

NEW RESEARCH AND FARMERS' INTUITION

GETTING TO GRIPS WITH DECISION EXCELLENCE

The first detailed analysis of farmers' intuitive decision making has been released. Dr Nuthall, of Lincoln University, noted a leading international rural research journal has published the analysis ('Intuition, the farmers' primary decision method. A review and analysis', Journal of Rural Studies). The work is co-authored with Dr Old.

Surveys make it clear farmers make by far the majority of decisions using their intuition. They don't formally analyse each decision, but use their mental powers to decide on what action to take. Sometimes the decision is instantaneous, but in others a range of thought levels are brought to bear before acting. Good decision intuition is not a mysterious process.

Profit and other assessments show some farmers are good intuitive decision makers, others not so good. It is certainly true, Dr Nuthall commented, that farmers with little experience, whether they have good potential intuition or not, find it difficult to make good decisions.

The intuition process often uses what is called 'pattern matching'. Dr Nuthall explained this is where the brain uses experience to match up past events with the current decision problem. The farmer's intuition then comes up with what the brain believes to be the correct action.

A review of past research in urban settings, Dr Nuthall notes, shows intuition is rather more than just pattern matching. Intuition develops with a farmer's thought process, self criticism and review. This new research collected farmer and farm data and used this to show the systems associated with successful intuition. Farmer intuition has never been analysed to this extent before.

Data from over 700 farmers was analysed using what is called structural equation analysis. This gave clear answers on how farmers can improve their intuition. In the end many of the conclusions make sound common sense. 'If this wasn't the case, you might question the accuracy of the data and wonder about the confidence you could have in the results' Dr Nuthall concluded.

An important issue in using the results is working out ways to work with farmers to improve their intuitive abilities. Like any skill, improvement is certainly possible using proven techniques. To help this extension process, Dr Nuthall reasoned that a story of a tight knit group of farmers working on improving their intuition would help.

This novel tells the story of a group of the farmers and their meetings covering a range of management challenges and skills associated with intuition. Guided by meeting facilitators, the farmers sort out each other's decision problems, learning and taking on board the lessons. The book, 'The intuitive farmer ... inspiring management success', is available by mail through most international book retailers including 5M.

The analysis of the farmer research survey shows a number of factors are associated with good intuition. Obviously the farmers' technical farming knowledge is important as a forerunner. But equally is the attention to carefully observing the state of the farm and the relevant markets.

Observations must be accurate and cover all the issues important to any decision. And the farmer must be good at anticipating the path ahead ... looking ahead skills are critical in assessing alternative actions to solve any decision problem. These all tend to be inbuilt skills

All these skills can be improved with attention and practice. Review and self criticism are part of improving these skills. A farmer should analyse all past decisions and take on board any lessons on offer. Discussing past actions with colleagues and family helps improve mind held patterns and good solutions.

The analysis, noted Dr Nuthall, also made it clear a knowledge of correct decision approaches was important. This was an area the farmers in general were not that good at.

This is where the novel on intuition can help enormously. Decision rules relying, for example, on an understanding of diminishing returns such as ensuring marginal returns equals marginal costs must come to a farmer intuitively to allow success. Many others are also important.

Also important is the farmer's own personal attributes, and their objectives too. Like anyone, farmers express their managerial skill through their personality and natural intelligence giving rise to their 'managerial style'.

A good level of conscientiousness, and low anxiety, for example, are associated with high managerial ability. Dr Nuthall concluded 'there is good evidence to show it is possible for a farmer to modify her or his personality to better align with features associated with high ability'.

A new novel is being prepared to guide farmers through the process of modifying their 'management style'. This will be available in a few months.

The relative importance of each intuition developing skill on a percentage basis was calculated from the results using a range of analysis methods. Decision theory knowledge contributes from 11 to 23%, anticipation skills 5 to 8%, observation 2 to 21% , technical knowledge a whopping 14 to 55% and reflection and critique effort 10 to 23%. The remaining contributors give 26 to 2% (feedback, experience in its own right ...). It is clear each area is important and given improvement attention.

One researcher recommends farmers diary the decisions made and list out the factors they thought important. When they see the outcomes from the decision they relate this back to the actions taken. Were they correct? How could they improve the outcome? This analysis slowly sharpens up the farmer's intuition.

CONTACT

Dr Peter Nuthall on nuthalp@lincoln.ac.nz

Department of Land Management and Systems, Lincoln University.