

**A Study of How Advisors Use Decision Support Tools to Aid Farmer  
Decision Making – The Case of the e-Profit Monitor.**

**A Thesis Submitted to University College Dublin in Fulfilment of the Requirements for  
the Degree of Masters in Agricultural Extension and Innovation**

**By**

**Aileen Anne McCarron (B.Agr.Sc)**

**11369606**



**<sup>1</sup>UCD School of Agriculture and Food Science,**

**University College Dublin**

**Belfield, Dublin 4.**



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## Declaration

I declare that this thesis has not been previously submitted as an exercise for a degree at the National University of Ireland, or any other University, and I further declare that the work embodied in it is my own.

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Aileen McCarron

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## Abstract

The role of the agricultural advisor is a complex one. Influencing farmers to change or adopt new practices does not simply involve presenting information it requires a deeper understanding of the attitude and motivation of each individual farmer. Understanding what motivates people is an important starting point in setting out to influence people (*Macken-Walsh, 2016*). Therefore, the development of a good relationship between the advisor and the farmer is essential.

This research focused on how advisors decide on the best approach to take when advising clients with different attitudes and motivations towards the progression of their farm business. The study outlines the advisors use of the eProfit Monitor with drystock clients in three main advisory regions<sup>1</sup>. This provided an insight into the advisors view of the factors influencing farmer attitude towards and motivation to use the eProfit Monitor within the drystock sector.

The research methods comprised of semi-structured interviews and surveys administered to Teagasc drystock advisors. The study sample was 27 drystock advisors with five of these selected to carry out semi-structured interviews with. The aim of the survey was to provide an insight into advisors views and opinions on the best approach to take when advising clients with different needs and outlooks as well as their considerations for each client they deal with. The interviews then provided the opportunity for advisors to expand further on their opinions and provide a greater insight into their advisory approach. The advisors were divided into groups (low, medium, high) depending on their usage of the eProfit Monitor in 2016 which provided a basis for further analysis of results obtained as part of the survey.

The study found that advisors with a higher number of clients completing the eProfit Monitor recognise a wider range of motivations among their clients for completing the eProfit Monitor. They have a more varied view of the factors motivating their clients to use the eProfit Monitor than advisors with low to medium use of the eProfit Monitor. The research also found that the characterisation of clients based on age, education, area farmed etc. can help advisors determine farmer motivations and therefore help them establish the best

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<sup>1</sup> Westmeath/Offaly/Cavan/Monaghan, Roscommon/Longford & Galway/Clare

approach to take with each individual farmer. Characteristics of the farm and farm business can establish farmer motivation and attitude which can in turn help the advisor understand the view point of the farmer and determine the best advisory approach to take with them.

The study also established the multidimensional view advisors have of their role as agricultural advisors; adopting aspects of consultant, coach, teacher, trainer and therapist. This shows an understanding of the diversity of the role of an agricultural advisor. Results show that as the usage of the eProfit Monitor increases so too does the advisors recognition of the diversity of their role. This recognition of the different aspects of the advisors role indicates that they feel they have the skills necessary to fulfil this diverse role.

## Introduction.

The role of the agricultural advisor has changed significantly over the past number of years (*Garforth, 2004; Cerf, 2011; Manning, 2013*). Increased emphasis has been put on the importance of the relationship between the advisor and the client through the promotion of participatory methods of interaction. It is now widely accepted that co-operation between farmers and extension agents is essential to the formulation and solving of farmer problems (*Cerf, 1999*). Providing information alone is no longer enough to bring about change (*Manning, 2013*). Relational competence or competence about how to interact and communicate with clients' is essential (*Kvam, 2017*). In aiding decision making the advisor must focus not only on the delivery of technical information but also on the social aspect of the interaction (*Magne, 2004*).

Hoffman (2007) defines advisory work as helping others to solve their problems through enabling them gain greater insight into their causes resulting in new motivation and direction. However, the diversity of farmer attitudes and motivations towards problem solving and decision making make this role a complex one and the advisors task of aiding decision making a difficult one. Farmer attitudes are influenced by a range of different factors and people. Much research has been carried out over the years regarding these factors affecting the attitude of farmers towards change (*Rogers, 1995; Azjen and Fishbein, 1980*). Factors such as the characteristic of the technology in question, the socio-economic characteristics of the farm itself, the physical attributes of the farm holding as well as the personal and physical attributes of the key decision maker and the farmers perception of the future economic climate all influence the farmers decision to implement a new technology or ideas on the farm (*Rogers, 1995*). The Theory of Reasoned Action (*Azjen and Fishbein, 1980*) explores the factors influencing farmer decision making and recognises the importance of the attitudes and perceptions of the decision maker themselves. It allows the identification of the social and psychological factors influencing behaviour (*Garfort et al., 2004*). These factors are wide ranging and diverse and influence no two farmers in the same way. It is the role of the agricultural advisor as the change agent to recognise the wide array of attitudes and behaviours within their own client base and adapt the message they are delivering to best suit the attitudes and needs of each individual client.



This research examines how advisors decide on the best approach to take when advising clients with different motivations and attitudes towards the progression of their farming enterprise. It looks at the way in which advisors use a specific decision support tool (the eProfit Monitor) with drystock clients to aid their decision making process. The Teagasc eProfit Monitor is a financial analysis tool used to prepare management accounts for the whole farm (*Connolly & McDonnell, 2016*) and is widely used within the agricultural advisory profession in Ireland. The eProfit Monitor is used to assess a farms financial performance and benchmark performance against other farms (*Connolly & McDonnell, 2016*). It can be used to facilitate open discussion on farm finances. The eProfit Monitor is currently being used by approximately 18,000 Irish farmers (*Connolly, 2016*). The usage of the eProfit Monitor is well established within the dairy sector but is now gaining importance with dry stock farmers particularly, as it became a requirement of the funded Knowledge Transfer (KT) discussion group scheme. The profitability of Irish dry stock farms has been an issue of concern for many years. According to National Farm Survey data for 2016, of the 83,377 farms in Ireland, 70% are operating some sort of dry stock enterprise whether suckler farming, dry cattle farming or sheep farming (*NFS, 2017*). Despite the high proportion of dry stock farms in the country they have the lowest income and profitability year on year. The large variation in farm income across farming enterprise is driven by differences in both farm size and profitability (*NFS, 2017*). The drystock sector is characterised by low profitability and small holdings. In 2016, 51% of cattle rearing farms, 44% of other cattle farms and 48% of sheep farms earned less than €10,000. This is in stark contrast to dairy farms, with 45% of Irish dairy farms earning over €50,000 last year (*NFS, 2017*).

This research focuses on the advisors view of the factors influencing farmer attitude towards and motivation to use the eProfit Monitor within the drystock sector. It takes a look at the client centred approach used by advisors when working with their varied client base and how they view their role in changing client motivation and aiding the decision making process. The research examines how advisors segment their client base and decide on the best approach to take with each individual client with regard to the use (or not) of the eProfit Monitor and its influence on farmer motivation and attitude.

