



FRDC

EXTENSION

OCTOBER 2016

Peter Horvat

What is extension?



Getting the right information to the right people at the right time; or

The process of enabling change in individuals, communities and industries involved in the primary industry sector and with natural resource management; or

Is it useful to think about extension projects/initiatives more broadly in terms of their place in Community Capacity Extension & Education Support Systems

FIGURE 1: Simple theoretical (linear) approach to research development extension and adoption process

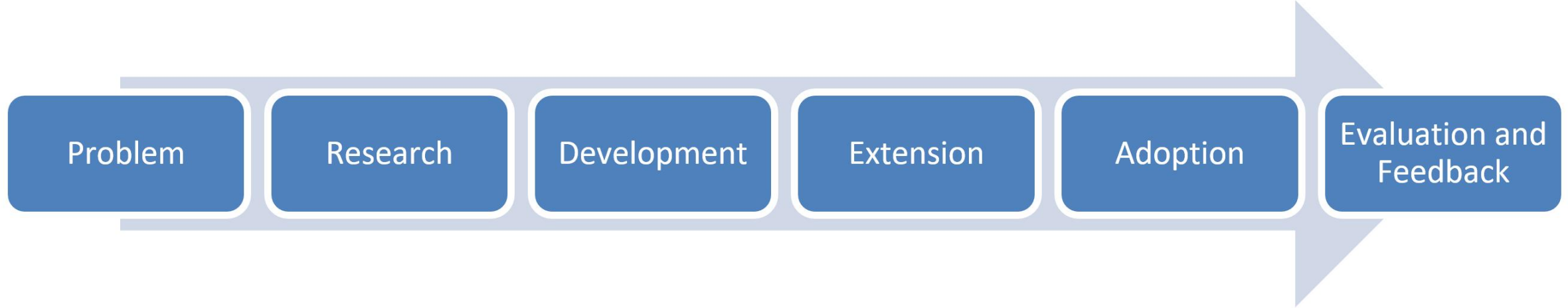
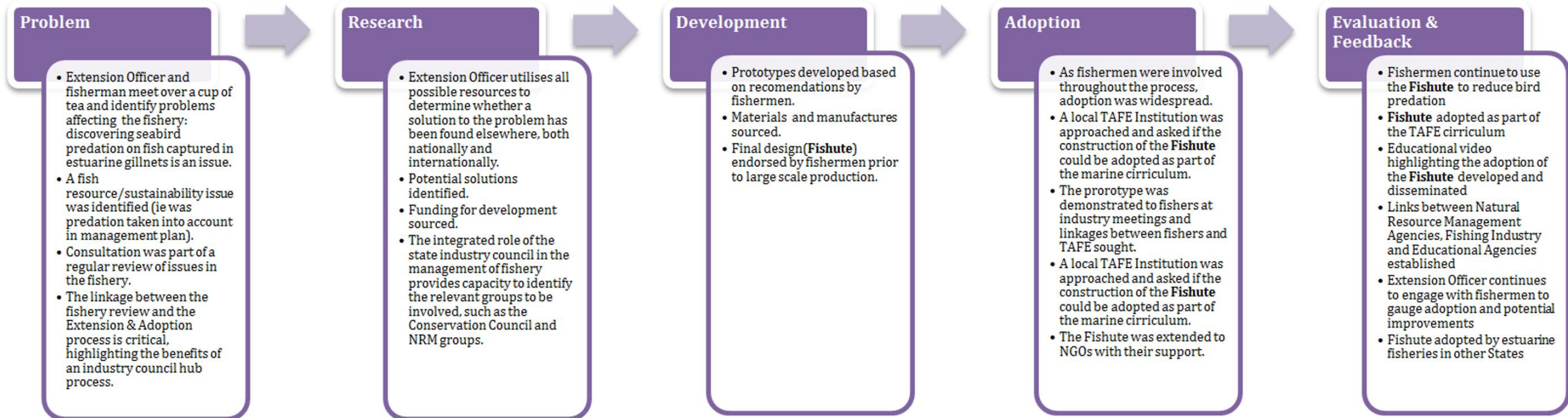
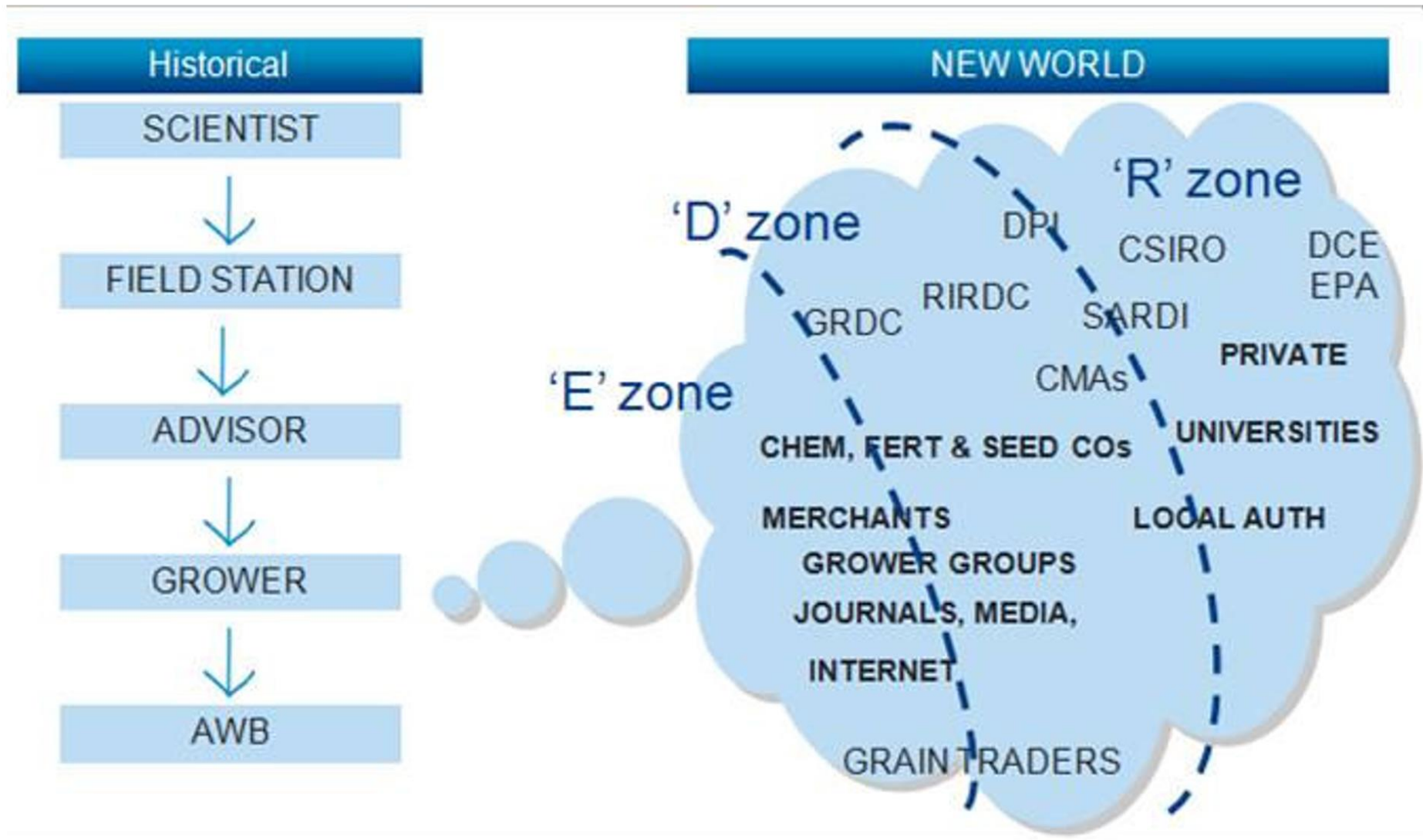


FIGURE 2: one linear example of successful extension and adoption utilising extension officers



