ICAR 2015
TECHNICAL WORKSHOP

10-12 JUNE 2015,
KRAKÓW, POLAND

ICAR 2015
TECHNICAL WORKSHOP

WWW.ICAR2015.PL

Rezare Systems

Agricultural Software Development Specialists

Innovations in Sheep Performance Recording in New Zealand

NZ sheep industry

1773 Sheep released by first European explorers (died

1814 First sheep farmed (Missionaries)

1961Selection Index

1965 National Flock Recording Scheme

1982 Peak sheep numbers, focus on wool – 70 million

1984 Subsidies removed

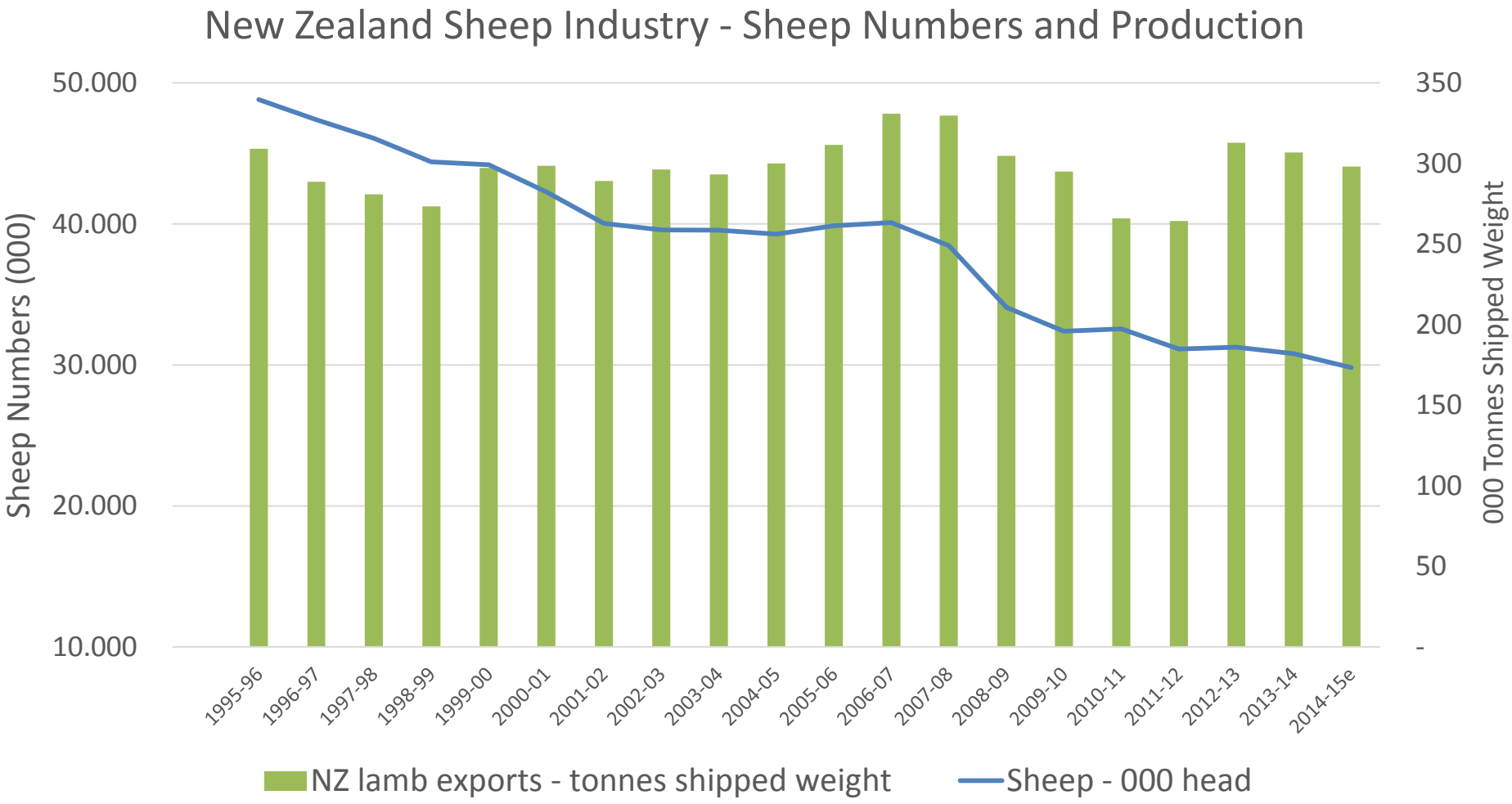
1987 39 Million sheep

1998 Sheep Improvement Limited formed

2014 Beef + Lamb New Zealand Genetics formed

Piquet Hill Romneys – photo credit Clive Dalton

Trends in Sheep Numbers and Productivity



Source: Beef + Lamb New Zealand

Genetic improvement

beef+lamb new zealand GENETICS

- Owned by Beef + Lamb New Zealand (farmer levy organisation)
- Combines performance recording, genomic research/services, and central progeny test
- $15M NZD (7.5M €) investment over 5 years

