

Final Report Draft: Marine Service Manager Essentials

Essential Management Tools for Skilled Technicians

2021-05-31 MAEST Sector LMP Program Agreement #C20LMP003

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Final Report Draft: Marine Service Manager Essentials

2021-05-31

The Marine Service Manager Essentials project was intended to create (with reference to the contract):

"[A] training program for upskilling and career progression of technically skilled persons in small and micro businesses by providing essential management tools, training, and mentorship in small craft marine (and scalable to other sectors)."

This Final Report summarizes the 2-year project phases and outcomes including:

- Steering committee support activities;
- Industry Consultation results;
- Instructional design and curriculum developed;
- Pilot delivery and mentorship model outcomes;
- Training feasibility and sustainability plans; and,
- Cross-sector promotion and networking results

as they relate to the original Project Management Workplan, the Communication Plan and Evaluation Strategy.

1 Project Summary

Essential Management Tools for Skilled Technicians has been a two-year project funded by the Province of BC and the Government of Canada through the Sector Labour Market Partnerships Program (01 July 2019 to 31 July 2021).

1.1 Project Goal

This project created training to specifically target skilled technicians who are transitioning into management positions. Training design priorities proposed were:

- 1. Non-academic training for hands-on learners (workshops and activity-based sessions rather than theory-driven classes);
- 2. Industry-specific content so applying new practices at work does not require a lot of translation from theory or another industry examples;
- 3. Mentoring as reinforcement and follow-up to learning so new practices do not simply get buried under the pressures of 'what we normally do'.

The project had 3 phases:

- 1. DEFINE what's difficult about transitioning from tools to becoming a manager by asking industry.
- 2. DESIGN workshop-based courses that incorporate mentoring to fill these gaps.
- 3. DELIVER trial courses to ensure what we developed is relevant and valuable.

The project feasibility and sustainability plan in Section 6 outlines how this course will continue to be delivered to BC marine service managers.

1.2 Relevance of this Project

We continue to build and market BC as a Marine Service Centre of Excellence. Part of this build is providing the foundations for *Employers of Excellence*—those who care about Customers, Careers, and their Community (industry) as a whole.

From our 2017 - 2019 project¹ we knew that:

82% of marine service managers come from a skilled trades background.

70% of those managers still work on the tools (in addition to management responsibilities).

A successful transition to management requires support.

Successful marine service companies require good management practices and organizational consistency. Only then can these businesses successfully hire employees, advance people's career paths, and support a credible, sustainable industry.

1.3 Project Steering Committee Support Activities

Throughout the project, the 15-person steering committee met as a group five times formally via Zoom (online video conferencing) and countless times individually with the project team via phone, email, or in-person meetings. This diverse group of trades managers, business owners, industry association representatives (marine and other sectors), and educators were instrumental in providing risk management suggestions and feedback for the planning and implementation of the project activities.

See *Appendix A: Project Steering Committee Support Summary* for detailed committee meeting summaries. Members and affiliations are listed in the *Acknowledgement* on page 1. See *Appendix B: Project Team Contacts* for the list of consultants and contract holders.

¹ C17LMP022 Employer Partnerships: Apprenticeship Support via Competency Assessment Facilitation Final Report February 2019

2 DEFINE: Industry Consultations & Employer Engagement

Phase 1 of the project was to define what every Marine Service Manager needed to know. Consultation workshops with industry were designed as both a gap analysis and an employer engagement exercise.

2.1 Capturing Industry Engagement

The Project Management Workplan proposed 5 industry consultation workshops in key centres of marine service across BC. These workshops were designed to be supplemented with 6 individual consultations. Both the workshops and individual consultations were carried out from September through November 2019.

The final tally of industry engagement included 6 industry workshops and 14 individual consultations. The data collected represents the participation of more than 90 individuals from over 70 companies giving over \$40,000 of their in-kind time to provide input and validate the need for this project.

>90 managers, individually or in one of our 6 workshops,

from

>70 companies across the province

who gave this project

>\$40,000 of their in-kind time telling us what every marine service manager needs to know.

2.2 Consultation Logistics & Metrics by Region

The BC small craft/recreational marine industry size and scope varies considerably by geographical location. Data was collected from the broadest range of company sizes over 3 key geographical locations.

North Coast focused primarily on power vessels for fishing (tourism, commercial, and personal recreation) requiring small custom manufacturing and related services.

Kanagan characterized by larger-scale small vessel manufacturing operations and the much smaller companies that support them as dealers or outsourced specialized labour.

South Coast (the Lower Mainland and Vancouver Island) where smaller manufacturing companies produce small and large custom vessels, both power and sail. The more extensive service and refit side of the industry covers every size and type of vessel.

On the North Coast, power vessels for fishing (tourism, commercial, and personal recreation) are the primary focus of small custom manufacturing and related services. In contrast, companies in the Okanagan are larger-scale small vessel manufacturing operations and the much smaller companies that support them as dealers or outsourced specialized labour.

On the South Coast (the Lower Mainland and Vancouver Island) smaller manufacturing companies produce small and large custom vessels, both power and sail. The service and refit side of the industry covers every size and type of vessel.

Despite these different operational realities, the themes and priorities for service manager training were clear and consistent. Several participants followed up by email, phone, or in person after their workshop or interview to add further details to their input. As word of the project spread, support and feedback from other subsectors (e.g., marine products, distributors, insurance) provided an external industry lens on training priorities.

In a previous sector labour market funded project $(2017 - 2019)^2$, Quadrant profiled the small craft marine industry in BC seeking ways to tailor workforce development supports to the extremely diverse range of companies. From that data, we know that this is a small-to-microbusiness industry; the median BC marine service company size is 7 employees. The heavy proportion of the consultation data in this project (Figure 1) from smaller companies aligns with that median data from the previous project.

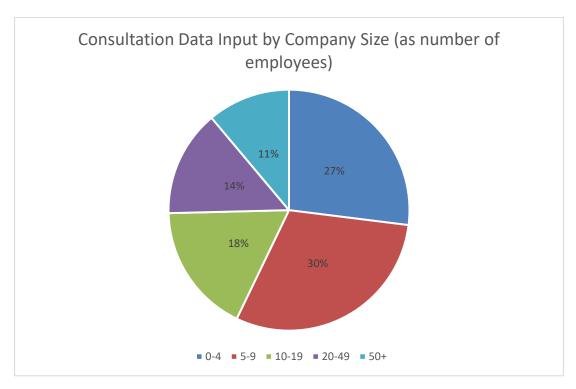


Figure 1 Proportion of consultation data from various company sizes

² https://news.gov.bc.ca/releases/2017JTST0133-001097

2.3 Industry Consultation Priorities

The 90+ managers from 70+ BC companies listed and ranked the knowledge and skills marine service managers need to succeed (the TRAINING PRIORITIES in red were designated as industry-specific). Through facilitated questioning, they identified 6 RISK THEMES the training should address. Incorporating their additional TRAINING REQUESTS will give them most relevant learning experience.

RISK THEMES TRAINING PRIORITIES TRAINING REQUESTS

Project Management

General Business Practices

Limited Time Away

/ Travel

Planning Human Resources Online pre-learning

Managing Employees Finance Training Updates

/ Managing Customers

Marketing

Accountability & Communication Legal Challenges/Self-tests

Insurance

Training & Mistakes Contracts Competency Certificate

Figure 2 Marine Service Manager Training Priorities, Risks and Logistic Requests

Project Management was by far the highest day-to-day operational priority. The lowest priorities were those that always include trusted industry-specific external experts.

See Appendix C: Industry Consultation Methodology and Analysis for the data collection and creation of this table.