## **Literature Review.**

Much research has been carried out on the relationship between the advisor and the farmer (*Magne & Ingrand, 2004; Cerf, 2011; Leeuwis, 2011; Manning, Soon & Fisher, 2013; Kvam, Hansen & Straete, 2017*) Their relationship is a complex one that takes time to develop. The development of a relationship between the farmer and the client is essential to the process of assessing farmer's needs and capacities. By getting to know each individual farmer and their own personal farming circumstances it is easier to create a solution that best meets their needs, or deliver an advisory message in a way that will encourage them to change. Originally, agricultural extension employed a transfer of technology approach to advising farmers, viewing farmers as passive recipients of information that they should uniformly adopt and apply (*Leeuwis and Van den Ban, 2004*). However, this view has changed and it is now widely accepted that individuality in the approach to each farming situation is essential to effective advisory processes.

Vago (2006) outlined the concept of Critical Success Factors (CSF) that are influential in building relationships with farmer clients and promoting change. CSF include academic achievement, life experience, cultural sophistication, adaptability and personality; with life experience and an understanding of farming and farming practices also essential (*Vago, 2006*). There are also critical failure factors (CFF), which inhibit successful interaction between the farmer and the advisor. Awareness of the reasons for these failure factors is essential. The advisor and the farmer's view on a topic may differ resulting in poor interaction and failure of the farmer to change. Therefore, adaptability is an essential skill for an advisor to possess in order to ensure they understand the client's outlook and deliver the message in a way that best meets that outlook. The increasingly complex nature of agricultural production and the changing rules regulations and requirements introduced by the various stakeholders in Europe has left farmers with many questions about what is best for their family farm. The role of the advisor is to recognise the wide array of attitudes and behaviours within their own client base and adapt the message they are delivering to best suit the attitudes and needs of each individual client.

Decision Support tools are widely used within the advisory profession in Ireland. Finlay, (1994) defined Decision Support Systems as mainly computer based systems supporting the decision making process of farmers (*Nguyen, n.d*). However, Cox (1996), felt the term should be used more loosely and include any kind of decision aid, whether computer based or not

(Nguyen, n.d). The role of the advisor is one of decision influencer or change agent in many cases (*Cerf, 2011*). Many authors make reference to the way in which advisors influence farmers' learning and decision making processes (*Cerf, 1999; Garforth, 2004; Cerf, 2011*). Therefore, it can be said that "the decision support tools are important, but they are a means to an end rather than the end itself" (*Connolly, n.d*). Their use and the information they provide are only useful where the farmer understands the message they are delivering. It is the role of the advisor to ensure the farmer understands that message being delivered to them through the use of decision support tools such as the eProfit Monitor

Manning, Soon & Fisher (2013), researched the role of the advisor in influencing change within the family farm. The advisors ability to provide information alone is no longer enough to bring about change or improvement (*Manning, 2013*). An awareness of the varying factors influencing farmer attitudes and behaviours is essential to understanding their client base and tailoring advice to best suit the needs of each individual client. The attitude of farmers towards change is diverse and the factors influencing their attitude are wide ranging and diverse and influence no two farmers in the same way (*Cerf, 2011*). The work of Gasson, (1973) refuted the notion that farmers' were solely driven by profit maximisation. Their motives are in many cases infinitely more complex which requires an advisor infinitely more astute to deal with the wide array of farmer attitudes, behaviours and beliefs. For years theories put forward by many researchers assumed that agricultural development was one directional. In other words all farms were moving in the same direction, towards intensification and profit maximisation albeit at differing paces. Farmers were often categorised based on these assumptions. The categorisation of farmers as innovators, early adopters, late adopters and laggards follows this view that all farmers are moving in the same direction with some reaching their goals earlier than others (*Leeuwis, 2004*). More recent studies show a flaw in this logic and recognise that many farmers run their farm differently and have different goals, outlooks and motivations for running their business. The work of Vanclay, (2004) outlined the importance of social principles for agricultural extension. He presented 27 principles each of significant importance to agricultural extension. His second principle, the recognition that not all farmers are the same, is important as it acknowledges the existence of different world views. "Different farmers have different priorities, different understandings, different values, different ways of working, and different problems" according to Vanclay, (2004). Therefore when implemented properly, different extension strategies may yield positive results. It is now essential that agriculture extension workers are

able to recognise different dynamics in farmer motivation and offer bespoke advice to different people (*Botha, 2006*).

Advisory competence can be divided into professional and relational competence. Each is essential to the relationship building process. Professional competence relates to the ability to share technical knowledge and experience about a topic while relational competence requires an understanding of how to communicate and interact with different clients (*Kvam, 2017*). This social aspect of advisory work is an area that has become increasingly important in recent years, as the development of a relationship with clients is the backbone of excellent advisor-farmer interaction and problem solving. “Farming is a socio-cultural practice rather than just a technical activity” according to *Vanclay, (2004)*. The provision of technical support alone to farmers is no longer enough; they must recognise factors specific to farms influencing individual farm households such as attitudes, subjective norms, behavioural control, resource availability, motivations and incentives (*Manning, 2013*). This can be categorised as the social aspect of their work. DEFRA (2008) proposed that instead of categorising farmers based on external factors such as farm size, livestock numbers and degree of market interaction, a more useful method of categorisation may be to focus on internal factors or individual perspectives of the farmer. This proposal puts forward the notion that farmers could better be categorised according to their outlook and approach to their business (*DEFRA, 2008*). This led to categorising 41% as ‘modern family businesses’; 23% as ‘custodians for whom farming is a way of life’, 22% as ‘pragmatists’; 7% as ‘challenged enterprises’ and 6% as a ‘lifestyle choice’. This level of categorisation is based on the view, and implicit goals of each farmer or farming family of their own farming business. The advisor can then tailor the advice they deliver to meet these views and needs.

Relationship development requires an understanding of the needs and attitude of the client as well as excellent communication skills. Dialogue and discussion is essential to building the advisor-farmer relationship in the long term. It also stimulates reflection and discussion which helps unravel ways of solving farmer problems (*Magne, 2004*). Groot (1997) outlines the importance of building the farmer-advisor relationship. He believes that in order to understand farmer’s problems or changes they need to make, the advisor has to integrate all aspects of the farming system even the social aspect into their interaction with their client (*Magne, 2004*). The advisor therefore needs to acquire the social and interpersonal skills necessary as well as the technical (*Magne, 2004*). The role of the agricultural consultant has changed significantly over the last number of years. It is no longer enough to provide

technical information on individual issues, farm advisors require an understanding of their clients' business and personal goals and objectives and how they fit into increasing production on that farm (*Botha, 2006*). "Successful consultancy is all about relationships" according to *Coutts, (2005)*.

Trust is an essential component of the advisor-farmer relationship and the ability to build trust is the essence of all business advising roles (*Johnson et al. 2006*). *Manning, (2013)* outlines the various dimensions of trust. These include cognitive and affective dimensions. Cognitive trust is the belief the farmer has in the advisors competence and reliability. It is knowledge driven and allows the farmer make decisions based on the competence of the advisor. Affective trust on the other hand, is the confidence the farmer has in the advisor generated through the level of empathy, understanding and care shown to the people involved in the business. Affective trust is driven by personal experience with the advisor and the advisor's reputation. While cognitive trust is important, it is affective trust which builds the relationship between the advisor and the farmer.

