



FRDC

FISHERIES RESEARCH &
DEVELOPMENT CORPORATION

FINAL

Digital Literacy for Queensland Commercial Fishers

Stage 1 - Improving Business Efficiencies

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February 2023

FRDC Project No 2019-022

Digital Literacy for Queensland Commercial Fishers – Stage 1 Improving Business Efficiencies
FRDC Project No 2019-022
2022

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The Fisheries Research and Development Corporation plans, invests in and manages fisheries research and development throughout Australia. It is a statutory authority within the portfolio of the federal Minister for Agriculture, Fisheries and Forestry, jointly funded by the Australian Government and the fishing industry.

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Acknowledgments

The authors would like to acknowledge and thank the following people and organisations for their generous contribution to this project:

- Queensland Seafood Marketers Association
- Queensland Seafood Industry Association
- Jeff Newman
- Neil Moretto
- Eileen Lewthwaite
- Michael Wood
- Moreton Bay Seafood Industry Association
- Women in Seafood Association
- The Fishermen's Portal
- Ocean Watch
- Queensland Department of Agriculture, Fisheries and Forestry
- NSW Professional Fishers Association

Executive Summary

Introduction

This report provides the outcomes of research conducted with Queensland fishers in 2019 whereby fisher-friendly online resources and tools were created to assist with the ongoing development of digital literacy and adoption within the seafood industry, initially in Queensland but potentially throughout Australia.

In a broad sense, digital literacy for the commercial fishing sector means having the capability and skills to live, learn and work in a society where they need to effectively communicate, record data and analyse information in an online environment utilising various digital technologies, social media, process, systems and other online platforms.

This project set out to assist Queensland fishers and fishing businesses to:

- Identify key success factors and barriers to maximise uptake of digital technologies, processes, platforms, and systems in the seafood industry to increase digital literacy
- build capacity among commercial fishers to use new digital technologies in their businesses and for 50 fishers to engage with the digital literacy program.
- Document the project's learnings so other fishing sectors and jurisdictions can use them.

Results/key findings

The project started with a small, focused survey that included a good cross-section of Queensland fishing industry participants. This provided valuable insight into digital technology capability and the willingness of fishers to adapt digital technologies in their businesses.

Attitudes to using digital technology varied among the interviewees, with many already adopting some form of technology (so have a positive attitude and a good experience) to those who are not confident with using it but still expressing to learn and try. A small group were not interested in digital technology and did not see the need to learn or to want to try.

Workshops in seven ports were planned and there was unanimous support for training sessions to be short and to the point (1 to 3 hours), with the learning content in bite-sized chunks.

The planned face-to-face workshops were designed to provide opportunities for participants to learn the basics of setting up the technology and getting online safely, with hands-on activities to help build confidence and the capability to access the online Digital Fishers portal for ongoing support.

The workshops were planned to be conducted in 2020 but were postponed due to COVID 19 restrictions impacting travel and meetings. The workshops were planned and booked four times during 2020, 2021 and 2022. The workshops were eventually cancelled. All training materials and resources are available online on a dedicated Digital Fishers portal <https://www.myfoodbusiness.com.au/digitalfishers>.

Implications for relevant stakeholders

While 2020 and 2021 have illustrated just how quickly the business environment can and is likely to continue to change the way commercial fishers operate in the future, fishers and fishing businesses need to have the capability to identify and use technologies that will help them adapt to the change such that their businesses remain commercially viable and responsive to the ever-evolving expectations of customers, the community, and the government.

Recommendations

It is recommended that FRDC and seafood industry associations and groups

1. promote the Digital Fishers Program and the associated resources that are available free at <https://www.myfoodbusiness.com.au/digitalfishers>
2. identify opportunities to incorporate the Digital Fishers program and resources in capability, capacity and extension programs to build digital confidence and use digital technologies effectively in businesses.