2.4 Critical Success Factors

The high level of industry engagement in 3 months was significant. Workshop attendance and engagement depended on strong existing relationships. Small-business trade-based industries are connected communities.

Expecting businesses to travel for consultation workshops is unrealistic. If we wanted to hear from them, we had to go to them.

These two factors explain the limited engagement on the North Coast and in the Okanagan. We used these lessons to change how we engaged with similar pockets of industry on the central and north island by hosting mini workshops rather than planning a larger session.

2.5 Lessons Learned

Experienced tradespeople see themselves as experts in their trade. Success in management does not translate into them identifying as an expert manager. Mentorship has both a self-identity and a sector culture barrier.

While a skilled tradesperson may reach outside their business on a technical topic, they are unlikely to do so on a management topic.

An interesting element from the consultations came from what was <u>not</u> said. None of the service managers in any of the workshops or individual consultations listed a cost to their business that was not billable as anything related to leadership or management mistakes.

Creating industry benchmarks for management competence as part of this training will identify the reality and risk of management errors and open a path to improvement.

The consultation process solidified marine service managers' initial engagement...

...and offered new discoveries on the challenges surrounding management & mentorship.

3 DESIGN: Industry Consultations Drive Curriculum Development

Phase 2 of the project was to create an instructional design plan and develop curriculum based on the data collected and analyzed during the industry consultation phase.

The foundational design principle for this project was that the consultation data would drive the design of all training. Industry indicated clear themes and consistent priorities in their desire for training regardless of the size and type of business.

3.1 Marine Service Manager Training Design

The final course design is a Marine Service Manager Journey incorporating all the elements of industry's training priorities, knowledge and skill competencies, their identified themes of risk, and their logistics requests (see Figure 2). The program design ensures that Marine Service Managers can practice the required management competencies in the workshop activities, which increases the skill transfer to their own work environments.

This 8-month development process required:

20 Industry Experts to demonstrate their systems and processes,

11 Subject Matter Experts to help create and vet content,

plus an additional

> \$10,000 of in-kind industry time given to the project.

The training plan was broken into 3 steps:

- 1. Online pre-learning of foundational concepts;
- 2. Activity-based in-person workshops to apply the online learning to real work situations; and
- 3. A competency conversation for certification based on the application of the concepts to the participants' role in their workplace.

The total time to certification is 4 – 5 months. The training is integrated with work and requires a minimal time away.

3.1.1 FAQ-Based Pre-Learning Online

Online pre-learning was designed with two goals:

- 1. As a challenge mechanism for experienced managers seeking this credential (self-tests can be written first to determine knowledge level by topic); and,
- 2. Short content chunks as reference material so all participants show up at the workshops with the foundational knowledge in each subject area.

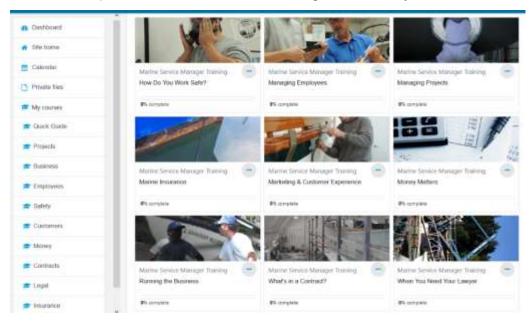


Figure 3 Online Dashboard for 9 short courses in Marine Service Manager Essentials pre-learning

Over 250 short FAQ-content pages, self-tests, and resource books/links were created with and vetted by eleven (11) different industry subject matter experts.

The nine (9) short courses are divided by topic:

- 1. Managing Projects
- 2. Running the Business
- 3. How do you Work Safe?
- Managing Employees
- 5. Marketing & Customer Experience
- 6. Money Matters
- 7. When you need Your Lawyer
- 8. What's in a Contract?
- 9. Marine Insurance

All online pre-learning should be completed before participants attend the workshops. Depending on previous knowledge and experience, this training takes 2 - 10 hours.

3.1.2 Activity-Based Workshops Learning from & with Peers

In-person workshops were designed on the framework of a marine service project. Each day, as participants identify and manage all the risk elements of their chosen project, they incorporate new knowledge from sessions with industry subject matter experts, group activities and peer mentoring opportunities. They build seven (7) Quality Assurance standards specific to their own workplace.

There is no way to challenge the workshop part of the training because it weaves together a project and requires unique evaluations and decision-based consequences. It is the foundational learning with subject matter experts and mentors which is key to this project.

No two participants will have the same outcome or manager journey. They will learn from their own choices + experiences and those of their peers.

3.1.2.1 Integrated Activity-based Sessions with Subject Matter Experts

The workshop is a 6-day progression through their chosen project case study using the following outline:

- Day 1: The Current State of your Business + introduction of six (6) Marine Service Manager Competencies (MSM) & the seven (7) Workplace Standards.
- Day 2: Meet Your Customer
- Day 3: Plan the Work
- Day 4: Do (Manage) the Work
- Day 5. Return or Deliver the Boat / Get Paid / Did We Make Money?
- Day 6: What did I Learn? + Re-evaluate MSM competency knowledge from Day 1 and continue to complete Workplace Standards. Identify areas that need support and mentorship in preparation for competency assessment certification.

Throughout the days, participants complete activities with Q&A sessions from industry-specific experts in the following subjects:

- Occupational Health & Safety (Job Hazard and Risk Analysis)
- Human Resources (Employee Onboarding and Journey Assessment)
- Finance (Calculating Margins)
- Leadership (Self- assessment and situational leadership)
- Legal (Contract Analysis and Risks)
- Insurance (Evaluate business and customer risks)
- Environmental Protection (Site Assessment and Clean Marine BC Certification)

In addition to these workshop sessions, these same experts are their mentors over the following 3 months as they work to put their Standards plans in place at work.

3.1.2.2 Project Simulation with Choices, Consequences, and Peer Group Mentoring

Participants choose-their-own service or build project weaving together the competencies from the Baseline Occupational Analysis Chart (Appendix C).

In this decision-tree model, participants learn from their own choices and those of their peers. Participants work through multiple stage activities and interconnecting relationships between the 9 pre-learning subject areas.

On Day 5, participants present their project and change-management plans for feedback from the facilitator and their peers. They are given a binary analysis of whether they addressed all the risks to the project in their plans (e.g., identified risk or not).

Although it's unlikely any one project would suffer every possible scenario they are asked to manage, multiple changes are realistic. Bringing each change to their awareness and hearing how their peers deal with changes is a critical element in the workshop.

3.1.2.3 *Identification and Assessment of Management Competencies*

On Day 1, managers are introduced to the 6 management competencies:

- 1. Communication
- 2. Planning
- 3. Organizing
- 4. Decision Making
- 5. Leading
- 6. Monitoring

The workshop activities are designed to expand managers' understanding and skill in these competencies. On Day 6, they re-evaluate their knowledge and skill levels. At their competency conversation for certification, they again re-assess their skill level.

3.1.2.4 Development of 7 work-based standards

Each stage of the workshop project has a Quality Assurance (QA) framework for activities and discussion:

- 1. Current State: Where am I now (on this topic)?
- 2. Ideal State: What does it look like when it is working correctly (the destination)?
- 3. Procedures: How do I get from where I am to where it is working (the roadmap)?
- 4. Training: How do I and the people that work for me get from where they are to where it is working (knowledge, skills, competence toolkit required)?
- 5. Evaluation: How do I know when I get there (mile markers and signposts)?
- 6. Records: Did I record what we did (learning from wrong turns, continuous improvement)? What is my evidence?

