
Specializ™ for occupational health and safety (OH&S)

Agenda

This presentation will take 40 minutes during which we will illustrate how Specializ can save your organisation considerable time and money while drastically increasing the accuracy of your enterprise risk management processes and outcomes.

The case study used describes an Occupational Health and Safety (OH&S) project at a mining company.

Item
Case study (BNH Mining)
Overview of the solution
Specializ in action
Solution benefits
Demonstration/Business Case
Conclusion

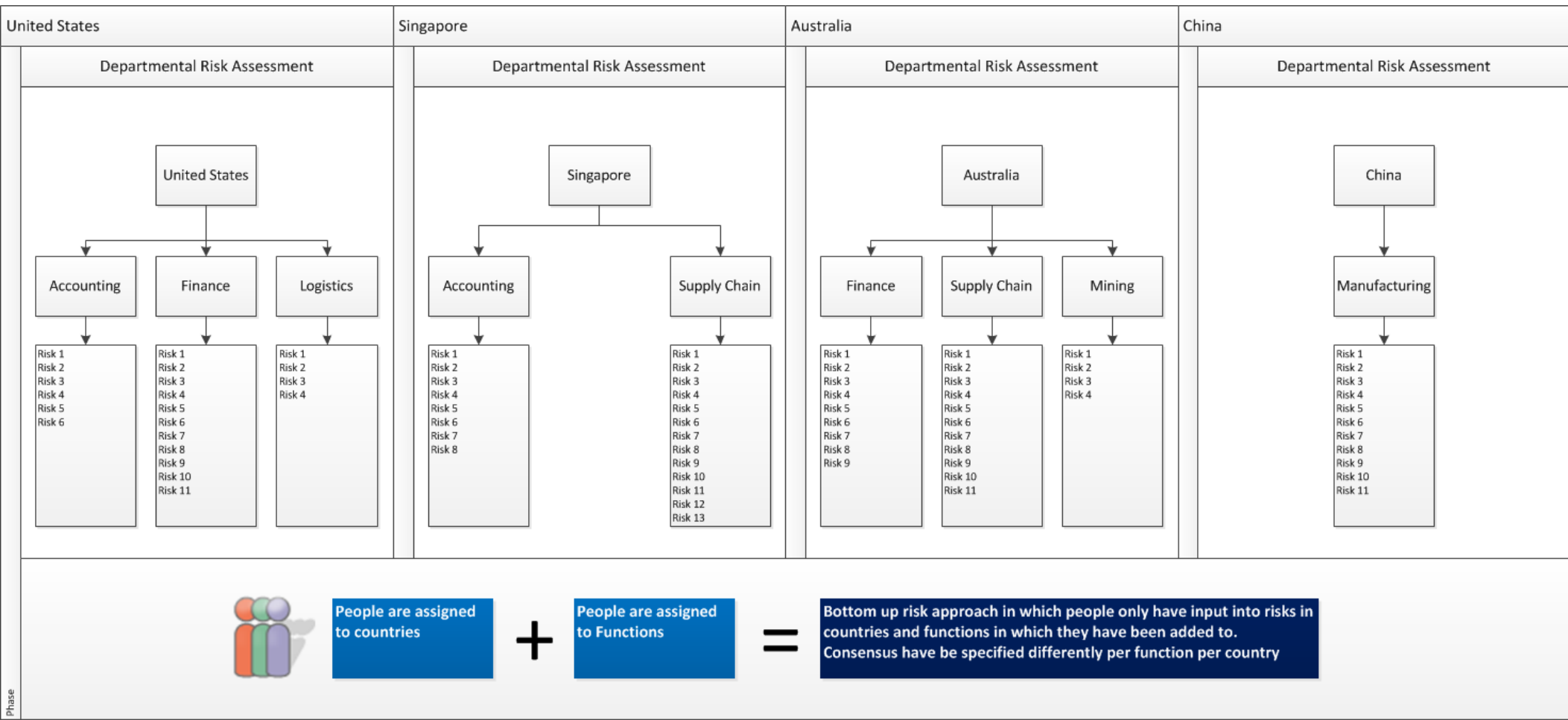
Specializ Overview

- Specializ is a powerful information generation tool. It is possible to gain consensus among thousands of people and slice and dice the information in virtually anyway imaginable.
- For example, we could safety risks, per group per geography, and then define the criticality, owner, test plans and maturity per control. We can then gain different levels of consensus for each group
- Specializ utilises populations instead of samples and guarantees consensus amongst participants.
- Specializ implements a standard social science research method called the Delphi Technique which was designed to generate rich contextual information among participants and gain consensus on that information.

