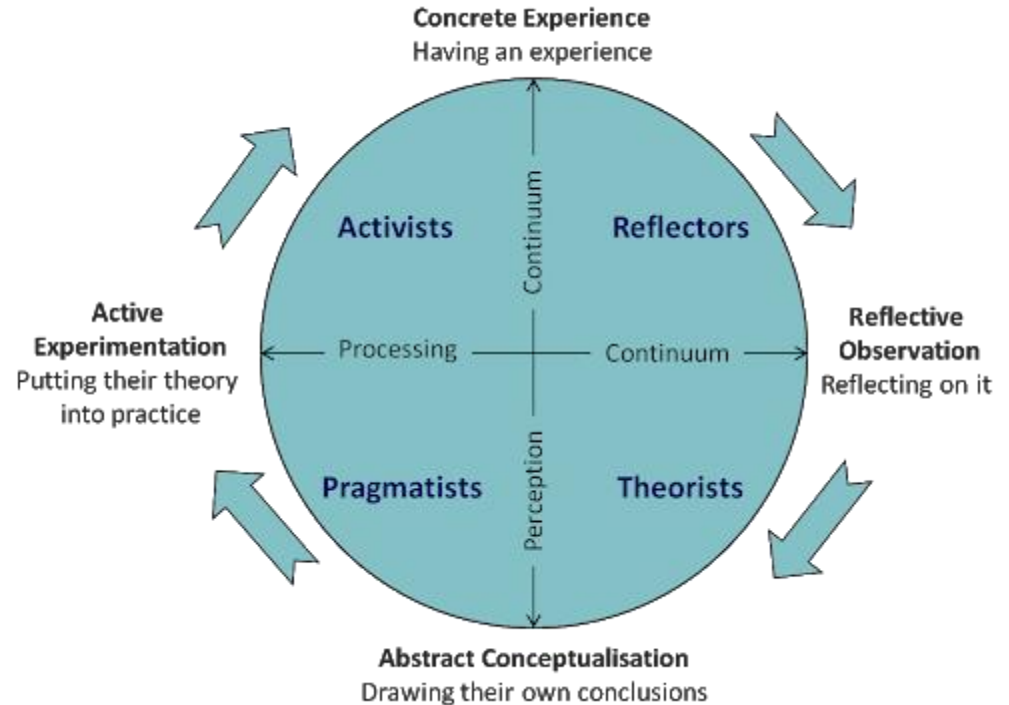
# Project aims

- The Honey and Mumford model can be used to better understand the learning preferences of AHDB levy payers and stakeholders and increase the range of strategies that are used for communicating to them.
- The main objectives of this research are therefore to:
  - Establish a baseline measure of perceived preferences in methods of accessing information and associated learning styles
  - Understand the extent to which levy payers and stakeholders might have multiple learning style preferences
  - Investigate whether this varies by sector or stakeholder group
  - Explore whether further trends are evident by demographic groups such as gender or age



# The learning cycle

- The learning styles signify where individuals are most comfortable entering the learning. To truly learn new information, an individual must move through the cycle using multiple approaches.
- The identification of learning preferences not only shows the best way to engage individuals but also the learner journey and those 'barriers' to learning that the individual is least willing to engage in.



# Characteristics of each learning style

- Key characteristics, including attributes and preferred activities, for each of the four learning styles are summarised in the below table.

Learning Style	Attributes	Activities
Activist	<ul style="list-style-type: none"> <li>Learn by doing, and happy to jump in</li> <li>Enjoy the challenge of new experiences, without bias</li> <li>Often guilty of acting before they think</li> <li>Do not learn well from teaching, theory, reading or analysing data</li> </ul>	<ul style="list-style-type: none"> <li>Puzzles</li> <li>Competitions</li> <li>Role-play</li> <li>Brainstorming</li> <li>Problem-solving</li> </ul>
Theorist	<ul style="list-style-type: none"> <li>Like to understand the theory behind actions</li> <li>Enjoy models, concepts and facts</li> <li>Analyse and synthesise testable hypotheses</li> <li>Not suited to learning without instruction</li> <li>Not good in situations that involve 'feelings' or when objectives or instructions are ambiguous</li> </ul>	<ul style="list-style-type: none"> <li>Models</li> <li>Statistics</li> <li>Stories</li> <li>Quotes</li> <li>Applying theories</li> </ul>
Pragmatist	<ul style="list-style-type: none"> <li>Need to be able to see how they apply their learning to the real world</li> <li>Abstract concepts are useless if they cannot see how it is applicable</li> <li>Enjoy trying new theories and techniques</li> <li>Do not happily engage when objectives and instructions are unclear, or when it is heavy in theory</li> </ul>	<ul style="list-style-type: none"> <li>Thinking about how to apply theories to reality</li> <li>Case studies</li> <li>Problem-solving</li> <li>Discussion</li> </ul>
Reflector	<ul style="list-style-type: none"> <li>Learn through observation and reflecting on results</li> <li>Prefer to watch from the side-lines</li> <li>Take information in from multiple perspectives and work to a conclusion</li> <li>Reflectors are not good at leading activities or being rushed, with no preparation</li> </ul>	<ul style="list-style-type: none"> <li>Observing activities</li> <li>Feedback from others</li> <li>Coaching</li> <li>Interviews</li> <li>Paired discussions</li> </ul>

# Methodology

- A questionnaire, suitable for delivery over the telephone, was designed to replicate the 40 question Honey and Mumford learning styles questionnaire
  - To keep consistent with the official questionnaire, respondents were encouraged to agree or disagree with each statement (although a don't know option was available if necessary)
- All interviews were completed by phone from Qa Research's contact centre in York between 10 February and 1 March 2021
- A total of 303 farmers/growers and 100 stakeholders were interviewed
- Contact details came from three sources:
  - Farmers/growers across all AHDB divisions were sourced from the 2020 LPSS, specifically those who had consented to recontact for further research
  - Due to the more limited number of Pork producers, the AHDB Pork Knowledge Exchange Team provided a small number of additional contacts to boost the sample
  - All Stakeholders were provided by AHDB
- Quota targets were set on sector (of main enterprise) for farmers/growers and stakeholder type (vet, agronomist, research/trials, other) for stakeholders to ensure key groups were represented
- An algorithm was applied to individual responses to calculate a learning style score and preference for each respondent. This is detailed in the report appendix.

# Summary of Achieved Survey Sample

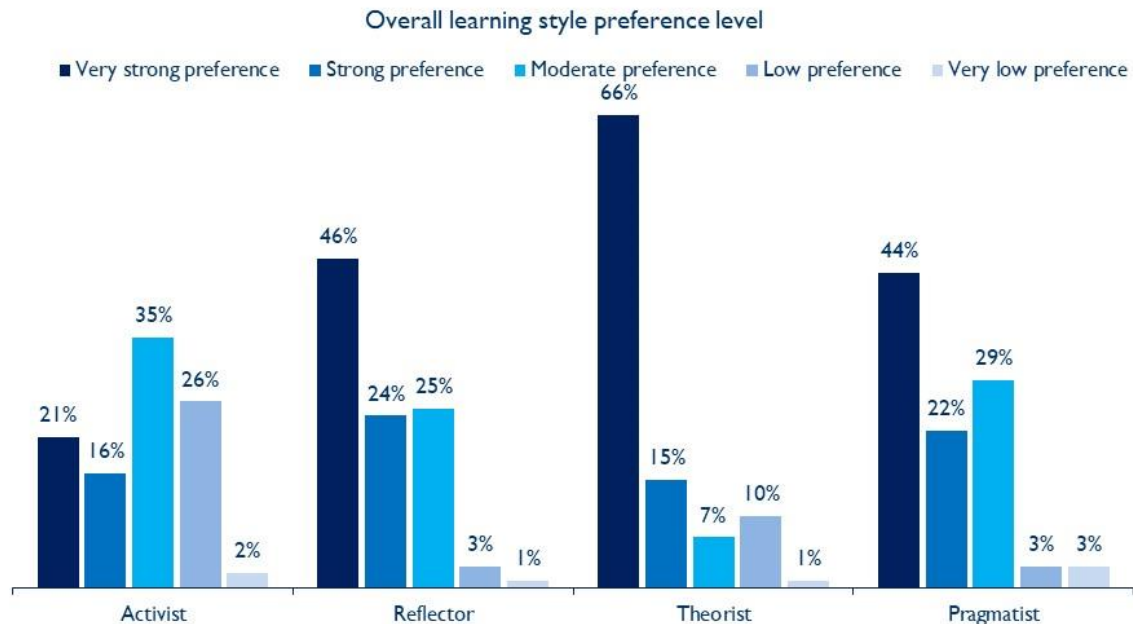
AHDB Sector or Group	Achieved sample <i>n</i>	Achieved sample %
<b>Farmers/Growers</b>		
Beef & Lamb	50	16.5%
Cereals and Oilseeds	53	17.5%
Dairy	50	16.5%
Horticulture	50	16.5%
Pork	50	16.5%
Potatoes	50	16.5%
<b>Total</b>	<b>303</b>	<b>100%</b>
<b>Stakeholders</b>		
Agonomists	27	27%
Vets	20	20%
Research/Trials	15	15%
Other	38	38%
<b>Total</b>	<b>100</b>	<b>100%</b>

- This table summarises the achieved sample for both the farmer/grower and stakeholder surveys

# *Executive Summary*



# Across all farmers/growers and stakeholders surveyed strongest preference for the *Theorist* style of learning



Source: Qa Research 2021 Base: All farmers/growers and stakeholders (403)

- This chart shows the overall preference rating for each of the four learning styles across the industry (i.e. farmers/growers and stakeholders). It should be noted that each learning style is scored independently and hence e.g. a *very strong* preference could be recorded across multiple learning styles.
- Overall, two-thirds (66%) of the industry have a *very strong* preference for the *Theorist* style of learning, making this the most dominant style.
- A further 46% have a *very strong* preference for the *Reflector* style of learning and 44% for the *Pragmatist* style of learning. Just one fifth (21%) have a *very strong* preference for the *Activist* style (this being the only style where other preference levels were more prevalent).
- Only a small minority of respondents registered a *low* or *very low* preference, with the exception of the *Activist* style of learning (with 28% having a *low* or *very low* preference).

# Executive Summary – Farmers/Growers

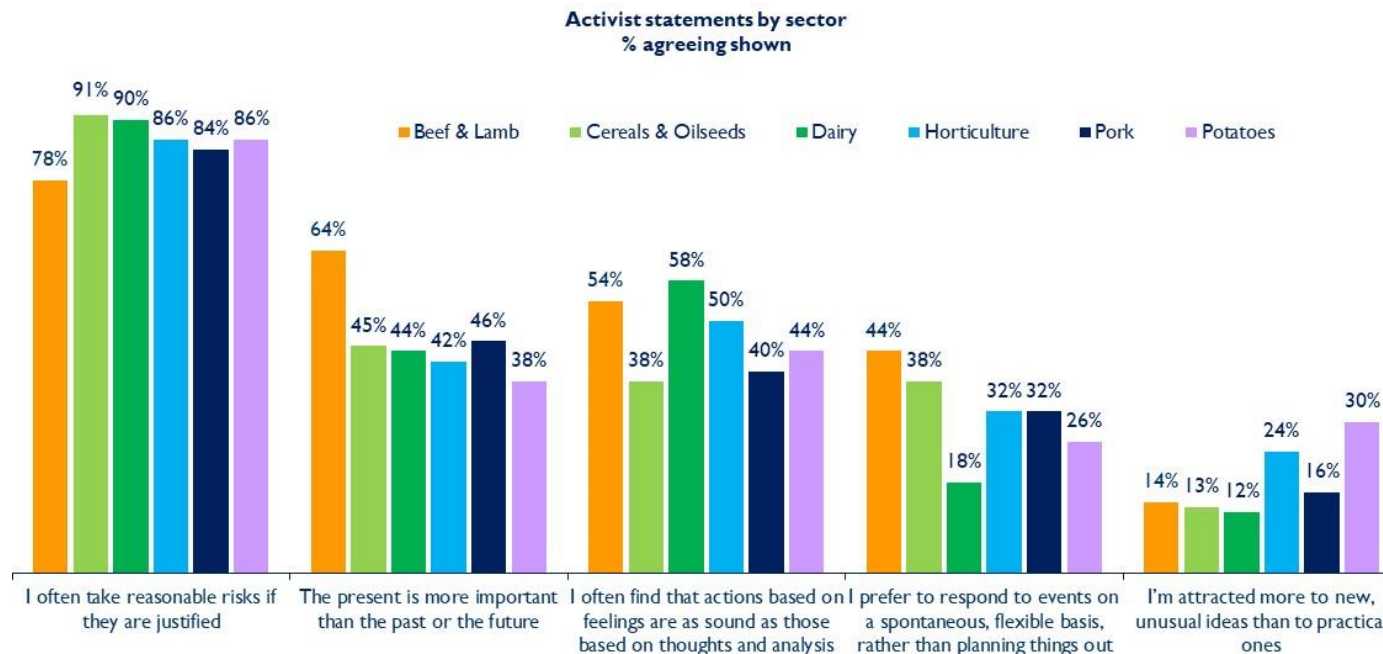
- Specific statements identify clear examples of attitudes or approaches that characterise the industry and transcend any learning style preferences. The vast majority take justifiable risks; like to ponder alternatives; do a thorough job; take a step-by-step approach and place great importance on whether things work in practice.
- Farmers/growers tend to have a stronger preference for the *Theorist* style of learning, with lower preference levels for the *Activist* style. Some sector specific trends;
  - Cereals & Oilseeds and Pork least likely to be *Theorists*
  - Potatoes and Dairy most likely to be *Reflectors*, with Pork least likely
  - Potatoes and Dairy least likely to be *Activists*
- Those aged 65+ tend to be the most likely to have very strong preference levels, suggesting they have reached a point where they are confident in their preferred way of learning.
- Just a quarter of farmers/growers (26%) have a single dominant learning style, varying from 40% of the *Pork* sector to 18% of the *Dairy* sector.
  - Most commonly dominant learning style is a *Theorist*, though Cereals & Oilseeds also high for *Reflector* learning style and *Pork* high for *Pragmatist* learning style.
  - Those with multiple enterprises (28%) more likely than those with just one enterprise (21%) to have a dominant learning style
- Potatoes (42%) and Dairy (38%) sectors are most likely to have a more multimodal preference (*NET: three or four highest preferences*)

# Executive Summary – Stakeholders

- Specific statements again identify clear examples of attitudes or approaches that characterise the industry and transcend learning style preferences. The vast majority avoid jumping to conclusions; do a thorough job; like exploring underlying principles; take a step-by-step approach and place great importance on whether things work in practice.
  - Stakeholders are less likely than farmers/growers to take justifiable risks and job role seems to impact on many other attitudes and approaches.
- Like farmers/growers, stakeholders also have a stronger preference for the *Theorist* style of learning, and lower preference levels for the *Activist* style. Job role had a strong impact on preference;
  - Agronomists most likely to be *Theorists*
  - Research/Trials most likely to be *Reflectors*, with Vets least likely
  - Research/Trials least likely to be *Pragmatists*
  - Vets most likely to be *Activists*
- Stakeholders are much more likely than farmers/growers to have a single dominant learning style (40%, compared to 26%), however this again varies by job role with Vets and those working in *Research/Trials* more likely than Agronomists to have a single dominant learning style.
  - The *Theorist* learning style is the most common single dominant style (16% of all stakeholders), followed by the *Activists* learning style (12%, though Vets are more than twice as likely to be *Activists* – 25%)
- Agronomists (23%) are the most likely to have a more multimodal preference (*NET: three or four highest preferences*). However, Vets are the most likely to have an equal preference for all four learning styles (10%).