Managers must complete these 7 Work-based standards using the above QA framework for each one:

- 1. Standards for the Marine Service Department
- 2. Standards for Safety & Environmental Protection
- 3. Standards for Employee Relations
- 4. Standards for Customer Experience
- 5. Standards for Planning the Work
- 6. Standards for Quality of Work
- 7. Standards for Business Processes

As managers work through their 6 days of activities, they are using their learning to expand their management competencies through the development of these work-based standard plans.

3.1.3 Competency-Based Certification Process

Managers' final competency certification is based on their ability to present their standards plans for their own workplace in each area.

Based on their completion and presentation of these plans (identifying risks and timelines for completion milestones) to the facilitator, participants are awarded their Certificate of Professional Competency.

3.1.3.1 *Marine Service Manager Mentoring Process*

Following the workshops, managers return to work for 2-3 months to continue to develop the plans for their ideal standards in their own workplace. During this stage, managers can lean into the experts who presented their knowledge and experience during the workshops as their industry-specific mentors in each subject area.

The pilot program pays for 2 hours of each mentor's time per participant (or company) to address questions about creating the standards plan for that subject. Mentor activities can range from help creating templates, processes, or documentation; directing managers to specific resources for training; identifying costs or timelines; and suggesting evaluation metrics.

If managers need more of their mentors' time, these mentors are available for a business-to-business relationship. This model satisfies the community and network-building this course is designed to create. It also addresses the major mentorship concerns and challenges identified in the first steering committee meetings (no time to mentor and mentoring competitor businesses).

3.1.3.2 *Marine Service Manager Certification Process*



The industry consultations clearly stated the certification had to:

- Be competency based (not a simple completion or participation);
 and
- 2. Include continuing education managers should be life-long learners.

The certification needed to be achievable in a reasonable amount of time with a mechanism to continue to improve.

The certification is based on the demonstration of excellence in 6 Marine Service Management competencies:

Communication | Planning | Organizing | Decision Making | Leading | Monitoring

through the development of 7 specific work-based Standards:

Marine Service | Quality | Safety & Environmental Protection | Customer Experience | Employee Relations | Planning Work | Business Processes

Training and record keeping is a critical element of all 7 standards the managers create to demonstrate their competence. Continuing education credits for manager training courses that meet industry/business needs are a foundational element for continuous business improvement strategies.

The continuing education credits are an important part of the participants' recognition that every business requires continuous improvement planning to remain viable. Lifelong learning/training is not only for employees on the tools but for themselves as professional managers.

MSM graduates who complete continuing education courses or submit evidence that they have completed other training relevant to their role will receive a sticker to add to their MSM certification for that year. Yearly stickers demonstrate an ongoing commitment to training and learning. Managers should tailor their own annual training plans to whichever area best suits their existing or future business needs.

3.1.3.3 Competency Conversations for Certification

The final assessment process ties the entire program together. Participants have 3 months to return to work and continue to build their 7 standards plans using their 6 management competencies. Just as they built their marine service project plans in the workshop (identifying major tasks, breaking them into small chunks, listing resources, putting them on a timeline, assigning them to a responsible person, and monitoring their progress against the plan), they will build a task and timeline plan for each of their 7 standards tailored to the needs of their own business or service department.

Each participant will present their plan outlines to the course facilitator for a Q & A session. The facilitator is only assessing the completeness of the plan and whether the participant has an understandable sequence of tasks on a timeline they can justify:

- Have they clearly identified the current state of the business for each standard?
- Have they clearly identified the ideal state of the business for each standard?
- Did they list 3 5 major tasks that would get them from current to ideal?
- Have they broken those down into smaller task lists and put them on a timeline in a reasonable order?
- Have they prioritized which standards will be worked on in the short, medium, and long term and why?
- Have they identified risks and barriers to completion?
- Do they have a plan to mitigate those risks (e.g., contingency plans)?
- What training (and for whom) and record keeping will be required?
- What will they measure and monitor to evaluate their continued success?

The final conversation is their 3-month self-evaluation of the growth and development of their own 6 management competencies.



3.2 Critical Success Factors

After the consultation data was analysed, it was clear that traditional topic-based workshop modules would not result in integrating new knowledge and skills upon return to work. Abandoning standardized development plans for training and weaving together the topics industry prioritized allowed us to **address manager's risks as they experience them**.

The training was created on the foundation of project management activities so managers could use their technical skills and transition them from doing the work themselves to managing the work of others and the business.

The program design ensures that Marine Service Managers can practice the management competencies in the workshop activities, which increases the skill transfer to their own work environments.

3.3 Lessons Learned

The TRAINING PRIORITY topics (Section 2.3, Figure 2) were not seen as neatly bundled independent silos of information. The instructional design plan and curriculum needed to reflect industry-specific cross over between the topics. Topics need to be presented the way participants encounter them at work.

The small craft marine industry audience for this training has a unique personality and culture when defining and mitigating risks. Managers connect to their work by association with the boating lifestyle and family history. They enjoy the challenges that go with constantly changing work. These are almost exclusively non-union companies—these managers are rarely limited by contractual definitions of job titles and work scope e.g., where the pipe fitter cannot do even a small part of the marine joiner's job. The more broadly skilled people they have, the more flexible and resilient the company is. The instructional design plan and curriculum needed to be relevant and focused by their industry-specific lens and experience of risk.

4 DELIVER: Pilot Training & Mentorship Outcomes

The pilot courses were delivered safely within the original training parameters despite the challenges of the pandemic and Provincial Health Orders.

4.1 Ongoing Industry Engagement Summary

Industry cash funding and workshop attendance during the pandemic were potential project challenges.

By raising industry funds through WorkSafeBC, the West Coast Boatyard Association, and charging participants a substantially reduced tuition fee, we were able to raise the industry cash funding required for this project.

While some of our experts had to turn down opportunities to work with us and mentor, there is a strong possibility they will engage in the future and discussions are open.

2 pilot courses delivered in Nanaimo and Vancouver

attended by

16 marine service managers or emerging managers

represented the management of

>200 marine service workers in BC raised

> \$30,000 in industry cash contributions.

4.2 Pilot Logistics and Workflow Summary

Two full pilot courses were delivered. The first in-person workshop was held in Nanaimo, BC in October 2020. The second was held in North Vancouver, BC in November/December 2020. Both courses had 8 participants for a total of 16 participants.

- 6 hours on average to complete online prelearning
- 6 days in person workshop activities with

Including sessions with

7 industry experts / mentors

Participants were invited to register and given one month to complete their online pre-learning before coming to the workshop. We estimated the online portion would take anywhere from 2 – 10 hours depending on prior experience. Actual reported values ranged from 2.5 to >12 hours to complete. All participants completed their required online activities. The average time to complete was 6 hours.

The 6 days of workshops were broken into 3 x Friday/Saturday sessions. Each 2-day session included activities run by industry subject matter experts. Homework was assigned to participants after Day 2 and Day 4 to be completed while they were back at work for the week.

4.3 Critical Success Factors

These critical success factors and lessons learned become our best practices for hands-on, industry-specific, tailored supports for small business, trade-based sectors.

The volume of multi-disciplinary content in this Manager Essentials Course is substantial but truly represents what every Marine Service Manager needs to manage their project risks. Opportunities to discuss and process this amount of integration is critical.

A skilled facilitator is the key to helping managers optimize take-away messages from their workshop journey. It's also critical to ensure the peer-to-peer mentoring remains balanced and constructive.

Time between workshop sessions to go back to work, process, and do some homework based on real work was important for relevance and to minimize learning saturation.

4.4 Lessons Learned

Participants want more group/peer sharing time which can be increased when it's safe to do so. Participants wanted more of all the content – this can be managed through continuing education short courses and micro-credentials.

4.5 Best Practice Recommendations for Marine Service Manager Mentors

One of the 3 main project goals was to determine a mentorship model and best practice for the small craft marine industry and incorporate that into this pilot training.