Extension Models

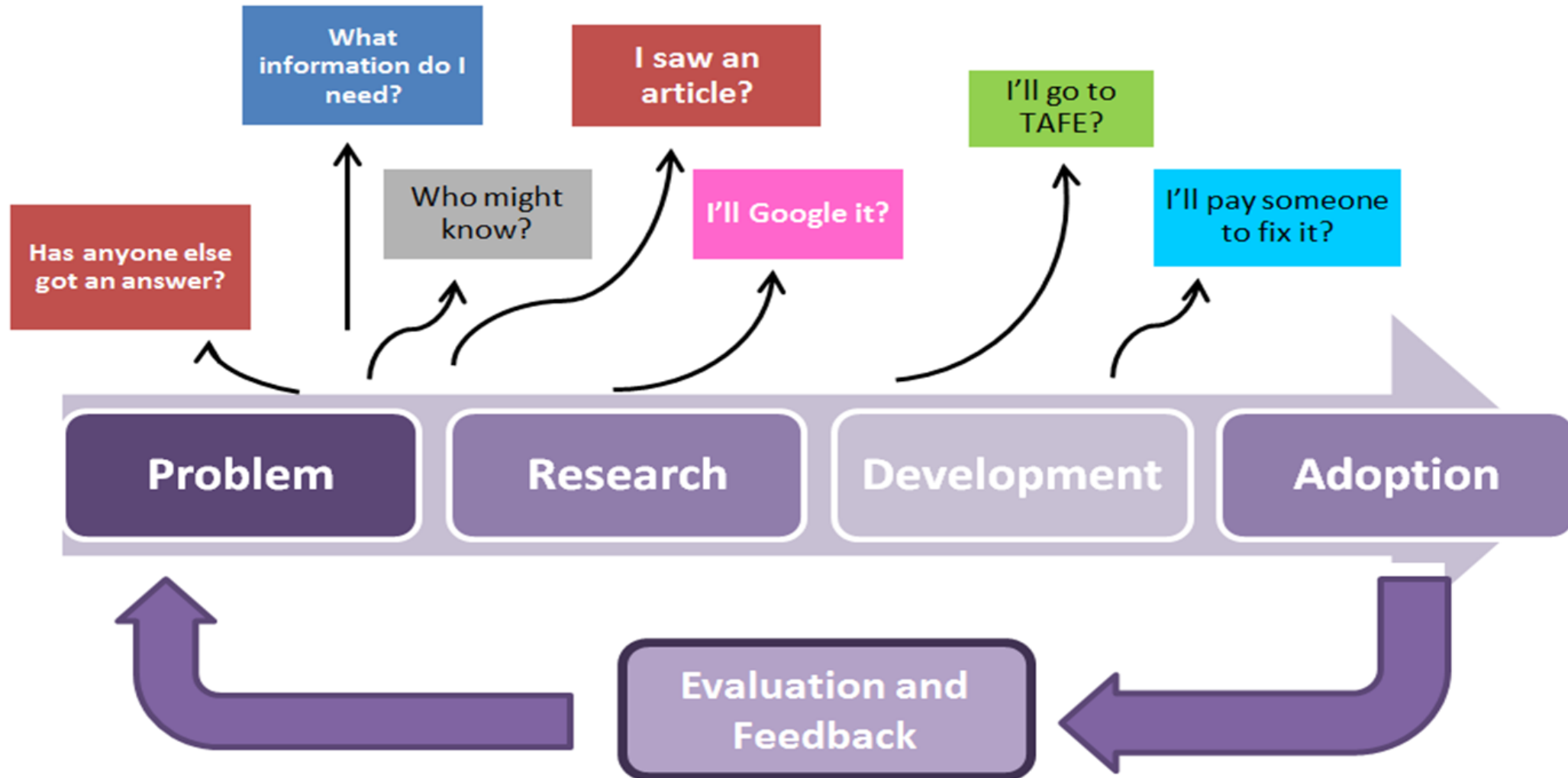
The historical and new world extension models – an example from the Grains RD&E Strategy (2010)



FRDC's view on Extension and Adoption



Learning logic meets commonsense....





