Why? Collaborating is crucial in the process of becoming a data-driven destination. Furthermore, **adopting a user-centred approach** allows the DMO to implement solutions and make decisions utterly relevant to the visitors, which is crucial for the long-term destination's success. Consequently, **additional essential skills might be needed** while stepping forward through this pathway. Henceforth, a model to anticipate it would be of utmost importance for the DMO.

How? The "4 D's" model can be inspirational for those DMOs who seek to organize a **complex set** of circumstances and contingencies, turning it into a **consistent plan** for better addressing those issues. As designers do, the aftermath of solving a problem or adopting an innovative improvement in the destination may be **tested first by a prototype** –a preliminary version of the solution- before adopting it widely. In this regard, **identifying a solution** to be adopted requires first **defining the problem**. This, in turn, can be done by **gathering the insights** that account for the matter. The **competencies needed** in the destination might be **consistently identified** with the solutions to be adopted collectively.
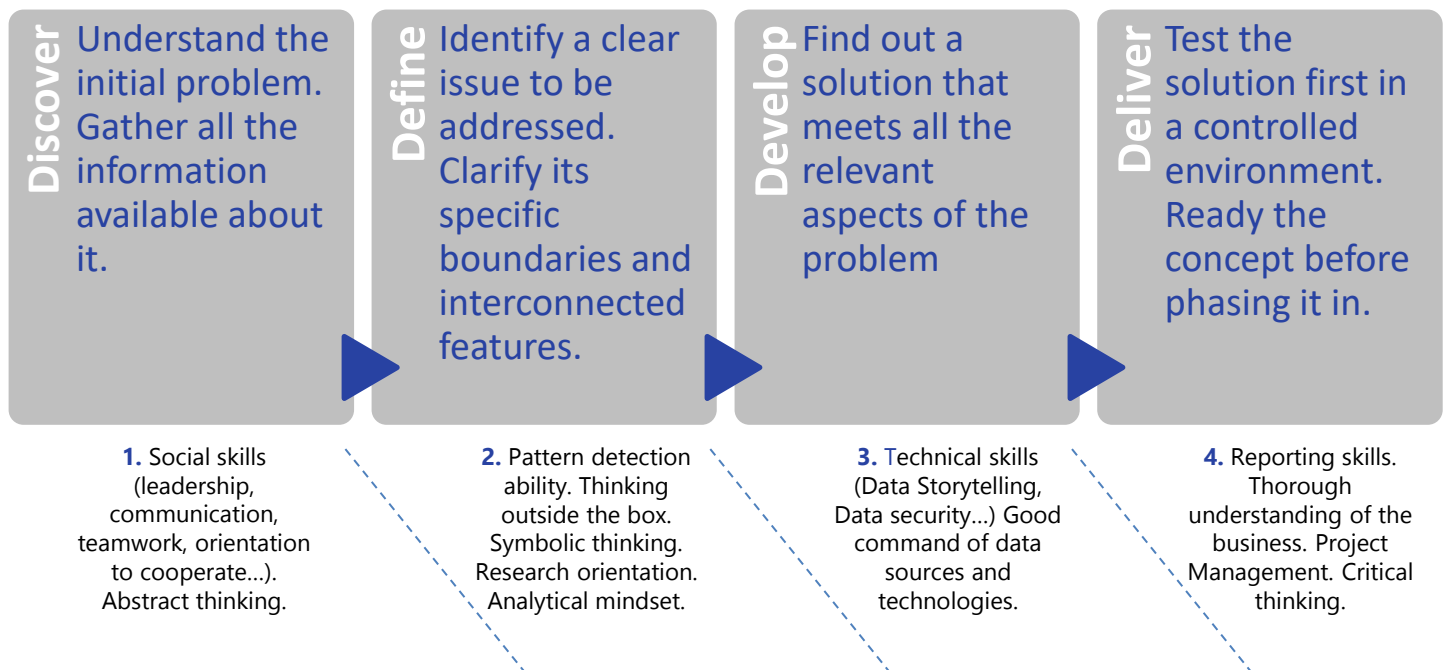
Tips and Guidelines

- **Focus on a single aspect of the tourism experience** in your destination that might be improved by having better data. At this stage, collaboration is crucial, as information might come from several sources in different supports and formats.