The original proposal was to embed mentoring training and a mentoring program within the Marine Service Manager Training certification. This was imagined to include a set number of individual mentoring sessions into the cost of the training and allow the manager and mentor to determine if they wanted to continue longer term.

The barriers to mentorship flagged by the steering committee in the Evaluation Strategy Report and reinforced by the industry consultation data were:

- No time. The best mentors will burn out because they are running their own companies;
- Why mentor competitors?;
- Lack of clarity on the concept of mentorship / lack of existing standards for mentorship: "Yes, I've had a mentor or would like a mentor. If I'm a mentor, what is the commitment?"
- Retired mentors have time and can train for mentorship but will lose their currency after a few years. This will mean constant mentor turn over; and,
- Industry culture and self-identity: almost 90% of managers come from a trades background—this is where they see their expertise. Their management experiences are often limited to a few companies within a specific scope. They aren't nearly as confident to mentor on management topics.

In the original Project Management Workplan, the mentorship environmental scan data was used to design driving questions for the industry consultations to help identify a functional mentorship model for this industry. Both the steering committee and industry consultation feedback above led the design team to further investigate mentorship programs that operate in Canada looking for a better fit.

Sustainable programs require extensive labour-intensive attention to detail. Some of this can be partially managed by innovative software programs e.g., www.mentorcity.com that help provide matches based on survey questions. They are most successful helping build and track internal mentoring programs within large organizations (with a common set of organizational values, goals, and vision for mentorship).

Even the software requires a high level of management commitment and customization based on the organization.

For small business, trades-based industries with no history or experience with formal mentorship opportunities, the academic structure and approach is unlikely to inspire or motivate participants. The existing models of mentorship in the original environmental scan don't offer a solution that matches the steering committee and industry consultation feedback.

The training program incorporated two mentoring models.

- 1. Peer and team mentoring was built into the workshop discussion and sharing activities. This natural format seemed to break down the barriers of self-identity and skilled trade culture discussed earlier. Every manager was able to share their best practices at some point along the workshop case study. Many of the managers have kept in contact with their peers as they worked on their standards plans for certification.
- 2. Expert mentoring from the 7 industry experts (SMEs) that did activities and Q&A with them throughout the workshops. The project paid for 2 hours of mentorship beyond the training. Mentors were also available for business-to-business relationships if more time was required. At least one mentor has entered into a business relationship with a participant following their project-paid session. Regardless of the slower uptake on this novel concept, participants are still reaching out to these experts beyond the certification as questions or challenges arise in their management role at work.

5 Project Evaluation

Based on the original Project Evaluation Framework, the targets and performance indicators (financial, engagement, and evaluations) for this project were all met or exceeded. Both quantitative (reporting numbers) and qualitative metrics (evaluations) were used to determine if the project outcomes were achieved.

At every stage of this project (Define, Design, Deliver), the Evaluation Strategy focused heavily on participation metrics as validation of need and relevance. These realistic performance targets and outcomes were simple and effective indicators of success throughout the project. By design, they were an integral part of the project data collection so there were no extra complications or challenges in evaluating the project. For a detailed analysis of the project evaluation, see Appendix D: Evaluation Strategy Outcomes.

"There is nothing like this [training] available anywhere."

Trevor S., Vancouver

5.1 Participant Indicators

A critical element of this training is the creation of the 7 workplace standards designed to give marine service managers foundations for good habits and processes at work. The standards they create (and what they watch their peers create) are tailored to their existing workplace. Their competency certificate is based on the demonstration that they are using their management competencies to implement their tailored standards at work to continuously improve their operations.

There are two critical measures of the overall success of the training for participants:

1. Will managers use the standards and processes they developed for themselves at work?

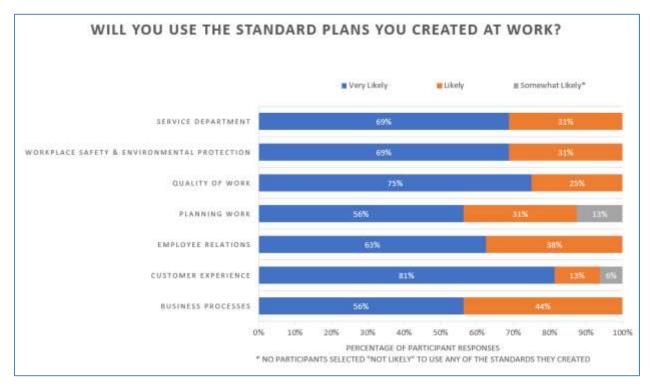


Figure 4 Will service managers use their new standards plans at work?

Participants indicated they will 'Very Likely' or 'Likely' use their created standards/processes at work.

Customer Experience and Quality of Work Standards were the highest ranked (most likely to be used).

None of the participants responded that they were 'Unlikely' to use any of any category of standard.



2. Has their confidence in their management capabilities improved?

Figure 5 Increased Confidence in Management Competency

10%

20%

30%

0%

Every participant 'Definitely' or 'Mostly' gained confidence in multiple management competencies and their ability to manage risks.

40%

50%

PERCENTAGE OF PARTICIPANT RESPONSES
* NO PARTICIPANTS SELECTED "NOT AT ALL" FOR ANY CATEGORY

60%

70%

80%

90%

100%

None of the participants responded with 'Not at all'.

As further reinforcement of the value of the training, we have a full class of unsolicited 'wait list' applicants for a follow up course. Due to the ongoing Provincial Public Health Orders there has been no active promotion of the program; word of mouth endorsement of the program has come from the participants. One application is from Nova Scotia.

15 marine service managers have received their

certification to date.

Training impact videos with the pilot participants are currently in progress (they were delayed due to COVID). These demonstration-of-outcome videos are an important part of the ongoing communication and engagement strategy.

These videos will be multi-purpose:

- 1. Evidence of the hands-on and tailored nature of the training program giving maximum relevance to each company;
- 2. A celebration of the achievement of each person gaining their Certificate of Professional Competency as a Marine Service Manager;
- 3. A marketing tool to engage the next group of companies to send their managers or managers-in-training; and,
- 4. Part of a sponsorship campaign to solicit participation from product manufacturers or distributors that want to keep their brand in front of these managers and continue to build relationships with emerging managers.



Figure 6 MSM Demonstration of Impact Videos will be available at www.quadrantmarine.com

5.2 Industry Expert and Mentor Indicators

From the subject matter expert (SME) and mentor perspective, the two most critical measures of success were:

1. What was the value to them and their company in participating in the training?

"It helps me to stay in touch with people who are "in the trenches" of working in our industry and is an opportunity to share perspectives with each other. In addition, it helps to build the overall capacity and awareness in our industry." Jason H.

"We work with professionals in the marine industry...the professional exchange of information and interactions with participants in the industry is valuable to assist in our professional development, development of contacts, as a mentoring tool and to facilitate progression in the industry." Chris S.

2. Will they continue to participate in future training?

"Yes, absolutely...I had a wonderful experience working with [the mentee]. They seemed very dedicated to implement all they learned from the course. I think it should become an industry norm to take this course or have taken this course when hiring for this role." Lindsay B.

"Yes, I would love to...This has been a wonderful experience, knowing both the industry needs and my enthusiasm to share 25+ years of experiences." Dave P.

Every mentor's feedback was positive (some commented about Zoom and the challenges of technology during the pandemic). Every SME and mentor said they would recommend the training and be happy to keep working with the participants.

Four of the seven mentors had participants contact them for additional help completing their workplace standard plans. All had positive experiences.

Although the certifications from the pilots are complete, participants are still in the process of reaching out to mentors as they get to specific stages of putting their work plans into action. This demonstrates participants are actually incorporating their new management habits and competencies into their daily operations.