# Farmers and Growers: Learning Style Statements

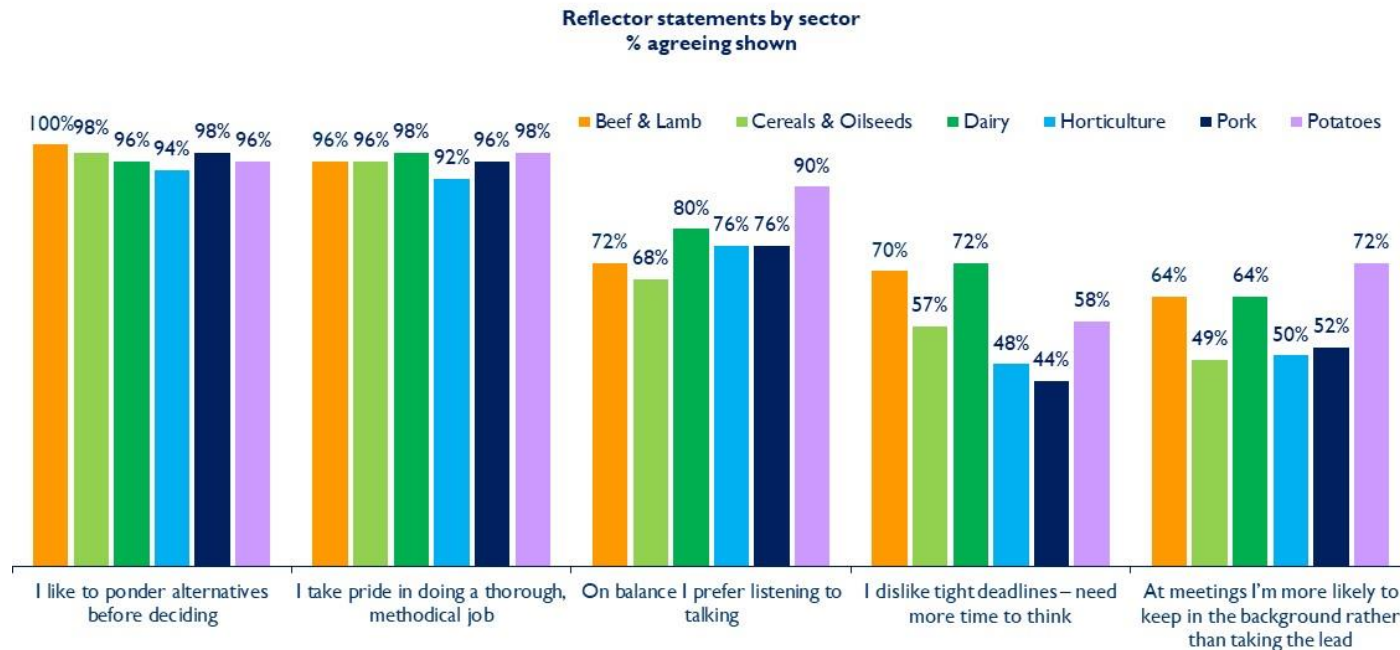
## All sectors likely to take justifiable risks but less likely to be spontaneous or be attracted to new/unusual ideas



Source: Qa Research 2021 Base: Beef & Lamb (50); Cereals & Oilseeds (53); Dairy (50); Horticulture (50); Pork (50); Potatoes (50)

- Before moving to look at overall learning style preferences, this section looks at some individual statements linked to each of the four learning styles. The above chart compares responses to five **'Activist'** statements.
- There is considerable variation by statement, with the vast majority agreeing that **'I often take reasonable risks if they are justified'**, though Beef & Lamb less likely to agree with this statement (78%).
- Opinion more split on other *Activist* statements with notable trends including: Beef & Lamb (64%) most likely to agree that **'The present is more important than the future'**; Dairy (18%) least likely to agree that **'I prefer to respond to events on a spontaneous, flexible basis, rather than planning things out'**; and Potatoes (30%) and Horticulture (24%) most likely to agree that **'I'm attracted more to new, unusual ideas than to practical ones'**.

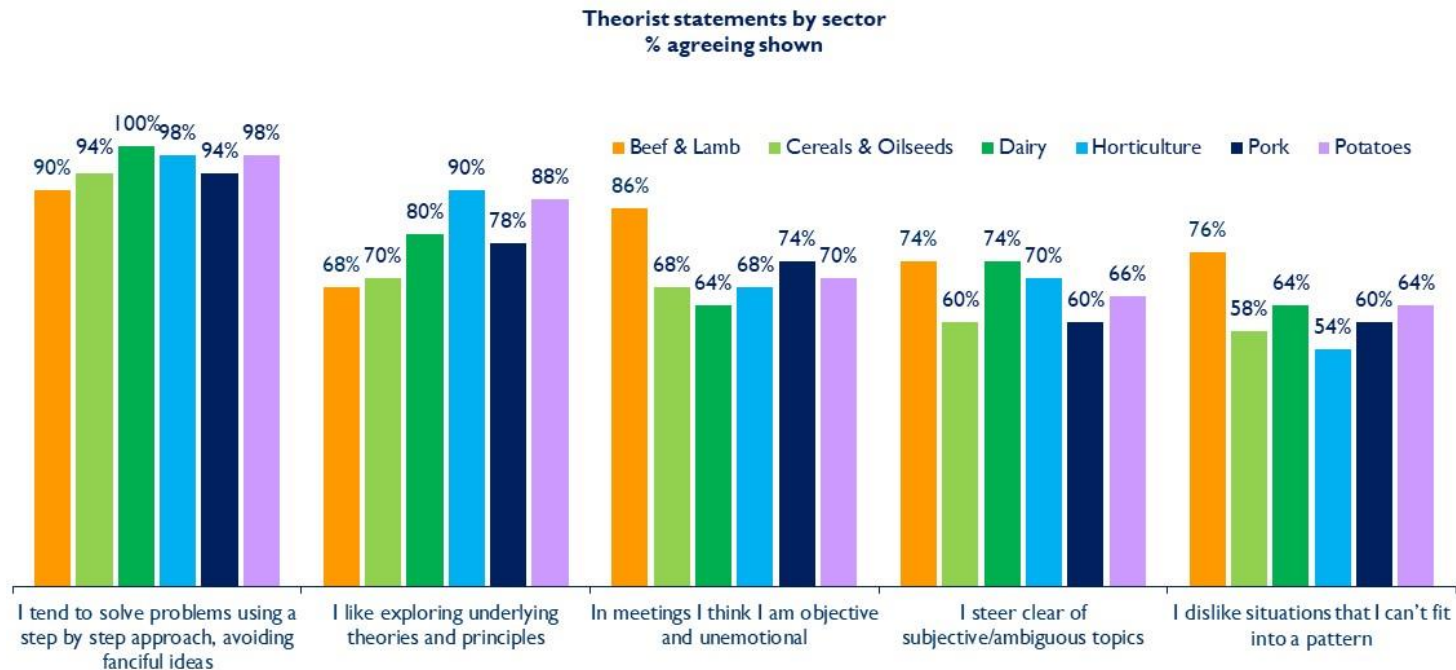
## Reflector statements resonated with farmers/growers, particularly the Potatoes sector



Source: Qa Research 2021 Base: Beef & Lamb (50); Cereals & Oilseeds (53); Dairy (50); Horticulture (50); Pork (50); Potatoes (50)

- The above chart compares responses to five **'Reflector'** statements.
- Less marked variation, with the vast majority agreeing that **'I like to ponder alternatives before deciding'** and **'I take pride in doing a thorough, methodical job'**.
- Opinion more split on other statements with notable trends including: Potatoes (90%) most likely to agree that **'On balance I prefer listening to talking'**; Dairy (72%) and Beef & Lamb (70%) most likely to agree that **'I dislike tight deadlines'**; and Potatoes (72%) most likely to agree that **'At meetings I'm more likely to keep in the background rather than take the lead'**.

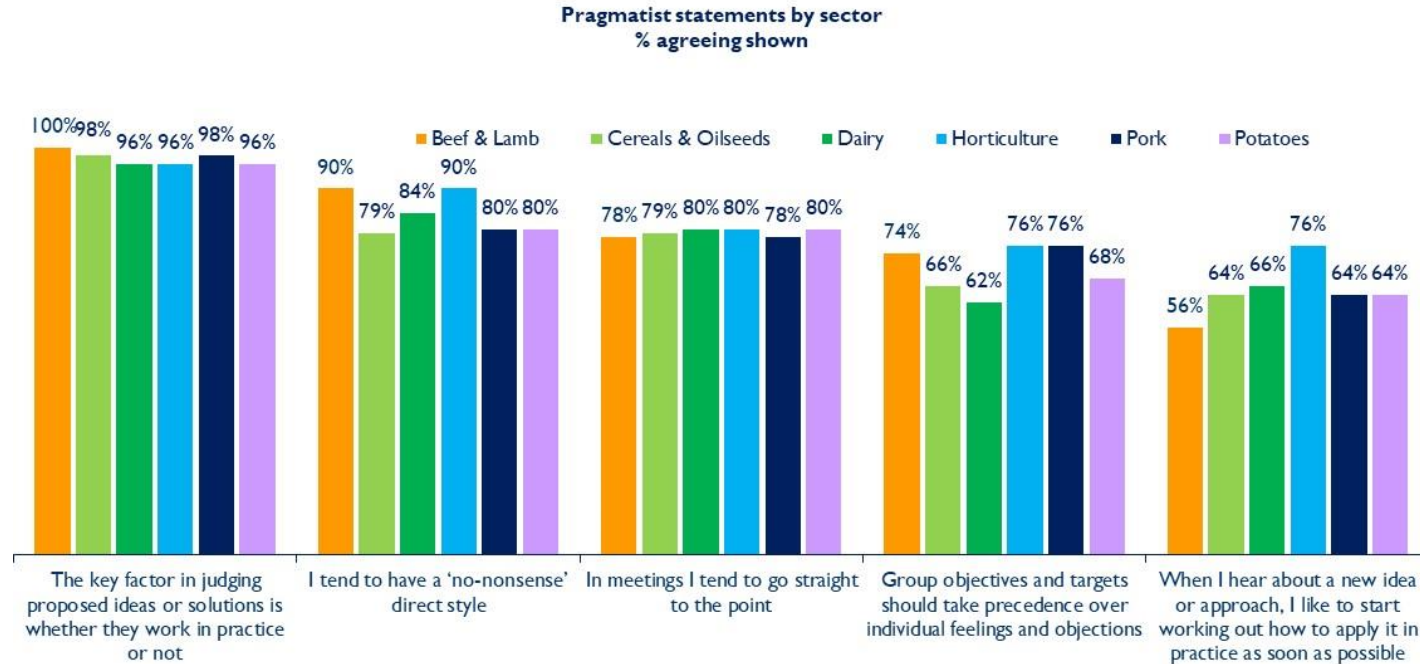
## Theorist statements also resonated; many like clear instructions and to understand theory behind actions



Source: Qa Research 2021 Base: Beef & Lamb (50); Cereals & Oilseeds (53); Dairy (50); Horticulture (50); Pork (50); Potatoes (50)

- The above chart compares responses to five **'Theorist'** statements.
- At least half of each sector, and frequently two-thirds or more, agreed with each statement. Highest levels of agreement with **'I tend to solve problems using a step by step approach, avoiding fanciful ideas'**.
- Horticulture (90%) and Potatoes (88%) are very likely to agree that **'I like exploring underlying theories and principles'**, whilst Beef & Lamb most likely to agree that **'In meetings I think I am objective and unemotional'** (86%) and that **'I dislike situations that I can't fit into a pattern'** (76%).

# Responses to *Pragmatist* statements suggest it is important for ideas to work in practice



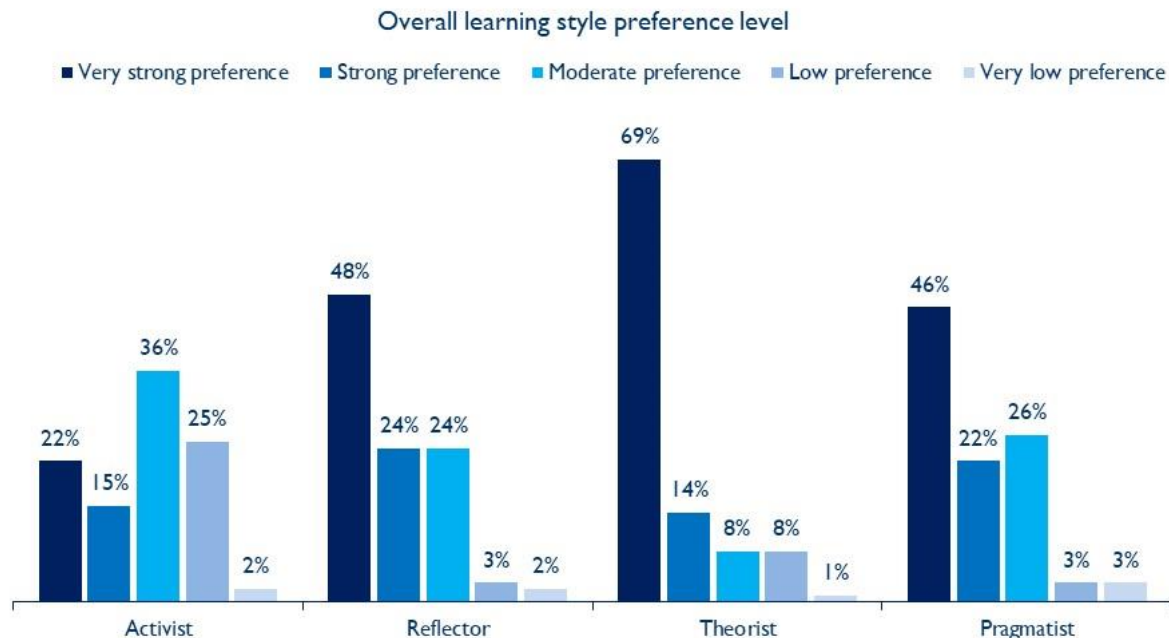
Source: Qa Research 2021 Base: Beef & Lamb (50); Cereals & Oilseeds (53); Dairy (50); Horticulture (50); Pork (50); Potatoes (50)

- The above chart compares responses to five '**Pragmatist**' statements.
- Generally two-thirds or more agreed with each statement. Almost universal agreement with '**The key factor in judging proposed ideas or solutions is whether they work in practice or not**'.
- Only limited variation by sector, *Horticulture* (76%) being most likely to agree that '**When I hear about a new idea or approach, I like to start working out how to apply it in practice as soon as possible**' and *Beef & Lamb* (56%) being the least likely.