Keywords

Digital literacy, technologies, business efficiencies, communications, marketing

Species: Moreton Bay Bugs (*Thenus australiensis* and *T. parindicus*), Scallops - (*Amusium balloti* and *A. pleuronectes*), Crabs – Blue Swimmer Crabs, Mud Crabs and Red Spot Crabs, Fish – Stout whiting (*Sillago robusta*), Winter whiting (*Sillago maculata*) and Sand Whiting (*Sillago ciliata*), Pipefish, Pinkies, Prawns - Tiger prawn (*Penaeus esculentus*, *P. semisulcatus* or *P. monodon*), Endeavour prawn (*Metapenaeus endeavouri* and *M. ensis*), Red spot king prawn (*Penaeus longistylus*), Banana prawn (*Penaeus merguensis*), Eastern king prawn (*Penaeus plebejus*), Bay prawn (*Metapenaeus bennettiae* and *M. macleayi*). Greasyback prawns (*M. bennettiae*), and school prawns (*M. macleayi*), Squid - pencil squid (*Photololigo* spp.), tiger squid or northern calamari (*Sepioteuthis* spp.) and arrow squid (*Ommastrephes bartramii*, *Sthenoteuthis oualaniensis*).

Introduction

In today's business world, digitalisation is commonplace, but so is the resulting skills gap. Many organisations are struggling with effective, efficient digital adoption because they expect employees to adapt to these technical changes on their own.

In an organisation where this is the case, the responsibility tends to fall to the employer to provide adequate training and resources for tools they expect their employees to use. This is usually accompanied by assessments and accountability built into this training so that employers can quantify results and identify areas for improvement.

When we consider the primary industries sector, especially the Australian seafood industry, there is an added layer of complexity as there is no one employer or organisation responsible for assisting fishers to become digitally literate and confident. So, fishers have had to adapt to technologies and digital platforms independently.

Holistic, strategic training processes that cater to all types of businesses and their various learning methods is of paramount importance because when done correctly and the audience is engaged, digital skills training is proven to drive business success, improve productivity, boost innovation, and foster greater agility.

In 2019 there was a specific urgency for a digital literacy program to happen in Queensland due to the Queensland Fisheries Management reform processes underway at that time and the planned move from paper reporting to online reporting in mid-2020. Following consultation with industry and government, it was suggested that it was premature to roll out a digital literacy program purely associated with the Queensland fisheries reform. At the same time, there continued to be significant antagonism and scepticism towards the proposed reforms by industry. Research shows, and experience confirms it, that fishers are highly unlikely to engage in a digital literacy program in such an antagonistic environment and that it will likely result in an extremely low adoption rate.

It was decided that instead of focusing on the fisheries management reform process that an industry-wide approach was needed that involved localised supportive communities where people can get advice and assistance from people who not only understand digital technologies but also the fishing industry context. It was also important to take a staged approach that focused on understanding

- the level of digital literacy and capabilities, recognising that some fishers are early adopters of new technologies, whilst others struggle with a lack of confidence and digital know-how,
- what the specific skills gaps were to ensure that a digital literacy program was developed that built confidence and delivered both short and long-term business improvement outcomes for participants.

Creating fisher-friendly resources and tools as well as a network of skilled people, will underpin the development of and provide a legacy for ongoing development of digital literacy and adoption within the seafood industry, initially in Queensland but potentially throughout Australia.

While 2020 and 2021 have illustrated just how quickly the business environment can and is likely to continue to, change the way commercial fishers operate in the future, fishers and fishing businesses need to have the capability to identify and use technologies that will help them adapt to the change such that their businesses remain commercially viable.

Objectives

Objective 1: To identify key success factors and barriers to maximise uptake of digital technologies, processes, platforms, and systems in the seafood industry to increase digital literacy

Objective 2: To build capacity among commercial fishers to use new digital technologies in their businesses and for 50 fishers to engage with the digital literacy program.

Objective 3: To evaluate the program and document the learnings of the project that can be used by other fishing sectors and states as part of the project's legacy as well as informing a possible Stage 2 project)

Method

The project was undertaken in four steps. The timing of these steps was severely disrupted due to the COVID Pandemic in 2020 and 2021. The impact and how this was managed are detailed within the description of each step.