*Carlock (2007)* proposed four different types of advisor; each with their own unique approach to advising family businesses.

- Teacher/trainer: transmits general knowledge and information allowing the client to then interpret the information before implementing it in their business.
- Consultant: offering tailored advice, applied to each client's situation.
- Coaches: supporting clients to develop new skills so that they can adopt new practices.
- Therapists: identifying habits and blockages and facilitating clients to adopt new ways of looking at a problem.

Teacher/trainers and consultants are generally directive by nature and focus on rational thinking (*Manning, 2013*). Coaches and therapists identify the blockages in thinking and facilitate new ways of looking at a problem (*Manning, 2013*). The offering of tailored advice is an essential component of the role of agricultural consultant as factors influencing change are wide ranging and diverse and influence no two farmers in the same way. Social interaction is essential, as advisors need to move away from the more reactive approach towards a more interactive method of problem solving. The co-production of problems and

solutions results in greater understanding of the issue and builds up an excellent relationship of open communication between the advisor and the farmer. This is the essence of a client centred approach and would not be possible if the relationship between the farmer and the advisor did not exist. Therefore, the promotion of change in farming practices requires the consideration of both knowledge flow and behaviour in order to develop an effective method of influencing change (*Manning, 2013*).

## Research Methodology

A mixed method approach was used with the aim of triangulating data sources and providing a more in-depth look at the information obtained (*Bryman, 2012*). A combination of advisor survey's and advisor interviews were used to obtain a more comprehensive view of advisor opinion on farmer motivation and attitude and how this influences the delivery of advisory messages. Triangulation allows the mutual corroboration of both survey and interview responses to provide a broader look at the data obtained as part of the research (*Bryman, 2012*).

### Advisor Survey's

In total, 49 drystock advisors based in three advisory regions of Ireland<sup>2</sup> were surveyed online and a 55% (n=27) response rate was achieved. Due to time constraints an online survey was carried out with all drystock advisors in the three advisory regions. These three regions were selected as it was felt that they were representative of the Teagasc drystock advisors across the country. The aim was to provide an insight into the advisors views and opinions on the best approach to take when advising clients with different needs and outlooks as well as their considerations for each client they deal with.

The main advantages of the online survey method used was that it allowed the advisors complete the survey in their own time, which ensured qualitative questions were answered thoroughly providing a greater insight into advisor opinion on the topic. A limitation of this research method is that the online survey may have impacted on the response rate achieved (*Bryman, 2012*). This survey provides information on how advisors view farmer motivation and attitude towards the use of the eProfit Monitor while also providing an insight into the considerations advisors make for each client they deal with in order to deliver the advisory message in a way that meets their outlook.

The survey results were then analysed and advisors were categorised into groups based on the number of eProfit Monitors they completed in 2016. These groups were (1) Low eProfit Monitor users, (2) Medium eProfit Monitor users and (3) High eProfit Monitor users. The survey responses were then analysed to see if there were any differences in advisor views on farmer use of the eProfit Monitor between the three groups. A limitation of this categorisation

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<sup>2</sup> 1) Westmeath/Offaly/Cavan/Monaghan, 2) Roscommon/Longford and 3) Galway/Clare

method is that the year 2016 may not have been representative of the advisors general usage of the eProfit Monitor. It may be over or under representative of their past or future usage of the eProfit Monitor system. However, for the year in question the categorisation was accurate and represented their usage of the eProfit Monitor in 2016.

## **Interviews**

A number of short, semi-structured, telephone interviews were then carried out with a selection of advisors in each advisory group. Semi-structured interviews provide a more general view of interviewee opinion and provide the interviewee with the opportunity to expand on their view and opinions without being restricted (*Bryman, 2012*). Advisors were asked as part of the questionnaire to express their interest in being involved further in this research. Advisors were randomly selected for interview on this basis and two advisors from each of the three advisory groups were interviewed. Interviews were carried out in order to provide a greater insight into the advisors personal views on the motivations of their clients to use the eProfit Monitor and if they feel farmer motivations for using the eProfit Monitor have changed due to government schemes such as the KT discussion groups or have they as advisors had any influence over farmer views and motivation for using the decision support tool. Interview findings reinforce questionnaire findings and further reveal the client centred approach used by advisors when working with farmers.

The findings from this research are expected to provide an insight into how advisors decide on the best approach to use with individual clients depending on their individual characteristics, attitudes and motivations. This is expected to support advisory efforts to increase drystock farmer adoption of financial management tools. It also provides an insight into how advisors view their own role as agricultural advisors and the influence this has on their client's motivation and outlook on the use of the eProfit Monitor.



## Research Findings

A number of key advisor characteristics were established as part of this research. 60% of advisors involved in this survey have more than 16 years' experience in the role of agricultural advisor. None of the advisors surveyed had <100 clients, with the majority dealing with a client base of between 201 and 250 clients. In total there are 82 discussion groups being run by the 27 respondents to this survey. That is an average of 3 discussion groups per advisor.

In 2016 there were a total of 983 eProfit Monitors completed by the respondents to this survey. However, the range was quite large, ranging from 0-85 per advisor. There is a stark contrast in the level of eProfit Monitor usage between dairy and drystock farmers in Ireland. A total of 690 drystock eProfit Monitors were completed in 2015 (*Kelly, 2016*), while a total of 1505 dairy eProfit Monitors were completed in 2016 (*O'Dwyer, 2016*). This trend is also reflected within the advisor survey results carried out as part of this research. At present five of the advisors surveyed have less than 10% of their clients using the eProfit Monitor, while the majority (63%) have 11-30% of their client base actively using the eProfit Monitor (n=27). There are only five advisors with more than 30% of their clients using the eProfit Monitor and none with greater than 50 % using the eProfit Monitor.

Continued use of the eProfit Monitor among drystock farmers is low. When asked what percentage of their client base were completing a eProfit Monitor every year, 21 said less than 20% while no advisor had more than 40% of their clients completing the eProfit Monitor every year (n=27). This is in contrast to the dairy sector where 276 farmers have used the eProfit Monitor system every year from 2008 to 2016 (*O'Dwyer, 2016*). This would indicate a different motivation and attitude towards its use between dairy and drystock farmers and advisors.

As part of this research advisors were categorised based on their 2016 eProfit Monitor usage into low, medium or high users of the eProfit Monitor. This provided a basis for further analysis of the results obtained as part of the survey and allowed the exploration of advisors views of the impact of factors such as motivation and attitude on the use of the eProfit Monitor by farmers.

### **Advisor view on farmer motivation for using the eProfit Monitor.**

Farmer motivation is an important factor to consider when deciding on the advisory approach that needs to be taken with a particular client. The work of *Magne (2004)* looked at advisory practices of agricultural advisors in Creuse, France. Their work was aimed at characterizing current advisory practices in the region for managing change in beef-cattle systems. They were looking at ways to guide and help farmers in long-term and everyday decision making. Their paper tries to identify the role of advice in the farmers change processes. One important finding from this study is that in many cases farmers find it difficult to explain the problems they are having as in many cases they are unaware of them. This results in no clearly expressed request for help and therefore no motivation to change.