Automating Health Checks and Assessments in Specializ

- Specializ would allow Deloitte to build *libraries* of industry specific Health and Safety Checks and Assessments and roll them out to clients with minimal effort from Deloitte
- This would allow Deloitte to focus on its content as opposed to administrative tasks associated with collecting client data
- Specializ assessments will create the data Deloitte can use to build Safety Analytic solutions that predict KRIs per industry, per work stream. These KRIs can then be updated in Deloitte's Specializ libraries and assessed at future clients.

Specializ Routing Tree



Phase

Specializ Technology

Specializ operates in one of three ways:

- SaaS in the Amazon EC2 environment (over SSL)
- Deployed to your environment as a VMWare Linux instance
- Deployed to Amazon EC2 or Rackspace Australia and only you can access it – ***NOT EVEN WE CAN GET TO IT***

- ✓ There is ***no complicated technical implementation*** with Specializ, either go directly to your website with SaaS or drop the VMWare instance into your environment – *It is that easy*
- ✓ There is ***no functional implementation*** associated with Specializ, simply build your organisational hierarchy and content and you are done – *It is that easy*
- ✓ Pass through authentication to active directory so even user management is easy
- ✓ There are **no hidden configurations** to manage, we do all the hard work for you

Specializ Libraries accelerate your organisation

- Specializ is not limited to any particular field or industry. Just a few of its applications across industries and functions are listed below. The solutions below already exist in Specializ as built-in libraries. If you do not see the content you need we will build it for you and **FAST** (less than three days).

Industry	Application
Banking	<ul style="list-style-type: none">• Basel II/III• Solvency II• FAS-133
Environmental, Health and Safety	<ul style="list-style-type: none">• ISO 14000 environmental management systems• Environmental metrics• WHS, OH&S, OSHA assessment and metrics
Risk Management	<ul style="list-style-type: none">• COSO enterprise risk management• IRM assessment and testing• ISO 27001 assessment and testing• NIST/DIACAP/DITSCAP assessment and testing• FISMA and A-123 compliance testing, certification and accreditation• IT maturity assessments based on COBIT
Process Improvement	<ul style="list-style-type: none">• Lean management• Process improvement and business process redesign• Six Sigma re-engineering

Case Study: OH&S

In this presentation we will compare two methodologies for OH&S:

- **The Workshop approach to Health Checks and Assessments**
- **The Specializ approach**



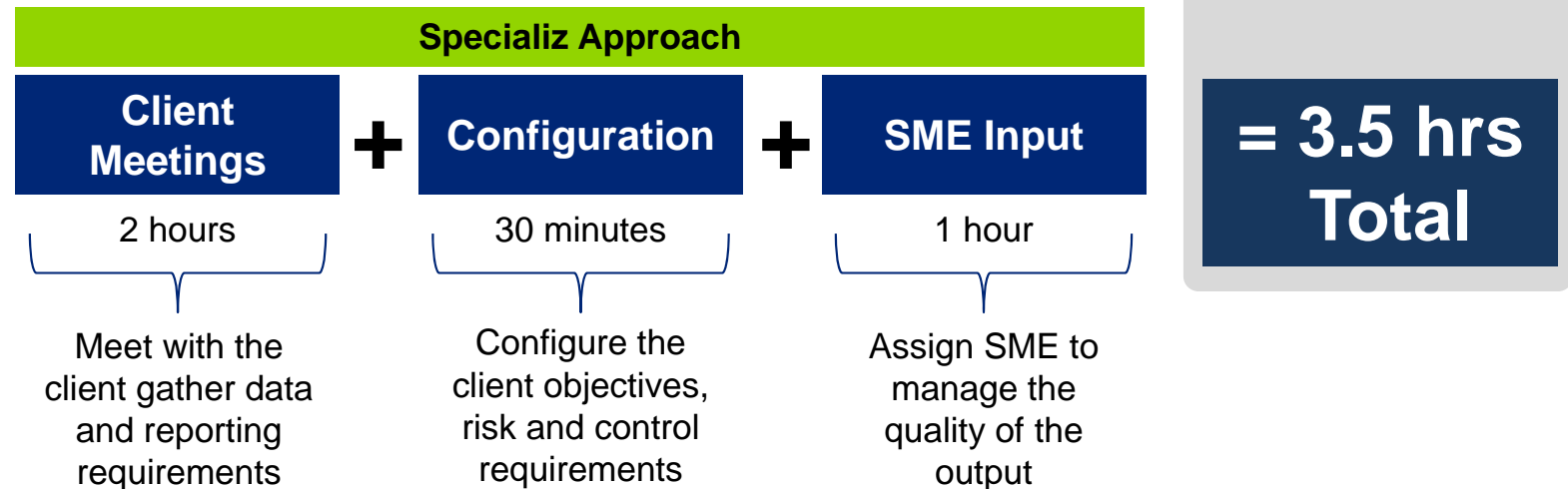
Using each methodology across 7 BNH lines of business, we will highlight the differences in attaining:

- **Objectives**
- **Risks**
- **Controls**

Interviews and workshops introduce inefficiencies to OH&S Assessment

- **Interviews and workshops are a common vehicle used to conduct OH&S Health Checks and Assessments information.**
- **When used to collect OH&S information, interviews and workshops suffer from a number of problems including:**
 1. Considerable stakeholder time and commitment required
 2. Data collection is neither consistent nor directly comparable across workshops
 3. Sample sizes are too small to base important decisions on
 4. High costs associated sampling more stakeholders due to travel, facilitation, analysis and reporting fees
 5. Failure to collect information accurate enough to support decision-making or to justify the cost of data collection
 6. There is an inherent “expiration date” of the collected information, requiring duplication in effort and expenditure to assure ongoing accuracy and relevance

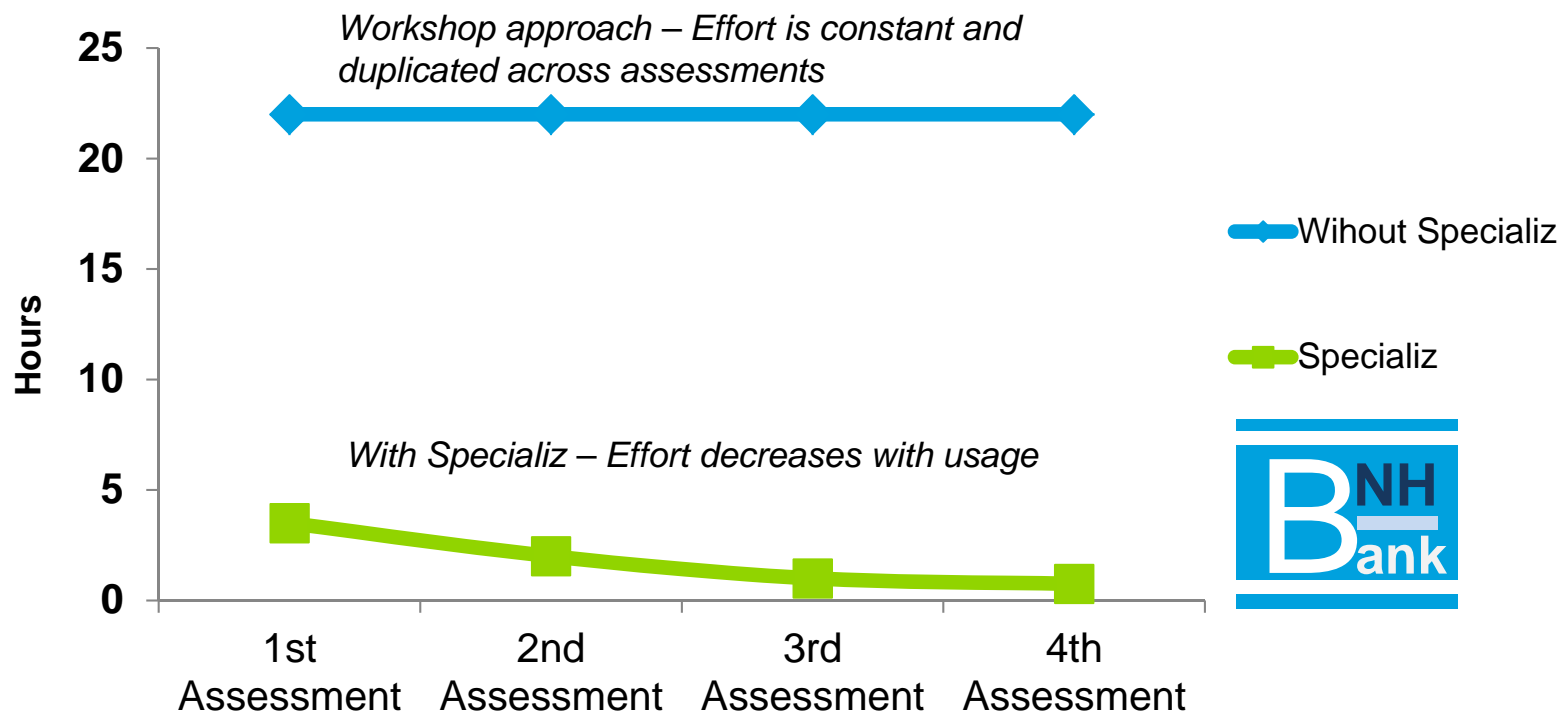
OH&S Information gathering from the perspective of the OH&S Manager