Step 1: Consultation and familiarisation with digital products:

Queensland industry groups, associations and organisations were contacted and briefed about the project (see Attachment 1 Industry Briefing).

Consultation was undertaken with industry associations, including Queensland Seafood Industry Association and Queensland Department of Agriculture and Fisheries who were planning to introduce digital catch reporting. This approach was designed to assist with identifying the “pain points” experienced by fishers in understanding and applying digital technologies within their businesses. We also wanted to consider and compare the skills and competencies of fishers who use technology efficiently and those who don't. The third element of the consultation was to identify the technologies fishers were curious about or wanted to learn how to apply in their businesses.

Interviews were also undertaken with Oceanwatch and the Professional Fishers Association of NSW to understand how the NSW Fisheries digital reporting program was rolled out in that state and how the training to support this introduction was conducted. This helped to identify the successful elements of the training that could be applied to the digital literacy workshops and online portal developed for Queensland Fishers.

A desktop study was conducted to identify potential barriers and success drivers for the uptake of digital technology in Queensland fishing businesses. Based on this research, an in-depth interview protocol was developed, and interviews were conducted with individual fishers.

Step 2: Capacity building using the digital literacy framework, information and knowledge discovered in Step 1:

This step aimed to lay the foundation for building the digital capabilities of at least 50 Queensland fishing businesses. To achieve this the findings from Step 1 were to be used to develop an integrated capacity-building program that included:

- a training success path
- a face-to-face training workshop outline
- training resources to support the face-to-face training workshops (including tips and tricks, checklists, quick start guides etc.)
- an online site incorporating presentations and resources used in the workshops
- a series of learnings guides to assist with self-paced learning

These materials were originally to be trialled with a user group. This did not happen due to COVID issues (the package of materials needed to be trialled in a face-to-face situation, but travel restrictions made this next to impossible). It was then decided to try the package in the face-to-face workshops. See Step 3 below.

Step 3: Conduct face-to-face workshops in at least 5 Queensland ports.

A series of 3-hour (half-day workshops) were planned to be conducted in key Queensland fishing ports. The location and timing of the workshops were developed in consultation with the fishers, the industry associations, and QDAF.

The workshops were designed to include a series of practical hands-on activities so that participants would leave the workshop able to get online safely, access and use the learning materials to guide their own self-paced learning and, importantly, leave the workshop with a plan of how to introduce and use digital technologies within their businesses.

Due to the travel and other COVID pandemic restrictions, the workshops which were initially organised for June/July 2020 were delayed to November 2020, delayed again until June/July 2021 and finally delayed until mid-2022.

Step 4: Report and recommendations

A report including recommendations has been developed.

Originally one of the key parts of the report was to provide recommendations and insights to support the rollout of the QDAF catch reporting app. However, the delays associated with COVID are likely to have made this redundant.

Results & Discussion

In a broad sense, digital literacy for the commercial fishing sector means having the capability and skills to live, learn and work in a society where they need to effectively communicate, record data and analyse information in an online environment utilising various digital technologies, social media, process, systems and other online platforms.

Step 1: Consultation and familiarisation with digital products

Desktop research

An environmental scan and desktop review set the background and the context for the digital fisher training program. It outlines the barriers, pain points and pathways to success as detailed in relevant published material ([see Attachment 2 Environmental Scan](#)).

Key findings include:

- There is a significant digital skills and capability gap across the whole primary producer supply chain.
- Farmers and fishers can see the digital landscape changing but knowing how to adapt and stay relevant can be a challenge.
- Research suggests that improving digital innovation could improve the gross value of production of the Australian agriculture sector by \$20.2B (Growing a Digital Future Framework).
- A lack of access to mobile and telecommunications infrastructure is costing agribusinesses and the Australian economy billions of dollars each year with an estimated 43% of producers having patchy or no mobile reception.

