



**Why****Definition**

A *random vector* is a random variables whose values are vectors.

**Notation**

Let  $x : \Omega \rightarrow \mathbf{R}^n$  be a random vector.

$$x(\omega) = \begin{bmatrix} x_1(\omega) \\ x_2(\omega) \\ \dots \\ x_3(\omega) \end{bmatrix}.$$



