



DEADLY WASTES CANVAS



How to use
Template
Example

Deadly Wastes Canvas

The Deadly Wastes Canvas helps you to identify the sources and causes of waste in your process. Waste takes time and increases costs. Waste occurs in different forms, from product defects to excessive inventory and over processing. Use the Deadly Wastes Canvas to identify waste in your processes and find solutions to improve efficiency.

Tips for use

The Deadly Wastes Canvas is most effective if done by a group of people; since discussions will be more fruitful.

Use the Deadly Wastes Canvas to brainstorm how to improve the efficiency of your process. Have a look at the example of Pizzeria Toscana to get inspired and learn from the practical application of this tool.

How to use

Waste can be described as 'something that adds no value'. With the Deadly Wastes Canvas, you identify the wastes in your process, the causes of these wastes and how to eliminate wastes. Identifying and removing waste helps you to focus on what is valuable to the customer. By following the five steps, you will be able to complete the Deadly Wastes Canvas.

Step 1: select the process

First select a process that you would like to make more efficient. A process is a set of connected activities to achieve a specific result. A process should have a clear start and ending. Examples of processes are hiring personnel, ordering a pizza or drilling a hole.

Step 2: describe the selected process

Describe the selected process as a list of connected activities. Write each activity on a sticky note and place all activities in the right order. When hiring personnel for example, writing the vacancy happens before the job interviews. Connect activities with arrows to indicate the process flow. For more explanation on mapping your process see the Process Journey tool.

Step 3: identify the wastes in your process

From the theory of lean manufacturing we take nine forms of waste that can be represented by the acronym DOWNTIMES:

- Defects: Mistakes that require additional time, resources, and money to fix;
- Overproduction: Production that is more than needed or before it is needed;
- Waiting: Wasted time whenever work in the process has to stop for some reason;
- Non- or miscommunication: Misunderstanding and

miscommunication caused by inaccurate or missing information;

- Transportation: Unnecessary movements of products and materials;
- Inventory: Excess products and materials not being processed;
- Motion: Unnecessary movements by people (e.g. walking) or machines;
- Excess processing: More work or higher quality than is required;
- Skills: Not or under-utilizing peoples' talents, skills and knowledge.

Look again at all activities in your process. For each activity, check if you can find one of the nine types of waste and write the activities down that have waste in the column 'where in the process' in the Deadly Wastes Canvas.

Step 4: identify the causes of waste

To be able to solve a problem, it is important to understand where it comes from. When you have found one or more wastes in the activities in your process, think about what causes these wastes and write this down in the column 'causes' in the template.

Step 5: come up with solutions

Finally, look for ways to remove waste and improve your process by searching for solutions. You can systematically go through all the identified wastes and look for solutions to improve efficiency.

deadly wastes canvas

name _____

deadly waste	color	where in the process	cause	solution
defects	red			
overproduction	orange			
waiting	green			
miscommunication	blue			
transport	purple			
inventory	pink			
motion	light red			
excess processing	light blue			
skills	blue			

date _____



Example Pizzeria Toscana

industry	Restaurant
products & services	Italian dishes, delivery and in the restaurant
size of business	7 employees
revenue	€ 245,000
location	Breda