- Any remote and online training will need to be optimised to make it accessible at slower internet speeds that are often experienced still in rural and regional locations. This includes being out at sea.
- Digital inclusion follows some clear economic and social contours. Australians with low income, education, and employment levels are significantly less digitally included. There is consequently a substantial digital divide between richer and poorer Australians.
- Australian women have a lower digital literacy rate than Australian men, with the widest gender gap occurring in the 65+ bracket. The widest digital inclusion gap between older women and men is for the group aged 75–79. Those aged 65+ are the least digitally included age group in Australia.

Previous studies on digital literacy in Australia have found consistent barriers and pain points identified for individuals and businesses. These barriers include:

- Lack of understanding of the value and benefits of the technology
- The costs involved
- Knowing what the best technology is to have in one's business
- Not knowing the return on investment and whether it is worthwhile to spend the money
- Worried about the security and privacy of personal and business information
- Not having the digital ability to use the technology
- No time to learn the new skills required and then the time to implement it
- Not knowing the associated legal requirements of being online and fear around terms and condition check boxes and the "fine print"
- Fear of social media
- Exposing oneself to negative feedback and comments
- The view it is not a priority for one's business
- The view it is not relevant to one's customers
- Negative public perception of technologies used
- The view that the technology will be too complex to use
- Lack of education and training
- Confusion/uncertainty
- The trainer doesn't demonstrate why and how to integrate the technology

Studies have also shown that when digital literacy is low, people don't understand:

- The device type needed
- The right system required
- The right software needed
- What integrations with current requirements and business technologies are required
- The relevance of the right technology to their business
- Whether satellite connectivity is useful
- Time and place to update devices
- The options available to them

Industry Association interviews

Interviews took place with following organisations to understand other fisher experiences related to using and adopting digital technology (see Attachment 3 Industry Consultation).

- Queensland Seafood Industry Association
- Queensland Department of Agriculture and Fisheries
- Professional Fishermen's Association NSW
- OceanWatch

- Victorian Fisheries Authority
- New South Wales Department of Primary Industries x 2
- Western Australia Department of Primary Industries and Regional Development

Government consultation

All fisheries management authorities in New South Wales, Northern Territory, Queensland, Tasmania, South Australia, Victoria, Western Australia, and the Commonwealth (AFMA) were contacted to discuss the project and to understand what digital reporting technologies they use and what their experiences were regarding uptake by fishers and fishing businesses.

This research informed the development of the Success Path (see Attachment 4 for Pathway to Success).

Fisher in-depth interviews

Twenty-one (21) fishers throughout Queensland were interviewed in November 2019 using a standardised interview protocol (see Attachment 5 Fisher Interview Protocol). A report detailing the findings from these interviews is attached (see Attachment 6 Fisher Interview Report).

This small, focused survey included a good cross-section of Queensland fishing industry participants and as such, provides valuable insight into digital technology capability and willingness of fishers. The point was made that most fishing businesses are small, where owners and employees are likely to have a broad range of responsibilities within the business. Therefore, it is important that any training program recognise that digital technology is not their main focus – they need to be fishing.

Attitudes to using digital technology varied among the interviewees, with many already adopting some form of technology (so have a positive attitude and a good experience) to those who are not confident with using it but still expressing to learn and try. A small group were not interested in digital technology and did not see the need to learn or to want to try.

Figure 1: The six personas of fisher digital capability and willingness



There was unanimous support for training sessions to be short and to the point (1 to 3 hours) with the learning content provided in bite-sized chunks. Examples of the formats that could be used include podcasts, videos, blogs and templates. The option for digital badges and completion certificates was considered useful for some people.

While both face-to-face "in person" and online modes are deemed acceptable it is worth considering that people who lack confidence are unlikely to go online for training without assistance. The planned face-to-face workshops will need to provide opportunities for participants to learn the basics of setting up the technology and getting online safely. Having mainly hands-on activities will help build confidence.

Online training delivery will provide ongoing support for workshop participants (and those who are already digitally confident) where skills and knowledge can be practised and refreshed.

In addition to the technical content, the training program needs to consider digital well-being aspects. Digital well-being relates to the impact of technologies and digital services on mental, physical and emotional health. For example, a positive experience could be connecting with others and working flexibly, while a negative experience includes trolling/cyberbullying, digital overload, and information overwhelm.

