

CTCN - RESPONSE PLAN IMPLEMENTATION - 2016000007 /  
COSTA RICA

# D5: Knowledge management gap analysis to support the Costa Rica Green Hub project

CTCN

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Objective: To provide insight in gaps in competence for delivering the Green Hub in Costa Rica

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## 1 EXECUTIVE SUMMARY

An effort has been undertaken to determine which elements should be trained in the knowledge management train-the-trainer programme that is a key deliverable of CTCN - RESPONSE PLAN IMPLEMENTATION - 2016000007 / COSTA RICA.

The effort involved self-assessment by a representative sample of 13 out of 50 prospective trainees of a knowledge management programme that is to be delivered by those participating in the train-the-trainer programme.

The self-assessment demonstrates that there are gaps across all key competences required to set-up and deliver a successful knowledge management programme and system and therefore, the train-the-trainer programme will be dimensioned such that all key competences will be addressed with equal attention.

## 2 INTRODUCTION

DNV GL is supporting CTCN with offering technical assistance to Costa Rica, in particular the request proponent FUNDECOR who are involved in design and delivery of the Green Hub. The objective of the technical assistance is to provide a train-the-trainer course in knowledge management, to be delivered in a DNV GL office in the Netherlands, so that local capacity can be built in Costa Rica in a cost-effective manner.

It is envisioned that following the train-the-trainer programme, the acquired knowledge will be replicated to Costa Rica technical staff involved in the design and management of the Green Hub. At least 50 technical staff from national institutions will be trained. In the first stage, the Green Hub information system will be at least used by over 100 natural resource practitioners.

To establish the exact structure and content of the train-the-trainer programme, a competence gap analysis was made based on a methodology that DNV GL has used in prior work with their clients.

This report presents the findings of the gap analysis. The first section addresses the methodology of undertaking the gap analysis, whereas the second section explains the results. The gap analysis concludes with priority areas for the train-the-training course and identifies the next steps to prepare for the actual delivery of the training programme. The appendix contains the survey instrument.

## 3 METHODOLOGY

DNV GL has delivered knowledge management masterclasses to hundreds of professionals nationally in the Netherlands and internationally over the course of the last 25 years. Furthermore, DNV GL's knowledge management competence centre, who will provide the trainers for the train-the-trainer programme, has been delivering practical knowledge management work for customers in a wide range of sectors and to a large variety of organisation types and has kept abreast of developments in the field through our own research, conference participation and membership of the international KM community.

Through this collective experience, DNV GL has built an understanding which competences are key to delivering knowledge management results. Not having these competences will result in what we are calling costs of ignorance.

To fit the context of the technical assistance to Costa Rica, we have made these competences specific to delivering a knowledge management system, which is normally part of a wider knowledge management programme.

The key competences to delivering a knowledge management system are:

1. We know how to develop a knowledge management strategy.
2. We know how to set up an IT roadmap to underpin our knowledge management strategy.
3. We know and can apply a toolbox for expert knowledge capture, validation and dissemination.
4. We know how to manage a knowledge management system.
5. We understand the architectural choices for a knowledge management system.
6. We know how to choose a technology stack for a knowledge management system.
7. We know how to improve findability of knowledge on a knowledge management system.
8. We understand the roles involved in a successful knowledge management programme.
9. We know how to measure success of a knowledge management programme.