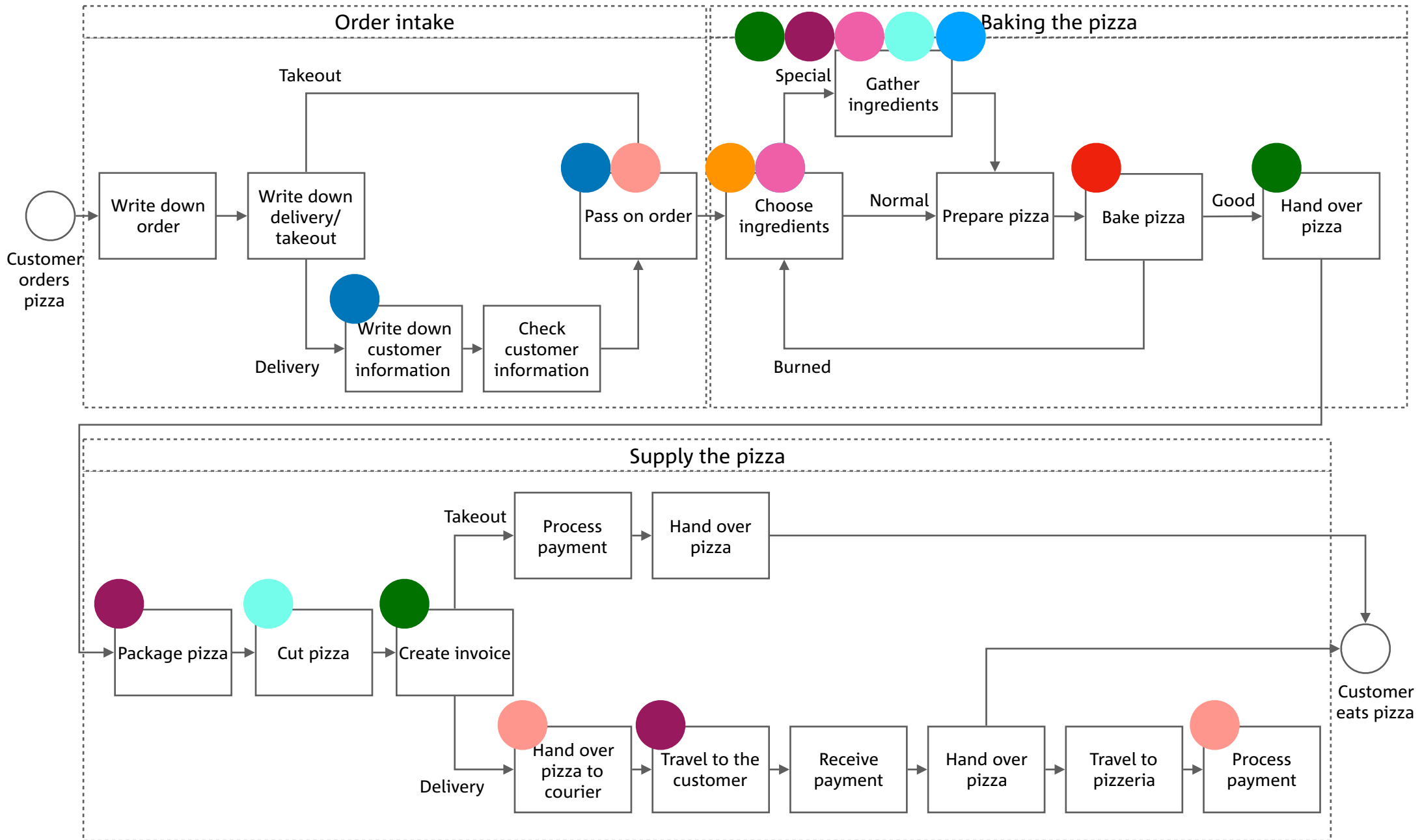
Pizzeria Toscana was set up by Lorenzo and his wife. The restaurant has become successful because of its pizzas and fresh dishes with authentic Italian taste. Especially in the weekend and with nice weather the restaurant and the terrace are packed.

Pizzeria Toscana's Deadly Wastes

Because it is so busy, the pizzeria wants to know which Deadly Wastes occur in the process of serving a pizza, with the aim of eliminating them. This requires a clear picture of the process. Lorenzo used the Process Journey tool to describe all the steps between "customer ordered pizza" to "customer eats pizza". With the Deadly Waste Canvas Lorenzo examines which types of wastes occur in his process. Then he describes the causes of these wastes and looks for possible solutions to improve his process.

process journey

name Pizzeria Toscana



date _____

Inspired by the Lean Six Sigma method

deadly wastes canvas

name Pizzeria Toscana

deadly waste	color	where in the process	cause	solution
defects		Bake pizza	Burned pizza	Standardise the work so everyone knows how long a pizza should be baked. Use an alarm to indicate when the pizza is ready.
overproduction		Choose ingredients	Cut too many ingredients because you don't know the demand	Determine in advance (based on orders in the past) how many ingredients need to be cut
waiting		Gather ingredients Hand over the pizza Create invoice	Preparing special ingredients Busy with baking other pizzas Pizza can't be delivered without invoice	Determine how many ingredients you need Packaging will be done by the pizza maker Create invoice when customer makes order
miscommunication		Write down customer information Pass on the order	Write down wrong address Write down wrong order/ingredients	Digitise order intake to avoid misunderstandings and make sure that the order can be displayed directly in the kitchen
transport		Gather ingredients Packaging pizza Traveling to customer	Ingredients come from different freezer Packaging pizza is done at a different counter Customer lives far away	Put all freezers in or close to the kitchen Package the pizzas directly in the kitchen Apply a maximum distance for delivery
inventory		Choose ingredients Gather ingredients	Cut too many ingredients Ordered too many artichokes	Use orders from the past to predict how many ingredients you will need
motion		Pass on the order Transfer pizza to courier Process the payment	Phone is on the other side than the kitchen Kitchen is at the back of the pizzeria Courier has to bring money to the cash desk	Use a digital system so the order will be transferred directly to kitchen and delivery Don't accept cash, electronic payments only
excess processing		Gather ingredients Cut the pizza	Same price for pizzas with special ingredients Extra activity in the process	Ask a higher price for special pizzas or stop providing special pizzas Don't cut the pizza in slices
skills				

date _____