Table 1 summarises the participation challenges and training needs for each persona identified by the interviewees. This was then used to guide the development of the training content for the face-to-face workshops and supporting resources.

Table 1: The participation challenges and training needs for each of the six personas

Persona	Participation challenges	Training needs
Toe In	Technology not sturdy enough Connectivity Worried about negative comments No time	Learn to type How to use a smart phone How to use a computer Word Scan documents Save files to folders
No but keen	Not sure how to use a smart phone	How to use government websites SFM seller system online Apps
Business transformer	Connectivity Time needed to get good at something Using internet banking Security and passwords Terminology	Making short videos for social media Accounting systems Online payroll How to build a website Finding digital grants and help writing Google Ad words On line searching Potential benefits of going digital
Digital comfort zone	Passwords Connectivity Video conferencing	BAS and Accounting systems Using a computer correctly Word Passwords and security Video conferencing
No choice/thanks no thanks	Connectivity Emails Passwords	How to use smart phone How to use a laptop/computer Accounting systems

Step 2: Capacity building using the digital literacy framework, information and knowledge discovered in Step 1

Training Modules

Using the findings in Step 1 five draft training modules were developed (see Attachment 7 Digital Fishers Program Outline). The key principles used in the development of the modules are:

1. The content design considers the training participation challenges and training needs of each of the six digital fisher personas.
2. The initial workshop series and online resources focus on the following persona groups: not online yet but keen, Toe in, no choice and thanks, but no thanks.
3. All training resources developed to support the face-to-face workshops reside at <https://www.myfoodbusiness.com.au/digitalfishers>.

4. The workshops incorporate instructions on accessing the Digital Fisher online portal, and printed material includes written and visual access instructions. The online portal also provides clear instructions (written and visual) for non-workshop participants.
5. All modules include step-by-step guidance (written and visual) on how to do each task/activity learned in the face-to-face workshop. This will help to reinforce learning post workshop.
6. The face-to-face workshops follow a general format and include core content but with room to change the content based on the needs of the participants.

Training Resource Development

A full suite of training resources has been developed as part of this project. These include:

- An online training portal (see Attachment 8 Online Course Structure).
- A video series featuring a Queensland fisher talking about how digital technologies have benefited his business, the challenges he faced and how he overcame them (go to www.digitalfishers.com.au)
- A PowerPoint presentation for each module includes a voiceover that provides detailed information and instructions.
- A Module Guide for each module which includes a script and additional information for each module
- A series of templates, checklists, and worksheets to match the modules and provide opportunities for businesses to develop their own digital transformation plan
- Additional instructional videos

Resources for each module are described below and have been uploaded to FRDC SharePoint Folder.

Introduction Module

- Introduction Presentation
- Introduction PowerPoint
- Introduction Module Guide
- Digital Fishers Program Outline
- Video: find your way around the Digital Fishers Portal

Module 1: What can digital do for you right now

- Module 1 Presentation
- Module 1 PowerPoint
- Worksheet: Identify the possibilities for my business
- Module 1 Guide
- Worksheet: Your digital fisher personality
- Factsheet: Tech Speak
- Video: hear from our fisher

Module 2: How to stay safe in cyberspace

- Module 2 Presentation
- Module 2 PowerPoint
- Module 2 Guide
- ACSC Small Business Cyber Security Guide
- Factsheet: How to protect yourself from scams
- Factsheet: Tips for creating a strong password
- Worksheet: Checklist to identify what I need to do to secure my business
- Worksheet: Password Quiz

- Video: hear from our fisher

Module 3: Communicating online

- Module 3 Presentation
- Module 3 PowerPoint
- Module 3 Guide
- Worksheet: Apps I use or could use in my business
- Factsheet: Using Zoom
- Video: hear from our fisher
- Video: find and download weather app on an Apple device
- Video: find and download weather app on an Android device
- Video: download the Zoom app on an Apple device

Module 4: Social media in business

- Module 4 Presentation
- Module 4 PowerPoint
- Module 4 Guide
- Factsheet: Overview of 5 social media platforms
- Video: hear from our fisher

Bonus Module: How to get the right tools for your business

- Bonus Module PowerPoint
- Bonus Module Guide
- Worksheet: Understanding your technology requirements
- Factsheet: Tips for purchasing a rugged smartphone
- Video: hear from our fisher

These resources are all freely available online once enrolled in the Digital Fishers course. Go to <https://www.myfoodbusiness.com.au/digitalfishers> for free access.