- **Brainstorm insights about the optimal solution** within the set of resources available. Different solutions might come across for any contingency. The decision-makers should assess each, choosing the most aligned with the destination's strategy.

- Imagine how to **test the solution** and how to evaluate its added value. Outline also how it could be **escalated for general use** and **each stakeholder's role** in that.

The 4 D's model

The following chart features the process for adopting new solutions to test their validity and reliability in a destination. The process starts by **collecting all the relevant information** about any specific need of the user at a precise moment of the tourism experience. Then, the decision-makers can speculate about the **best way to address the issue**. Different prototypes might be set up for **testing different solutions** until an efficient, acceptable initiative is adopted and escalated. **Diverse skills** might get involved in this process, especially if the prototyped action requires extra technical knowledge. Therefore, the DMO's skillset might be reshaped to meet the upcoming challenges.
Examples of skills that might be relevant at each stage are included under the boxes describing each step of the model.

Discover Understand the initial problem. Gather all the information available about it.	**Define** Identify a clear issue to be addressed. Clarify its specific boundaries and interconnected features.	**Develop** Find out a solution that meets all the relevant aspects of the problem	**Deliver** Test the solution first in a controlled environment. Ready the concept before phasing it in.
1. Social skills (leadership, communication, teamwork, orientation to cooperate...). Abstract thinking.	**2.** Pattern detection ability. Thinking outside the box. Symbolic thinking. Research orientation. Analytical mindset.	**3.** Technical skills (Data Storytelling, Data security...) Good command of data sources and technologies.	**4.** Reporting skills. Thorough understanding of the business. Project Management. Critical thinking.

Link with other Smart Tourism Pillars: Before this factsheet, the one entitled "**Data management and technological solutions**" (pillar 2) explained how the destinations aiming to become data-driven should always draw from their strategy when choosing technology or processes. After this document, "**Knowledge transfer**" (pillar 4) focuses on the latest tools and techniques for sharing knowledge within the destination. Tips and guidelines can be found consulting the Toolkit for Tourism Destinations and other supporting materials available in the digital library of the Smart Tourism Destinations project website.

Instructions: The following table aims to help a destination **assess its need for new skills**. Please fill in the blank cells you may need, keeping in mind common contingencies often experienced in your destination. For your convenience, examples are provided along with each step, in this case, on the "Visit" stage. The goal is to sketch the best way of implementing (i.e. **Proof of Concept**) the devised solution (i.e. **prototype**) to address the improvement opportunities identified in the procedure, likewise assessing the skills required for that.

Destination Proof of Concept (PoC):

Prototyping / Visitor's journey		Pre-visit	Visit	Post-visit
DISCOVER	**Activity** (e.g.. "local transportation")			
	Issues (e.g. "the bus lines' schedule is not adapted enough for tourists")			
	Insights (e.g. "the local bus managers are not targeting the visitors' needs")			
DEFINE	**Ideas** (e.g. "Develop an app for visitors which could track their mobility patterns")			
	Use case (e.g. "create a tourism mobility assessment tool for optimizing the bus service")			
DEVELOP	**Model** (e.g. "transportation network efficient design")			
	Techniques/Technologies (e.g. "mobile data, GPS, Wifi, heatmaps, UGC analysis")			
DELIVER	**Implementation** (e.g. "only in lines to/from the city centre and tourism attractions")			
	Cooperation (e.g. "City Hall, bus companies, technological partners, eventually telcos")			
	Assessing (e.g. "The tourists' satisfaction indicator on local transportation should improve")			

Shortlist here the skills identified in the PoC:

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Developed with the contribution of Smart Tourism Expert Estrella Díaz-Sanchez and based on the Smart Tourism Destinations webinar
"The future of work: new skills and profiles for Smart Tourism and how to get ready."
4 D's model adapted from British Design Council's "Double Diamond."