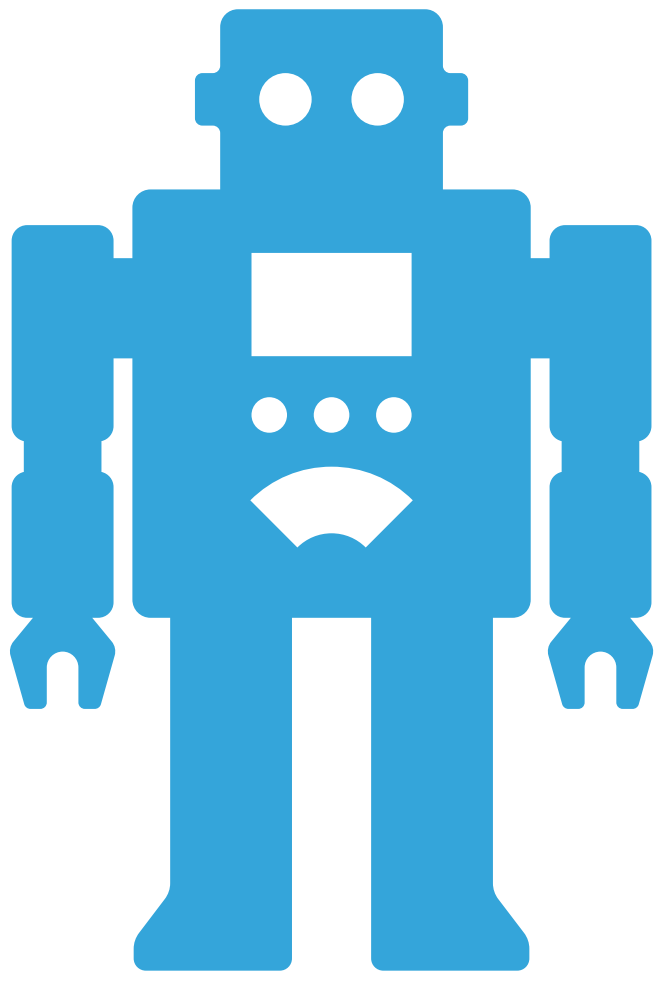
DONE

ORDER?

MELTDOWN & SPECTRE FOR NORMAL PEOPLE

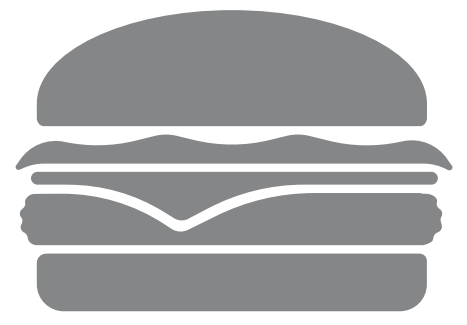
CONFIDENTIAL BURGERS INC. : PARALLEL, IN ORDER EXECUTION