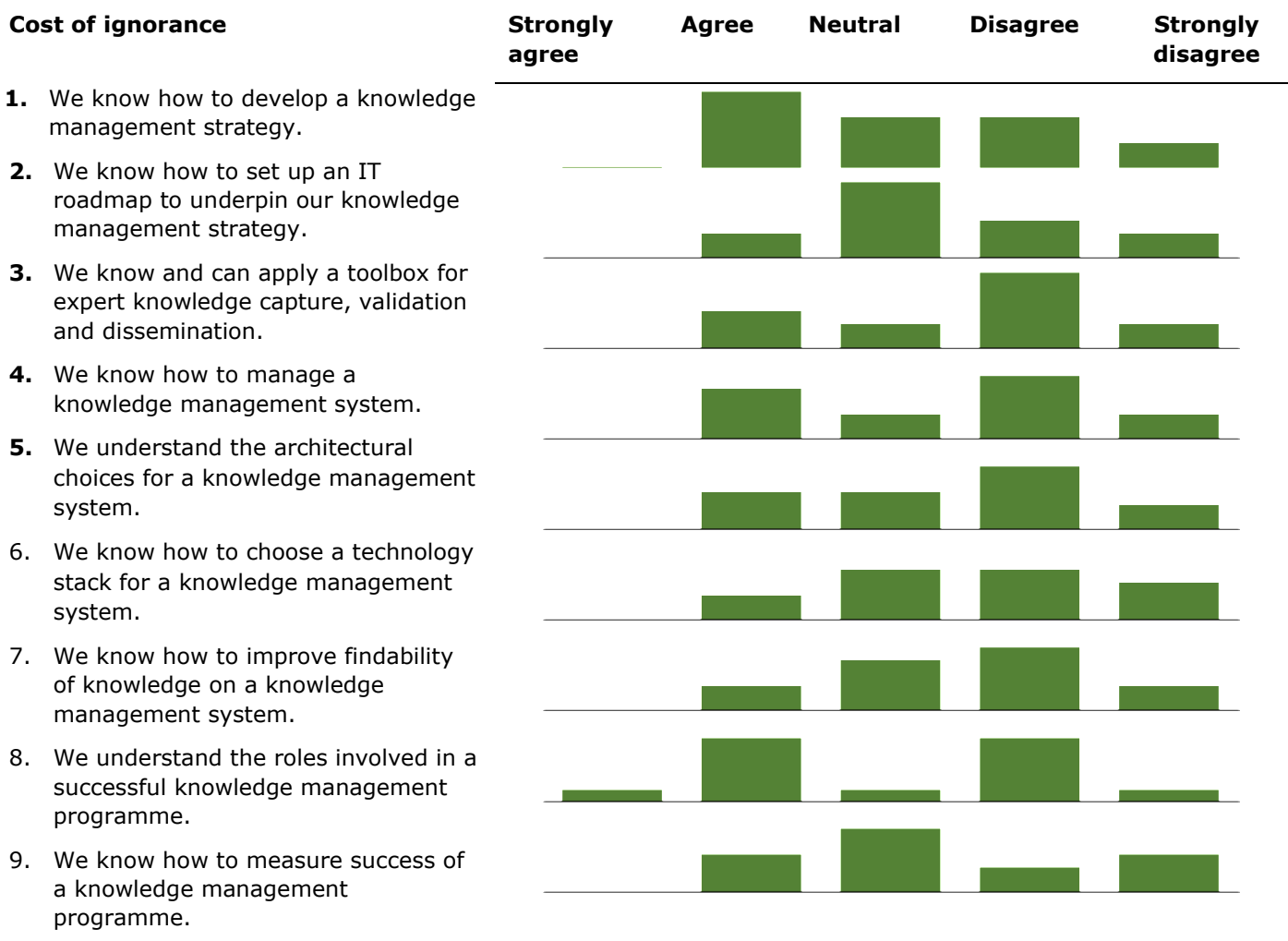
Using this list of key competences, DNV GL has created a self-assessment tool that has been used to determine, through self-reflection by respondents, where the biggest competence gaps might be.

Furthermore, in order to assess the maturity of knowledge management work as perceived by stakeholders in Costa Rica, we have included a standard maturity model into the self-assessment tool. This helps the DNV GL trainers to prepare training materials and align with participants' expectations.

To administer the self-assessment tool, the request proponent FUNDECOR has identified a sample of 14 respondents from within its own organisation as well as the Costa Rican government to represent those who will benefit from local delivery of the KM training programme. 13 respondents successfully returned results, which were analysed to design the structure and content of the train-the-trainer programme. 1 respondent returned an empty file. This is deemed a sufficient subset of the target group of 50 trainees as specified in the introduction of this report.

