The Data Dictionary

- a quasi-formal grammar for describing the content of data that the software will process and create
- a notation for describing control data and the values that control data can take, e.g., "on," or "off"
- a repository that also contains "where-used" / "how used" information
- a notation that can be represented manually, but is best developed using CASE tools

Building a Data Dictionary

Name: the primary name of the composite data item

Aliases: other names for the data item

Where used: data transforms (processes) that use the composite data item

How used: the role of the data item (input, output, temporary storage, etc.)

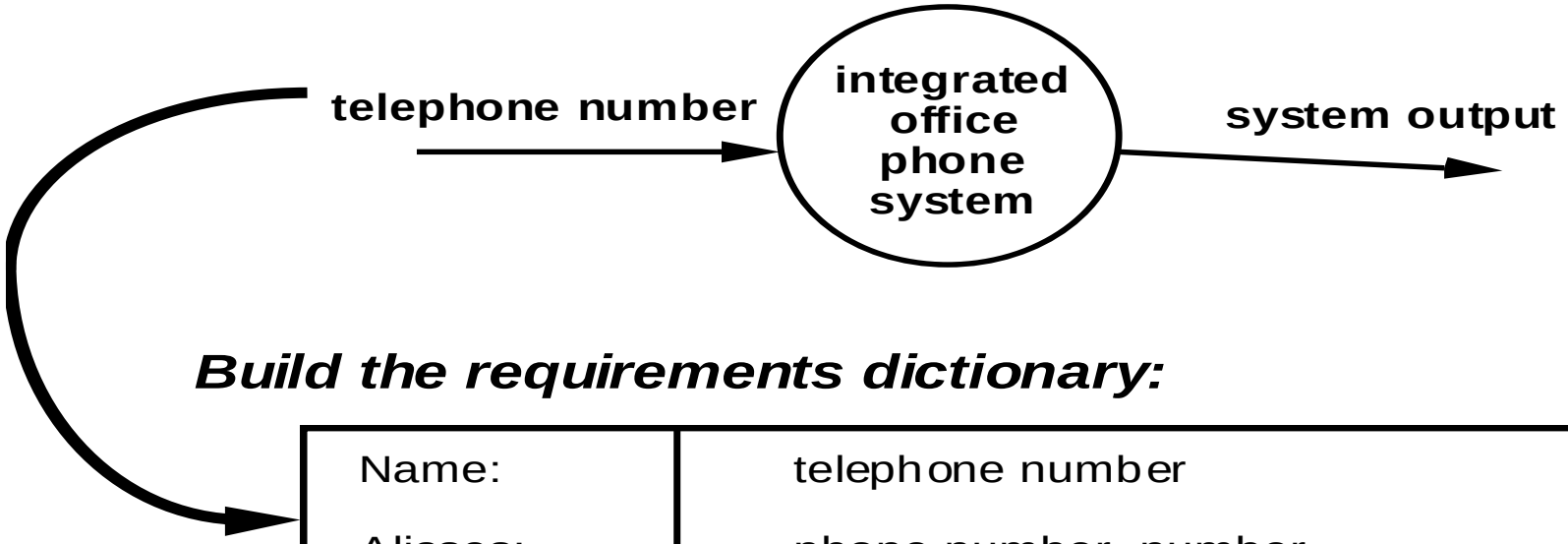
Description: a notation for representing content (presented on next slide)

Format: specific information about data types, pre-set values (if known)

Data Dictionary Notation

Notation	*Meaning*
=	is composed of
+	and
[|]	either-or
{ }^{n}	n repetitions of
(...)	optional data
* ... text ...*	delimits a comment

Data Dictionary Example



Build the requirements dictionary:

Name:	telephone number
Aliases:	phone number, number
Where/How used:	read-phone-number (input) display-phone-number (output) analyze-long-distance-calls (input)
Description:	telephone no. = [local extension | outside no. | 0] outside no. = 9 + [service code | domestic no.] service code = [211 | 411 | 611 | 911] domestic no. = ((0) + area code) + local number area code = *three numeral designator*
Format:	alphanumeric data