- ✓ Using Specializ requires 3.5 hours regardless of quantity of business units
- ✓ This enabled information collection 44x times faster at BNH Bank than the workshop approach

Specializ Time-to-Assess decreases with each Assessment

- Each issue across all 7 business units will require ~154 hours per incident using a workshop approach
- Specializ requires only 3.5 hours for the initial assessment and a fraction of that for each subsequent assessment, regardless of the topic of interest
- One-off assessments can be accomplished in minutes if required



Scheduling and performing Risk Assessments

Workshop Approach




- ☒ Can be easily scheduled and coordinated with participants' schedules
- ☒ Robust against biases such as groupthink
- ☒ Robust against socially desirable responses, especially if one's boss is in the room
- ☒ Anonymity of participant responses
- ☒ Quantifiable safety data that has reached group consensus
- ☒ Standardised participant risk output from workshop to workshop

Specializ Approach



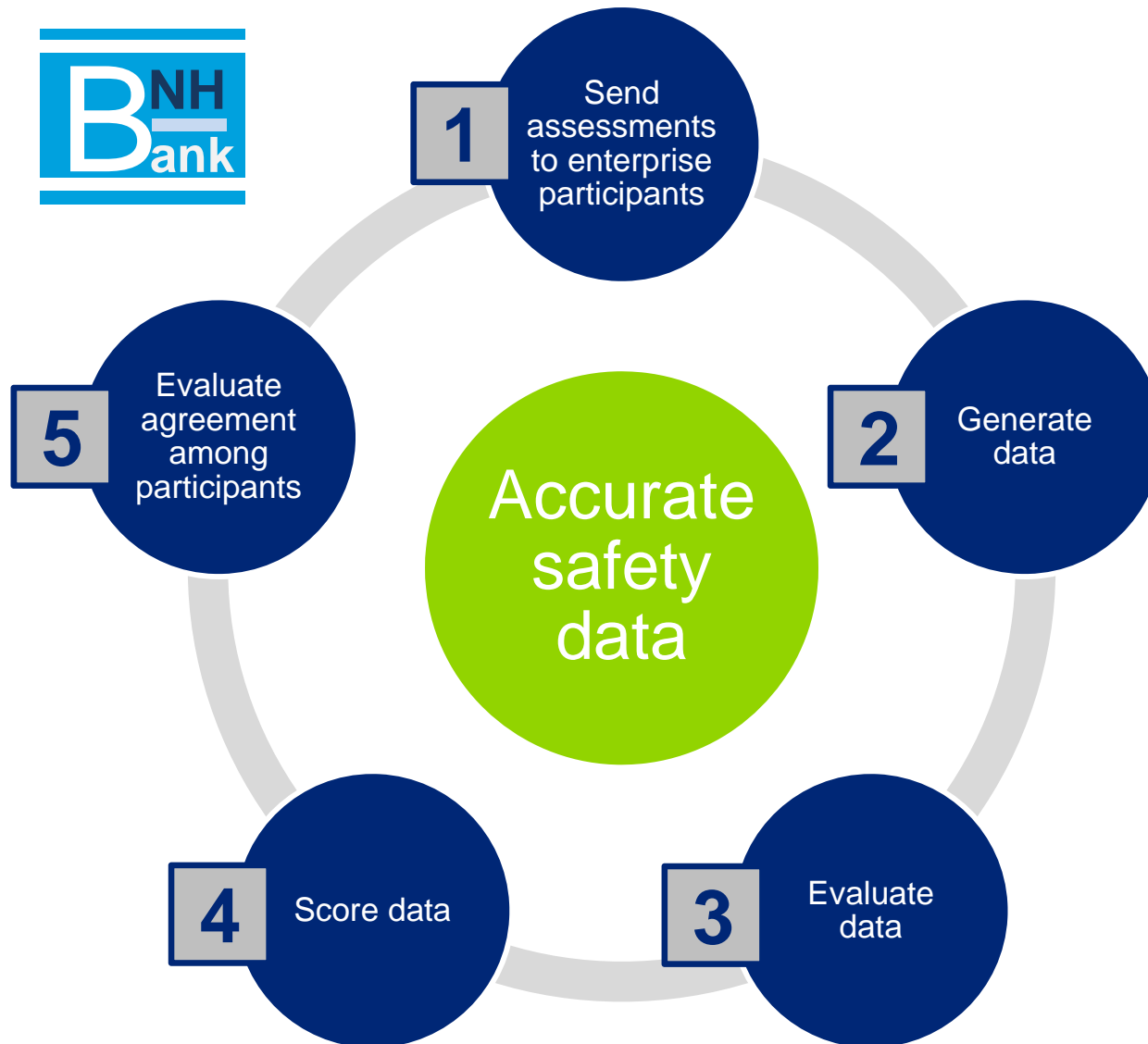
- ☒ Participants complete Health Check and Safety assessments online and on their own time
- ☒ Specializ is anonymous allowing participants to freely state their beliefs
- ☒ Specializ iterates until consensus is reached
- ☒ Specializ can produce comparable risk assessments across the entire organisation