delivery mechanisms

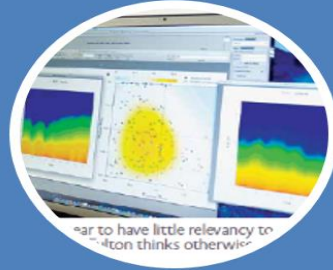
Continuum of extension – Intensive to Remote



One on one
Face to Face



Educating
people



New R&D
knowledge
generation



Talking
among
groups of
people



Use of
traditional
and new
media



Extension officers
Oceanwatch/Seanet
Seafood Industry or Sector Bodies
Fisheries management agencies
Specialist service providers – boat
builders, net makers, processors

Schools – primary, secondary,
tertiary – non-standard online,
indigenous, workbooks

- PIEFA and PICSE,
- Certification – skippers, etc
- Agrifoods Skills Council
- Workshops and conferences
- Direct workplace training

Project based engagement of :

- Researchers
- Seafood Industry or Sector
Bodies
- Oceanwatch/Seanet

Seafood Industry or Sector Bodies
Regional groups – City Councils,
Eyre Regional Development Board
Slow Food Group
Marine Discovery Centres
Fishing Clubs
Trade, processing, retail chains
NGOs,
Port gatherings, Oyster meetings.

Media General – news, etc.
Libraries
Government Communication –
Licence/Management letters, Fish
Magazine,
Internet, Websites and electronic
newsletters
Social Media – Facebook, twitter,
etc.

Communication platforms



FISH - Magazine



Including yourself, how many people read your copy of FISH?