In order to gauge advisor opinion on farmer motivation for using the eProfit Monitor they were asked to categorise their own client base based on their motivation for using the eProfit Monitor. The four categories they could select from were (1) “ To help them make informed business decisions”, (2) “To benchmark their farm with national figures and other farms”, (3) “To satisfy bank lending” and (4) “To comply with Knowledge Transfer Scheme requirements”. The advisor could select as many motivations as they felt applied to their clients.

An average score was calculated for each of the advisory groups (low, medium, high) depending on their responses. Table 1 below shows that advisors with the highest usage of the eProfit Monitor recognised a wider range of motivations within their client base for using the eProfit Monitor. While compliance with the Knowledge Transfer scheme requirements was deemed the main farmer motivation across each group (low, medium, high), there was a notable increase in the range of farmer motivations identified by advisors with higher usage of the eProfit Monitor. More advisors in this high usage category recognised improving farm business management and benchmarking as motivations for their clients to use the eProfit Monitor. This highlights two things:

- (1) As the usage of the eProfit Monitor increases so too does the range of motivational factors influencing farmers to use it.
- (2) Advisors with higher usage of the eProfit Monitor may have a greater ability to recognise different motivations within their client base for using the eProfit Monitor. This in turn can influence the advisory approach they take with a particular client.

**Table 1: Advisor ratings of the importance of different motivations for their clients' use of eProfit Monitor.**

	<b>Low EPM usage (n=7)</b>	<b>Medium EPM usage (n=10)</b>	<b>High EPM usage (n=10)</b>
<b>Improve Business Management</b>	0.7	1	1.3
<b>Benchmarking</b>	0.4	0.6	1.3
<b>Bank requirement</b>	0.4	0.6	0.7
<b>KT Compliance.</b>	2.85	3.1	3.6
Each advisor indicated the percentage of clients for which each of the four motivations applied. This was used to calculate a score for each motivation. The total score for each motivation was divided by N to get an average score in each group.			

Advisors surveyed were asked to further categorise their clients into three groups based on their motivation for using the eProfit Monitor. The categories and results are outlined in Table 2 below. According to advisors in each group (low, medium, high) the main reason for farmers to use the eProfit Monitor was to comply with KT scheme requirements without fully understanding or using the results. The advisors with the lowest number of clients completing the eProfit Monitor have the highest number of clients completing the eProfit Monitor just to comply with KT scheme requirements. Again in the higher usage categories there is a more varied view of farmer motivation for completing the eProfit Monitor with more farmers now seeing the benefit of using the eProfit Monitor or using the eProfit Monitor to improve overall farm management.

Interviews with advisors in this category reiterate this point with advisors feeling that differences in farmer characteristics affect farmer motivation for using the eProfit Monitor. In particular it is felt that full-time farmers are more willing to look at their farms financial performance as they are relying on the farm alone to make a living. They have no income from an outside source and therefore need to make real effort with their farm to make it as profitable as possible. One advisor noted how the dynamic and attitude of the group can motivate its members to complete the eProfit Monitor. The same advisor noted that the motivation for joining the group can have a huge influence on the attitude of the farmer to completing the necessary tasks. He noted that farmers who joined groups prior to BTAP or

KT established “*more focused vibrant groups whose attention was on improving the farm business*” and profitability is a big part of that. On the other hand farmers who join groups as part of a scheme saw it as “*the advisors job to do the eProfit Monitor for them*” and didn’t see the benefit of completing it.

Overall, as advisors use of the eProfit Monitor increase so too does their view of the motivational factors influencing their clients to use the eProfit Monitor.

<b>Table 2: Advisors view of farmer opinion of eProfit Monitor usage.</b>			
	<b>Low EPM Usage (n=7)</b>	<b>Medium EPM Usage (n=10)</b>	<b>High EPM Usage (n=10)</b>
<b>Farmers interested in using the eProfit Monitor to improve farm management</b>	0.6	1.4	1.3
<b>Farmers who complete the eProfit Monitor to comply with KT scheme and now see the benefit</b>	1.3	1.6	2.2
<b>Farmers who complete the eProfit Monitor to comply with KT scheme but don’t use the results.</b>	4	1.8	2.9
Each advisor indicated the percentage of clients for which each of the three farmer opinions applied. This was used to calculate a score for each opinion. The total score for each opinion was divided by N to get an average score in each group.			

## Client Categorisation

A good relationship between the client and advisor is essential to understanding the needs of the individual client. *Klerkx, (2010)*, looked at the role of the advisor in the promotion of sustainable farm management. Strong interaction between farmer and advisor were essential to dealing with problems within farming systems. “Information can be exchanged in different forms, but meaning is constructed only in interaction with the existing knowledge base of the recipient” (*Klerkx, 2010*). Therefore, in the process of knowledge construction, factors such as beliefs, worldviews, interests, emotions and uncertainties should be considered for each client as they co-determine a person’s attitude towards change (*Leeuwis and Van den Ban, 2004*)

Individual farmer characteristics were used to categorise advisor client base. The four categories they were asked to select from were (1) Approaching retiring, (2) Part-time farming, (3) Full-time farming (4) Young farmer/New entrant. The proportion of clients in each category was similar across the three advisory groups. Part-time farmers represent the largest portion of each advisory group’s client base. Thirteen out of 27 respondents indicated 61-80% of their clients were farming part-time. A further 6 out of 27 indicating 81-100% of clients farming part-time while 7 out of 27 indicated 41-60% of clients farming part-time. Interviews provided a deeper insight into how advisors feel these characteristics are influencing farmer motivation. The general view is that *“part-time farmers are not as enthusiastic about completing the eProfit Monitor as some full time farmers as they are not relying solely on the farm to put food on the table”*. It can therefore be said that the reliance on an external income can be a demotivating factor for some farmers to look at the profitability of their farming enterprise.

Approaching retiring was the second largest category represented followed by Full-time farming with Young Farmer/New entrants to farming the least represented category across the three advisory groups. This categorisation provides an overview of the characteristics of the farmers these advisors are dealing with, which provides an insight into their attitudes and motivations. The structure of the client base is similar across the low, medium and high users of the eProfit Monitor. This means that the differences in advisory perception of farmer motivation and attitude towards the completion of the eProfit Monitor cannot be attributed to a variation in the makeup of each advisors client base.

<b>Table 3: Advisors views on the makeup of their client base by category</b>			
	<b>Low EPM usage (n=7)</b>	<b>Medium EPM usage (n=10)</b>	<b>High EPM usage (n=10)</b>
<b>Retiring</b>	3.6	3	3.2
<b>Part-time farming</b>	4.7	4.9	5.0
<b>Full-time farming</b>	2.4	1.9	1.8
<b>Young Farmer/New Entrant</b>	1.6	1.4	1.2
Each advisor indicated the percentage of their clients in each of the four categories. This was used to calculate a score for each category of client. The total score for each category was divided by N to get an average score in each group.			