# Farmers and Growers: Overall Learning Style Preference

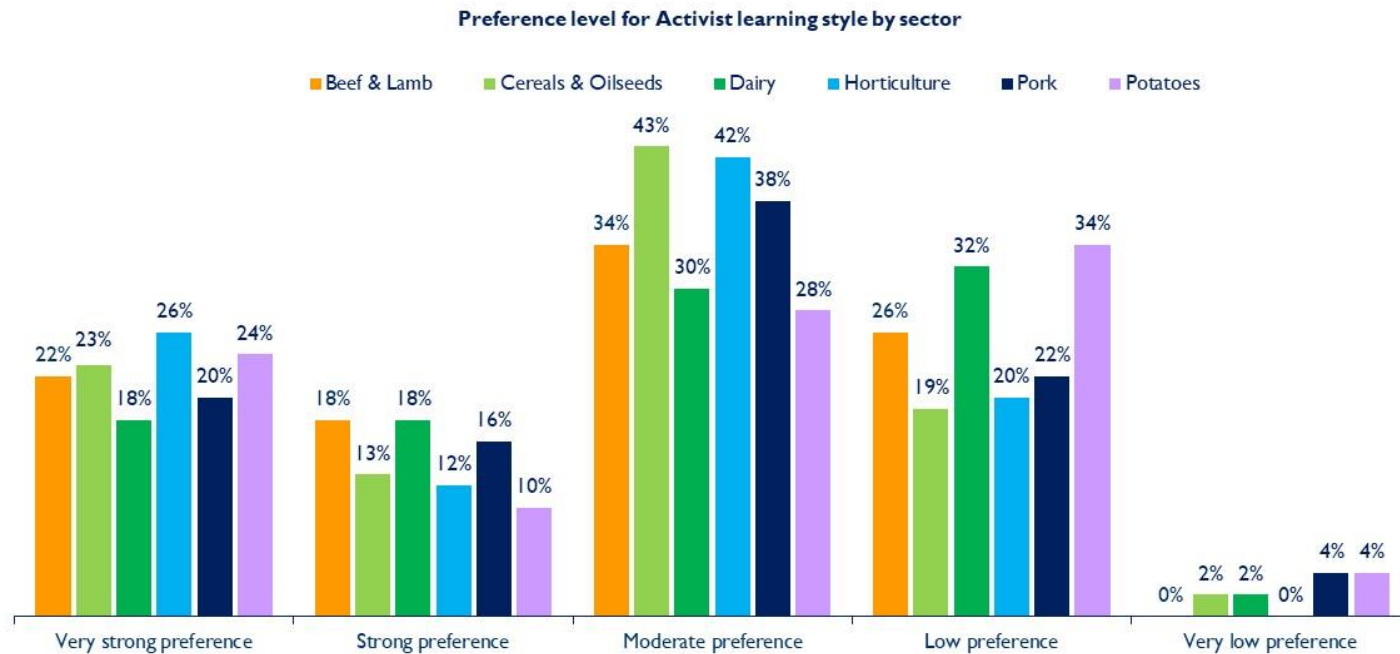
## Strongest preference for the *Theorist* style of learning overall, with lower preference levels for the *Activist* style



Source: Qa Research 2021 Base: All farmers/growers (303)

- This chart shows the overall preference rating for each of the four learning styles for all farmers/growers. It should be noted that each learning style is scored independently and hence e.g. a *very strong* preference could be recorded across multiple learning styles.
- Seven in ten (69%) farmers/growers have a *very strong* preference for the *Theorist* style of learning, making this the most dominant learning style.
- Approaching half have a *very strong* preference for the *Reflector* and *Pragmatist* styles of learning (48% and 46% respectively). Just one fifth (22%) have a *very strong* preference for the *Activist* style (this being the only style where another preference level, namely *moderate*, was the most prevalent).
- Only a small minority of respondents registered a *low* or *very low* preference, with the exception of the *Activist* style of learning (with 27% having a *low* or *very low* preference).

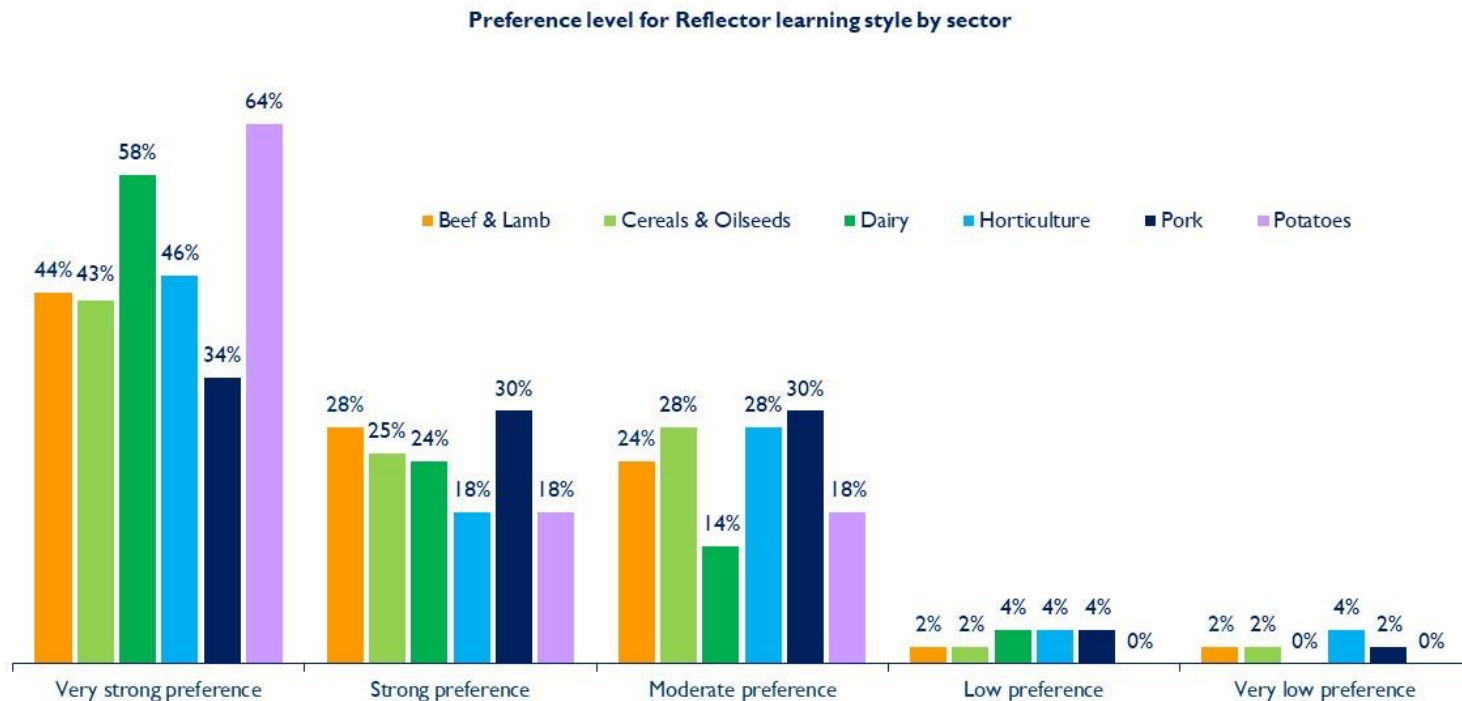
## Potatoes and Dairy sectors most likely to have low preference for the Activist learning style



Source: Qa Research 2021 Base: Beef & Lamb (50); Cereals & Oilseeds (53); Dairy (50); Horticulture (50); Pork (50); Potatoes (50)

- This chart shows preference ratings for the *Activist* learning style by AHDB sector, which as shown previously has a higher proportion of farmers/growers with a *moderate* preference.
- Some variation by sector is evident, with *Potatoes* (38%) and *Dairy* (34%) the most likely to have a *low* or *very low* preference.
- Those aged 65+ are the most likely (27%) to have a *very strong* preference for the *Activist* learning style, compared to 21% of those aged 45-64 and 20% of those aged 16-44.

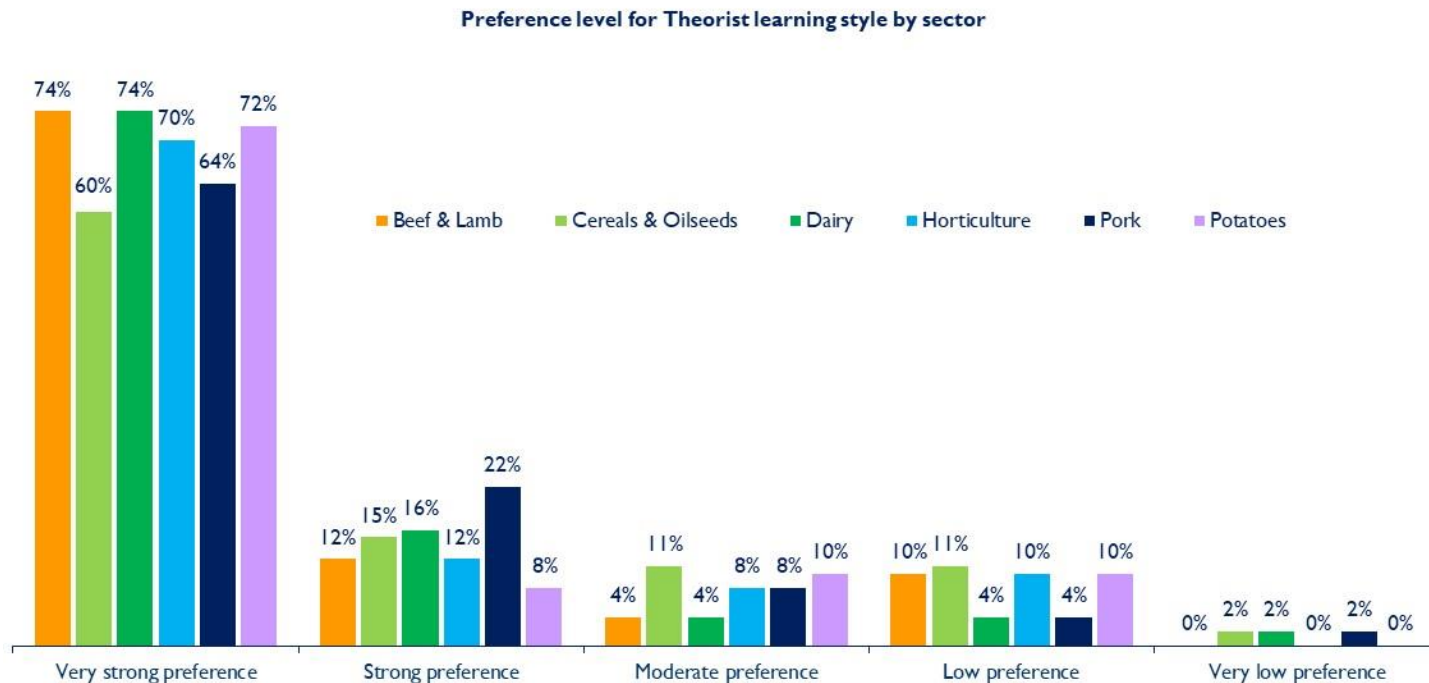
# Potatoes and Dairy most likely to have very strong preference for the Reflector learning style



Source: Qa Research 2021 Base: Beef & Lamb (50); Cereals & Oilseeds (53); Dairy (50); Horticulture (50); Pork (50); Potatoes (50)

- This chart shows preference ratings for the *Reflector* learning style for each AHDB sector. Some variation is evident, with *Potatoes* (64%) and *Dairy* (58%) the most likely to have a *very strong* preference, and *Pork* the least likely (34%).
- Very few respondents have a *low* or *very low* preference for the *Reflector* learning style, in fact all of those interviewed within the *Potatoes* sector have at least a *moderate* preference.
- Those aged 65+ are the most likely (61%) to have a *very strong* preference for the *Reflector* learning style, compared to 43% of both those aged 45-64 and 16-44.