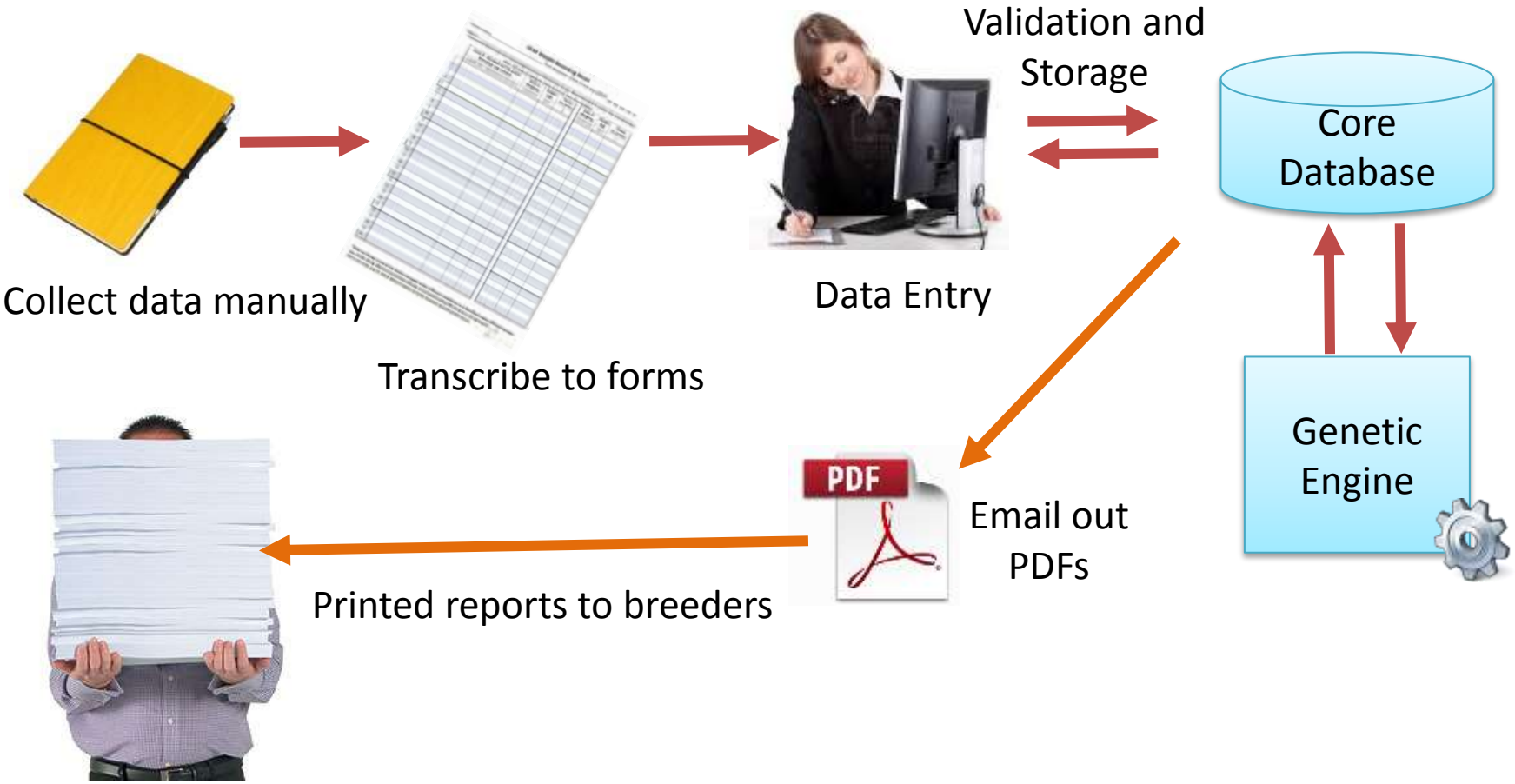
Historic System and Approach

- Traditional Performance Recording System
- Based on paper in, paper out from 1970s/1980s
- Regional bureaus enter data, run reports

- JADE object-oriented database
- Genotypes handled separately
- Separate Genetic Engine runs produce blended BVs