Advisors were asked to indicate their agreement or disagreement with a number of statements related to the motivation of farmers. The advisors rated their responses as strongly agree, agree, don't know, disagree and strongly disagree. Responses given by each advisor agreeing with the statements were added together and an average score was calculated for each group (low, medium, high). The responses are shown in Table 4.

The first statement *“If a client is near retiring, I focus less attention on the profitability of the enterprise and more on making the farm as easy to manage as possible”* produced a variety of different responses with 23 agreeing or strongly agreeing, 3 disagreeing and 1 undecided. The most notable differences related to the statements on part-time and full-time farming. Nine out of ten advisors in the medium and high eProfit Monitor usage groups agreed with the statement *“Part-time farmers require a simple, manageable farming system. The completion of an eProfit Monitor is important and allows them to see where changes can be made”*. This is in contrast to the low eProfit Monitor usage group where only four out of seven respondents agreed with this statement. A similar trend was found in responses to the statement *“Full-time farming clients require technical and financial advice. It is essential that the farming enterprise is profitable in order to support the farm family and therefore an eProfit Monitor is an essential requirement”*. Again nine out of ten advisors in the medium and high eProfit Monitor usage group indicated their agreement with this statement while only four out of seven agreed in the low eProfit Monitor usage group. This indicates a distinct

difference in attitude, and possibly advisory approach, between these three groups of advisors.

The fourth statement *“Young farmers or new entrants to farming are more driven and focused on making the most from their enterprise; therefore an eProfit Monitor is an essential advisory tool”* elicited a range of responses. Twenty-two respondents agreed with the statement with a further three disagreeing and two undecided. The general view ascertained through interviews with advisors is that age is not an important factor in the consideration of advisors about how to deal with a farmer. The personality and attitude of the farmer has a greater influence on their approach to dealing with them than their age or education. One advisor feels that younger farmers that have completed the green cert would have a certain degree of openness to learning and that *“you would be hearing back what they have learnt at agricultural college regarding beneficial practices”*. However, others have noted that they don’t see any major difference in the motivation of younger farmers; stating *“you would imagine younger farmers would be more interested”* and that *“sometimes you would be disappointed that they are not”*. *“It’s more about the individual I find and someone that is open to things and giving it a go”*.

*“A lot of farmers are not making a profit and are unwilling to acknowledge it. Therefore, they do not see any benefit in completing an eProfit Monitor”*. 81% of respondents agree with this statement with 1 undecided and 4 disagreeing. This is the startling reality of the situation in the drystock sector. Profitability is a major issue and the results show that many farmers are unwilling to address it. One advisor stated how *“there is a bit of a fear with the eProfit Monitor that it might make them look like a bad farmer”*. However, the same advisor stated that *“once you collect the information and talk them through the results and show them the harsh reality of the situation it opens their eyes up big time to where they need to make the few changes”*.

While the completion of an eProfit Monitor is a compulsory element of the new Knowledge Transfer scheme, this statement surrounding the profitability of farms indicates how necessary this component is in order to open the eyes of farmers towards what is required to improve the situation on their own farm. This is where the delivery of tailored advice is essential in order to engage with farmers and make them aware of the changes that need to be made on their own individual farm.

The final statement “*Literacy and numeracy are a problem for some of my farmer clients*” divided opinion. Only 44% of respondent agreed with this statement to some degree with 41% disagreeing completely with it while a further 4 were undecided. This is in contrast with other research which indicated that literacy and numeracy are still silent problems among a large proportion of the farming community. This shows some degree of improvement in this area which is a positive result and means more options are available to farmers regarding their farming practices and a wider range of advisory approaches can be used.

**Table 4: Advisor agreement with statements regarding different categories of client.**

	<b>Low EPM usage (n=7)</b>	<b>Medium EPM usage (n=10)</b>	<b>High EPM usage (n=10)</b>
<b>Retiring – want to focus on ease not profit.</b>	6	7	10
<b>Part-time – epm essential for ease of management for part-time farmers.</b>	4	9	9
<b>Full-time – require technical and financial information. The epm is essential to providing this.</b>	4	9	9
<b>Young farmer/new entrant – more driven and focused on improving. EPM is an essential advisory tool.</b>	6	8	8
<b>Farmers don’t want to acknowledge lack of profitability.</b>	6	8	8
<b>Literacy/Numeracy are a problem for some farmers.</b>	2	6	4
Advisors agreement with each of the statements above was examined. The number of advisors in each group who agreed with each statement was added together. This provided the overall score for each statement and each advisory group.			



Further categorisation was carried out with advisors asked if certain characteristics of their clients effected how they deliver advisory messages. The work of *Rogers, 1995*, indicated how factors such as characteristics of the farming unit, physical attributes of the farm holding and personal attributes of the key decision maker influence farmer decision making and willingness to change. As part of this research advisors were asked to indicate the level of influence characteristics such as (1) Agricultural Education, (2) Age, (3) Enterprise, (4) Area Farmed, (5) Stage in family lifecycle, (6) Full-time/Part-time farming had on how they delivered their advisory messages. The table below outlines the level of influence different farmer characteristics have on how the advisor delivers advisory messages to their clients.

### **Agricultural Education**

Agricultural education while providing essential technical and financial knowledge is not changing the views of advisors on what is motivating these educated farmers. The survey results show that while agricultural education does influences the advisors delivery of advisory messages it is not as influential as other farmer characteristics. Semi-structured interviews carried out with five advisors provided a deeper insight into the views and opinions of some of the advisors surveyed as part of this research. One advisor noted how in some cases you are disappointed that the level of interest is not greater among younger, educated farmers. Another noted how they have the knowledge as you are hearing back in discussion groups what they have learnt in Agricultural College. It is the level of interest or attitude that influences the approach that the advisor takes to getting that farmer to complete an eProfit Monitor more so than the level of education that individual has.

### **Age**

The survey results show that age has a greater influence on the high eProfit Monitor users than either the medium or the low eProfit Monitor users. The medium eProfit Monitor users are influenced least by age which is reiterated in the semi-structured interviews carried out with two advisors from this category. The view among these advisors is that it is the personality of the farmer and their openness and willingness to learn and change that determines the approach they take. Each of the advisors interviewed stated that in some cases older farmers have more motivation to change their practices and complete an eProfit Monitor than some of their younger clients. They state that *“it’s the personality”* that is the biggest influencer for them and *“they try to take people at face value”* and not be influenced by factors such as age. The higher users of the eProfit Monitor on the other hand see age as

having a greater influence on the approach they need to take as advisors. Again semi-structured interviews with advisors in this category provided an insight into their views. One of the advisors interviewed stated how they feel that a younger farmer profile within a group can help motivate them to get involved. This shows the difference in advisor opinion between these two advisory groups. However, one thing is the same, the influence of farmer attitude and personality on the approach they take.

### **Farming Enterprise**

Farming enterprise had the greatest influence on the high eProfit Monitor usage advisors. This is in comparison to the medium and low eProfit Monitor users who were only moderately influenced by the farming enterprise in operation. This shows that the farming enterprise in operation on the farm has an influence on the advisory approach adopted by advisors when delivering advisory messages. This indicates a view that farmers operating certain farming enterprises are more open to the use of the eProfit Monitor than others which influences the advisory approach taken with that farmer.