5.3 Industry Sponsor Indicators

Our largest contributor of industry cash funding was WorkSafeBC. Participants also paid a discounted pilot tuition fee for this training; this was almost exclusively paid by the employer.

"It sounds like you'll have a good product that will be of tremendous value to the learners and industry...Inclusion of hazard and risk assessment as a learning outcome is such an important step – we often see that this is the greatest challenge that many employers have, i.e. not knowing how to conduct a proper/thorough risk assessment specific to their workplace."

Tom P., WorkSafe BC

"We had an employee take part in the program and found it to be valuable. He appreciated our investment in his growth...it helped strengthen his business knowledge overall and lends a good base to the experience he is gaining as a working leader."

Christina C. Marine Industry Employer

6 Training Feasibility & Sustainability Plan

6.1 Feasibility Notes

In the January 2021 Steering Committee meeting, the size of the future pool of potential Marine Service Managers to market the training to was questioned. We know from the first two pilots that 16 managers represented about 200 workers in the micro and small businesses represented there. Labour market data from Quadrant's 2019 LMP project³ indicates there are about 4000 small craft marine service employees in BC. Using the same ratio for comparison, this would indicate a potential 300 marine service managers left to train if they all wanted to participate.

Running two cohorts per year as we did in the pilots is a reasonable goal. Given the constraints of peak service times for industry plus the four-month time to certification (one month to complete the online pre-learning modules, one month of 3 x Friday/Saturday workshops, and two months back at work to build their tailored workplace standards for a competency conversation), industry time is maxed out.

At a training rate of two x 8 - 10 person cohorts training 16 - 20 people per year, the program could run for 20 years. In that time we would expect a significant turn over of managers requiring training. This program will be self-sustaining in the marine service industry for more than 3 years.

6.2 Sustainability Plans

As expected, the development of this training program (industry consultations, curriculum development and pilot testing) required a large commitment of resources in comparison to what it will take to sustain it. The ongoing resources required for this training fall under the categories of maintenance, administration, and delivery.

The training delivery will require the largest ongoing commitment of resources. The largest single expense will be the facilitation and monitoring of progress and competency conversations for certification.

The smaller cohorts were very productive. This model will allow future training to include more time with small group activity and discussion time, as requested by participants in the evaluations.

The program structure will fund itself sustainably with approximately 80% tuition fees from participants and 20% sector contributions of in-kind or cash funds from sponsors. Tuition fees are projected to be \$3000 per participant and include all online, workshops, and competency certification. Sponsorship opportunities (for industry organizations, product manufacturers and distributors) will give a unique avenue of access to their target demographic (marine service managers) and offer widespread promotion of their support and good will.

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³ See page 9 for information about the 2019 project.

There will be additional revenue from continuing education courses. The most requested courses centre around leadership and managing people. As well as further training on efficient Job Hazard and Risk Analysis. Mentorship in the trade workplace has also been requested.

There are possible cross-sector consulting opportunities where we can accelerate their time to pilot delivery using the developed plans and templates. We have been in contact with 10 other sectors and have expressions of interest to present our training program from 5 of them.

6.3 Continued Sector Support Plan

No training program will succeed without the support of the primary audience (employers and managers). In this case, this program also requires ongoing support from the subject matter experts and mentors. Ongoing sector support is the only risk to the sustainability of this training and the sections below outline the mitigation strategies for each group.

6.3.1 Employer Support

The foundations for ongoing employer support for this program were built into the industry consultation phase. Industry collaborated in geographical-based cohorts to determine their priority lists for service manager training — both content, risks, and logistics. This phase was not just designed to gather information. It was a calculated expense designed to maximize inclusion and diversity of perspectives. The outcome of that participation is ongoing engagement.

Employer engagement was evident by the rapid filling of the two x eight-person pilot courses, even with the ongoing pandemic. The wait list for the next (unannounced) fall program is already 8 people by word of mouth. Communication with the sector about the success of the pilots will follow the project impact videos with participants. Employer support has been strong throughout the project.

6.3.2 Participant Support (Managers)

We are filming short videos of the 16 managers or emerging managers who participated. The goal is to highlight the most relevant aspects of the training by outlining:

- 1. The impact the training and planning had on their business; and,
- 2. The impact the training and tailored planning had on their confidence and competency as a manager.

They can also provide any advice to future participants.

Our plan to celebrate the certification of each manager with these videos will promote their skills and the participation of their company in the program.

6.3.3 Subject Matter Expert & Mentor Support

All 8 of our subject matter experts and mentors were positive about their time on the project and the importance of this ongoing training for the industry. We will continue to promote the hours of in-kind time and good will they bring to the project.

As we develop the ongoing continuing education courses for marine service managers, the calendar will be populated with shorter courses these mentors will teach allowing them to further engage with the sector. These continuing education courses are also part of the overall sustainability plan for both the industry engagement and financial sustainability of the project.

6.4 A 3-year Budget for Ongoing Program Delivery

The program will require different financial resources for ongoing delivery of the marine service manager course and the retooling of the developed program for other industries. This section outlines budget projections for both.

6.4.1 Program Delivery Budget

Each 8 – 10 person cohort training will require the following resources:

Phase	Admin	Facilitator	Experts/ Mentors	Travel	Supplies	total
Curriculum Review & Maintenance	\$500	\$500	\$500	0	0	\$1500
Administration Setup, promo, software licensing, fees	\$2000	0	0	0	\$1000	\$3000
Delivery	0	\$8000	\$4000	\$2000	\$3000 Books, lunches, venue, etc.	\$17000
Assessment (competency conversations)	0	\$2000	0	0	0	\$2000
Total	\$2500	\$10500	\$4500	\$2000	\$4000	\$23500

Depending on the delivery location, travel may not be required. An 8-person training delivery with a tuition free of \$3000 as discussed in the January 2021 Steering Committee meeting, will cover all costs. Expanding the class to 10 people or adding the planned industry sponsorship will produce a reasonable profit.

There will be additional revenue from continuing education courses and possible cross-sector opportunities.

6.4.2 Projections for Costs to Retool for Another Trade-based Sector

An additional revenue opportunity may come by assisting other sectors in scaling this management training specific to their industry needs. They may be interested in developing their own continuing education program or sending their managers to our training.

These projections are based on each phase of developing the Marine Service Manager training and what percentage of that time or content is expected to be reusable or tailored to another industry.

The tools for determining and analyzing industry priorities do not need to be redeveloped so the planning phase requirements are far simpler.

Project phase	Management & Facilitator	Subject Matter Experts	Travel	Supplies	total
Planning	\$10000	0	0	\$1000	\$11000
Province-wide Industry Consultations and priority analysis Reuse all templates.	\$50000	All in kind industry time logged	\$7000 – could be higher depending on number of locations	\$3000	\$60000
Instructional design and Curriculum development ID reuse 100% CD reuse 50%	\$30000	\$10000 to be industry specific	\$2500 to visit a few key locations if possible	\$2500	\$45000
Pilot delivery x 2 cohorts Reuse all logistics templates etc.	\$40000	\$10000, some might be in-kind time	\$7000	\$8000	\$65000
Total	\$130000	\$20000	\$16500	\$14500	\$181000

The total given here represents the upper end of the resource scale. For industries that are similar to Marine Service, the time and financial commitment could be under \$100000, especially if the consultation phase was managed remotely (though in-person consultations foster future engagement and connection as noted earlier).