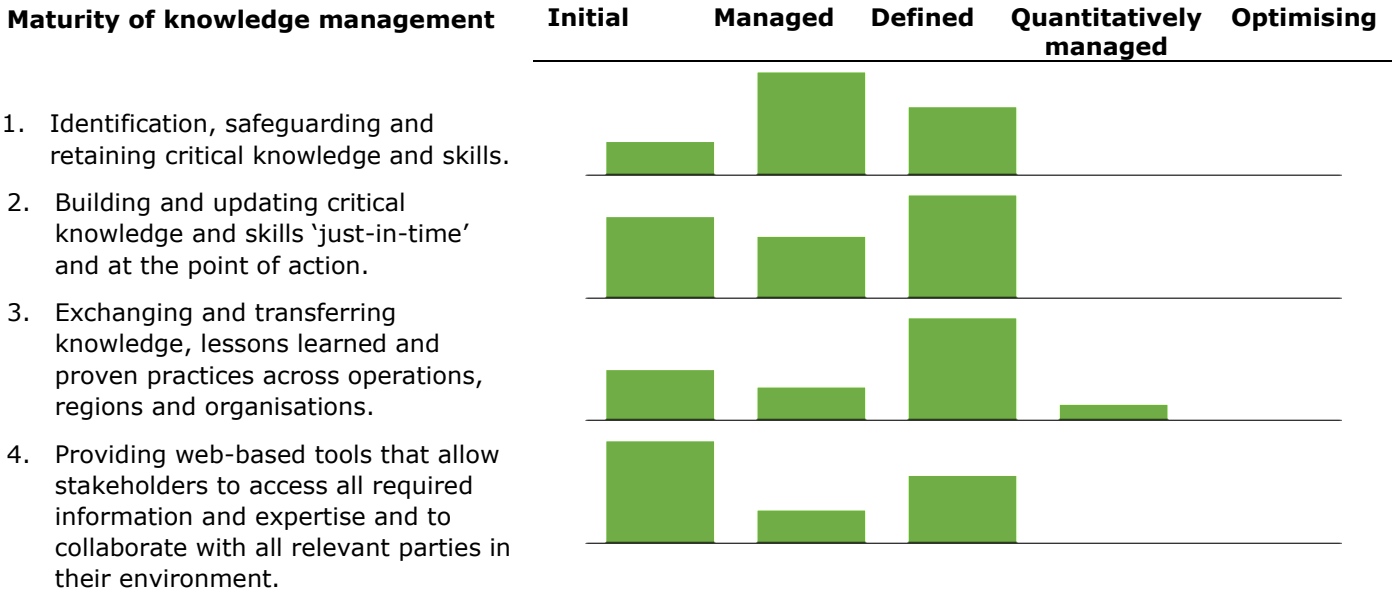
## 4 RESULTS

The results of the self-assessment are shown below (see appendix for the data-set used to generate the graphs).





**Maturity of knowledge management**



The results above demonstrate that although not all respondents believe that they see gaps across the key KM competences, it is clear that the majority does see gaps across all listed competences, meaning that there is scope for delivering local KM training in Costa Rica.


Furthermore, the results show that the maturity of knowledge management delivery is at best at a 'defined' level (with one respondent reporting that they see the 'Exchanging and transferring knowledge, lessons learned and proven practices across operations, regions and organisations' at 'quantitatively managed' level).

All in all, the results show that the train-the-trainer programme needs to prepare the participants for being able to train local Costa Rican stakeholders in all key KM competences as identified by the DNV GL self-assessment tool.