### **Area Farmed**

Again area farmed has limited influence on each of the advisory groups. This shows that it is not an important consideration for advisors when deciding on the advisory approach to take with a farmer. However, it is noted by one advisor in the high eProfit Monitor usage category that *“in many cases farmers with fairly large holdings are farming full-time and need to make a serious go at their farming”* as they are *“relying on it as their sole source of income”*. So while area farmed is only of minor influence on the advisory approach adopted it can lead on to other important considerations.

### **Stage in Family Lifecycle**

Again stage in family lifecycle had limited influence on any of the advisory categories. It is my view that it is again linked to whether it is a full-time or part-time operation. If farming full-time they are relying solely on the farm to make a living and support their family. So the stage in that family's development dictates the level of demand for income from that farm. Part-time farmers have the additional support of an off farm job which provides a separate income to the family. This means they are not relying solely on the farm to make an income and therefore stage in family lifecycle is not as important to consider.

### **Full-time/Part-time farming.**

Whether the farmer is farming full-time or part-time influences high eProfit Monitor users most. The view of the advisors in this group who were interviewed is that the full time farmers are more reliant on the income from the farm and are therefore more interested in whether or not their farm is making a profit. Their view on the part-time farmers is that they are not as enthusiastic about completing the eProfit Monitor as *“they are not relying solely on the farm to put food on the table”*. This is in contrast to the views of the medium and low eProfit Monitor users who feel that in some cases the part-time farmer is *“more tuned in because they are bringing in a wage, and with the farm as well they want to see are they making anything”*. One advisor interviewed commented that *“Time is a big issue with the part-time farmer as well, so if they are putting time into something that is not making them money they might be more inclined to look at it”*. This is reiterated in the views of the low eProfit Monitor users. One advisor when thinking about their own client base stated that *“We see them as being farmers, because we deal with them only in farming. Yet I suppose to them, they have a job and maybe the job comes first and maybe farming is something they do on the side. Because we only see the farming we see it as the most important thing. We don’t see the other side of it”*. This statement shows an understanding and appreciation of possible client motivations.

Overall as the advisors use of the eProfit Monitor increases they appear to become more aware of different client characteristics and are more influenced by these characteristics when delivering advisory messages. As already mentioned the enterprise type in operation on the farm is considered influential in the advisors decision on how best to deliver their advisory message. Age is another influential factor for the high users of the eProfit Monitor when compared to its influence on the other two advisory groups. Overall, advisors with higher use of the eProfit Monitor appear to be influenced by a wider range of client characteristics when delivering their advisory messages. One important point to note is that the personality and attitude of the farmer is considered the most influential factor for the advisor when deciding on the best advisory approach to take.

**Table 5: The level of influence client characteristics have on the delivery of advisory messages.**

	<b>Low EPM usage (n=7)</b>	<b>Medium EPM usage (n=10)</b>	<b>High EPM usage (n=10)</b>
<b>Agricultural Education</b>	1	1	1
<b>Age</b>	1.1	0.9	1.4
<b>Enterprise</b>	1.1	1.3	1.6
<b>Area Farmed</b>	1	0.7	1.0
<b>Stage in family lifecycle</b>	1.1	1	1.1
<b>Full-time/Part-time farming</b>	1.1	1	1.3
<b>Total</b>	<b>6.4</b>	<b>5.9</b>	<b>7.4</b>

Each advisor indicated the level of influence each client characteristic had on their delivery of advisory messages. This was used to calculate a score for each client characteristic. The total score for each characteristic was divided by N to get an average score in each group. The total was then calculated by adding together the scores in each advisory group.

### **The effect of farm income on the delivery of advisory messages.**

Profitability within the drystock sector has always been an issue. Despite the high proportion of drystock farms in the country they have the lowest income and profitability year on year (*NFS, 2017*). Table 6 below outlines how the advisors surveyed categorise their clients in terms of farm income. The majority of advisors place their clients in the low income category. The low and medium eProfit Monitor users categorised the lowest proportion of their client base in the high income category and the highest in the low income category. This trend is similar to the high users of the eProfit Monitor who also placed the majority of their clients in the low income category. However, the high users of the eProfit Monitor do have a slightly larger proportion of their client base in the average and high income categories.

<b>Table 6: Income Category</b>			
	<b>Low EPM Usage (n=7)</b>	<b>Medium EPM usage (n=10)</b>	<b>High EPM usage (n=10)</b>
<b>Low Income</b>	3.1	3.1	2.1
<b>Average Income</b>	1.4	1.4	2.1
<b>High Income</b>	0.4	0.5	0.9
Each advisor indicated the percentage of their clients that fall into each income category. This was used to calculate a score for each income category. The total score for each income category was divided by N to get an average score in each group.			

Five out of the seven advisors in the low eProfit Monitor usage group indicated that the level of income produced by the farm had no influence on whether or not they used the eProfit Monitor with clients, with two indicating that it did have an influence. Advisors in the medium eProfit Monitor usage group showed a similar trend with nine out of ten advisors in that group indicating that the level of income produced has no effect on whether or not they use the eProfit Monitor with their clients. Seven out of ten advisors in the high eProfit Monitor group indicated that the level of income produced had no effect on their use of the eProfit Monitor with clients with a further 3 stating that it did influence their decision to use the eProfit Monitor.

When asked to expand further on this advisors stated that they “*encourage farmers who are concerned about low income to complete an eProfit Monitor to assess the farm situation*”. They feel that where “*income is positive/neutral then there is hope of achieving more profit through targeted advisory messages*”. There is also a view that “*without completing an eProfit Monitor you can't know the level of income produced*” however, “*more intensive farmers are more likely to request an EPM*” as “*part time and small, low income drystock farmers are not profit focused and not generally interested in eProfit Monitors*”.

### **Advisory Role and competence in financial management.**

Carlock (2007) suggests there are four different types of professional advisors, namely; teacher/trainers, consultants, coaches and therapists. Each brings a unique, yet related approach to change and innovation based on their disciplines. Teacher/trainers transmit general knowledge and information allowing the farmer to then interpret the information before implementing it on their farm. Consultants offer tailored advice, applied to each client's situation. Coaches support clients to develop new skills so that they can adopt new farming practices. Therapists identify habits and blockages in thinking and facilitate clients to adopt new ways of looking at the problem.

Table 7 below outlines how the advisors surveyed as part of this study see their role as an advisor. The majority of advisors selected multiple responses to this question which indicates they view their advisory approach as varied and their role as diverse. The advisors in the low eProfit Monitor usage group show the least diversity in their view of their advisory role. They see their role as strongly consultancy based with a minor teacher/therapist role. Only one respondent from this group selected multiple responses to this question.

The advisors in the medium eProfit Monitor usage group showed a wider array of responses seeing their role again largely as a consultant with minor aspects of teacher, therapist and coach. Two out of the ten advisors selected more than one comment to describe their role and therefore see their role as more diverse than the low eProfit Monitor users do.