7 Cross-sector Promotion & Networking Results

The strategy for helping other small business, trade-based sectors build manager training has started with the following conversations:

- 1. Automotive Retailers Association is interested and will schedule a presentation when we're ready;
- 2. BC Wood and Wood Products is interested but not at that stage of sector development yet;
- 3. Canadian National Trades / Concrete Finishers is interested. They have a representative on this project Steering Committee and have been following along closely. We can present to their group anytime;
- 4. Construction Foundation of BC is interested. They also have a representative on this project Steering Committee and their interest is for their small trades managers. We can present to their group anytime;
- 5. The BC Landscape and Nursery Association conversation was very positive and timely. We'll present to their group in the coming months; and
- 6. The BC Agriculture Council is interested and waiting for us to schedule a presentation

As well, 5 representatives from the Ministry of Agriculture, Food, and Fisheries have asked to sit in on one of the other presentations.

It is worth noting some of the initial reactions and support from other sector leaders after hearing about the training highlights:

With respect to moving from skilled trades worker to manager, one leader stated, "We often say that they [skilled trades workers] are being promoted into incompetence." Two other leaders expressed their own experiences with the barrier for skilled trades managers to identify as management experts able to mentor.

The Steering Committee has been a great help populating the list of other sectors to reach out to. We follow up as they continue to contact us with their ideas. The budget projection in Section 6.4.2 will allow us to build on those early conversations following the presentation with a range of possibilities for assistance and cost depending on their existing capabilities and capacities.

Appendix A: Project Steering Committee Support Summary

7.1 Steering Committee Activity Summaries

The goal of the committee was to work within the pre-approved (Phase 4: Implementation contract) project scope and timelines to discuss, fine-tune and approve each deliverable for on-time submissions to MAEST.

7.1.1 August 2019 Kick-off Meeting

Committee members were already engaged from the spring 2019 proposal process; they were aware of the concepts and goals already. After a quick introduction we were able to jump right into the first 3 deliverable drafts outlining the structure and foundational logistics for the project:

- 1. Project Workplan;
- 2. Communication Plan; and,
- 3. Evaluation Plan.

Mentorship was the hottest topic in this meeting: how would we find and engage mentors? What would that look like in other industries? How would we evaluate mentors?

There was general agreement that the language and structure of formal mentorship does not exist in most small business, trade-based industries. It was proposed that rather than frame mentorship as something managers need to learn, we need to approach it as capturing what they already do. The project can provide support and confidence.

7.1.2 January 2020 Phase 1 Industry Consultation Meeting

Critical to the success of the consultations, the industry-based steering committee members participated in the consultation workshops themselves and brought their industry colleagues with them.

Our non-industry-based steering committee members helped brainstorm potential sources of industry cash funding for the pilot delivery phase of the project as well as identifying cross-sector applications for this training model.

There was a general agreement about:

- 1. The ongoing challenges of engaging mentors;
- 2. The risk of resistance to proposed online learning in trades in general;
- 3. The pattern of low priorities for tool-oriented managers on abstract business process topics e.g., legal, insurance, and contracts; and
- 4. As business grow, work based on personal relationships decreases and knowledge of those more abstract business processes become increasingly necessary.

7.1.3 July 2020 Phase 2 Instructional Design & Curriculum Development Meeting

In this curriculum development phase, our industry-based steering committee members:

- 1. Participated in the additional observation/interview consultations;
- 2. Recommended industry colleagues for further in-depth expert conversations and making introductions; and,
- 3. Provided documents and templates to modify and use in the workshop activities.

Our non-industry-based steering committee members continued to engaged in:

- 1. Brainstorming potential sources of industry cash funding for the pilot delivery phase of the project
- 2. Identifying cross-sector applications for this training model; and,
- 3. Recommending and making introductions to Subject Matter Experts for content creation.

The meeting focused on the workshop delivery challenges:

- 1. With reduced pilot cohorts due to COVID-19, attendance was offered by invitation. The steering committee provided recommendations of both new and experienced marine service managers to attend the pilots so we can get well rounded feedback to improve the material and flow even with reduced numbers.
- 2. Pilot training workshops should be broken up into segments rather than one long continuous workshop; and,
- 3. Valued-added elements to the training are important:
 - a. Ongoing continuing education courses;
 - b. NEW Clean Marine BC Marine Service Facility Certification; and
 - c. Insurance underwriters should be persuaded to offer discounts for companies with certified management.

7.1.4 January 2021 Phase 3 Pilot Delivery Meeting

The main discussion topics covered at the pilot delivery meeting were:

- 1. Mentorship on a micro and macro scale changing the culture so industry learns to reach outside their own companies to solve business problems;
- 2. Discussion of potential pushback or sticking points in the training;
- 3. The process of competency-based certification; and
- 4. Participant evaluations results.

Committee members offered their input on the feasibility and sustainability drafts for the small craft marine industry. They also offered introductions to other small business, trade-based sectors that could be interested in this training for us to contact and gauge interest.

7.1.5 April 2021 Final Report Highlight Meeting

The final formal steering committee meeting recapped the highlights from the 3 project phases, comparing them to the original project workplan and evaluation framework from fall 2019. The major focus was on the details of the Competency Conversations for certification and feedback from subject matter experts / mentors. Continuing education and sustainability were minor topics. Draft demonstration of impact videos were well received.

The committee was asked what was most relevant for them/their company about this project:

- Seeing the whole picture of running the business so the manager can excel in their role.
- Giving confidence to have conversations with their upper management and owners or business partners.
- Highlighting mentorship as a way to retain employees.
- Supporting business growth by showing career paths supporting and promoting this growing industry.
- Providing accessible, flexible, industry-verified training.
- Dynamic training that impacts work.
- Building relationships in the industry.

8 Appendix B: Project Contact Info

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&

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9 Appendix C: Industry Consultation Methodology and Analysis

The group and individual interview data were captured consistently in a structured process of questions and activities. While the information collected was qualitative, by bundling the data into themes, we were able to quantify and rank industry priorities and concerns.

Data was entered into a spreadsheet as the exact summary phrases and quotes presented to us. It was sorted by category and coded for themes. Responses were weighted by the number of people who ranked a certain answer in a certain order. Pivot tables were built to count the number of times responses were given.

9.1 Consultation Data

The results from these consultations were themed and will form the instructional and curriculum design plans in the next project phase.

Although the operations in marine service companies across BC differ by company size, scope (service focus, dealership/sales model, manufacturer), and geographical location, what started as workshop icebreaker activities for relationship/credibility building, became an enlightening commentary on the foundations of this professional community as a whole.

9.1.1 Why the Marine Service Industry?

We asked every workshop attendee and those we interviewed personally, how they got into this industry and why they stay with it. Answers were entirely free form and people could give more than one response.

Overwhelmingly, the most cited answer was a personal connection to boats and a love of the lifestyle on the water that accompanies this industry.

"I grew up on boats."

"I started working on boats at an early age."

"We're always on or near the water."

The reasons people stay with it as a career were more equally split. The number one reason marine service managers stay in the business is people—their staff and their customers. The second is the variety of challenges and problem solving they do every day.

"The people in this industry are why I stay."

"Every boat is different. Every day is different."

9.1.2 What's the Most Important Asset in this Industry?

Nearly unanimously, the most cited word was:

Employees

Other single additions included customers, business reputation, and location.

9.1.3 What Value does this Consultation hold for You?

The single most cited answer was networking. When we broke that down a little further the responses indicated:

- Sharing common challenges and experiences, and learning from peers;
- Giving back to this industry and contributing to the profession resources for future generations;
- Appreciation of being asked and having a voice in improving the awareness and promotion of our trade; and,
- Knowing the BC government was invested in our industry.

Legal services are outsourced.

Bookkeeping is typically done in-house.

HR expertise is often responsibility of the service manager.

is in-house almost half the time, typically not a dedicated role (off the side of an existing employee's regular responsibilities).

