

# Robotic Task Mapping Template

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# 1. Identify Cell Customer

➡ **Who / what receives the parts that the cell is making?**

## 2. Cell Output

**How does the cell define value?**

- **Output part specifications**
- **Output part presentation**
- **Cell Pace**

➡ **“What I need you to give me to do my work is ... so I can ...”**

➡ **Drawings, pictures and videos**

## 2. Cell Output

- ➔ **Part presentation - How are the parts arranged at output?**
  
- ➔ **Are the parts singulated? What is the space around them?**
  - **Placed one by one**
  - **Stacked on top of each other**
  - **Stacked side by side**
  
- ➔ **What is the actual presentation?**
  - **On a table**
  - **In a fixture**
  - **In a tray**
  - **Stack of trays**
  - **Random bins**

## 2. Cell Output

 **Is the output target moving? How so?**

- **On a moving conveyor**
- **On a stable surface**

 **Drawings, pictures and videos**

## 3. Cell Input

### ➔ Parts

#### Number of parts

- How many different parts types need to be handled, processed at the station?

#### Characteristics of the parts

- Dimension
- Weight
- Material

#### Variation in time

- Are there changeovers at this station?
- Are you planning to introduce new parts in the near future?

### ➔ Drawings, pictures and videos

## 3. Cell Input

- ➔ **Part presentation - How are the parts arranged at output?**
  
- ➔ **Are the parts singulated? What is the space around them?**
  - **Come one by one**
  - **Stacked on top of each other**
  - **Stacked side by side**
  
- ➔ **What is the actual presentation?**
  - **On a table**
  - **In a fixture**
  - **In a tray**
  - **Stack of trays**
  - **Random bins**

## 3. Cell Input

➔ **Are parts moving when presented? How so?**

- **Stopped when picked**
- **On a moving conveyor**

➔ **Drawings, pictures and videos**



## 4. Define Process

- ➔ List the steps
- ➔ What tooling, sensors, sequence does the robotic cell need?
- ➔ Value-added, non-value added
- ➔ Record video

# 5. Document Information Flow

Include communication protocol and data structure if electronic

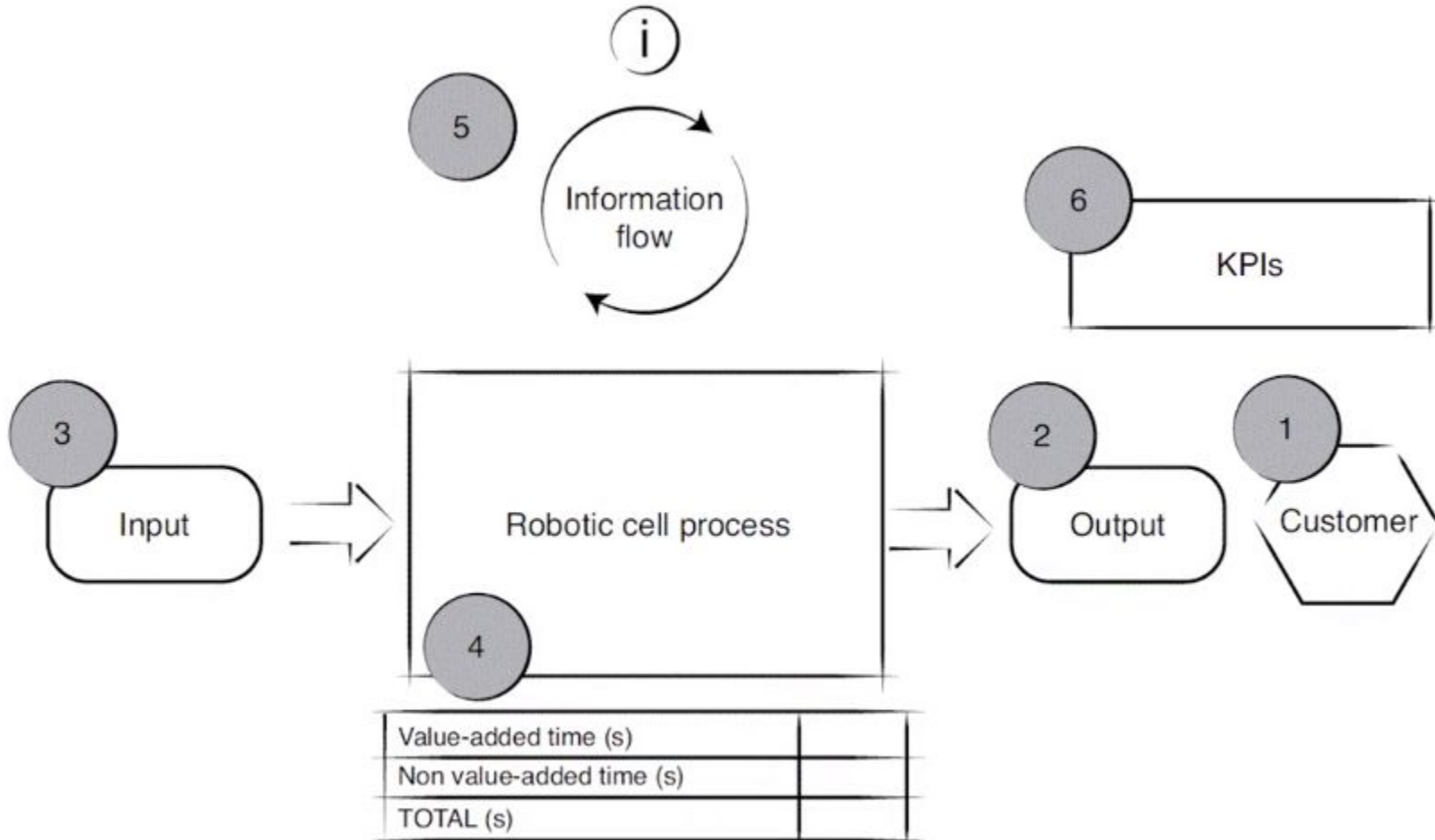
➔ What information comes to and goes from the robot controller, where to-and-for, in which format?

Information	Coming from	Going to	Format

## 6. Measure KPIs

- ➔ Define KPI targets
- ➔ How will they be measured?


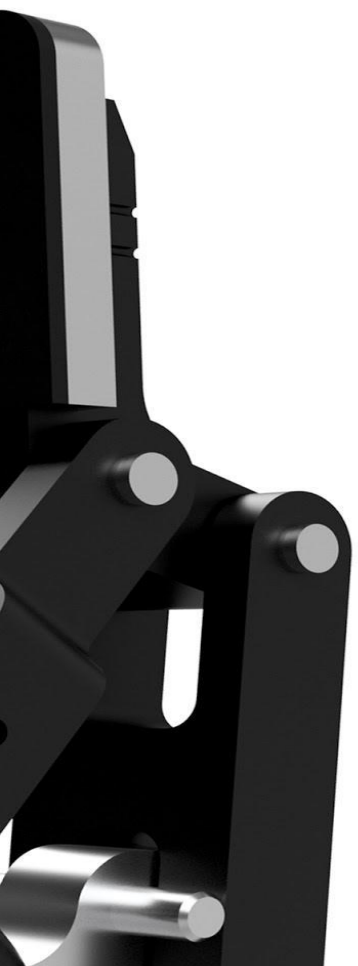
# 7. Robotic Task Summary



# 8. Sketch Cell Layout

➔ Sketch

➔ CAD



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