

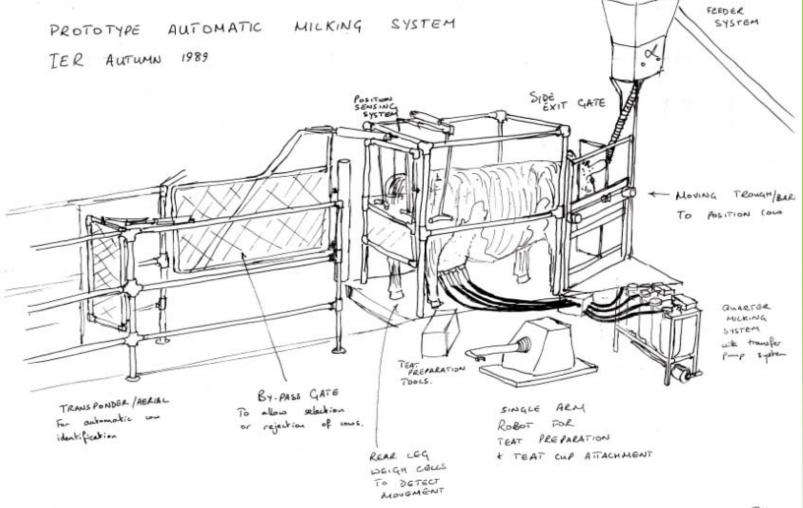
A history of eCow: concepts to cash

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Robotic Milking: 1988:1995





UK robotic milking research



1987 Project Started in lab

1989 First prototype tested

- PoC = Proof of Concept

1992 Viable development version sold

1993 IP Transfer to de Laval (staff secondment)

1996 PoP = pre-production prototype

2000 Market Launch of VMS

2016 Sales exceed 10k (0.6% of dairy parlours)

No IP revenue to UK plc due to:-Dispersal of technical team BTG failing to prosecute at Patents court, Munich

Challenges in Commercialisation



- Funding
- Long time scales (7-10 years)
- Competition
- IP Management
- Skills, Recruitment and Retention
- Scale Risk
- Finding the Minimal Viable Product



My BBSRC & Defra Projects 1995-2005

- Cow breath sensing
- In-line progesterone analysis
- In-line milk sensing
- Rumen telemetry

Successful projects but no commercialisation

Commercialising IP



- As a researcher?
- Lose control and ownership
- "Not your problem" low personal risk
- No reward except salary and benefits
- Start a company ?
- Funding through grants and investors
- Needs new skills (recruiting, raising money, SELLING)
- High risk of failure (95%)
- Needs support from partners/family

Starting eCow



- Frustrated with management of a company I founded
- Freedom to Operate obtained
- Projects for ITITechmedia (built cash pile)
- Wrote and Filed a UK Patent Application 2007
- Won a Smart Award to build prototype bolus
- Employed first staff
- First sales in 2011



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Building eCow

- Shortage of cash and skilled people
- Identifying the customer needs
- Getting the quality right
- Keeping up with software platforms
 - Windows 7
 - Android versions
- Building the data system



Expanding eCow

- Need 1 FTE but with many different skills
- But we employ 5 FTE
 - Opportunistic Projects that fit our strategy
 - Build capability in people/systems
 - Build resilience
- Strategic Projects
 - Milkalyser
 - VirtualVet





Concepts to cash

- Excitement
 - Doing something very special
 - High Risk
 - Product failure
 - Financial failure
- Enjoyment
 - A sense of personal control
 - Credibility in society