- ☒ Specializ allows participants to feed off of each other's ideas and vote on them
- ☒ Specializ is fast taking less than 10 minutes to complete one iteration

OH&S assessment statistics

Consideration	Data Collection Method	
	Workshop	Specializ
OH&S Manager's time	$22 \times 7 \times \$100 = \text{\$15,400}$	$3.5 \times \$100 = \text{\$350}$
Participants' time	$70 \times 4 \times \$100 = \text{\$28,000}$	$70 \times .75 \times \$100 = \text{\$5,250}$
Mitigation Inaccuracy (Actual risk mitigation spending should be \$250,000)	<p>The fewer participants, the greater the degree of inaccuracy.</p> <p><u>Example:</u> An organization has 15,000 employees and only 70 are sampled (0.05%)</p> <p><u>Result:</u> Due to the extremely limited data collected from this small sample, accuracy could be off by as much as 1,000%, resulting in over/under assessment of risk funding requirements</p>	<p>Specializ can include all 15,000 employees as easily as 70, dramatically increasing the accuracy of the results.</p> <p>This brings mitigation spending estimates much closer to their true values</p> 
Number of yearly health assessments	Limited to about 12 workshops per year per OH&S manager	Can perform up to 900 OH&S assessment with one OH&S manager

*In the above example, Specializ cost savings over one workshop is **\$37,800**, considering only participants' and risk manager's time*