## 5 CONCLUSIONS AND NEXT STEPS

DNV GL concludes that the train-the-trainer programme needs to cover all of the key competences to deliver a KM programme in Costa Rica. It is now proposed that the programme is structured as follows:

Day	Time	Session with learning objective	Delivery through:
1	10:00-11:00	Welcome, introduction, expectations and practical arrangements.	Presentation and group discussion
	11:00-12:30	Overview of knowledge management and DNV GL experience.	Presentation
	12:30-13:30	Lunch provided	
	13:30-15:30	How to develop a knowledge management strategy.	Presentation, group exercise (applied to Green Hub context)
	15:30-16:00	Train the trainer reflections	Discussion on how to best transfer this topic locally in Costa Rica
	16:00-18:00	Knowledge exchange tropical forestry (to be confirmed)	Site visit/guest lecture tropical forestry
2	9:00-16:00, lunch provided at time convenient to participants	Toolbox for expert knowledge capture, validation and dissemination.	Presentations, group exercises. Coverage of DNV GL's Knowledge Risk Management methodology. Propose to use a number of agroforestry cases, with Edwin Aalders being our expert to work with
	16:00-17:00	Train the trainer reflections	Discussion on how to best transfer this topic locally in Costa Rica
3	9:00-16:00, lunch provided at time convenient to participants	How to set up an IT roadmap to underpin our knowledge management strategy.	Examples of KM IT roadmaps and how to construct them.  Exercises with sprint methodology to set up iterative delivery of KM systems, including personas and use case development. Use Green Hub as central case study in all exercises.
	16:00-17:00	Train the trainer reflections	Discussion on how to best transfer this topic locally in CR
4	9:00-16:00	How to manage a knowledge management system.	
		Architectural choices for a knowledge management system.	
		Choose a technology stack for a knowledge management system.	
		Improve findability of knowledge on a knowledge management system.	
	16:00-17:00	Train the trainer reflections	Discussion on how to best transfer this topic locally in CR
5	9:00-14:30	Understand the roles involved in a successful knowledge management programme.	
		How to measure success of a knowledge management programme.	
	14:30-15:30	Train the trainer reflections	Discussion on how to best transfer this topic locally in Costa Rica
	15:30-16:00	Final evaluation and farewell	Discussion, group photo, certificate



The next steps following establishment of the above schedule for the train-the-trainer programme include:

1. Preparation of training materials and exercises
2. Organisation of logistics for the training (training room, AV equipment, scheduling of trainers, travel and accommodation arrangements for participants)
3. Organisation of meaningful side-events with experts in tropical agroforestry, rural development and adjacent topics, to make optimal use of the fact that the training location (Arnhem, The Netherlands) is near some of the world's leading centres of excellence (Wageningen University, Larenstein Institute, . Technical Centre for Agricultural and Rural Co-operation).

## 6 APPENDIX 1: SELF-ASSESSMENT TOOL

# KNOWLEDGE MANAGEMENT REDUCE YOUR COSTS OF IGNORANCE

Develop, capture, share and use the most important asset of your sector

Knowledge is one of the most important and determining assets in organisations, networks and sectors. Global trends challenge the way you deal with knowledge and experience: a faster pace of technological innovations, aging workforces, shifts in and between economic regions, and a global availability of information via the web

### Costs of ignorance

These trends create many opportunities but also challenges. When you respond too late or inadequate your performance will suffer from:

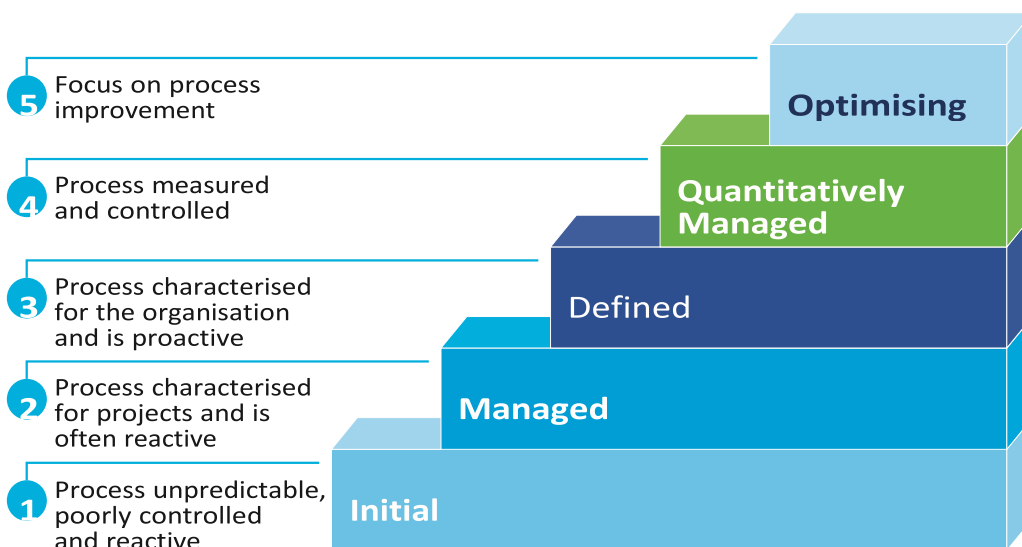
- Reinventing the wheel
- Insufficient reuse of lessons learned and good practices
- Lack of validated knowledge at the point of action
- Loss of critical knowledge through retirement or transfer
- Loss of productivity because employees cannot find the right information to do their job and make crucial decisions.

### Critical knowledge needs attention

Professional knowledge management enables you to:

- Identify, safeguard and retain critical knowledge and skills
- Build and update critical knowledge and skills 'just-in-time' and at the point of action
- Exchange and transfer knowledge, lessons learned and proven practices across operations, regions and organisations
- Support knowledge-intensive work by web-based tools which allow employees to access all required information and expertise.

### KM maturity levels



The following “health checks” are designed to help you get an overview of the major issues related to knowledge management and to assess the maturity of your knowledge management processes.

### Health check questionnaire

#### Cost of ignorance

	Score				
1. We know how to develop a knowledge management strategy.	<input type="checkbox"/> <i>Strongly Agree</i>	<input type="checkbox"/> <i>Agree</i>	<input type="checkbox"/> <i>Neutral</i>	<input checked="" type="checkbox"/> <i>Disagree</i>	<input type="checkbox"/> <i>Strongly Disagree</i>
2. We know how to set up an IT roadmap to underpin our knowledge management strategy.	<input type="checkbox"/> <i>Strongly Agree</i>	<input type="checkbox"/> <i>Agree</i>	<input type="checkbox"/> <i>Neutral</i>	<input checked="" type="checkbox"/> <i>Disagree</i>	<input type="checkbox"/> <i>Strongly Disagree</i>
3. We know and can apply a toolbox for expert knowledge capture, validation and dissemination.	<input type="checkbox"/> <i>Strongly Agree</i>	<input type="checkbox"/> <i>Agree</i>	<input type="checkbox"/> <i>Neutral</i>	<input checked="" type="checkbox"/> <i>Disagree</i>	<input type="checkbox"/> <i>Strongly Disagree</i>
4. We know how to manage a knowledge management system.	<input type="checkbox"/> <i>Strongly Agree</i>	<input type="checkbox"/> <i>Agree</i>	<input type="checkbox"/> <i>Neutral</i>	<input checked="" type="checkbox"/> <i>Disagree</i>	<input type="checkbox"/> <i>Strongly Disagree</i>
5. We understand the architectural choices for a knowledge management system.	<input type="checkbox"/> <i>Strongly Agree</i>	<input type="checkbox"/> <i>Agree</i>	<input checked="" type="checkbox"/> <i>Neutral</i>	<input type="checkbox"/> <i>Disagree</i>	<input type="checkbox"/> <i>Strongly Disagree</i>
6. We know how to choose a technology stack for a knowledge management system.	<input type="checkbox"/> <i>Strongly Agree</i>	<input type="checkbox"/> <i>Agree</i>	<input checked="" type="checkbox"/> <i>Neutral</i>	<input type="checkbox"/> <i>Disagree</i>	<input type="checkbox"/> <i>Strongly Disagree</i>
7. We know how to improve findability of knowledge on a knowledge management system.	<input type="checkbox"/> <i>Strongly Agree</i>	<input type="checkbox"/> <i>Agree</i>	<input type="checkbox"/> <i>Neutral</i>	<input checked="" type="checkbox"/> <i>Disagree</i>	<input type="checkbox"/> <i>Strongly Disagree</i>
8. We understand the roles involved in a successful knowledge management programme.	<input type="checkbox"/> <i>Strongly Agree</i>	<input type="checkbox"/> <i>Agree</i>	<input checked="" type="checkbox"/> <i>Neutral</i>	<input type="checkbox"/> <i>Disagree</i>	<input type="checkbox"/> <i>Strongly Disagree</i>
9. We know how to measure success of a knowledge management programme.	<input type="checkbox"/> <i>Strongly Agree</i>	<input type="checkbox"/> <i>Agree</i>	<input type="checkbox"/> <i>Neutral</i>	<input checked="" type="checkbox"/> <i>Disagree</i>	<input type="checkbox"/> <i>Strongly Disagree</i>

