<div align="center">CHAPTER   7</div>

Use Cases for Data-Driven Personas

This chapter explores use cases of data-driven personas. In particular, we discuss 12 specific use cases in 3 general types: (1) <u>analytical</u>, (2) <u>interactive</u>, and (3) <u>team-centered</u> use cases. The use cases are presented from the viewpoint of <u>end-users</u> of the personas. By "end-users", we refer to the professional stakeholders that make decisions based on the personas or communicate with other stakeholders using the personas. As such, end-users are different from the "users" that the personas represent. The chapter contains action points for both data-driven persona end-users and persona developers.

7.1   TOWARD USE CASES OF DATA-DRIVEN PERSONAS

An important concept for data-driven persona use cases is **Personas + X**, which refers to the idea that personas always require a use case to deliver value-in-use (see Figure 7.1). To realize the potential of data-driven personas as user representations, the data-driven personas need to be coupled with real use cases, tasks, decision-making scenarios, or actual problems in user-centered design.

$$\text{Personas} \quad + \quad X \quad \begin{cases} \bullet \text{ Business Goals} \\ \bullet \text{ Scenarios} \\ \bullet \text{ Assumptions} \\ \bullet \text{ Use Cases} \\ \bullet \text{ Narratives} \\ \bullet \text{ Jobs to Do} \end{cases}$$
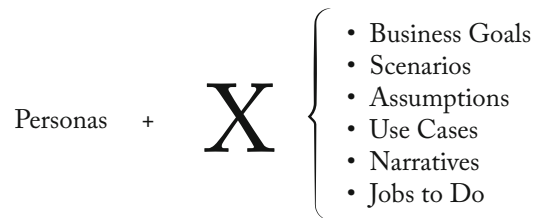
Figure 7.1: To obtain value from personas, one needs to couple them with actual decision-making scenarios, use cases, or goals.

One approach for making the "X" more concrete is replacing it with a specific user-related goal. For example, in marketing, X can indicate goals such as growing sales, improving ad click-through rates, collecting less expensive sales leads, or collecting more leads. Thus, the question would become, for example, "How do we grow <u>sales</u> using data-driven personas?" In this case, <u>sales</u> is the value of the variable <u>X</u>. Such a question is a starting point in data-driven persona design.

In the following subsections, we present 12 use cases (i.e., the "X") for data-driven personas, divided into 3 general categories.

1. **Analytical use cases:** focused on finding insights from the user data using descriptive information and passive observation.

2. **Interactive use cases:** analyzing the user data based on flexible system functionality and the active participation of persona users for modifying and manipulating that data.

3. **Team-centered use cases:** practical activities for user understanding in an organizational setting.

The use cases (UCs) are based on the accumulated knowledge and insights gathered by the authors from their multi-year research on data-driven personas, developing an interactive persona system for industry use, and assisting organizations with the implementation and use of these personas. We include specific implementation examples when applicable. Table 7.1 shows an overview of the use cases, and the following subsections explain each use case.

Table 7.1: Data-driven persona use cases by type		
Analytical Use Cases	**Interactive Use Cases**	**Team Use Cases**
Customer Journey Mapping	On-Demand Persona Generation	Communicating Data via Personas
Behavioral Modeling	User Sentiment Analysis	Challenging Existing Assumptions
Market Gap Analysis	Chat with a Persona	Supporting Design Activities
Longitudinal Analysis of User Interests	Persona Recommendations	Split Testing with Personas

7.2   ANALYTICAL USE CASES

7.2.1   UC1: CUSTOMER JOURNEY MAPPING

Journey mapping is plotting the stages and paths of the users' lifecycle, documenting each persona's unique state of mind, needs, and concerns at each stage. Combining customer journey mapping with data-driven personas is an exciting application area for data-driven personas. The customer journey concept relies on the notion that users or customers engage with an organization's products and messages on various channels at various times. Data-driven personas can help isolate, conceptualize, and communicate information on customer segments that are specifically salient at each step of the customer journey.

A typical manifestation of the customer journey is the conversion funnel, a popular digital marketing concept (Jansen and Schuster, 2011). Figure 7.2 offers an example of using data-driven personas in conjunction with the conversion funnel.