9.1.4 Existing Professional Services/Experts

Every attendee was asked what experts their company already has, and whether it was in-house or outsourced. The goal was to determine how in depth the training would need to be in certain subjects and to make sure the training wasn't redundant.

The definition of these professional services varied considerably from person to person, especially for financial services, human resources, and IT. As a result, the data was themed into a general summary to give an accurate picture of how the marine service industry uses business support services.

Every company had access to some form of legal advice and services. Only 2 participants listed them as in-house.

Financial services were more mixed. Most businesses had in-house bookkeeping—in smaller companies the manager was often also the bookkeeper.

Accountants were split relatively equally between inhouse and outsourced, but many participants didn't distinguish their accountant from their bookkeeper.

While they might be the same person, it could also be a limited understanding of the distinction between the two. The largest companies also had more speciality resources in-house (e.g., controller, payroll, purchasing).

The results around Human Resources was also mixed and heavily dependant on definition and understanding of that as a professional designation. Most companies stated they had internal HR but upon further discussion, the service manager cited themselves as the internal HR expert.

The question around IT support indicated that about half the participants outsourced their computer and web support. Of those that indicated it was in-house, they often referenced someone already in their business with additional skills in maintaining their website and social media marketing presence.

9.1.5 What creates risk in marine service companies?

These questions sparked great discussion and storytelling in the workshops and interviews:

- What would you tell someone new to your management role?
- What causes the most business frustration?
- What cost you or your company money that you could not bill the client for?
- What do you wish you'd figured out sooner?

Six main themes emerged out of the answers to all these questions:

- 1. Leadership balance
- 2. Planning, preparation, and knowledge
- 3. Managing employees
- 4. Managing customers
- 5. The importance of accountability
- 6. Training and mistakes

These themes will support framing of the learning outcomes and the shape of the activities for the training. Section 9.1.8 shows the breakdown of the themes by question with examples.

9.1.6 Training Logistics

For a sustainable training program, we needed industry to tell us when they can be away from work, for how long, and what recognition of this training should look like.

9.1.6.1 Time of year and location of training matter

Although there are differences between manufacturing-based marine services and repair and refit-based services, most companies reported being busy year-round. Avoiding their peak service times means not offering this course from late February to the end of October. Late fall and winter were the most convenient times to be away from their day-to-day activities.

Larger companies have an increased ability to send someone away for training without losing critical capacity. The largest companies said they could send someone on courses for up to a month. Most smaller companies could only commit to having someone away for a couple of days to a week.

These discussions led to industry suggestions on workshop delivery method:

- Travel and accommodations are expensive so if courses can't be offered locally, could we minimize/optimize the f2f time with some online learning in advance;
- Pre-requisites and foundational learning could be online with practice activities and applications in person;
- Online self-tests before f2f portion would help determine the level of understand of the subject; and,
- The ability to challenge certain subjects based on existing competence/experience.

9.1.6.2 *Certification Matters*

Except for one workshop attendee, it was unanimous that certification was important. Industry suggestions for certification:

- Levels within the certification process;
- Modular delivery and certification;
- Ongoing or annual upgrade;
- Competency based (not just attendance or participation based);
- Needs an evaluation process (must pass some criteria).

9.1.6.3 Perception of Mentoring

To get a sense of the industry's familiarity and comfort with the concept of mentorship, we asked every participant about their experiences and perceptions of mentoring:

- Did you have a mentor?
- Would you still want a mentor?
- Could you be a mentor?

Answers were concise, consistent and will impact the development of that part of the overall training:

 Almost every participant has had multiple mentors, past and present, and spoke positively about their experiences;

Marine service careers are too complex to have only one mentor.

Ryan G., Business Manager

• A few participants described their anti-mentor, an example of what not to do.

"You're on your own. Don't ask me any questions. Don't touch my tools."

Tim M., Anti-mentor attitudes from his first day on the job

- Some expressed concerns about over mentoring, described as not letting people make mistakes to learn from them.
- Except those who are very close to retirement, no one turned down the idea of having a mentor as part of this training;
- Most participants believe they already mentor people within their own companies, even if it's in an informal sense;
- There was some hesitation about potentially being a mentor as part of this training program—especially when it came to specifics of what we would be asking of them and how it might look;
- Participants stated very clearly that they have no time to mentor external to their company.

9.1.7 Training Priorities

Using a small-group facilitated workshop activity, groups of 3 or 4 were assigned one section of the larger poster outlining possible training topics. Participants were asked to fill in as many details as possible on what training topics fit under each category. They could also populate an 'other' category with any topic they felt we had missed. Participants were then asked to prioritize (rank) the topics most important to them and their business.

Participants were instructed to cross out irrelevant categories and rearrange the prepopulated example information blocks to best describe what was relevant to their work. After the larger group shared and discussed their thoughts, the small groups were again

Project Management was by far the highest priority on marine service managers' risk list.

asked to rank the relevance (importance) of each category to their work.

The results from the consultation groups resulted in the baseline marine service manager competency map outlined in Table 1. It's important to note that these topics are not independent silos of information. These results will become the foundation for the instructional design plan and subsequent curriculum development process. That process will have to consider the industry-specific cross over between the topics.

Determining what creates the most risk for marine service managers lays the groundwork for a prioritized occupational standard chart with industry's wish list for attitudes, skills, and knowledge required for competent managers.

The top 3 marine service manager priorities for training were:

- 1. Project management;
- 2. General business practices; and,
- 3. Human resources.

Mid-range training priorities were:

- 1. Finance: and.
- 2. Marketing

The lowest priorities were:

- 1. Legal;
- 2. Insurance; and,
- 3. Contracts.

The topics identified by industry as marine specific are in red above and in Table 1. It is interesting to note that the lowest ranked priorities are not necessarily the topics where a manager might experience the least risk. However, these are the areas where managers are most likely to have an external expert. The lower ranking on these categories may indicate their level of trust in the expertise and credibility of their outsourced expert and therefore lower their perception of risk.

Neither the major categories of information nor the rankings changed by geographical location. Differences in priorities were more likely to be based on the size of the company.

Two themes appeared consistently that were not part of the pre-populated examples: communication and accountability. Communication in its broadest definition is the single largest entry on the worksheets. Accountability was defined as both a value (e.g., honesty, integrity) as well as a skill/knowledge competence (e.g., quality assurance and warranty).

Communication & Accountability were added by managers under every topic category.

Table 1 Baseline Marine Service Manager Competency Chart

Management Competency Block	Sub-competencies (Attitudes, Skills, & Knowledge): Core Competencies (general principles and specific circumstances) Marine Industry-Specific Competencies (specific principles and circumstances)					
	Immediate & Ongoing Risks with Highest Priorities					
Projects	Managing workflows, facilities, and equipment	Creating work orders	Quoting, Estimating & Costing	Applying quality assurance standards (accountability)	Communicating clearly and consistently	Choosing and using PM tools
Business Processes	Understanding basic business processes and best practices (Succession planning)	Communicating clearly and consistently	Developing supply chain and inventory systems	Creating company policies	Setting quality assurance practices	Analyzing business health (SWOT and other metrics)
Employees	Hiring and retaining staff	Training staff	Evaluating staff performance	Maintaining safety standards & compliance	Creating human resources polices	Communicating clearly and consistently
	Frequent Risks & Medium Priorities					
Finances	Balancing cash flow	Tracking A/R and A/P	Setting billing and charge-out rates	Calculating margins	Reading financial statements	Understanding tax implications to the business
Marketing	Managing web and marketing technology	Creating and maintaining a company brand	Managing traditional marketing technologies	Identifying marketing opportunities	Tracking marketing efforts and metrics	Educating customers (communication)

	Perceived Lowest Risk & Lowest Daily Priority (with external experts)*					
Legal	Assessing risk / Understanding categories of liability	Maintaining environmental compliance	Placing liens	Recording and reporting best practices	Maintaining up- to-date standards	Choosing the correct type of contract
Contracts	Creating work order contracts	Comprehending lease and rental contracts	Contracting subtrades	Writing specifications for new build contracts	Using waivers	Reading purchase agreements
Insurance	Understanding policies and coverage	Choosing an appropriate policy	Handling business insurance claims	Handling customer insurance claims	Understanding environmental insurance	Understanding builder's risk

*With the assistance of external experts for legal, contracts, and insurance, marine service managers ranked these subjects lowest on their priority list for training. Not one of these topics made it into the top 3 priorities for anyone. There are still significant risks to businesses here but the perception of risk and significance to the day-to-day tasks seems less. Working with SMEs in the DESIGN phase of the project determined the foundational understanding marine service managers need to have e.g., what questions should they know to ask and when?