#### Maturity of knowledge management

	Score				
1. Identification, safeguarding and retaining critical knowledge and skills.	<input type="checkbox"/> <i>Initial</i>	<input checked="" type="checkbox"/> <i>Managed</i>	<input type="checkbox"/> <i>Defined</i>	<input type="checkbox"/> <i>Quantitatively managed</i>	<input type="checkbox"/> <i>Optimising managed</i>
2. Building and updating critical knowledge and skills ‘just-in-time’ and at the point of action.	<input type="checkbox"/> <i>Initial</i>	<input checked="" type="checkbox"/> <i>Managed</i>	<input type="checkbox"/> <i>Defined</i>	<input type="checkbox"/> <i>Quantitatively managed</i>	<input type="checkbox"/> <i>Optimising managed</i>
3. Exchanging and transferring knowledge, lessons learned and proven practices across operations, regions and organisations.	<input type="checkbox"/> <i>Initial</i>	<input type="checkbox"/> <i>Managed</i>	<input checked="" type="checkbox"/> <i>Defined</i>	<input type="checkbox"/> <i>Quantitatively managed</i>	<input type="checkbox"/> <i>Optimising managed</i>
4. Providing web-based tools that allow stakeholders to access all required information and expertise and to collaborate with all relevant parties in their environment	<input checked="" type="checkbox"/> <i>Initial</i>	<input type="checkbox"/> <i>Managed</i>	<input type="checkbox"/> <i>Defined</i>	<input type="checkbox"/> <i>Quantitatively managed</i>	<input type="checkbox"/> <i>Optimising managed</i>

## 7 APPENDIX 2: RAW DATA-SET

Question	Respondent														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	4	3	4	3	2	3	5		4	5	2	2	2	1	
2	4	3	3	3	3	4	5		4	5	2	3	3	2	
3	4	3	4	4	4	2	5		4	5	3	4	2	2	
4	4	3	3	4	4	4	5		4	5	2	2	2	2	
5	3	3	4	4	4	4	5		4	5	2	2	3	2	
6	4	3	4	5	4	4	5		3	5	2	3	3	2	
7	4	3	4	4	4	3	5		4	5	2	3	2	3	
8	3	2	4	4	4	4	5		2	4	1	2	2	2	
9	4	3	3	5	3	4	5		2	5	3	2	2	3	
1	2		3	3	3	2	1		1	2	2	3	2	2	
2	2		3	2	3	1	1		1	2	3	3	1	3	
3	3		2	3	4	1	1		1	3	3	3	2	3	
4	1		3	1	3	1	1		1	3	2	2	1	3	

Tally					
1	2	3	4	5	
1	4	3	3	2	
0	2	6	3	2	
0	3	2	6	2	
0	4	2	5	2	
0	3	3	5	2	
0	2	4	4	3	
0	2	4	5	2	
1	5	1	5	1	
0	3	5	2	3	
0	0	0	0	0	
2	6	4	0	0	
4	3	5	0	0	
3	2	6	1	0	
6	2	4	0	0	



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