16



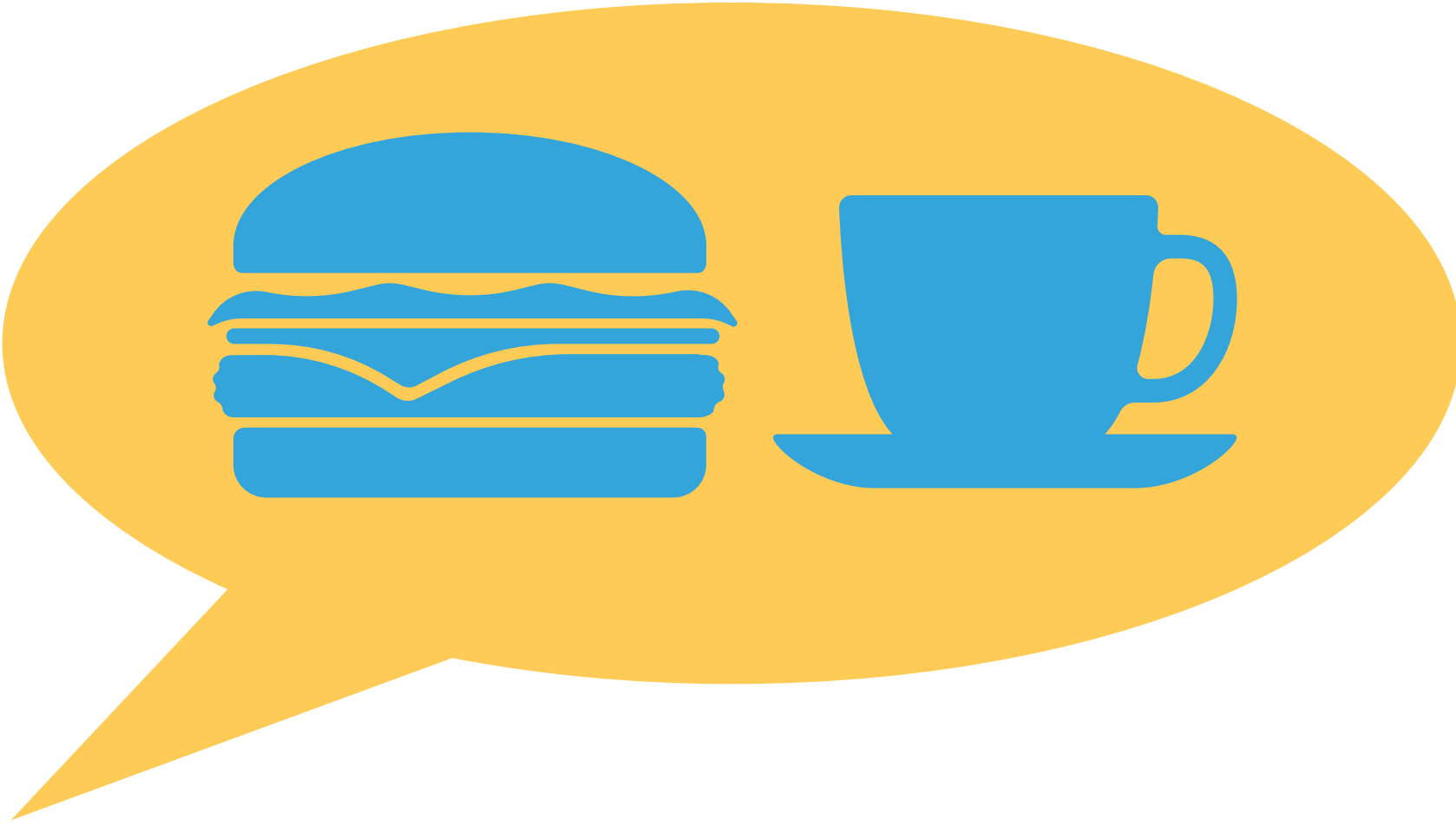
Customer

Waiter

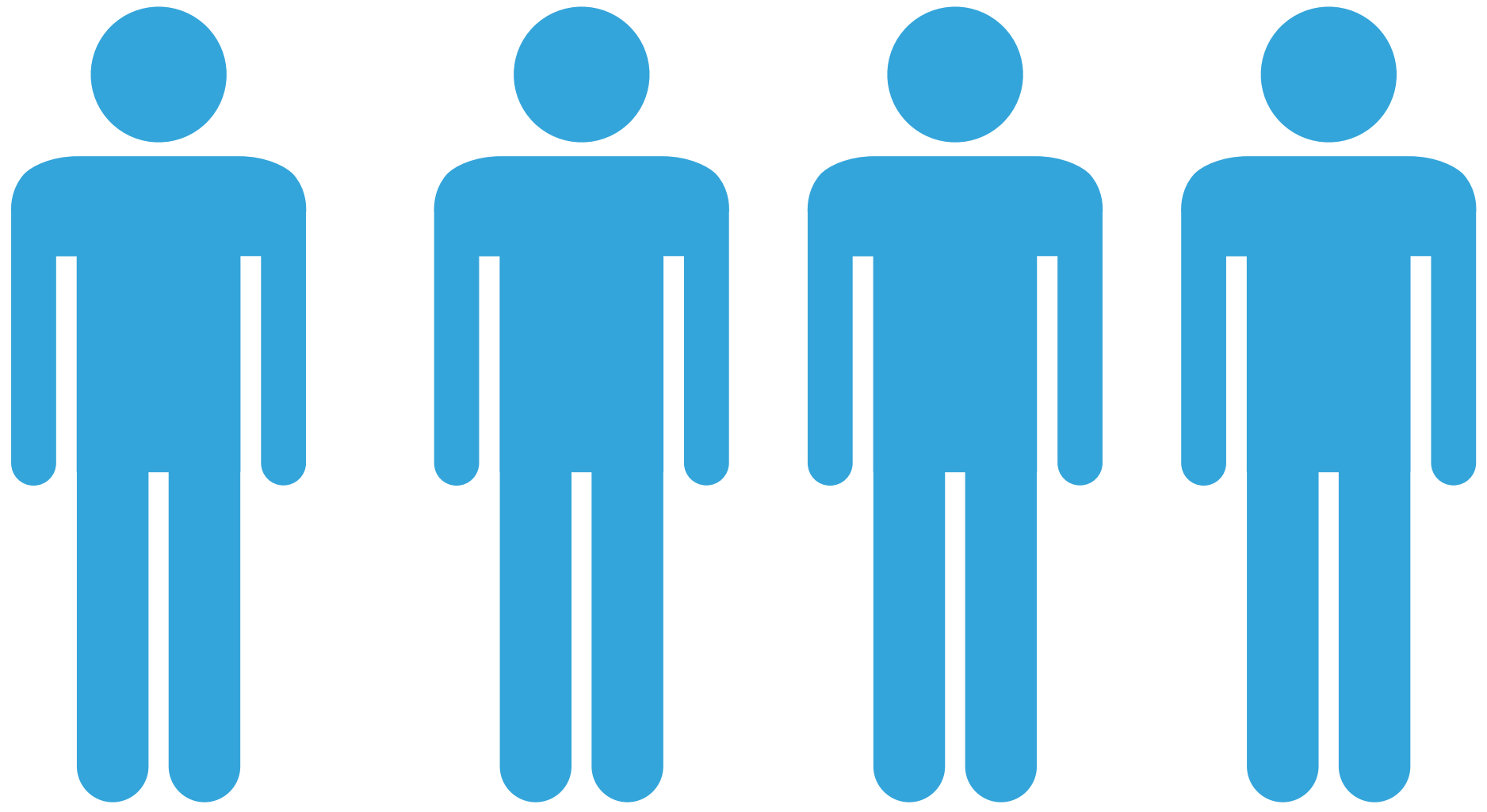


Pizza oven

Burger grill



Coffee machine



- One customer[1] after another (**in order**)
- Each part of the order [2] executed **in parallel**

I.e. burger and coffee prepared at the same time

- PRO: **Faster bc. of better resource utilisation.**
- CON: Still not perfect, more complex