9.1.8 Themes from Workshop Discussions

9.1.8.1 What advice would you give to someone new to your position?

Themes	Data counts	
Leadership/ Self-Aware/ life balance	43	Lots of advice about taking time for self, learning for self, balance in life
Customer	31	Everything from communicate and care for the client, to knowing you can fire a client
Accountability	29	Be honest, stand by your work, take care in quotes/estimates
Planning/Prep/ Knowledge	22	Build your own knowledge, recognize that there is a lot of things you don't know
Employees	15	Value your employees, invest in them, but recognize not everyone is a good fit
Training/ Mistakes	8	Invest in the people that are good, recognize that mistakes will be made

9.1.8.2 What is the most frustrating part of your job?

- What is the me	ot maon an	ing part or your job:
Themes	Data	
	counts	
Planning/Prep/	46	Lack of knowledge, uniqueness and customization
Knowledge		of boats, planning for the right parts, etc
Employees	21	Everything from 'drama in the workplace' to finding qualified employees
Customer	12	Customers want everything but do not want to pay for it
Accountability	9	Ensuring the quote aligns to the job
Leadership/	8	Knowing the need to take time for themselves but
Self-Aware/		the demands of the business make it difficult.
life balance		
Training/	3	Simple mistakes by an employee can cost a lot of
Mistakes		time and money on a job.

9.1.8.3 What cost your business money that you couldn't bill the customer for?

Themes	Data counts	
Planning/Prep/ Knowledge	36	Lack of planning, clarity of estimates and quotes,
Training/ Mistakes	16	Recognition that when someone is training, it take more time for them to do a job and they make mistakes – which are costs that the business cannot charge the client for
Customer	11	Customer asks and expectations, also the micromanaging client who takes up the owners/workers time when they could be working on the job
Accountability	8	There is some disconnect between the warranty for the boat and the actual cost associated with fixing something.
Employees	6	Mistakes and lack of customer service skills
Leadership/ Self-Aware/ life balance	0	This is interesting – they did not attribute anything that cost them money they could not bill the customer to themselves

9.1.8.4 What have you figure out now but wish you knew sooner?

Themes	Data counts	
Planning/Prep/ Knowledge	30	Recognition of how important that the manager/owner have knowledge, project management skills, understand how to cost things properly
Leadership/ Self-Aware/ life balance	20	Recognition that self-development, training, learning to communicate, understanding all aspects of the business
Customer	13	How to communicate and manage the customer, recognition that you can fire the customer, be in it for the long game with customers
Employees	10	Recognizing that good employees are critical to business, not everyone a good fit, the most qualified might not be the best person
Accountability	3	Ensure your estimates are accurate and stand by them
Training/ Mistakes	1	How important training is

10 Appendix D: Evaluation Strategy Outcomes

The following table details the outcomes of the project from the metrics used in the original evaluation strategy. As identified in Section 5, the evaluation focuses on participation (industry consultations, subject matter experts and mentors, and those who took the course) as the real validation of the project's success. Participation metrics, assessed by both numbers and value of in-kind time, met or exceeded the targets in Table 1.

Table 2 Project Evaluation Outcomes

Define Phase : Industry Consultation Evaluation							
Objectives & Outcomes	Targets	Performance Indicators	Project Outcomes				
✓ Short term: A baseline map of management competencies for the marine service industry ✓ Medium term: Identification of potential SMEs for curriculum development and pilot workshop /mentoring phases. ✓ Long term: New Marine Service Employers of Excellence partner engagement. Promotion opportunities for BC's Marine Service Centre of Excellence.	 5 x facilitated workshops 6 x individual consultations \$40,000 of in-kind time contributions based on industry charge-out rates Identification of cross-sector networking opportunities. 	 Number of companies contacted/Attendance statistics by geographical area Participation metrics: ✓ Industry validation of existing themes ✓ Industry identification and validation of new themes ✓ Prioritization of themes ✓ Follow up contact from participants ✓ Interest in pilot courses 	 6 x facilitated workshops across BC (Vernon, Campbell River, Nanaimo, Port Alberni, Vancouver, Sidney). 14 x individual phone consultations across BC. Overall >90 service managers from >70 companies participated in consultations. North Coast – 4/7 companies participated. Okanagan – 9/16 companies participated. Southern Vancouver Island – 19/30 companies participated. Central & North Vancouver Island – 24/32 companies participated. Lower Mainland – 24/34 companies participated. In-kind value of time exceeded 				

Objectives & Expected Outcomes	Targets	Performance Indicators	Project Outcomes
 ✓ Short term: A full suite of SME-vetted modules that align with core and industry-specific competencies Alignment with instructional and curriculum design principles for adult learners in trades. [Mentor training content developed] ✓ Medium term: Content provides promotional materials for the training pilots. Long term: Logistics for sustainability plan Building relationships with SMEs and mentors 	 SME's, instructors and mentors for each subject \$10,000 of in-kind time contributions based on industry charge-out rates Identification and justification of 2 pilot training locations Identification of cross-sector networking opportunities. 	 ✓ Completed course content for the pilots tested and ready for delivery. ✓ SME reviewed/ validated content for activity-based workshops that align with the consultation data ■ [Mentors from industry have successfully completed their training and have support from their employers re: time to mentor] 	 9 pre-learning modules created 6-day workshop with integrated active learning 20 industry experts discussed their processes and toured their facilities. 11 subject matter experts helped create, vet, and deliver content. [Mentorship model modified to suit industry culture and needs.] Nanaimo and North Vancouver pilot locations justified by participation metrics 4 cross-sector networking opportunities brought forward by the steering committee at this stage.

Objectives & Expected Outcomes	Targets	Performance Indicators	Project Outcomes
✓ Short term: Pilot training delivery, evaluation, and modifications after each delivery ✓ Medium term: Sustainability Plan Final Reporting Inputs In progress Long term: Cross-sector promotion Building relationships with industry-specific sponsors	 2 x pilot training deliveries, one outside of the lower mainland, southern island 10 x participants in each pilot \$31,000 in cash contributions from industry Up to 10 cross-sector expressions of interest in this project 	✓ Participation and completion statistics ✓ Functional cost-recovery training model ✓ Training evaluations (participants, instructors, and mentors) ✓ Expressions of interest/waitlist for additional training ✓ Sponsor evaluations ✓ Invitations to present findings to cross-sector partners	 October 2020 Nanaimo pilot delivered November/December 2020 North Vancouver pilot delivered. Participant numbers were lowered from 10 to 8 due to COVID restrictions. There were 8 participants in each pilot. 15 / 16 participants completed their competency-based certification. \$31,000 in cash contributions were collected from industry sources. 6 expressions of interest from other sectors to attend a presentation of the project results. Positive evaluations from all participants (service managers, sponsors, and subject matter expert / mentors) Waiting list for course in fall 2021