# 1.1 The product vision

Your starting point for product development should be an informal "product vision." A product vision is a simple and succinct statement that defines the essence of the product that is being developed. It explains how the product differs from other competing products. This product vision is used as a basis for developing a more detailed description of the features and attributes of the product. As new features are proposed, you should check them against the vision to make sure they contribute to it.

The product vision should answer three fundamental questions:

1. *What* is the product that you propose to develop? What makes this product different from competing products?
2. *Who* are the target users and customers for the product?
3. *Why* should customers buy this product?

The need for the first question is obvious—before you start, you need to know what you are aiming for. The other questions concern the commercial viability of the product. Most products are intended for use by customers outside of the development team. You need to understand their background to create a viable product that these customers will find attractive and be willing to buy.

If you search the web for "product vision," you will find several variants of these questions and templates for expressing the product vision. Any of these templates can be used. The template that I like comes from the book *Crossing the Chasm* by Geoffrey Moore.[1] Moore suggests using a structured approach to writing the product vision based on keywords:

- FOR (target customer)
- WHO (statement of the need or opportunity)
- The (PRODUCT NAME) is a (product category)
- THAT (key benefit, compelling reason to buy)
- UNLIKE (primary competitive alternative)

- OUR PRODUCT (statement of primary differentiation)

On his blog *Joel on Software*, Joel Spolsky gives an example of a product described using this vision template:[2]

> *FOR a mid-sized company's marketing and sales departments WHO need basic CRM functionality, THE CRM-Innovator is a Web-based service THAT provides sales tracking, lead generation, and sales representative support features that improve customer relationships at critical touch points. UNLIKE other services or package software products, OUR product provides very capable services at a moderate cost.*

You can see how this vision answers the key questions that I identified above:

1. *What* A web-based service that provides sales tracking, lead generation, and sales representative support features. The information can be used to improve relationships with customers.
2. *Who* The product is aimed at medium-sized companies that need standard customer relationship management software.
3. *Why* The most important product distinction is that it provides capable services at a moderate cost. It will be cheaper than alternative products.

A great deal of mythology surrounds software product visions. For successful consumer software products, the media like to present visions as if they emerge from a "Eureka moment" when the company founders have an "awesome idea" that changes the world. This view oversimplifies the effort and experimentation that are involved in refining a product idea. Product visions for successful products usually emerge after a lot of work and discussion. An initial idea is refined in stages as more information is collected and the development team discusses the practicalities of product implementation. Several different sources of information contribute to the product vision (Table 1.2).

**Table 1.2**

Information sources for developing a product vision

| Information source | Explanation |
|---|---|
| Domain experience | The product developers may work in a particular area (say, marketing and sales) and understand the software support that they need. They may be frustrated by the deficiencies in the software they use and see opportunities for an improved system. |
| Product experience | Users of existing software (such as word processing software) may see simpler and better ways of providing comparable functionality and propose a new system that implements this. New products can take advantage of recent technological developments such as speech interfaces. |
| Customer | The software developers may have extensive discussions with prospective customers of the product |

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|---|---|
| experience | to understand the problems that they face; constraints, such as interoperability, that limit their flexibility to buy new software; and critical attributes of the software that they need. |
| Prototyping and “playing around” | Developers may have an idea for software but need to develop a better understanding of that idea and what might be involved in developing it into a product. They may develop a prototype system as an experiment and “play around” with ideas and variations using that prototype system as a platform. |

# 1.1.1 A vision example

As students, readers of this book may have used Virtual Learning Environments (VLEs), such as Blackboard and Moodle. Teachers use these VLEs to distribute class materials and assignments. Students can download the materials and upload completed assignments. Although the name suggests that VLEs are focused on learning, they are really geared to supporting learning administration rather than learning itself. They provide some features for students, but they are not open learning environments that can be tailored and adapted to a particular teacher's needs.

A few years ago, I worked on the development of a digital environment for learning support. This product was not just another VLE but was intended to provide flexible support for the process of learning. Our team looked at existing VLEs and talked to teachers and students who used them. We visited different types of school from kindergartens to colleges to examine how they used learning environments and how teachers were experimenting with software outside of these environments. We had extensive discussions with teachers about what they would like to be able to do with a digital learning environment. We finally arrived at the vision statement shown in Table 1.3.

**Table 1.3**

A vision statement for the iLearn system

| |
|---|
| *FOR* teachers and educators *WHO* need a way to help students use web-based learning resources and applications, *THE iLearn system* is an open learning environment *THAT* allows the set of resources used by classes and students to be easily configured for these students and classes by teachers themselves.<br><br>*UNLIKE* Virtual Learning Environments, such as Moodle, the focus of iLearn is the learning process rather than the administration and management of materials, assessments, and coursework. *OUR* product enables teachers to create subject and age-specific environments for their students using any web-based resources, such as videos, simulations, and written materials that are appropriate.<br><br>Schools and universities are the target customers for *the iLearn system* as it will significantly improve the learning experience of students at relatively low cost. It will collect and process learner analytics that will reduce the costs of progress tracking and reporting. |

In education, the teachers and students who use learning environments are not responsible for buying software. The purchaser is a school, university, or training center. The purchasing officer needs to know the benefits to the organization. Therefore, we added the final paragraph to the vision statement in Table 1.3 to make clear that there are benefits to organizations as well as individual learners.