- Decode instruction into μOPs

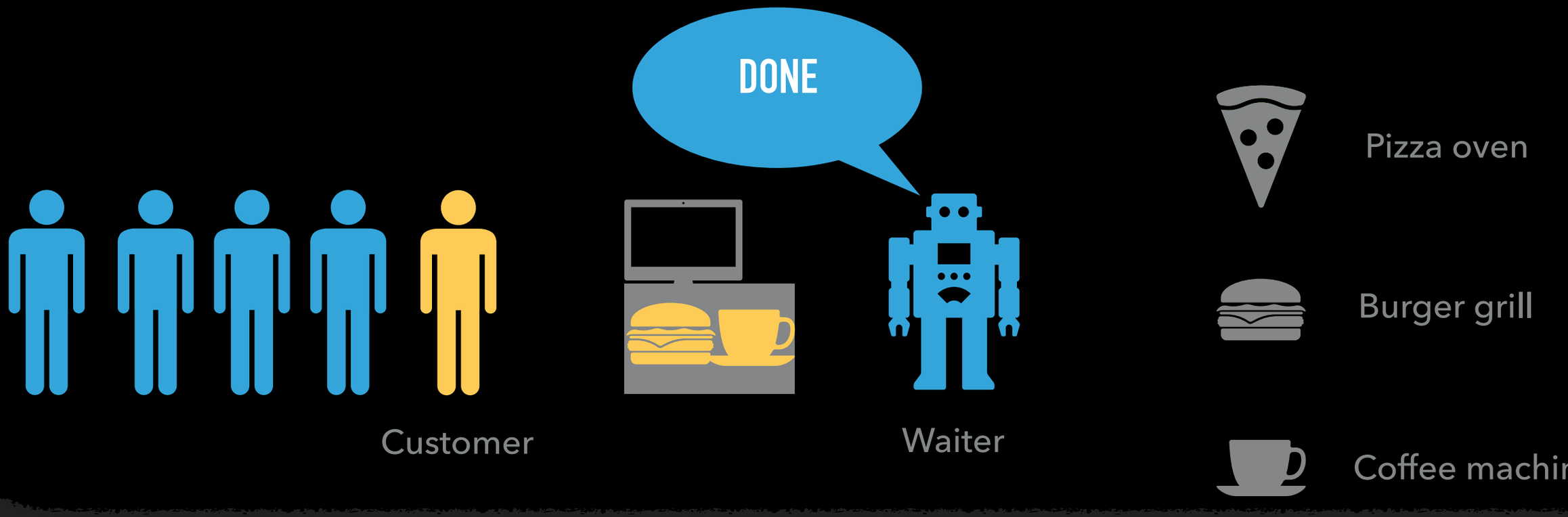
Schedule μOPs

- run 1st μOP and 2nd μOP (parallel execution of μOPs)

- retire instruction (customer)

- Decode instruction into μOPs
- Schedule μOPs
  - run 1st μOP and 2nd μOP (parallel execution of μOPs)
- retire instruction (customer)

CONFIDENTIAL BURGERS INC. : PARALLEL, IN ORDER EXECUTION

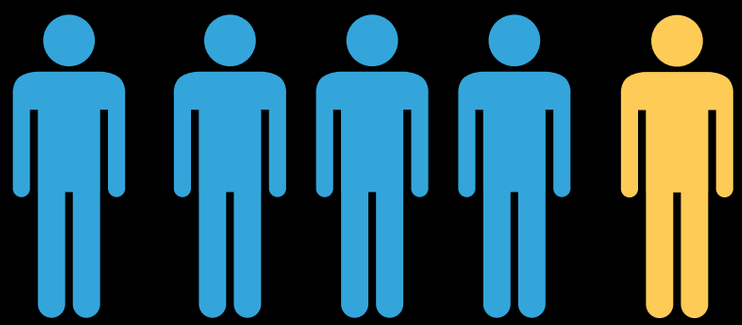


- One customer[1] after another (**in order**)
- Each part of the order [2] executed **in parallel**

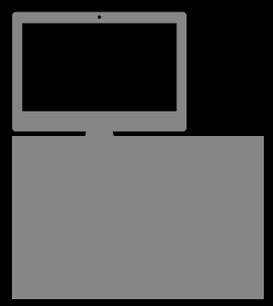
I.e. burger and coffee prepared at the same time

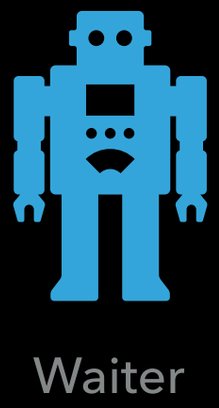
- PRO: **Faster bc. of better resource utilisation.**
- CON: Still not perfect, more complex

CONFIDENTIAL BURGERS INC. : PARALLEL, OUT OF ORDER EXECUTION



Customer





Waiter

Pizza oven

Burger grill

Coffee machine