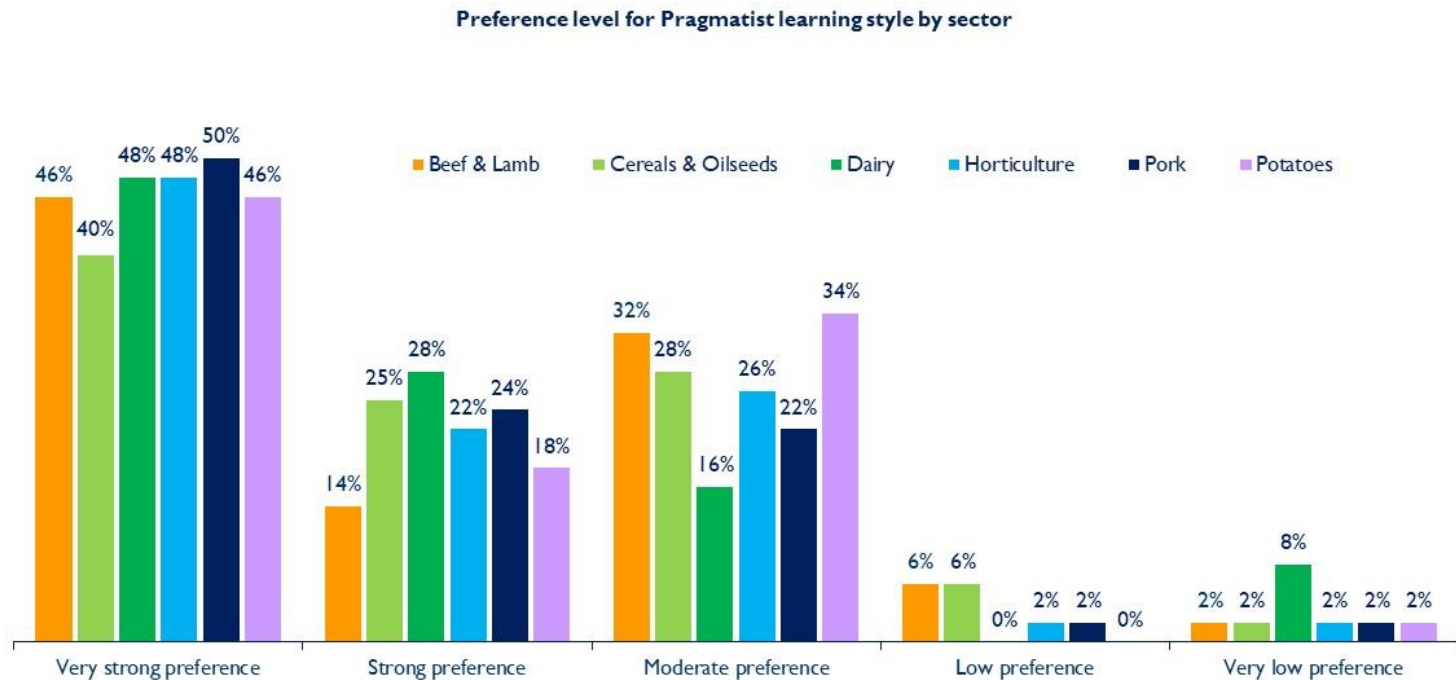
# Cereals & Oilseeds and Pork least likely to have very strong preference for the Theorist learning style



Source: Qa Research 2021 Base: Beef & Lamb (50); Cereals & Oilseeds (53); Dairy (50); Horticulture (50); Pork (50); Potatoes (50)

- This chart shows preference ratings for the *Theorist* learning style for each AHDB sector. Only minimal variation is evident, with *Cereals & Oilseeds* (60%) and *Pork* (64%) the least likely to have a *very strong* preference. However, even in these sectors only a small minority have a *moderate* or *low/very low* preference for the *Theorist* learning style.
- As with other learning styles, those aged 65+ are the most likely (78%) to have a *very strong* preference for the *Theorist* learning style, compared to 68% of those aged 45-64 and 57% of those aged 16-44. Men (70%) are also more likely than women (59%) to have a *very strong* preference, though this is not a significant difference.

# Dairy sector most likely to have very low preference for the *Pragmatist* learning style

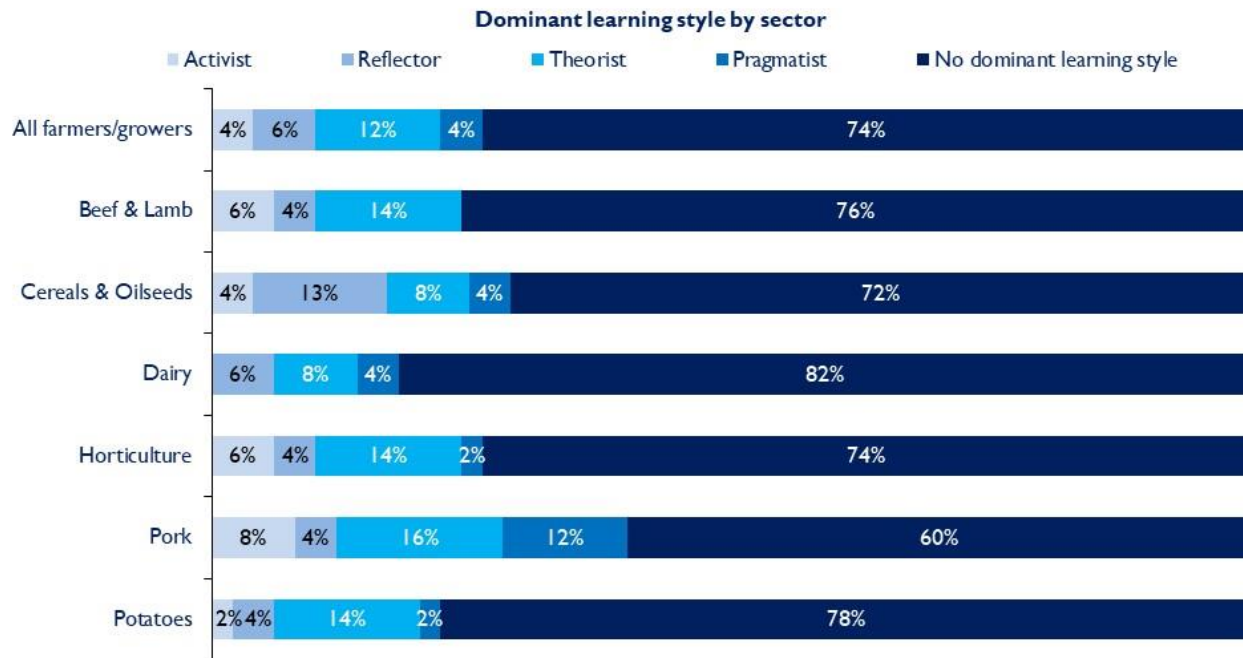


Source: Qa Research 2021 Base: Beef & Lamb (50); Cereals & Oilseeds (53); Dairy (50); Horticulture (50); Pork (50); Potatoes (50)

- This chart shows preference ratings for the *Pragmatist* learning style for each AHDB sector.
- Only minimal variation by sector is evident, particularly amongst those with a *very strong* preference. Another notable difference is that *Potatoes* and *Beef & Lamb* are the most likely to have a *moderate* preference, whilst being less likely to have a *strong* preference.
- At the other end of the scale, nearly one in ten (8%) of those in the *Dairy* sector have a *very low* preference for the *Pragmatist* learning style.

# Farmers and Growers: Dominant Learning Style

# Majority of farmers/growers do not have a single dominant learning style, though more do in *Pork*

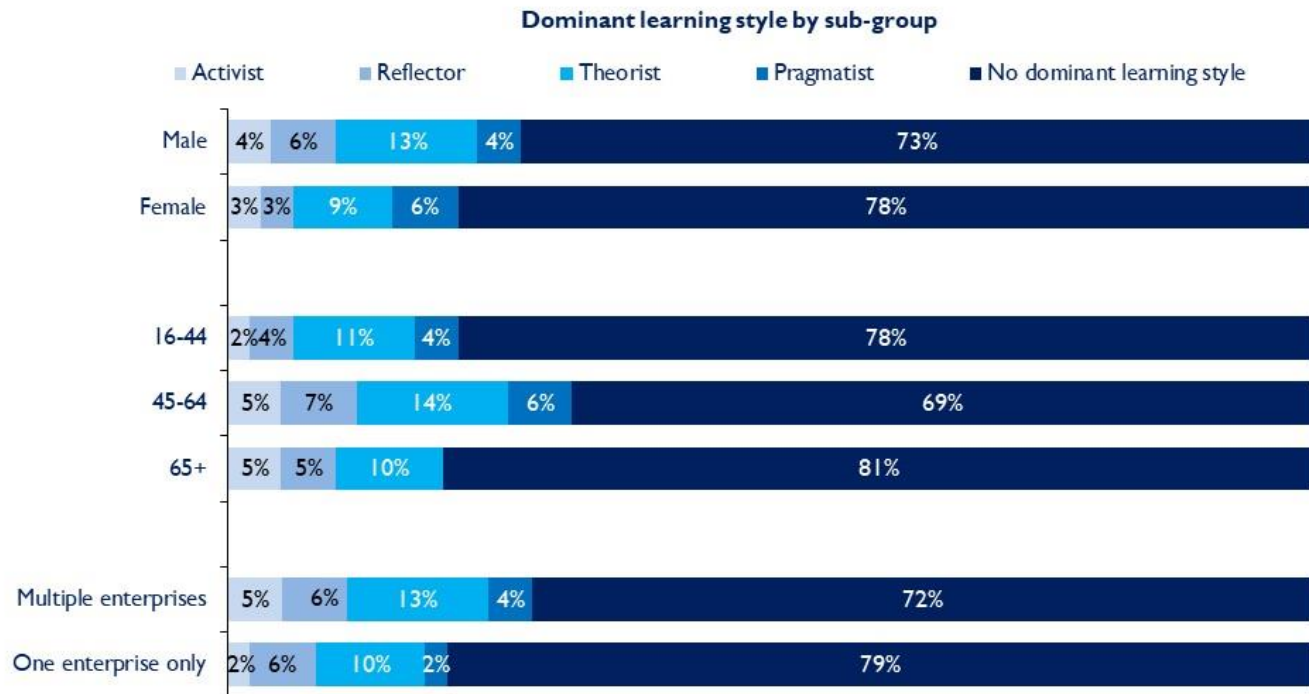


Source: Qa Research 2021 Base: All farmers/growers (303); Beef & Lamb (50); Cereals & Oilseeds (53); Dairy (50); Horticulture (50); Pork (50); Potatoes (50)

- Once a preference level has been calculated for each learning style, it is possible to determine whether an individual has a single dominant learning style or not.
- A quarter (26%) overall have a single dominant learning style, which varies from as high as 40% in the *Pork* sector to as low as 18% in *Dairy*.
- The most common is the *Theorist* learning style (12% overall, increasing to 16% in *Pork*), which is unsurprising given the very high proportion with a very strong preference. Other notable findings being that 13% of the *Cereals & Oilseeds* sector have a dominant *Reflector* learning style and 12% of the *Pork* sector have a dominant *Pragmatist* learning style, which are both very low in all other sectors (including no dominant *Pragmatists* in *Beef & Lamb*). Also, no dominant *Activist* learning style was found in the *Dairy* sector.



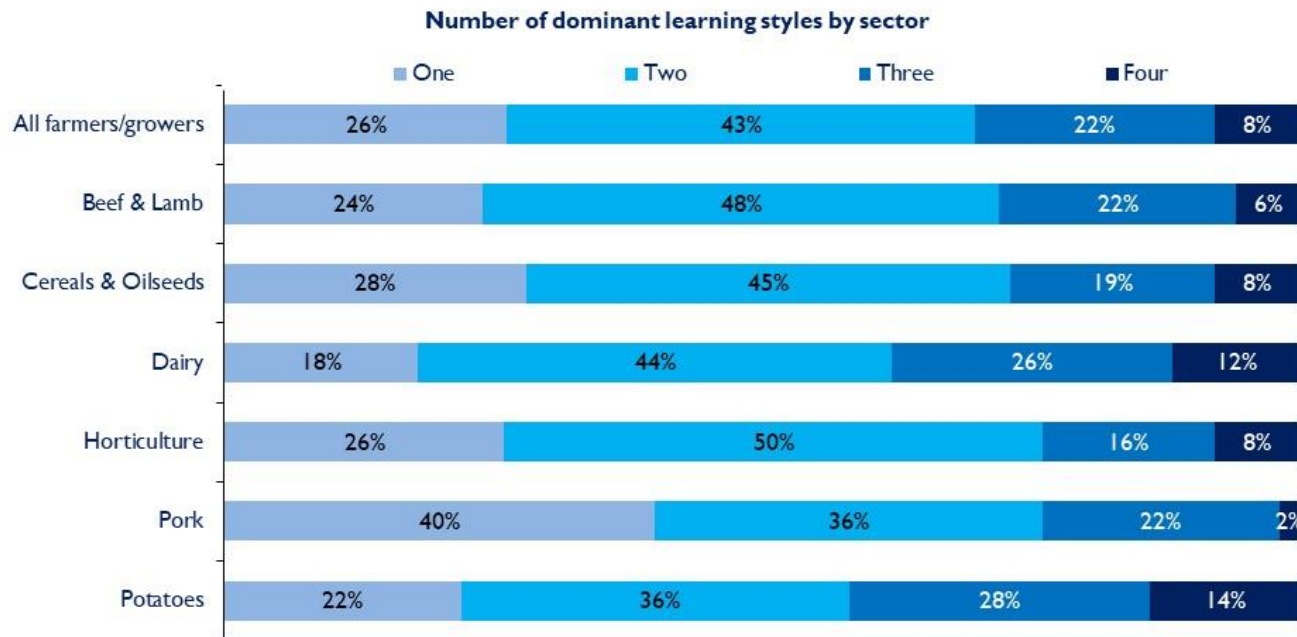
# Men, those aged 45-64 and those with multiple enterprises all more likely to have a dominant learning style



**Source:** Qa Research 2021 **Base:** Male (270); Female (32); 16 to 44 (46); 45 to 64 (174); 65+ (83); Multiple enterprises (199); One enterprise only (86)

- As shown in the above chart, men (27%), those aged 45-64 (31%) and those with multiple enterprises (28%) are all slightly more likely to have a dominant learning style.
- The *Theorist* learning style is the most commonly dominant across all sub-groups. One finding of note is that there are no dominant *Pragmatist* learning styles amongst the 65+ age group.