Advisors in the high eProfit Monitor usage group identify their role as almost equal parts that of a consultant and therapist with some identifying that they have a role as a coach and a teacher also. Four out of ten advisors in this group selected multiple responses. They therefore see their role as diverse and are aware of the need for it to be this way to meet the varying needs of their client base.

The selection of multiple responses shows an understanding of the diversity of the advisory role and shows that advisors feel they have the skills to fulfil these diverse roles. The advisors view of the diversity of their role increases as we move through the groups from low to high eProfit Monitor usage. Advisor in the high eProfit Monitor usage category showed the highest awareness of the diversity of their role and how recognising this diversity can help deliver their advisory messages to different categories of client.

**Table 7: Relative weighting of different advisory roles for Low, Medium & High eProfit Monitor users.**

	Low EPM Usage (n=7)	Medium EPM Usage (n=10)	High EPM Usage (n=10)
<b>Teacher</b>	0.14	0.4	0.2
<b>Consultant</b>	0.86	0.6	0.6
<b>Coach</b>	0.14	0.1	0.4
<b>Therapist</b>	0	0.3	0.5

Each advisor indicated how they view their advisory role. The numbers of responses representing each role were added together for each advisory group. This was used to calculate a score for each advisory role. The total score for each advisory role was divided by N to get an average score in each group.

Finally, advisors were asked to rank their own competence in the area of financial management. This returned a wide array of responses, however generally advisors felt that their level of competence in the area of financial management was quite good with the majority of advisors rating themselves as good, very good or excellent in the area of financial management. This indicates they feel they have the skills necessary to discuss eProfit Monitor results and other financial issues with farmers. Within the low eProfit Monitor usage category 2 out of 7 advisors ranked their competence in the area of financial management as very good, while 3 ranked their competence as average and a further 2 as poor. Nine out of 10 advisors in the medium eProfit Monitor usage category ranked their competence in financial management as good or very good with only one advisory ranking their knowledge as average. Eight advisors ranked their knowledge of financial management as very good, good or excellent with two ranking it as average in the high usage category. As eProfit Monitor usage increases advisory competence in the area of financial management appears to increase also with more advisors ranking their competence as good, very good or excellent in medium and high eProfit Monitor usage groups than in the low usage group.

## **Discussion and Conclusion**

The research findings suggest that the ability of the advisor to support farmer decision making is influenced by two main factors:

1. The farmer's motivation and attitude towards change.
2. The advisors ability to recognise the differences in attitude and motivation and tailor their message to meet their needs.

This research highlighted the client centred approach adopted by advisors when working with different farmers with a variety of needs and outlooks. Farmer characteristics and outlooks are considered important when deciding on the best approach to take to promoting practices such as the completion of the eProfit Monitor and delivering the advisory messages it provides. In order to establish what these influential characteristics are the development of a good relationship between the farmer and their advisor is essential. As such the focus of advisory work has changed in recent years. It has moved away from the idea that all farmers are moving in the same direction with their farm business, all be it a different paces, and has recognised the varying needs and outlooks of each individual farmer. Providing technical advice alone is no longer sufficient to sustain a satisfactory advisory service; social relationships and interaction with the clients is essential to meeting their needs also.

### **Motivation**

The motivation of the farmer towards the use of the eProfit Monitor is an important factor to take into consideration. The identification of the motivational factors influencing individual farmers can be difficult, but can help determine the advisory approach to take with a particular client. Advisors surveyed and interviewed as part of this research recognised this within their own client base and recognised how different farmers have different motivations for using the eProfit Monitor and monitoring their farm finances. This recognition shows an understanding of their farmer clients and their farm businesses at an individual level. While compliance with Knowledge Transfer scheme requirements was considered the main motivational factor influencing farmers to complete the eProfit Monitor across the three advisory groups; the results also show us that as the advisors own use of the eProfit Monitor increases so too does their recognition of the factors motivating farmers to use it. Advisors with higher numbers of clients completing the eProfit Monitor recognise more motivations among their clients to use the eProfit Monitor to improve their farm business management



and benchmark their farms with others. They have a more varied view of client motivation compared with the low and medium users of the eProfit Monitor. This could be attributed to the experience of the advisor in dealing with their client base, or to their role in influencing farmer motivations through the continued use of the eProfit Monitor and its promotion as an essential decision support tool to their clients.

### **Categorisation**

Client categorisation can help advisors to determine the needs and attitudes of their farmer clients. By categorising farmers based on certain individual characteristics of the farm business or the farmer, the advisor can determine their motivations and the best approach to take with them. As the advisors use of the eProfit Monitor increases so too does their view of the level of influence certain client characteristics have on their delivery of advisory messages. This indicates an understanding of the various outside factors which can aid or inhibit the delivery of advisory messages to different clients. The enterprise in operation on the farm was considered the most influential client characteristic by all three advisory groups. This indicates a view that farmers operating certain farming enterprises are more open to the use of the eProfit Monitor than others which therefore influences the approach the advisor takes with that farmer. Again a good relationship between the advisor and the farmer is essential for this to work. Characteristics of the farmer or the farm business can help the advisor understand the view point of the farmer and determine the best advisory approach to take with them.

### **Advisory Role**

The advisors role is diverse; and they recognise it as such. They view their role as multidimensional, adopting aspects of consultant, coach, teacher, trainer and therapist. Again as the advisors usage of the eProfit Monitor increases they see a greater diversity in their role as an agricultural advisor. The development of a good working relationship between the advisor and farmer requires aspects of each of these roles which is why it is vital that the advisor develops their skills in each of these areas. By recognising the diversity of their role, and identifying the aspects of each role they need to have, they can help the delivery of advisory messages to different categories of client.

The development of a good working relationship between the advisor and the farmer is an essential aspect of advisory work today. An understanding of the farmers' attitudes,

motivations and goals for their farm business is essential to providing an advisory service which meets the needs of each individual farmer. The goal of advisory services is no longer the delivery of reactive, technical advisory messages; it is the establishment of a working relationship with the farmer which allows the co-production of advice and information to suit the individual farmer's needs, which aids the decision making process of that farmer. This recognition in itself should help improve the uptake and continued use of the eProfit Monitor among drystock farmers over the coming years.

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## Appendix 1

### Survey Questions

# A study of how advisors use decision support tools to aid farmer decision making - the case of the eprofit monitor.

I am currently undertaking research for a Masters in Agricultural Extension and Innovation on advisors use of decision support tools to aid farmer decision making and would really appreciate your participation in the following survey.

Decision Support Tools are widely used within the advisory profession and are becoming an important component of agricultural knowledge transfer. They are used to enhance the decision making capabilities of primary producers and their advisors (Newman S.,2000).

This research proposes to look at how advisors decide on the best approach to take when advising clients with different needs and outlooks on where their farming enterprise is going. I am using the eProfit monitor as an example as it has been widely used with dairy farmers but is now gaining importance with dry stock farmers.

With this survey I hope to learn how advisors decide on the best approach to use with individual clients depending on their issues and needs. I hope to gain an insight into their considerations for each client they deal with.