Step 3: Conduct a series of face-to-face workshops in at least 5 Queensland ports

Workshop Agenda & Format

A standard workshop agenda and format were developed with opportunities for changes to the timing based on participant interests/needs. A workshop workbook was developed for each participant (see [Attachment 9 Workshop Workbook](#)).

Workshop Schedule

The digital fisher training was planned to be rolled out at the end of May 2020. This was delayed initially until September 2020, when it was hoped that the COVID Pandemic situation would be clearer. This series was also cancelled due to ongoing uncertainty and restrictions for travel and meetings.

In a meeting on the 26th of November 2020, the QDAF team advised that they planned to have their digital fisheries reporting app ready for launch by 30 June 2021 and launch it to fishers in September 2021.

Following these discussions, it was decided to schedule the Digital Fisher face-to-face workshops for May/June 2021. However, the ongoing COVID pandemic issues meant that these workshops were also delayed, initially to later 2021 and then delayed again to 2022.

Originally only 5 workshops were proposed; however, to provide more equitable access, 8 workshops were scheduled throughout the state (see below). In the event, only Sunshine Coast, Brisbane North and Brisbane South proceeded, with participants only showing up for the Brisbane South workshop. Cairns, Townsville, Mackay, Rockhampton, and Bundaberg/Hervey Bay were cancelled due to a lack of registrations.

Location	Dates
Brisbane South	Friday 20 January 2023
Brisbane North	Thursday 19 January 2023
Sunshine Coast	Wednesday 24 August 22
Bundaberg/Hervey Bay	Friday 11 November 22
Rockhampton	Thursday 10 November 22
Mackay	Wednesday 9 November 22
Townsville	Tuesday 8 November 22
Cairns	Monday 7 November 22

The entire course is now available online and an online feedback process has been implemented for all online course participants.

Performance Indicators

The original performance indicators for this project were

- Level of engagement by fishers during the initial consultation and research process to understand barriers to adoption and “pain points”
- Download and click-through rates of greater than 18.67% (as benchmarked by the agriculture and food industry click rates) of project user guides, cheat sheets and support tools
- 50 fishers trained in digital literacy in 5 ports (10 fishers per port)
- Scores of a minimum of 4 out of 5 from a trainer program feedback form
- Willingness of fishers scoped from this project to engage with a training program solely related to the QDAF reporting app as part of a proposed Stage 2 project

Fisher engagement

Fishers' engagement during the initial and more recent consultations has been good. This engagement has resulted in this unique program they codesigned with us. The codesign approach means that the content is highly practical, and participants who complete the training can immediately apply the learnings to their businesses. However, it is worth noting that post codesign, engagement in the project (workshops and online training portal) has declined. This is most likely due to the multiple cancellations due to the COVID pandemic lockdowns. The pandemic forced many people to get online who were previously quite resistant. This may have resulted in the workshop content not being as relevant to the potential participants as before the pandemic.

The rollout of the Queensland Fisheries app, which coincided with the timing of the workshops, has been the subject of some significant tensions between the fishers and the government. Consequently, some

fishers have reported anecdotally that this situation influenced fisher engagement due to perceptions that the workshops were somehow linked to the app.

Fishers Trained

The planned face-to-face workshop rollout has been continually disrupted, first by the COVID-19 pandemic travel and meeting restrictions, and then by the political standoff between Qld fishers and the QDAFF fisheries management decisions. The materials, presentation and workbooks are ready for use and can be rolled out anytime.

NSW and Tasmania have approached us for information about the program with the potential for the workshops to be rolled out in those states (subject to funding).