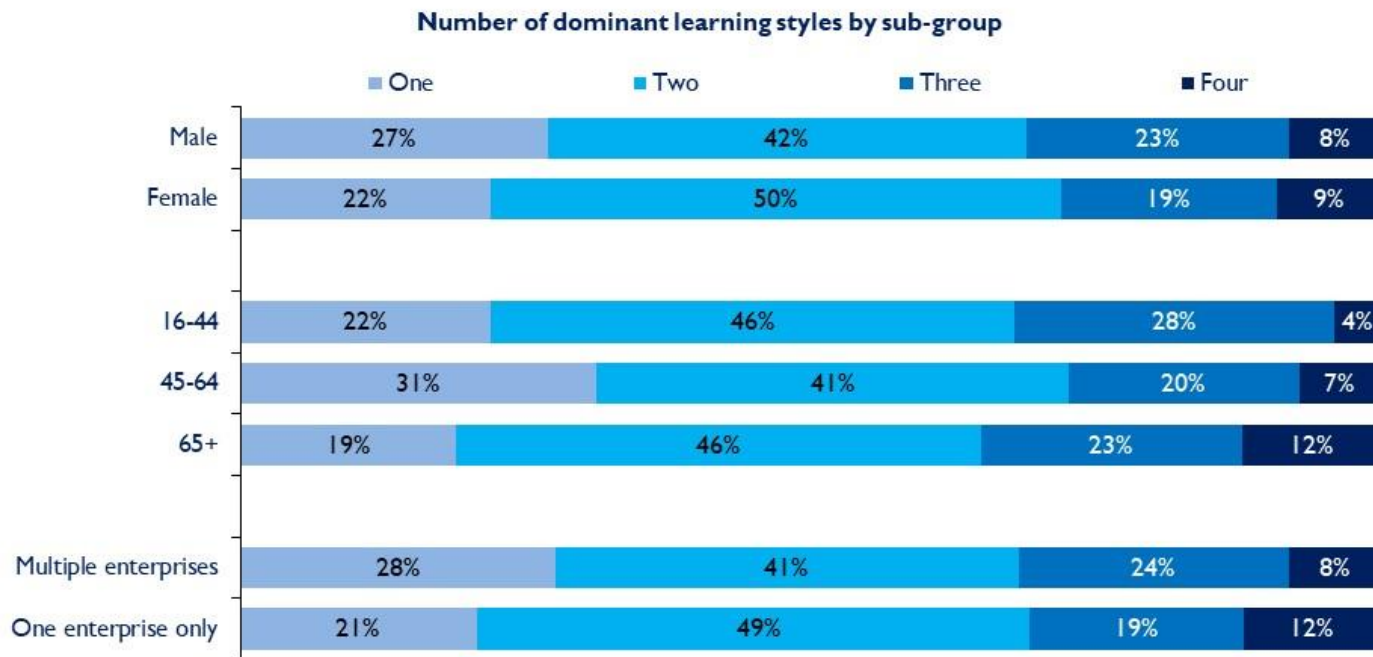
## Three in ten farmers/growers have 3 or 4 joint highest preferences, particularly *Potatoes* and *Dairy*



Source: Qa Research 2021 Base: All farmers/growers (303); Beef & Lamb (50); Cereals & Oilseeds (53); Dairy (50); Horticulture (50); Pork (50); Potatoes (50)

- With such a high proportion of farmers/growers not having a single dominant learning style, further analysis has been undertaken to identify the number of dominant styles that exist. It should be noted that whilst the vast majority (86%) of the sector have at least one *very high* preference, a further 11% have a highest preference that is *strong*, a tiny minority (3%) have a highest preference that is *moderate* and less than 0.5% have a highest preference that is only *low*.
- As seen previously, a quarter (26%) overall have a single dominant learning style, whilst a further 43% have two learning styles ranking equally as their highest preference. However, a further fifth (22%) have three equal highest preferences and nearly one in ten (8%) have an equal preference for all four learning styles. These individuals have a truly multimodal approach and will adapt to learning depending on the situation.
- Some variation is evident by sector, most notably that *Pork* has the highest proportion with a single learning style (40%) and only a tiny minority (2%) have an equal preference for all four learning styles. *Potatoes* (42%) and *Dairy* (38%) have a more multimodal preference NET: *three or four*.

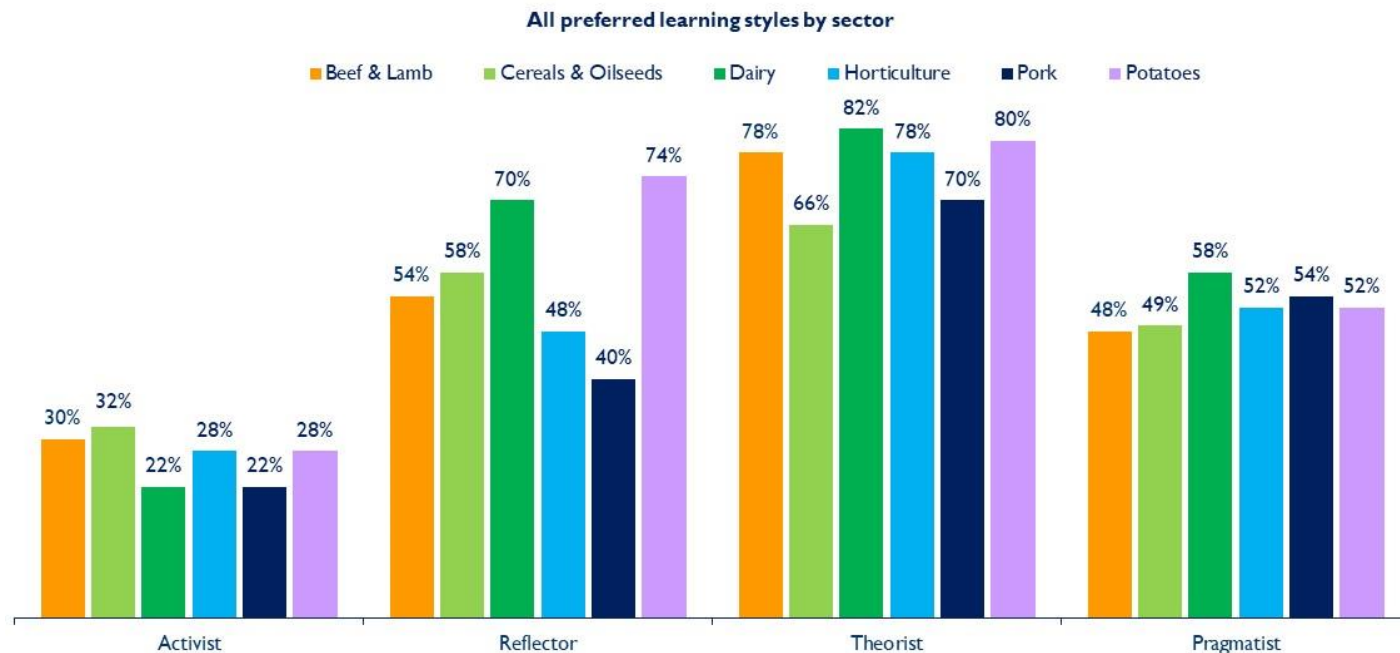
## Only slight variation in number of dominant learning styles by sub-group



Source: Qa Research 2021 Base: Male (270); Female (32); 16 to 44 (46); 45 to 64 (174); 65+ (83); Multiple enterprises (199); One enterprise only (86)

- Only slight variation is evident by sub-sector and as shown previously, men (27%), those aged 45-64 (31%) and those with multiple enterprises (28%) are all slightly more likely to have a single dominant learning style.
- At the other end of the scale, those aged 16-44 (4%) are slightly less likely than those aged 45-64 (7%) or 65+ (12%) to have an equal preference for all 4 learning styles. Perhaps surprisingly, those with multiple enterprises (8%) are slightly less likely than those with a single enterprise (12%) to have an equal preference for all 4 learning styles, however, when broadening the scope slightly to include NET: three or four there was little difference between the two.

# Highest preference as *Theorists* in all sectors, though *Potatoes* and *Dairy* also likely to be *Reflectors*

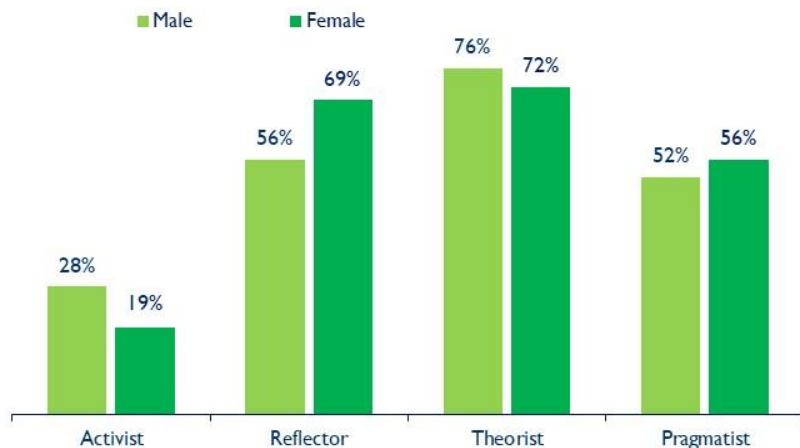


Source: Qa Research 2021 Base: Beef & Lamb (50); Cereals & Oilseeds (53); Dairy (50); Horticulture (50); Pork (50); Potatoes (50)

- The above chart shows a total proportion within each sector that have a preference for each learning style. This includes all highest preferences, whether an individual has a single preferred learning style or an equal preference for all four. Mirroring the fact that the *Theorist* learning style has the highest levels of very *strong* preference and that it is the most common single dominant style, it is also the most common learning style for all sectors (whether as a single or multimodal preference), though a little lower for *Cereals & Oilseeds* (66%) and *Pork* (70%).
- The greatest level of variation is evident amongst *Reflectors*, with three-quarters (74%) of the *Potatoes* sector having a preferred *Reflector* learning style (whether as a single or multimodal preference), followed by *Dairy* (70%). At the other end of the scale *Horticulture* (48%) and *Pork* (40%) are much less likely to be *Reflectors*.
- Around half of each sector have a preferred *Pragmatist* learning style (single or multimodal) and finally around a quarter have a preferred *Activist* learning style.

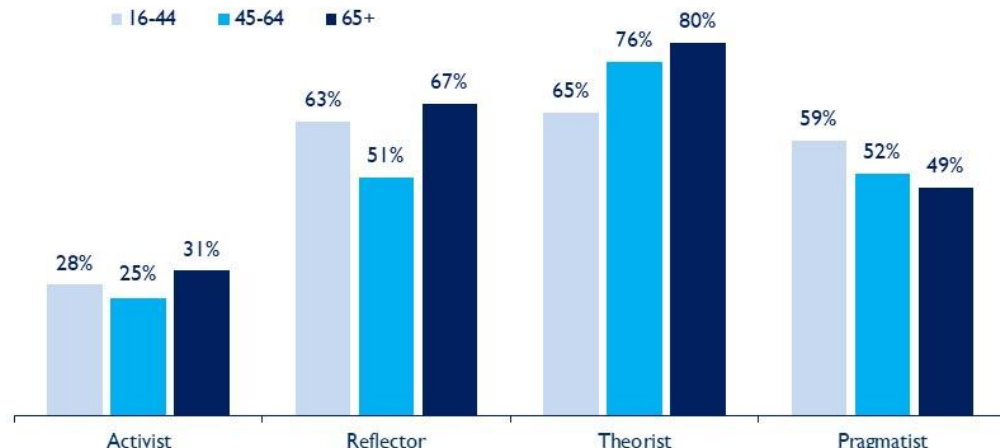
## Some sub-group variation, though often mirrors demographic profile of sector sample

All preferred learning styles by gender



Source: Qa Research 2021 Base: Male (270); Female (32)

All preferred learning styles by age

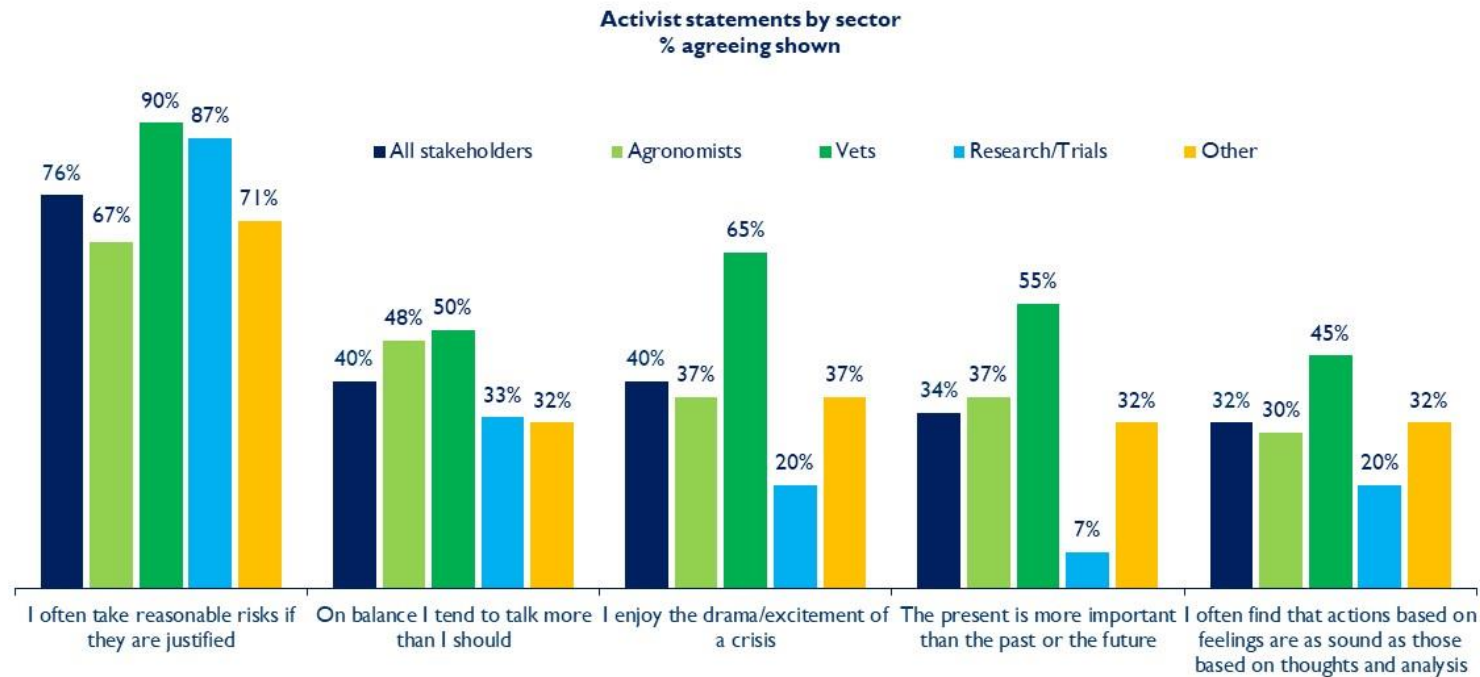


Source: Qa Research 2021 Base: 16 to 44 (46); 45 to 64 (174); 65+ (83)

- Some sub-group variation exists in preferred learning style (whether single or multimodal). As shown in the above chart, women (69%) are more likely than men (56%) to have a preferred *Reflector* learning style, though this may be linked to sector profile as men make up a relatively larger proportion of the *Pork* and *Horticulture* samples (these sectors being the least likely to be *Reflectors*). Men (28%) are also more likely than women (19%) to be *Activists*.
- Those aged 65+ (80%) are the most likely to be *Theorists*, compared to 76% of those aged 45-64 and 65% of those aged 16-44. Interestingly the 45-64 age group (51%) are much less likely than others to be *Reflectors*. Again, these trends could link to the age profile of each sector e.g. the younger age profile of the *Pork* sample.

