

APPENDIX 1 - THE CHALLENGE AND COMPLEXITY OF TECHNOLOGY ADOPTION

Many R & D Projects like the Sainsbury's FECPAK^{G2} Project face technology adoption challenges. There are many contributing factors that influence the relationship between farmers and their ability or desire to adopt technology and action an operational change in their business. Some of these factors include, perception of risk, opportunity, lifestyle, apathy, fear, to name a few. The technical description of this type of environment is a "Complex Adaptive Systems" (CAS). Although complex, CAS environments can be very successful when:

SUCCESSFUL COMPLEX ADAPTIVE SYSTEMS HAVE

- ✦ An ability to generate lots of ideas - "creativity"
- ✦ An ability to capture the useful ideas of others - "connectivity"
- ✦ A willingness to absorb new ideas - "flexibility"

NEW IDEAS AND A WILLINGNESS TO CHANGE

- ✦ Having created the ideas, you must have a willingness to change to allow it to happen
- ✦ Creating a willingness to change is the hardest hurdle to overcome
- ✦ This sounds easy but is very difficult - humans resist change - our brains are hard wired to resist change
- ✦ Change takes time, and requires a great deal of support to embed it as permanent improvement

CAPTURING THE VALUE OF INNOVATION

- ✦ Individuals don't live in a vacuum - they need support to harness their creativity most effectively
- ✦ What makes individuals implement, improve, and adapt new technologies, or just devise small improvements in the way they carry out their daily work (how they innovate) depends on the attitudes and resources around them
- ✦ Without the right support, good ideas just stay that way - good ideas

CREATIVE COLLABORATIONS

- ✦ Creative individuals don't work in isolation, the role of interaction and collaboration with others is critical to creativity
- ✦ We have an obsession with solitary genius - we tend to underestimate how much creative work is accomplished by groups
- ✦ Getting the right combination of skills on a team is as important, if not more so, than trying to get the smartest team members

"None of us are as smart as all of us" - Collective intelligence

ADOPTION OF FECPAK^{G2}

During the Project, farmers were regularly asked about their approach to parasite management and their views on adopting FECPAK^{G2} into their farming operation. Their varying responses have been summarised below.

ATTITUDE CHALLENGES INFLUENCING ADOPTION

Resistant to change

- ✦ My animals look OK
- ✦ My animal performance is fine
- 80% of farmers think they are in the top 20% of farmers*
- ✦ I just drench – it's easy
- ✦ I get my tests for free
- ✦ I use FEC – once a year?
- ✦ I don't like technology
- ✦ No one's asking me to do it
- ✦ My customer is the meat company
- ✦ My drenches are working – haven't tested though?
- ✦ I can tell if they need a drench
- ✦ My vet tells me what dates to drench
- ✦ I've got too many other things to worry about

Open to change

- ✦ Apathy is the enemy
- ✦ Make informed decisions
- ✦ You can save money
- ✦ Your animal performance will improve
- ✦ Drench resistance is real and it impacts performance
- ✦ I want to know what drenches work
- ✦ What I do affects the next generation
- ✦ I don't like using all that drench
- ✦ It's easy to do
- ✦ I can now see the problem
- ✦ It just makes sense – it's logical
- ✦ It's what my market wants



MINIMISING THE ADOPTION CHALLENGE

During the Project, several initiatives were undertaken to aid farmers using FECPAK^{G2}. These involved the early induction phase and how to maximise the overall benefits of the platform.

- a) **De-risk the purchase – ensure it will work for the user**
 - ✦ If it breaks we will fix it
 - ✦ If it breaks again we will replace it - at no cost
- b) **Value add – new features**
 - ✦ We will add new improvements and features at no extra cost
- c) **Empathy with the user – work for them**
 - ✦ We are with you to get you going – using the support of client managers
 - ✦ We can see your images so we can help you to get it right – dedicated client managers directly working with users
 - ✦ If you are having trouble we will help – client managers, videos, skype, agent support
 - ✦ We will add new applications – they will cost, but this will be your choice
 - ✦ We assist in providing or linking you to expertise
- d) **Communication – we will keep in touch with users**
 - ✦ We will keep you informed – blogs, social media etc
 - ✦ We will continue to keep messaging the success stories (maintain confidence)
- e) **Credibility – link expert support**
 - ✦ Gain key influencer support and input
 - ✦ We will work to gain scientific support
 - ✦ Work to create a farm management normality around monitoring FEC