3.3 Readers

=

Readership

50,000+

FISH magazine as a source of R&D information

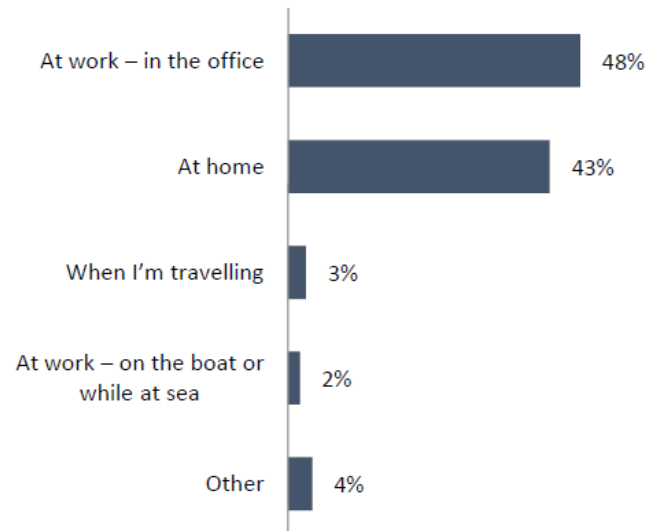


Have followed up a story within FISH

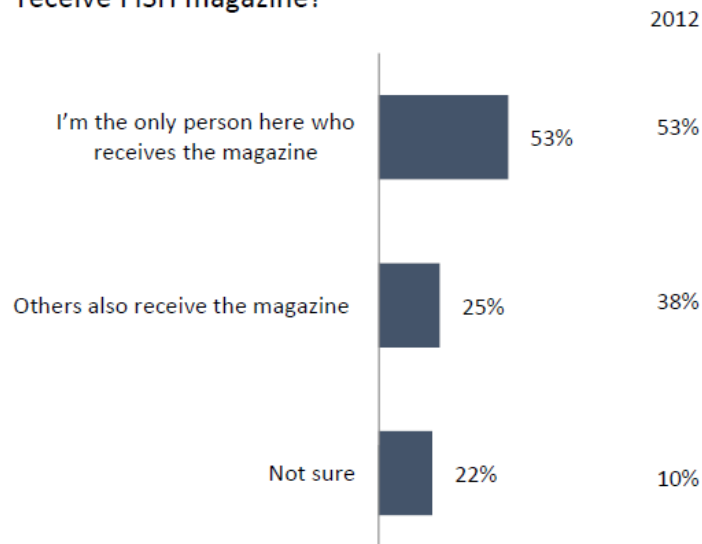


61%

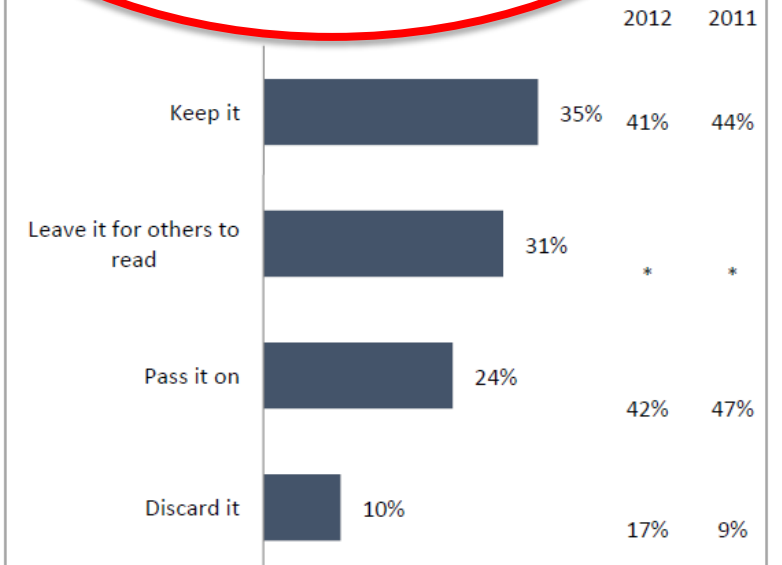
Where would you typically read FISH magazine?



Does anyone else in your business or workplace also receive FISH magazine?