# Stakeholders: Learning Style Statements

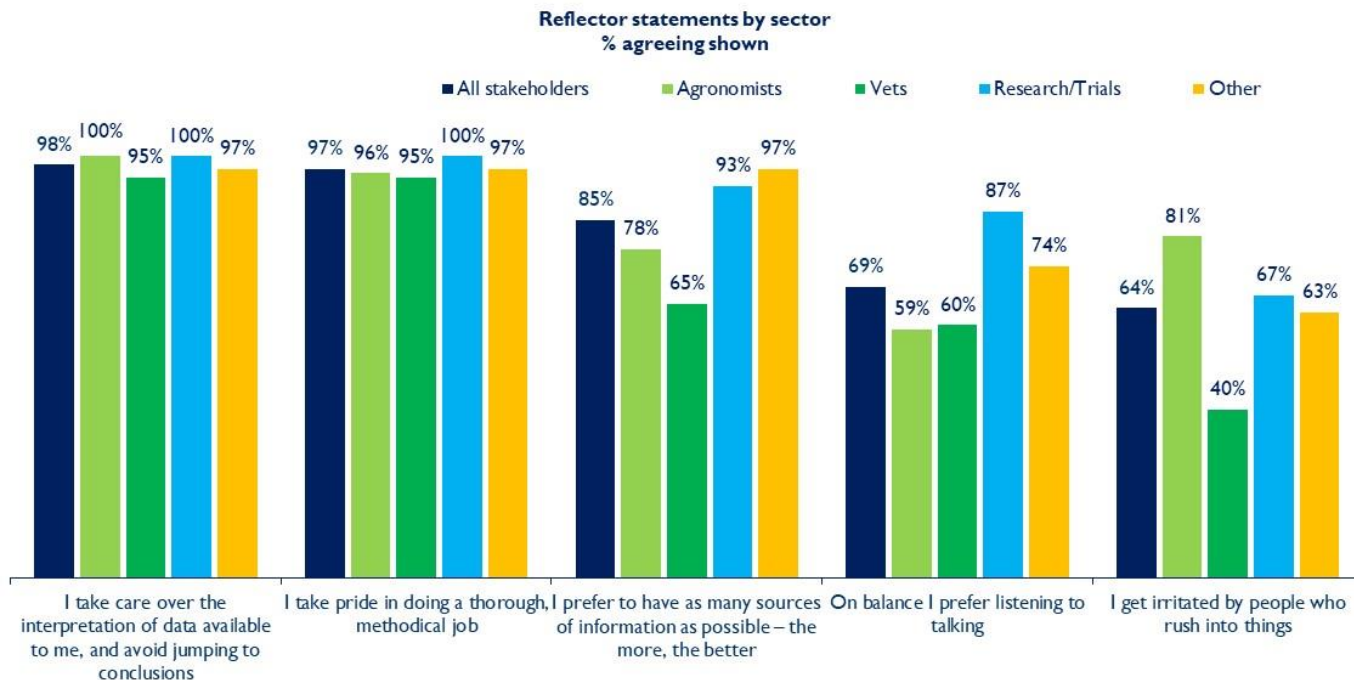
# Stakeholders often take justifiable risks, but vets most likely to display other Activist traits



Due to low base sizes the sub-group data should be treated with caution. Source: Qa Research 2021 Base: All stakeholders (100); Agronomists (27); Vets (20); Research/Trials (15); Other (38)

- Before moving to look at overall learning style preferences, this section looks at some individual statements attributed to each of the four learning style scores. The above chart compares responses to five **'Activist'** statements.
- There is considerable variation by statement, with three-quarters agreeing that **'I often take reasonable risks if they are justified'**, though Vets (90%) and Other roles (87%) are the most likely to agree with this statement.
- Across all other statements Vets tended to be much more likely to agree, for example, that **'I enjoy the drama/excitement of a crisis'** (65%); **'The present is more important than the past or the future'** (55%); and **'I often find that actions based on feelings are as sound as those based on thoughts and analysis'** (45%).

## Reflector statements suggest stakeholders do a thorough job, but job type dictates other traits



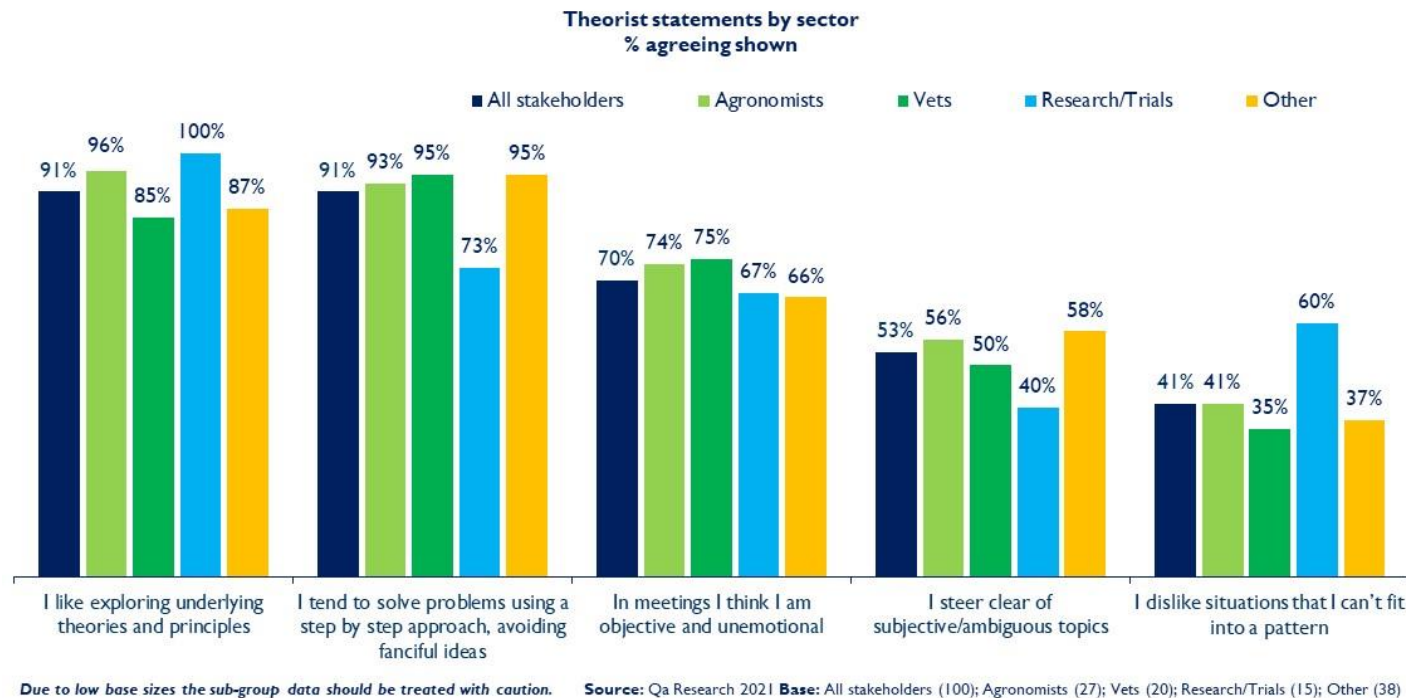
Due to low base sizes the sub-group data should be treated with caution.

Source: Qa Research 2021 Base: All stakeholders (100); Agronomists (27); Vets (20); Research/Trials (15); Other (38)

- The above chart compares responses to five 'Reflector' statements.
- Almost universal agreement with '*I take care over the interpretation of data available to me, and avoid jumping to conclusions*' and '*I take pride in doing a thorough, methodical job*'.
- Opinion more split on other statements with notable trends including: Vets (65%) *least* likely to agree that '*I prefer to have as many sources of information as possible*'; and Agronomists (81%) *most* likely to agree that '*I get irritated by people who rush into things*'. Specific job role would appear to impact on such characteristics.

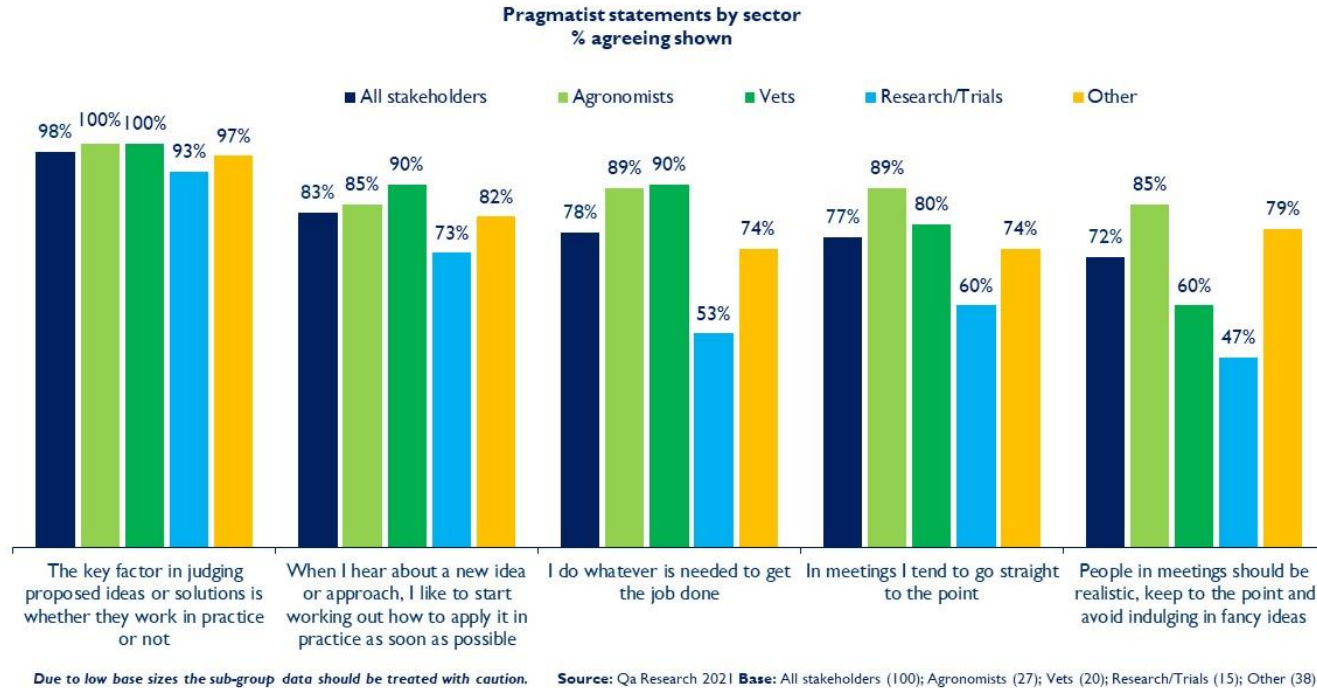


# Stakeholders more varied in their responses to *Theorist* statements compared to farmers/growers



- The above chart compares responses to five '**Theorist**' statements.
- A large proportion of stakeholders agree that '***I like exploring underlying theories and principles***' and '***I tend to solve problems using a step by step approach, avoiding fanciful ideas***'.
- Stakeholders of all types are less likely to agree with other statements, particularly '***I dislike situations that I can't fit into a pattern***' (just 41% agreeing), although those working in **Research/Trials** are more likely to agree (60%), again suggesting that job role would appear to impact on specific characteristics.

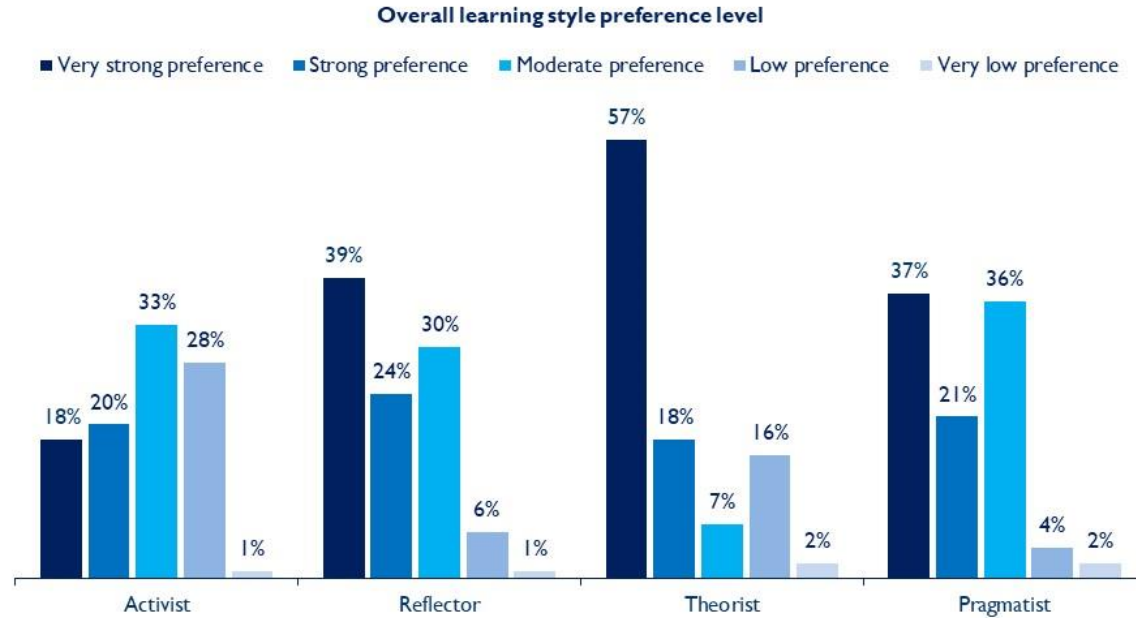
# Job role has a significant bearing on *Pragmatist* learning style traits



- The above chart compares responses to five '**Pragmatist**' statements.
- Almost universal agreement with '***The key factor in judging proposed ideas or solutions is whether they work in practice or not***'.
- There is significant variation by sector on other statements, with Agronomists tending to have a high level of agreement and those working in Research/Trials being *least* likely to agree e.g. 85% of Agronomists compared to 47% Research/Trials agreed that '***People in meetings should be realistic, keep to the point and avoid indulging in fancy ideas***'.