To date, 3 participants attended the Brisbane South Workshop, and seven participants enrolled in the online training course. Note that we have recently promoted the Digital Fishers Online course through the QSIA monthly newsletter, so an increase in enrolments is expected.

Online resources

A comprehensive set of training materials and resources are available online where Queensland fishers can enrol at no cost. Go to: <https://www.myfoodbusiness.com.au/digitalfishers>.

As people become more aware of the resources through our planned communication program, we expect to achieve a good download rate.

The challenge is for those who are not confident going online and using digital training material (the target audience for the current content). This issue needs to be revisited and considered by FRDC and SIA in developing the industry training platform.

Course Evaluation

Course evaluation is ongoing. An online evaluation form has been developed, so when people complete the course, they are invited to complete the evaluation form. In addition, other measurements that can be collected are - number of enrolments, course progress for individual participants and course completion. Any face-to-face workshop will be evaluated as they happen.

QDAF Reporting App

There is still significant angst among fishers relating to anything from QDAFF. This angst contributed to the eventual cancellation of the planned workshops in November 2022 – abusive phone messages were received relating to the workshops, which showed that the workshops were associated with QDAFF. This level of angst indicates that there is little appetite by Qld fishers for a course specifically for the QDAFF app.

Conclusion

This project set out to assist Queensland fishers and fishing businesses to:

- Identify key success factors and barriers to maximise uptake of digital technologies, processes, platforms, and systems in the seafood industry to increase digital literacy
- build capacity among commercial fishers to use new digital technologies in their businesses and for 50 fishers to engage with the digital literacy program.

Six distinct digital fisher personas were identified. These were used to design the Digital Fishers workshop series and an online portal <https://www.myfoodbusiness.com.au/digitalfishers>. These workshops and associated learning resources were developed to address the barriers and to deliver on the training needs identified through the in-depth interview survey. The workshops were specifically designed to be short and

practical. The focus was to use the workshop to increase digital confidence and to guide people to use the online Digital Fishers portal. The Digital Fishers portal has been designed to provide ongoing support for fishers. A Digital Fishers Facebook group with currently 9 members has also been established for updating participants when new resources and information are available.

Implications

While significantly delayed due to the COVID-19 pandemic and associated disruptions, the need for this program is more acute than ever. The Digital Fishers Program and associated workshop and online learning resources are freely available for other fishing sectors and jurisdictions to use. Initial approaches have been made to the NSW Professional Fishers Association and TSIC has expressed an interest in finding out more.

Recommendations

It is recommended that FRDC, Qld Department of Agriculture and Fisheries and industry associations such as Queensland Seafood Industry Association, Seafood Industry Australia, Women in Seafood Australasia, Moreton Bay Industry Association, Fishermen's Portal, Queensland Seafood Marketing Association and others to:

- promote the Digital Fishers Program and the available resources at <https://www.myfoodbusiness.com.au/digitalfishers>.
- identify opportunities to conduct face-to-face Digital Fishers workshops to assist those who are not digitally confident about getting online safely and using digital technologies effectively in their businesses.

Extension and Adoption

An Extension Strategy was originally developed (see **Attachment 10 Extension Plan**), and an editorial to assist industry groups in communicating with their members and networks about this project.

The Digital Fisher Workshops (delayed four times due to travel and other disruptions due to COVID) were scheduled as follows:

Location	Dates
Brisbane North	Thursday 19 January 23
Brisbane South	Friday 20 January 23
Sunshine Coast	Wednesday 24 August 22
Bundaberg/Hervey Bay	Friday 11 November 22
Rockhampton	Thursday 10 November 22
Mackay	Wednesday 9 November 22
Townsville	Tuesday 8 November 22
Cairns	Monday 7 November 22

In preparation for these, an online communication/marketing sequence was prepared to communicate about and promote the course (see Attachment 11 Online Communication/Marketing Campaign). Industry associations, groups and champions were asked to assist in getting the information out to members. This included social media posts and member communications by QSIA, WISA and FRDC. These efforts are summarised in the table below