What they do once they're finished reading FISH



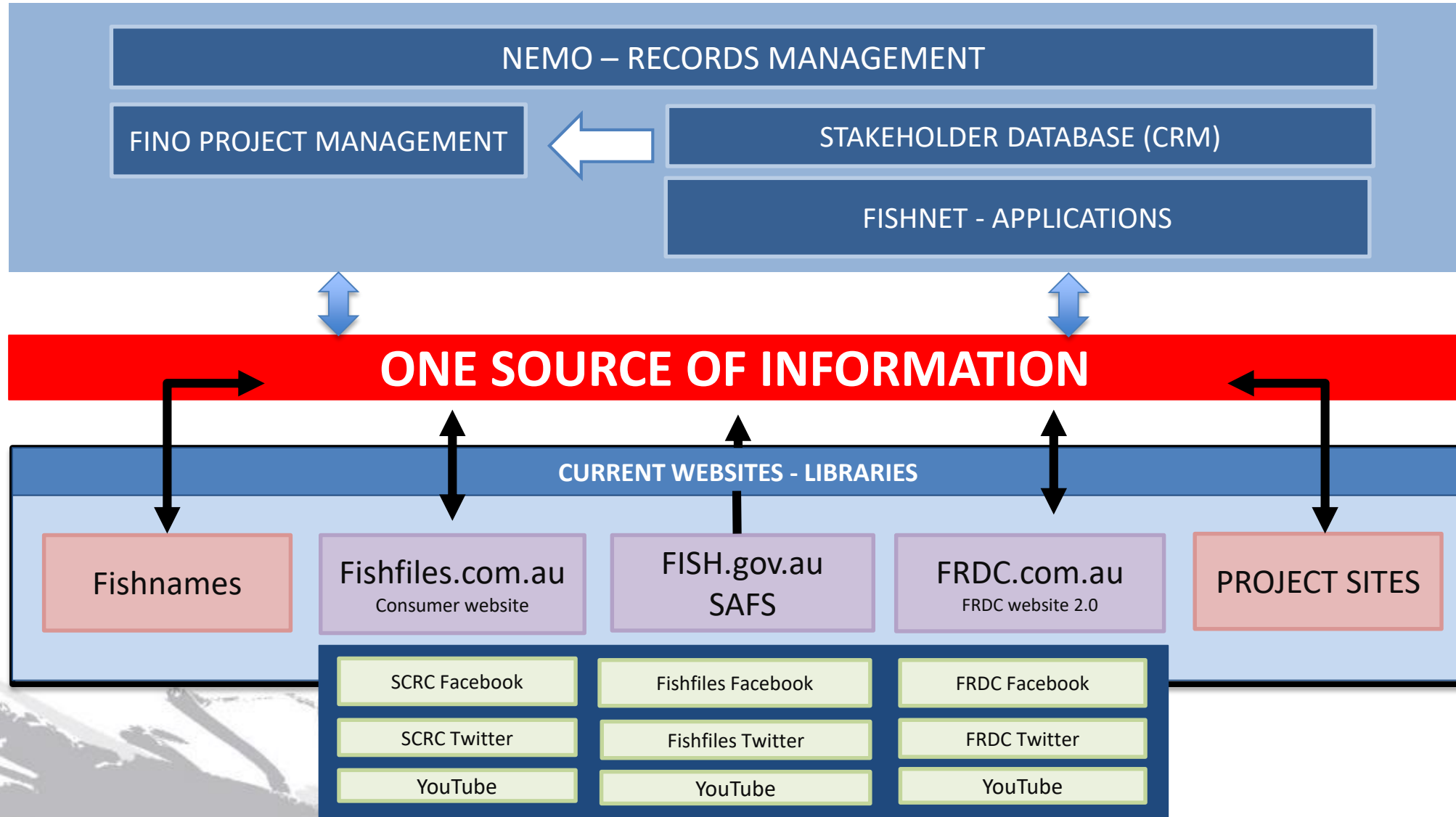


Digital infrastructure

Data Management System 1.0



New information system – one data source



Building the system – linking data



Greenlip Abalone

CAAB Code: 24 038004

Standard Fish Name: Greenlip Abalone

Scientific Name: *Haliotis laevis*

Authority: Donovan, 1808

Family: Haliotidae

Country: AU

SFN: Species

Obsolete Names: abalone; muttonfish

FRDC

Greenlip Abalone *Haliotis laevis*

TABLE 1. Stock status of Greenlip Abalone

Stock Status	North Coast	Central Coast	South Coast
Stock	Low	Low	Low
Production	High	High	High

fishfiles

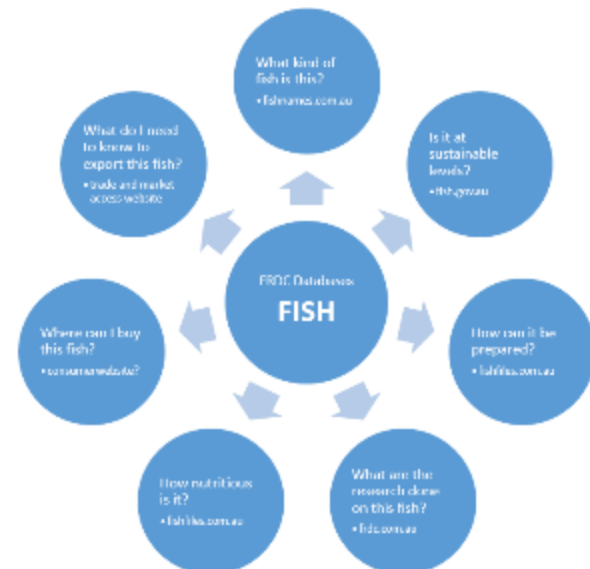
Greenlip Abalone

Fish Names Research Stock Status Market sales Culinary facets

NUTRITION INFORMATION

WILD ABALONE - SERVING SIZE: 100g	WILD ABALONE - QUANTITY PER SERVING PER PACK 1	WILD ABALONE - ENERGY PER 100g	WILD ABALONE - PROTEIN PER 100g	AVERAGE QUANTITY PER 100g
ENERGY	350 kJ	4.5	33.1	
PROTEIN	10.8g	37.3	10.8g	
FAT TOTAL	0.58g	0.82	0.58g	
saturated	0.20g	0.60	0.20g	
trans	0g	0g	0g	
polyunsaturated	0.27g	0.21	0.27g	
omega 3	0.004g	0.004	0.004g	
omega 6	0.004g	0.004	0.004g	
total	0.008g	0.008	0.008g	
monosaturated	0.07mg	2.2	0.07mg	
total	0.10g	0.10	0.10g	
CARBOHYDRATE	0.14g	1.01	0.14g	
sugars	0.03g	1.0	0.03g	
SODIUM	26.8mg	11.8	26.8mg	
PHOSPHORUS	122mg	14.2	122mg	
IRON	0.13mg	94.4	0.13mg	
BIOTIN	21.8mg	21.8	21.8mg	
VITAMINE	1.33mg	13.3	1.33mg	
MAGNESIUM	48.5mg	15.1	48.5mg	
ZINC	0.009mg	12.5	0.009mg	