# *Stakeholders: Overall Learning Style Preference*

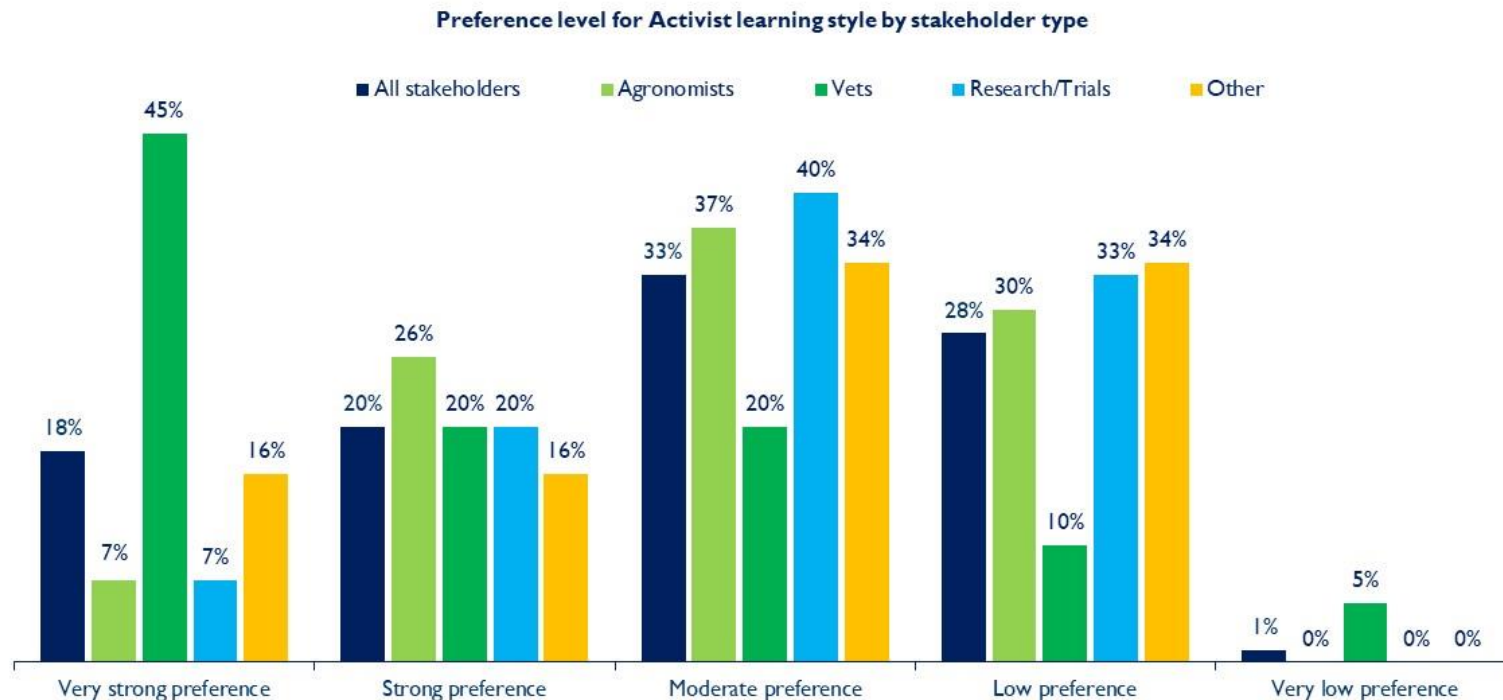
# Stakeholders have more varied preference levels across all four learning styles



Source: Qa Research 2021 Base: All stakeholders (100)

- This chart shows the overall preference rating for each of the four learning styles for all stakeholders. It should be noted that each learning style is scored independently and hence e.g. a *very strong* preference could be recorded across multiple learning styles.
- Approaching six in ten (57%) stakeholders have a *very strong* preference for the *Theorist* style of learning, which like farmers/growers, makes it the most dominant learning style.
- Approaching two-fifths have a *very strong* preference for each of the *Reflector* and *Pragmatist* styles of learning (39% and 37% respectively). Whilst just one-fifth (18%) have a *very strong* preference for the *Activist* style of learning.
- Compared to farmers/growers, stakeholders have more varied preference levels, even though the proportion registering a *low* or *very low* preference is still very small, with the exception of the *Activist* and *Theorist* styles of learning (with 28% and 16% respectively recording a *low* preference).

# Vets more likely to have very strong preference for *Activist* learning style

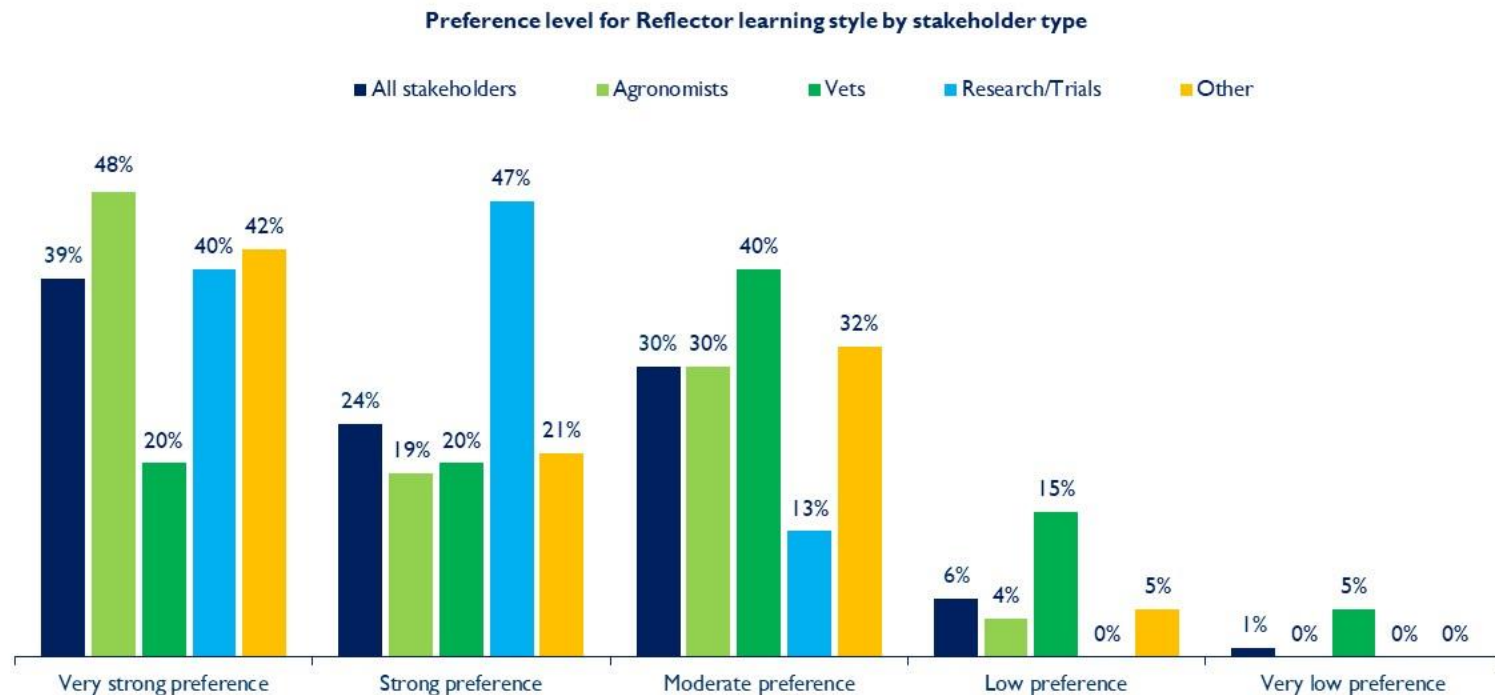


Due to low base sizes the sub-group data should be treated with caution.

Source: Qa Research 2021 Base: All stakeholders (100); Agronomists (27); Vets (20); Research/Trials (15); Other (38)

- This chart shows preference ratings for the *Activist* learning style by stakeholder type, which overall has the highest proportion with a *moderate* preference.
- However, approaching half (45%) of *Vets* have a *very strong* preference, compared to just 7% of both *Agronomists* and those working in *Research/Trials*.

## Vets have the weakest and Research/Trials the strongest preference for the Reflector learning style

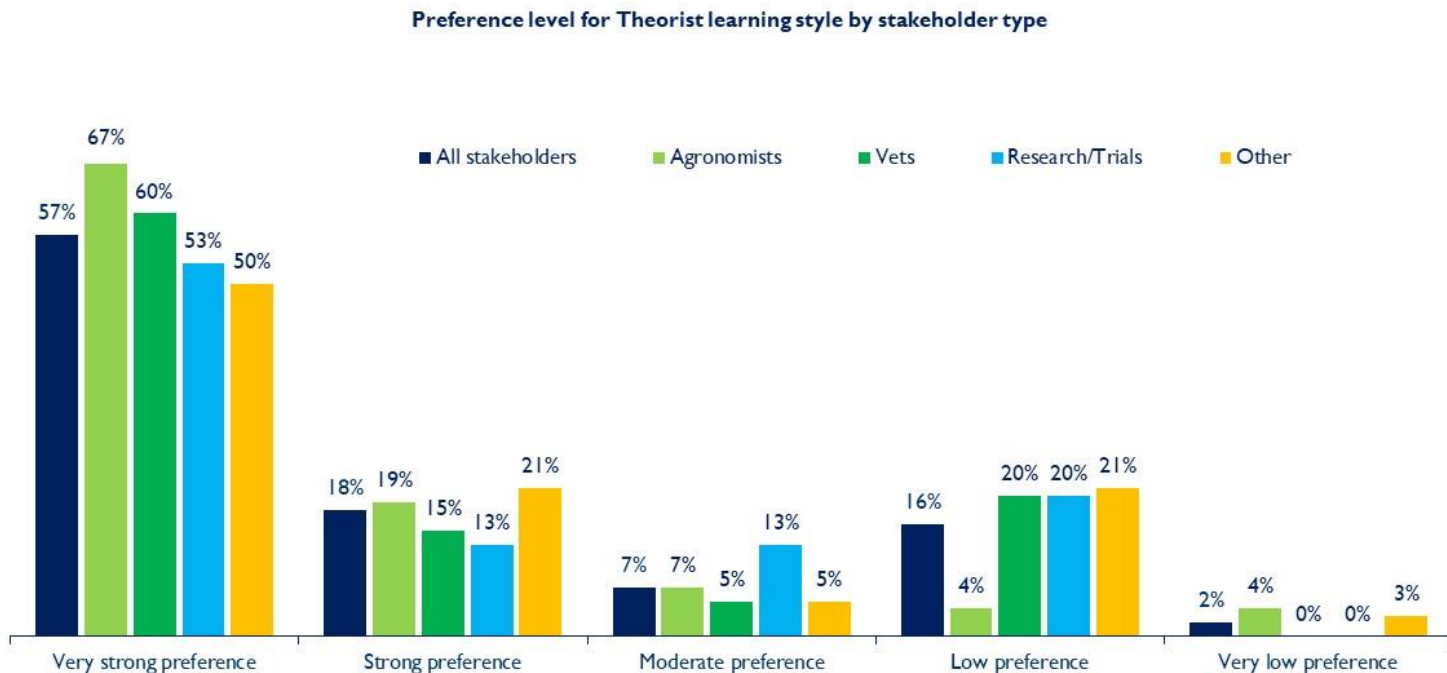


Due to low base sizes the sub-group data should be treated with caution.

Source: Qa Research 2021 Base: All stakeholders (100); Agronomists (27); Vets (20); Research/Trials (15); Other (38)

- This chart shows preference ratings for the *Reflector* learning style by stakeholder type.
- Most notably Vets (20%) are less likely to have a *very strong* preference than all other stakeholder types and also more likely to have a *low* or *very low* preference (15% and 5% respectively). Those working in *Research/Trials* all have at least a *moderate* preference for the *Reflector* learning style.

## Agronomists have the strongest preference for the *Theorist* learning style

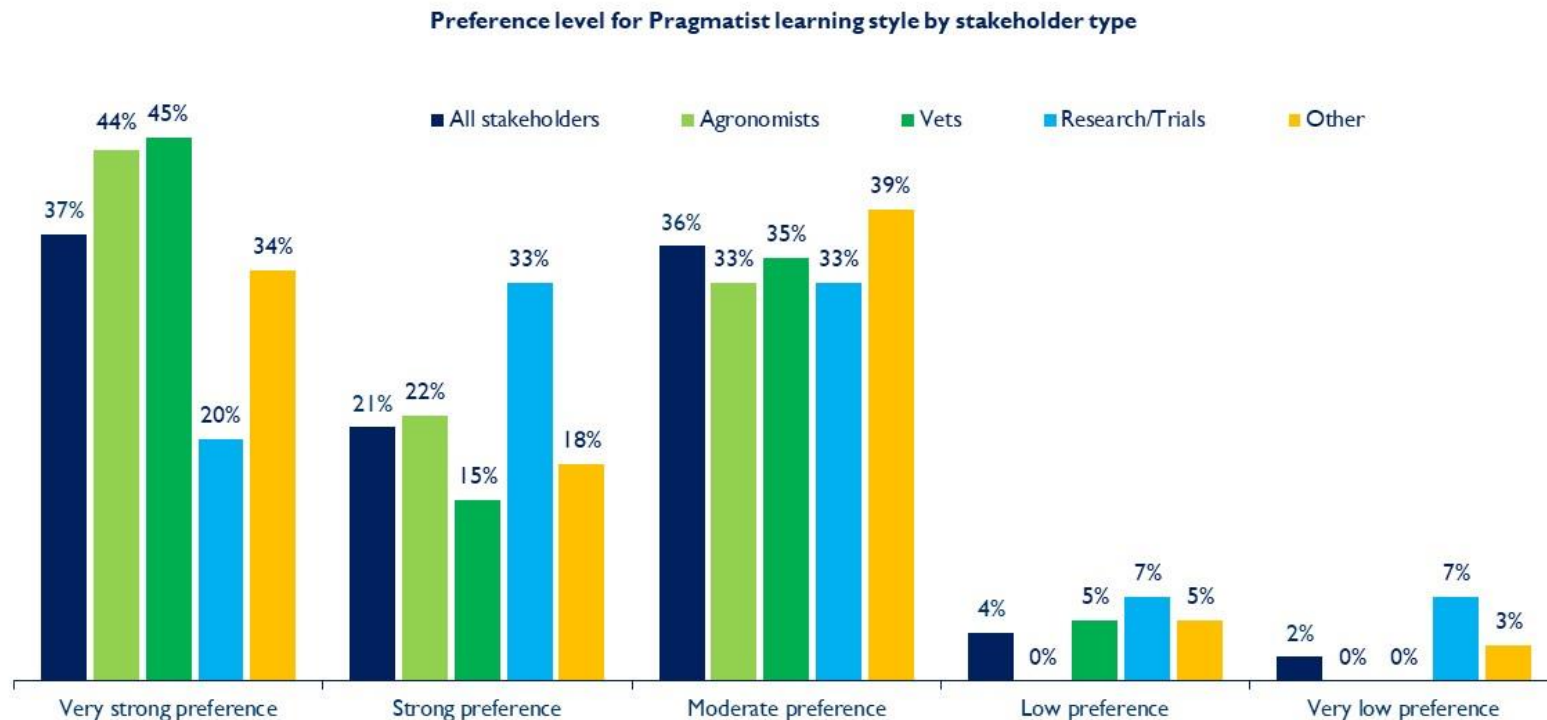


Due to low base sizes the sub-group data should be treated with caution.