Table 2: Communication Efforts for the Digital Fishers Program

Honey and Fox	Australian Wild Barramundi Project Facebook Group	13 posts
Honey and Fox	Digital Fishers Facebook Group	16 posts
Honey and Fox	Honey and Fox Facebook	14 posts
QSIA	Facebook <ul style="list-style-type: none"> 22 Sept 2022 – https://www.facebook.com/QLDSeafood/posts/pfbid02qSg3c7ZT7gPxVKFBUyczn9tZwMUpmm5R9Nh4H6oWgN4haBAHqBW2z37gUHfRyXmRI 19 Aug 2022 – https://www.facebook.com/QLDSeafood/posts/pfbid02ovsLPw7YsC6at1FKyRh2ssRK8vNLfZTyq3YvmEjaDYzpdgZxpRyVUnRKq7Vjnmgrl 18 Aug 2022 – https://www.facebook.com/QLDSeafood/posts/pfbid0QS9SfW51wZUc3qvJwSMDTDyiWwHpfstRxjCfysQNFKCev32bUhVBta3i5uFAVfHI 	3 posts
QSIA	Podcast with Jayne Gallagher promoting the importance of Digital Literacy and the Queensland workshops	19 Aug 22
QSIA	Weekly email campaign to members for 6 weeks	Sep - Oct 22
Honey and Fox and Seafood Directions	Postcard that was distributed at the WISA breakfast (see Attachment 12 WISA Postcard at Seafood Directions 2022)	13-15 Sep22
SIA	Post to promote the Digital Fishers Roadshow	16 Aug 22
FRDC	(see Attachment 13 FRDC Promotion on LinkedIn)	23 Aug 22
Honey and Fox	Direct emails to fishers in Honey and Fox database	Sep and Oct 22

Project coverage

The following communication resources have been developed and used or will be as the face-to-face workshop program rolls out.

- Project website landing page <https://www.myfoodbusiness.com.au/digitalfishers>
- Editorial promoting the project and the training program (see Attachment 14 Editorial)
- ¼ and ½ page adverts promoting the project and training program (see Attachment 15 Adverts)
- Publication in SIA newsletter (see Attachment 16 SIA Newsletter Publication)

- Publication in Queensland Fisher Magazine (see Attachment 17 Queensland Fisher Magazine Publication)
- Part 1 publication of a 3-part podcast series with QSIA about digital literacy (uploaded to FRDC SharePoint Folder)
- Part 2 publication of a 3-part podcast series with QSIA about digital literacy (uploaded to FRDC SharePoint Folder)
- Digital Fishers Program Information Sheet to be used for future promotion (see Attachment 18 Program Information Sheet)

Project materials developed

Commercial fishers in Queensland, and across Australia now have access to a program and associated resources to improve their confidence and competency using digital business tools to achieve the associated business efficiency benefits.

The program and resources include:

- Digital Fisher persona descriptions and digital training needs report
- Digital literacy program framework with national applicability available for use in other sectors
- Capacity-building tools in the form of micro-learning support materials which are easily accessible by large numbers of commercial fishers to support improving digital literacy

The materials are provided in the attachments to this report.

Attachments

The following attachments have been uploaded to FRDC SharePoint Folder

Attachment 1 Industry Briefing

Attachment 2 Environmental Scan

Attachment 3 Industry Consultation

Attachment 4 for Pathway to Success

Attachment 5 Fisher Interview Protocol

Attachment 6 Fisher Interview Report

Attachment 7 Digital Fishers Program Outline

Attachment 8 Online Course Structure

Attachment 9 Workshop Workbook

Attachment 10 Extension Plan

Attachment 11 Online Communication/Marketing Sequence

Attachment 12 WISA Postcard at Seafood Directions 2022

Attachment 13 FRDC Promotion on LinkedIn

Attachment 14 Editorial

Attachment 15 Adverts

Attachment 16 SIA Newsletter Publication

Attachment 17 Queensland Fisher Magazine Publication

Attachment 18 Program Information Sheet

NB: Online course materials (described in the methods section of this report) have been uploaded to FRDC SharePoint Folder