Specializ process of developing OH&S Assessments

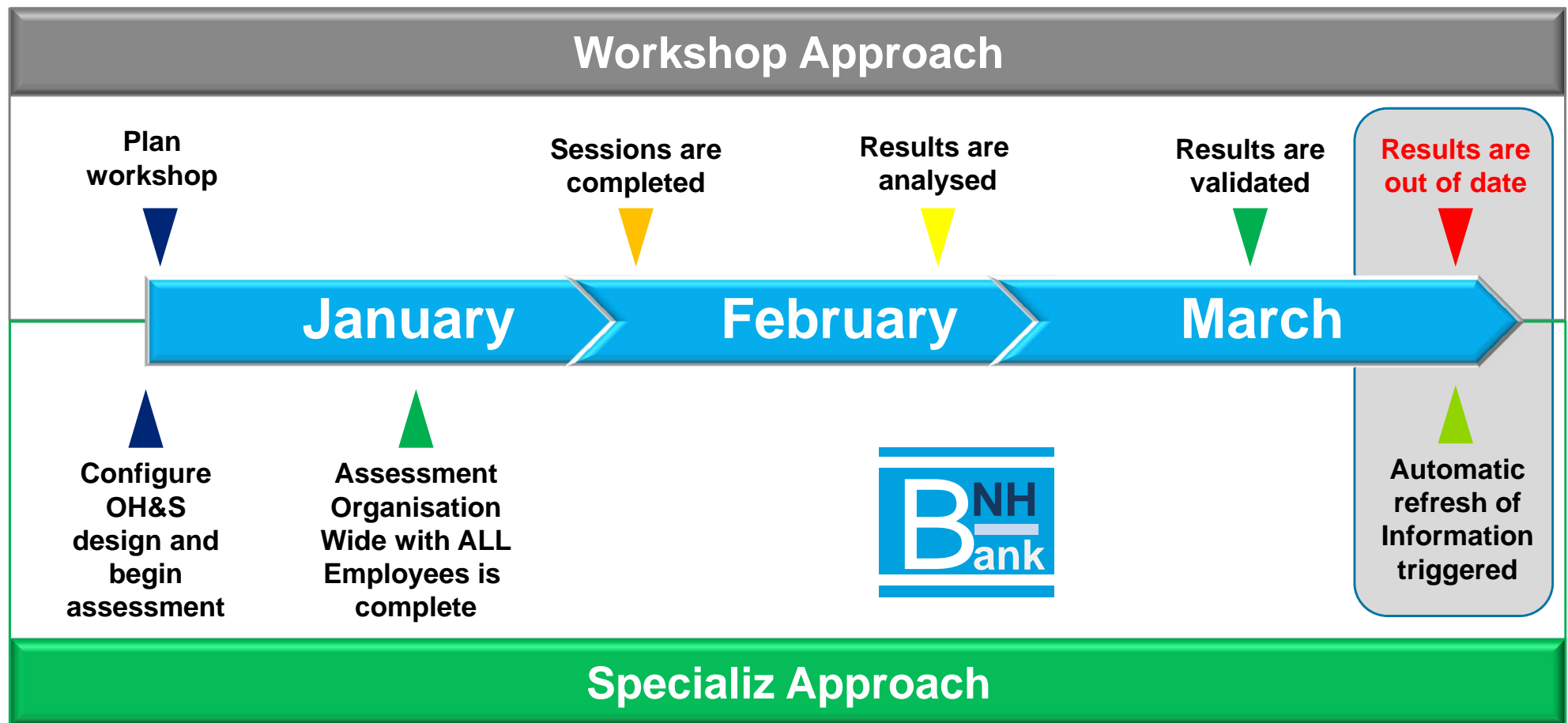


Specializ OH&S scoring and agreement

1. The more individuals that contribute data in their areas of expertise, the higher the quality of the results
2. Participants can edit and delete safety issues/risks created by others, in addition to adding their own, greatly enhancing the overall information set
3. Each stream has a manager that provides quality control, helping to ensure that results are consistent and that the iterations move towards consensus
4. The consensus algorithm not only scores the existence of safety issues but also their applicability to the stream of users to ensure high quality results
5. Each participant submits his/her list to be scored and the system calculates agreement and either completes the assessment or initiates another iteration

Maintaining accurate OH&S data

Utilising workshops to collect and manage OH&S Health Checks and Assessments from stakeholders has timing problems that undermine the value of the information they generate.