Source: Qa Research 2021 Base: All stakeholders (100); Agronomists (27); Vets (20); Research/Trials (15); Other (38)

- This chart shows preference ratings for the *Theorist* learning style by stakeholder type.
- More than half of all stakeholder types have a *very strong* preference for the *Theorist* learning style, rising as high as 67% of Agronomists. At the other end of the scale, just 8% of Agronomists have a *low* or *very low* preference.

## Those working in *Research/Trials* have the lowest preference for the *Pragmatist* learning style



Due to low base sizes the sub-group data should be treated with caution.

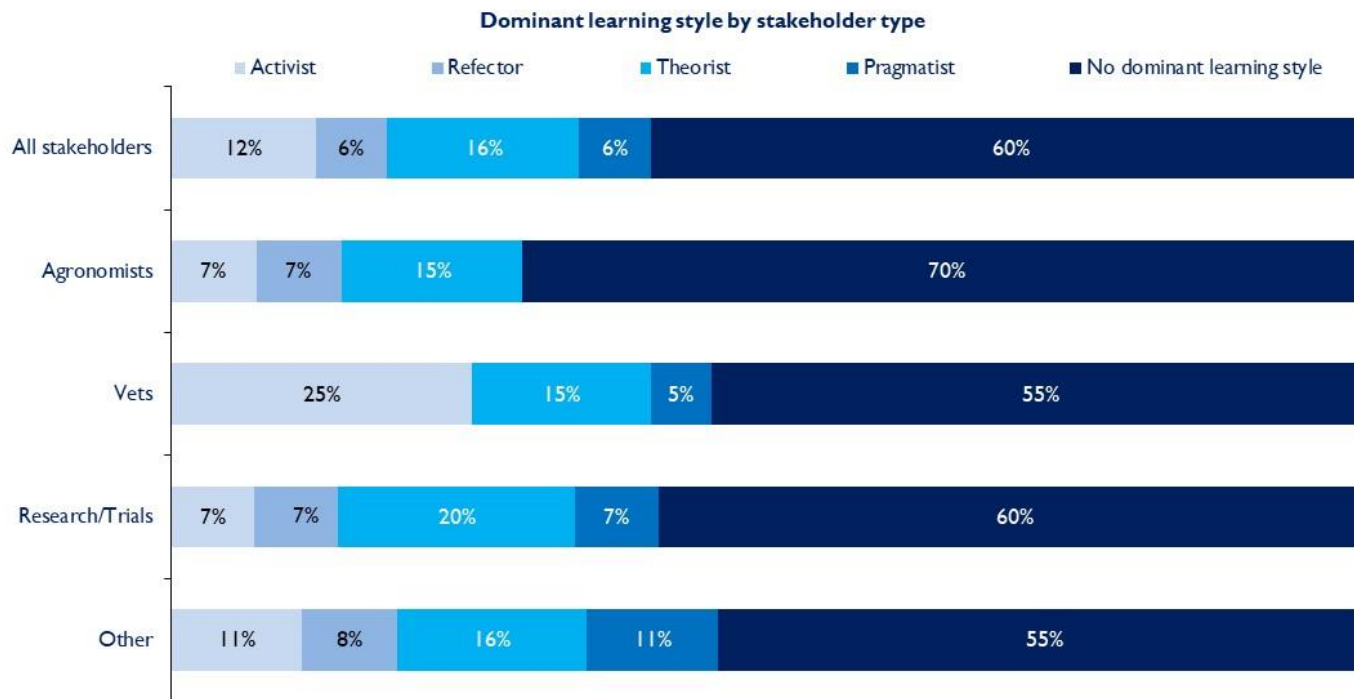
Source: Qa Research 2021 Base: All stakeholders (100); Agronomists (27); Vets (20); Research/Trials (15); Other (38)

- This chart shows preference ratings for the *Pragmatist* learning style by stakeholder type. Stakeholders working in *Research/Trials* (20%) are the least likely to have a *very strong* preference.
- At the other end of the scale, 14% of those working in *Research/Trials* have a *low* or *very low* preference. *Agronomists* all have at least a *moderate* preference for the *Pragmatist* learning style.



# Stakeholders: Dominant Learning Style

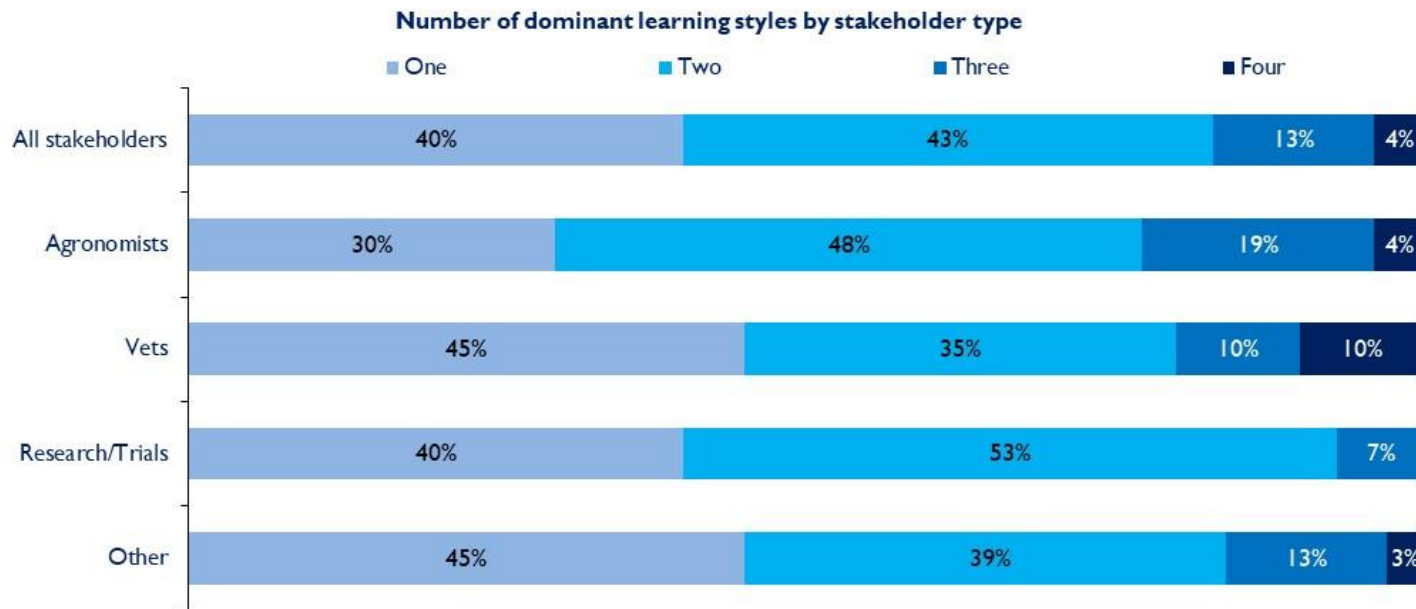
# Stakeholders more likely to have a single dominant learning style, with Vets twice as likely to be Activists



Due to low base sizes the sub-group data should be treated with caution. Source: Qa Research 2021 Base: All stakeholders (100); Agronomists (27); Vets (20); Research/Trials (15); Other (38)

- As with farmers/growers it is possible to determine whether an individual has a single dominant learning style or not.
- Two-fifths (40%) of all stakeholders have a single dominant learning style, which varies from as high as 45% of Vets and those in Other roles to as low as 30% of Agronomists.
- Despite the most common dominant learning style being a Theorist (16% overall), just over one in ten (12%) have a dominant Activist learning style, rising to 25% of Vets. No dominant Reflector learning style was found amongst Vets and no dominant Pragmatist learning style was found amongst Agronomists.

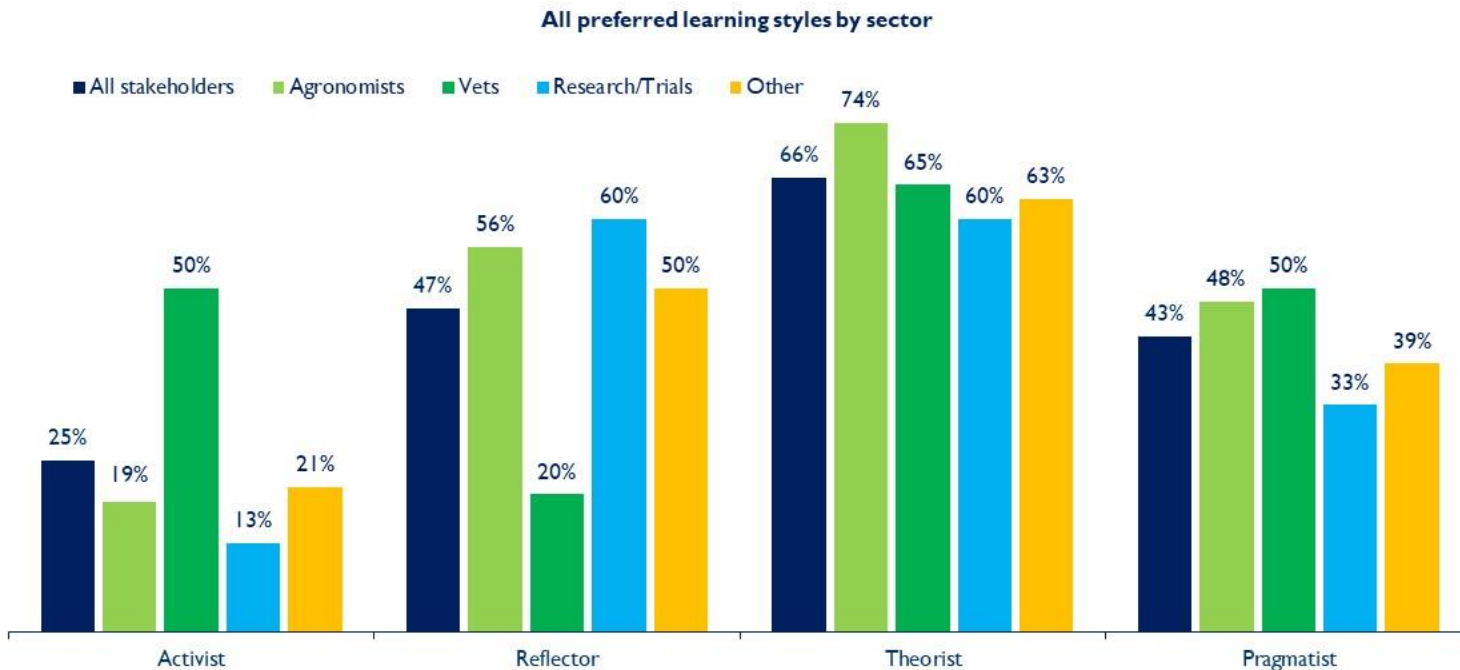
# Job role linked to likelihood of having multimodal learning style preferences



Due to low base sizes the sub-group data should be treated with caution. Source: Qa Research 2021 Base: All stakeholders (100); Agronomists (27); Vets (20); Research/Trials (15); Other (38)

- Further analysis has again been undertaken to identify the number of dominant styles that exist amongst stakeholder groups. It should be noted that whilst the vast majority (83%) of the sector have at least one very high preference, a further 15% have a highest preference that is strong, and a tiny minority (2%) have a highest preference that is moderate.
- As seen previously, two-fifths (40%) overall have a dominant learning style, with a further 43% having two learning styles ranking equally as their highest preference. However, a further 13% have three equal highest preferences and a small minority (4%) have an equal preference for all four learning styles. These individuals have a truly multimodal approach and will adapt to learning depending on the situation.
- Some variation is evident by stakeholder group, most notably that Agronomists has the lowest proportion with a single learning style (30%) and the highest proportion (23%) with a more multimodal preference NET: three or four. However, Vets are the most likely to have an equal preference for all four learning styles (10%). No stakeholders working in Research/Trials have an equal preference for all four learning styles.

# Highest preference as *Theorists*, though *Vets* very likely to be *Activists* but not *Reflectors*



Due to low base sizes the sub-group data should be treated with caution. Source: Qa Research 2021 Base: All stakeholders (100); Agronomists (27); Vets (20); Research/Trials (15); Other (38)

- The above chart shows a total proportion within each sector that have a preference for each learning style. This includes all highest preferences, whether an individual has a single preferred learning style or an equal preference for all four. Mirroring the fact that the *Theorist* learning style has the highest levels of very strong preference and that it is the most common single dominant style, it is also the most common learning style for all stakeholder groups.
- An interesting pattern emerges amongst *Vets*, who are much more likely than other stakeholder groups to be *Activists* (50%) and much less likely than other stakeholder groups to be *Reflectors* (20%).

# Appendix: Algorithm calculations

# Algorithm calculations tables

- To calculate scores, 40 questions were asked in a predetermined order, with 10 mapping to each 'learning style'
- A point was given when a respondent 'agreed' with a statement, and a total was calculated for each learning style using the below table.

Activist	Reflector	Theorist	Pragmatist
1	8	2	3
4	10	7	5
12	11	9	6
18	16	13	15
22	19	14	20
24	21	17	26
25	23	30	28
27	29	37	33
36	31	38	34
40	32	39	35

- The score for each learning style was then multiplied by 2 and used to determine a preference rating using this matrix ➡

Activist	Reflector	Theorist	Pragmatist	Preferences
20	20	20	20	Very strong preference
19				
18		19		
17			19	
16	19	18		
15			18	Strong preference
14		17		
13	18	16	17	
12	17	15	16	
	16			
11	15	14	15	
10	14	13	14	Moderate preference
9	13	12	13	
8				
7	12	11	12	
6	11	10	11	Low preference
5	10	9	10	
4	9	8	9	
3	8	7	8	
	7	6	7	Very low preference
	6	5	6	
2	5	4	5	
	4		4	
1	3	3	3	
	2	2	2	
	1	1	1	
0	0	0	0	



This research was carried out in compliance with  
ISO 20252, (the International Standard for Market and Social research),  
The Market Research Society's Code of Conduct & UK Data Protection law.



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