The survey will take 10-15 minutes approximately to complete. All information provided as part of this research will be held in the strictest confidence.

## Background Information:

Q1. How many years have you worked as an agricultural advisor? \*

- ☐ (a) <5 years
- ☐ (b) 6-10 years
- ☐ (c) 11-15 years
- ☐ (d) 16-20 years
- ☐ (e) >20 years
- ☐ Other: \_\_\_\_\_

Q2. How many years have you worked as a B&T Drystock Advisor? \*

- ☐ (a) <5 years
- ☐ (b) 6-10 years
- ☐ (c) 11-15 years
- ☐ (d) 16-20 years
- ☐ (e) >20 years
- ☐ Other: \_\_\_\_\_

Q3. How many clients do you have? \*

- ☐ (a) <50
- ☐ (b) 51-100
- ☐ (c) 101-150
- ☐ (d) 151-200
- ☐ (e) 201-250
- ☐ (f) >250

Q4. How many Discussion Groups are you currently facilitating?

	None	1	2	3	4	5
(a) KT Beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) KT Sheep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Non - KT Sheep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Non - KT Beef	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5. How many Profit Monitors did you complete in 2016? \*

Your answer \_\_\_\_\_



## Profit Monitor Usage

Q6. What % of your client base is using the Teagasc profit monitor? \*

- ☐ (a) <10%
- ☐ (b) 11-20%
- ☐ (c) 21-30%
- ☐ (d) 31-40%
- ☐ (e) 41-50%
- ☐ (f) >50%

Q7. Of the clients completing profit monitors in 2016, what % fall into the following categories: \*

	none	<20%	<40%	<60%	<80%	<100%
Farmers who are interested in and actively use the Profit Monitor results to improve their farm management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farmers who complete the Profit Monitor to comply with KT scheme requirements and now see the benefit in their farm management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farmers who complete the profit monitor to comply with KT scheme requirements but don't really understand or use the result.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8. What proportion of your time do you spend on profit monitors for your clients ? \*

- ☐ (a) <10%
- ☐ (b) 11-20%
- ☐ (c) 21-30%
- ☐ (d) 31-40%
- ☐ (e) 41-50%
- ☐ (f) >50%

Q9. Indicate how frequently you use each of the Profit Monitor reports with farmers when discussing Profit Monitor results:

	Never	Rarely	Sometimes	Often	Always
Cattle/Sheep Detailed Report	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cattle/Sheep Summery Report	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cattle/Sheep Scorecard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cattle/Sheep Short Report	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All Enterprises Report	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All Enterprises/ha Report	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whole Farm Report	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Multiple Year Report	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Balance Sheet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group Reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10. What reports do you use most with the categories of client listed below ?

	Cattle/Sheep Detailed	Cattle/ Sheep Summery report	Cattle/Sheep Scorecard	Cattle/Sheep Short report	All Enterprises	All Enterprises/ha
Famers who are interested in and actively us the Profit monitor results to improve their farm managment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farmers who complete Profit Monitors to comply with KT scheme requirements and now see the benefit in their farm managment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farmers who complete the Profit Monitor to comply with KT scheme requirements but dont really understand or use the result	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q11. Can you comment on the reasons for avoiding the use of certain reports with the different types of client.**

Your answer

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**Q12. What % of your clients complete a profit monitor every year ? \***

- ☐ (a) <10%
- ☐ (b) 11-20%
- ☐ (c) 21-30%
- ☐ (d) 31-40%
- ☐ (e) 41-50%
- ☐ (f) 51-60%
- ☐ (g) >60%

**Q13. What % of your own client base is using the eprofit monitor for the reasons outlined below? \***

	none	<20%	<40%	<60%	<80%	100%
To help them make informed business decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To benchmark their farm with national figures and other farms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To satisfy bank lending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To comply with Knowledge Transfer Scheme requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14. (i) What % of your own client base would you attribute to each of these categories? \*

	<10%	11-20%	21-40%	41-60%	61-80%	81-100%
Approaching Retiring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time farming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full-time farming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Young farmer/New entrant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(ii) Please indicate your level of agreement or disagreement regarding the statements below.

	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
If a client is near retiring, I focus less attention on the profitability of the enterprise and more on making the farm as easy to manage as possible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part-time farmers require a simple, manageable farming system. The completion of a profit monitor is important and allows them to see where changes can be made.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full-time farming clients require technical and financial advice. It is essential that the farming enterprise is profitable in order to support the farm family and therefore a profit monitor is an essential requirement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Young farmers or new entrants to farming are more driven and focused on making the most from their enterprise; therefore a profit monitor is an essential advisory tool.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A lot of farmers are not making a profit and are unwilling to acknowledge it. Therefore, they do not see any benefit in completing a profit monitor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Literacy and numeracy are a problem for some of my farmer clients.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15. How do the client characteristics listed in the table below influence your decision on how to deliver advisory messages?

	Not at all	Some Influence	Large Influence
Agricultural Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Age	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enterprise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Area Farmed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stage in family lifecycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full-time/Part-time farming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16. What % of your clients would you place in these three categories? \*

	0	20%	40%	60%	80%	100%
Low Farm Income	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average Farm Income	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High Farm Income	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17. Does the level of income produced by a farm effect your judgment on whether or not to use the profit monitor with a client? \*

☐ (a) Yes

☐ (b) No

If yes how?

Your answer

Q18. Does the level of farm income produced by the farm dictate the reports you use when analyzing the profit monitor with a client? \*

☐ (a) Yes

☐ (b) No

If yes how?

Your answer

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Carlock (2007) suggests there are four different types of professional advisors namely: teacher/trainers, consultants, coaches and therapists.

Q 19. Which of the following statements best describes your advisory approach?

Select

I transmit general knowledge and information allowing the farmer to then interpret the information before implementing it on their farm

☐

I offer tailored advice, applied to each client's situation.

☐

I support clients to develop new skills so that they can adopt new farming practices.

☐

I identify habits and blockages and facilitate clients to adopt new ways of looking at a problem.

☐



Q 20. How do you rate your own competence in the area of financial management? \*

- ☐ (a) Excellent
- ☐ (b) Very Good
- ☐ (c) Good
- ☐ (d) Average
- ☐ (e) Poor
- ☐ (f) Very Poor

## **Appendix 2**

### **Interview Email**

Hi\_\_\_\_\_

You recently completed a survey as part of my Masters research and indicated your willingness to be contacted further as part of my research.

Would it be possible to arrange a suitable time to call you regarding a few more questions I have about your survey answers?

This will only take 15-20 minutes and will help towards the completion of my thesis. The interview call will be recorded to aid the transcribing of the information later but information provided will be held in the strictest confidence.

Kind Regards,

Aileen McCarron

UCD/Teagasc Walsh Fellow

## **Appendix 3**

### **Semi-Structured Interview Questions.**

Q1. Are groups changing farmer motivations towards the use of the eProfit Monitor?

Q2. Do you think that will change over the next three years, will their attitude/motivation change when it has to be completed year on year.

Q3. How do you read farmer motivation?

Q4. A lot of your clients are farming part-time; do you think their motivations/attitudes are different to your other clients?