Summary of Workshop and Specializ approaches

Activity	Specializ	Workshop	Specializ Benefits
Assessment company wide	✓	✗	Is a structured quantitative solution to enterprise risk assessment
Quick and easy to complete	✓	✗	Provides rich, contextual health and safety attribute data quicker and with less effort
Anonymous technique that avoids groupthink	✓	✗	Uses populations of users, not samples, to give your organisation the most accurate picture of your risk landscape
Quantifiable results	✓	✗	Quantifies consensus per stream of risk
Guaranteed consensus	✓	✗	Takes a bottom up approach allowing theoretically infinite number of risk registers to be created and maintained
Scheduling participants	✓	✗	
Uses populations of employees	✓	✗	
Common framework for responses	✓	✗	
Allows users to respond to each other's input iteratively	✓	✗	
Participant buy in and sign off	✓	✗	

- ✓ **Specializ is based on a consensus building algorithm to ensure that the minimum required levels of consensus are met efficiently, effectively and with as little disruption to participants as possible.**
- ✓ **Organisations have saved thousands of dollars using Specializ to determine risk mitigation budgets.**
- ✓ **Stakeholder buy-in and agreement is reached before any assessment is closed**

Business Case for Specializ Software Adoption

Cost Benefit Analysis OH&S Example					
COSTS		Year 0 (\$'000)	Year 1 (\$'000)	Year 2 (\$'000)	Year 3 (\$'000)
Capital Costs					
Licensing		\$25,000	\$25,000	\$25,000	\$25,000
Hosting		\$2,000	\$2,000	\$2,000	\$2,000
Total Capital Costs		\$27,000	\$27,000	\$27,000	\$27,000
Operating Costs					
Hosting Administration		\$2,600	\$2,600	\$2,600	\$2,600
Specializ Administration	Assumes probability of realising benefits increases over time	\$2,600	\$2,600	\$2,600	\$2,600
Total Operating Costs		\$5,200	\$5,200	\$5,200	\$5,200
TOTAL COSTS		\$32,200	\$32,200	\$32,200	\$32,200
BENEFITS		Year 0 (\$'000)	Year 1 (\$'000)	Year 2 (\$'000)	Year 3 (\$'000)
Probability Assumptions (see notes below)		%	%	%	%
Revenue Streams		60%	70%	80%	90%
Savings from Risk Treatment		\$100,000	\$100,000	\$100,000	\$100,000
Savings from Time Reduction	Fewer loss expenses due to better risk mitigation and control	\$149,600	\$149,600	\$149,600	\$149,600
Total Revenue Streams		\$149,760	\$174,720	\$199,680	\$224,640
Positive Externalities					
Reduced Costs (Loss Events)		\$10,000	\$10,000	\$10,000	\$10,000
Reduction in Human Resources		\$60,000	\$60,000	\$60,000	\$60,000
Increased User Satisfaction	Fewer internal/external resources are required to generate better results	\$7,000	\$7,000	\$7,000	\$7,000
Total Positive Externalities		\$77,000	\$77,000	\$77,000	\$77,000
TOTAL BENEFITS		\$ 226,760	\$ 251,720	\$ 276,680	\$ 301,640
NET BENEFITS		Year 0 (\$'000)	Year 1 (\$'000)	Year 2 (\$'000)	Year 3 (\$'000)
(Total Benefits minus Total Costs)		\$ 194,560	\$ 219,520	\$ 244,480	\$ 269,440
		Undiscounted Net Benefits (\$'000)			
		Net Present Value @ 6%			
		Net Present Value @ 8%			
		Net Present Value @ 10%			
		Internal Rate of Return			

Assumes probability of realising benefits increases over time

Savings through better matching spending to real risks

Fewer loss expenses due to better risk mitigation and control

Fewer internal/external resources are required to generate better results

Employees own the data, fewer questions regarding its validity and less risk management effort

\$928,000.00

\$797,611.03

\$760,473.72

\$726,006.80

67%

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Next Steps

- See the benefits for yourself. Try the software for free for 30 days.
- Identify one or two assessments in which we can use the tool.
- Identify dimensions of product evaluation.
 - Cost savings
 - Accuracy
 - Time savings
 - Other dimensions?

Questions and Answers

What questions may I answer?

Presentation Feedback?

Need further depth from a Peoplenetz functional expert?