- Mostly in-flock breeding values
  ACE Across Flock Analysis bi-monthly

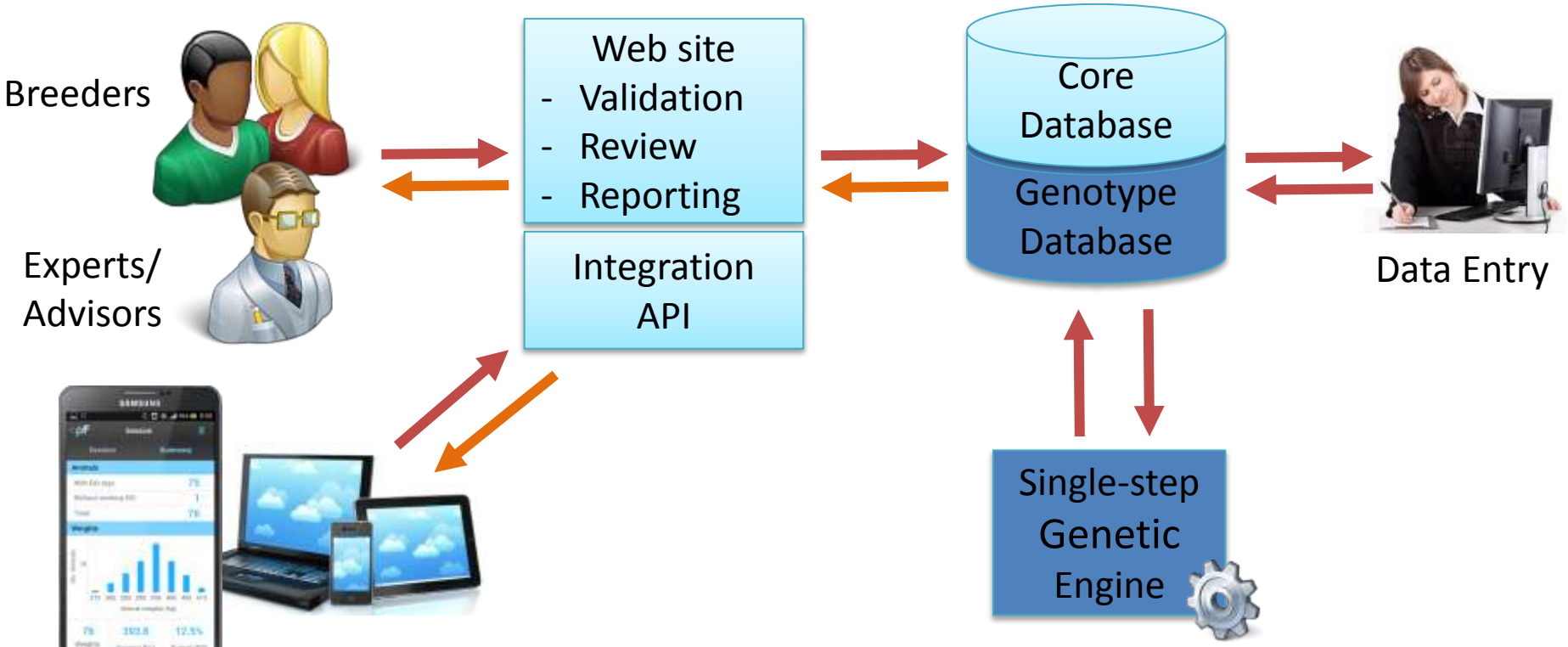
Current (Historic) System



Updated System

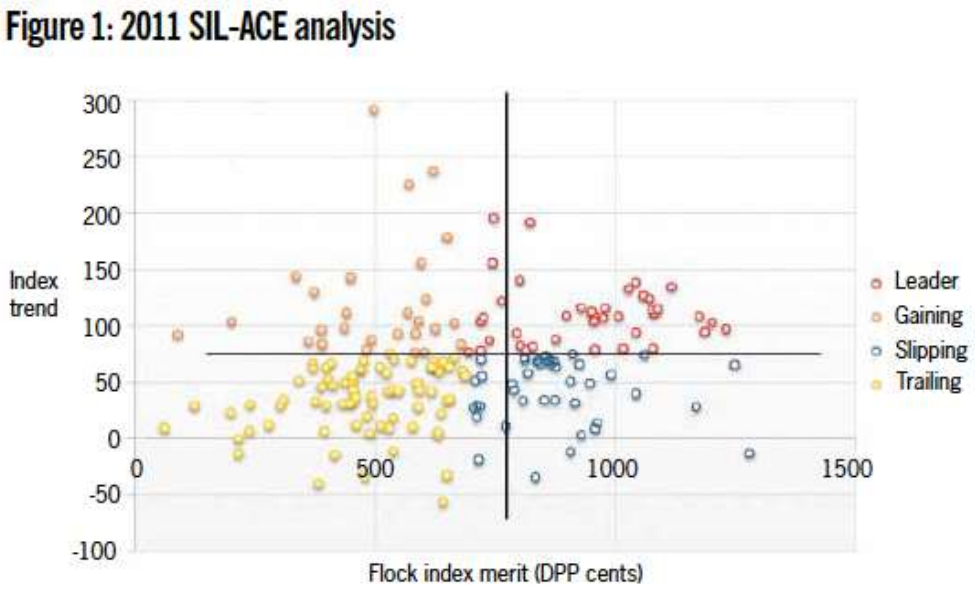
- Next-generation platform built on Web Services and APIs (C# and R, SQL Server, cloud-hosted)
- Mobile devices and in-field data collection, mobile and web reporting
- Increased data validation and expert advisor roles
- Genotypes in database
- Single-step analysis, weekly
- Integration of new goal traits – e.g. Stayability

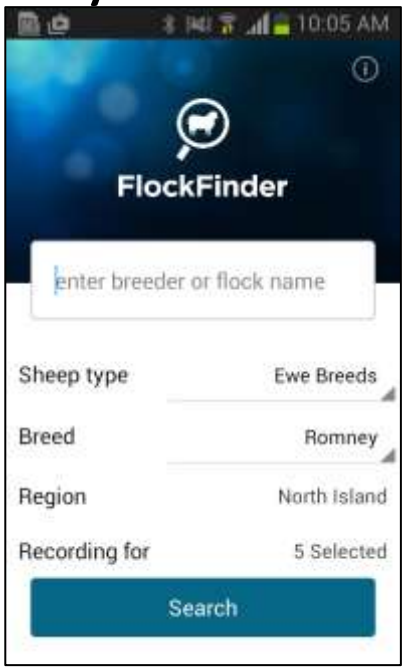
Updated System



Industry Tools

- Assist farmers with ram buying and understanding genetic gains
- Tools for advisors
- Integration with industry benchmarking tools





Rezare Systems

Questions?

Thank you