Nutrition Recipes



Digital delivery – the vision



Status of
Key Australian
Fish Stocks
2014

FIND A FISH NAME

Insert Fish Name Here:

- Search All Fields
- Search by Standard Fish Name
- Search by Obsolete Name
- Search by Scientific Name
- Search by CAAB Code



TRADE > AUSTRALIAN SEAFOOD TRADE AND MARKET ACCESS DATABASE
AUSTRALIAN SEAFOOD TRADE AND MARKET ACCESS DATABASE



Australian Fisheries
Healthcheck





doing the basics

Plan, plan, plan...



- The starting point for every APPLICATION should be on the **END USER**
- The more diffuse the end-user the more work to extend
- Know who your end user is and identify the gate keepers
- Every stage of the project offers opportunity for extension
- Choose appropriate extension deliver mechanism(**s**) – and no a journal paper on its own is not extension
- Collaborate with your stakeholders.

Project Title: FRDC: 2010/302 Equipping the mud crab industry with innovative skills through extension of best practice handling

Research Agency: Innovative Food Technologies, DEEDI, QLD

Client: Australian mud crab supply chain



Who was the driver/instigator for the research?

When was adoption undertaken?

Industry	Government	Researcher	Other:
During project			Other:

Extension Target	Who was responsible?	Tools used?	Performance indicators?	Outcomes	Adoption	Impact	Rating
Commercial mud crab fishers	Researchers Chairs of Associations	Stories pitched to industry publications Face to face communications Demonstrations or presentations at industry events Forums	case studies interviews improved economic return market data feedback participant numbers adoption level	information delivered to > 80% of supply chain at least 50% of industry adopted handling recommendations	32	36	Extreme
Wholesalers and retailers	Researchers Lead industry stakeholders	Stories pitched to industry publications Face to face communications Demonstrations or presentations at industry events Forums Point of purchase materials	case studies interviews improved economic return market data feedback participant numbers adoption level	information delivered to > 80% of supply chain at least 50% of industry adopted handling recommendations	28	40	Extreme
Market distributors	Researchers	Stories pitched to industry publications Face to face communications Demonstrations or presentations at industry events, Forums	case studies interviews improved economic return market data feedback participant numbers adoption level	information delivered to > 80% of supply chain at least 50% of industry adopted handling recommendations	25	36	Extreme
Industry associations	Researchers Chairs of Associations	Stories pitched to industry publications Face to face communications Demonstrations or presentations at industry events Forums	feedback participant numbers	information delivered to > 80% of supply chain at least 50% of industry adopted handling recommendations	21	18	Medium
Hospitality	Researchers	Stories pitched to industry publications Face to face communications Demonstrations or presentations at industry events Forums Point of purchase materials	case studies interviews improved economic return market data feedback participant numbers adoption level	information delivered to > 80% of supply chain at least 50% of industry adopted handling recommendations	17	11	Medium
Consumers	Researchers	Stories pitched to industry publications Point of purchase materials	case studies interviews market data feedback	satisfied customers return purchases	10	5	Low

Key Learnings:

- Actual mortality rates and how these relate to different environmental conditions and handling practices,
- Actual mortality rates and how this relates to economic data such as lost/potential income,
- Simple physiological information on what happens when crabs are out of the water and the effect of holding times and storage conditions,
- How handling practices contribute to stress factors,
- Key handling methods at critical points to minimise stress levels,
- How to differentiate product on brand messages of quality and best practice,

How different agents in the supply chain can communicate best practice handling and storage practices to others in the supply chain