

# RESPONSIBLE AI MADE EASY

## FOR ORGANISATIONS

Using Artificial Intelligence (AI) in your company?  
Help your customers understand and build their confidence in your AI solutions.

### PRINCIPLES FOR RESPONSIBLE AI



**DECISIONS MADE BY AI SHOULD BE EXPLAINABLE, TRANSPARENT AND FAIR**



**AI SYSTEMS, ROBOTS AND DECISIONS SHOULD BE HUMAN-CENTRIC**

# 4 FACTORS TO CONSIDER



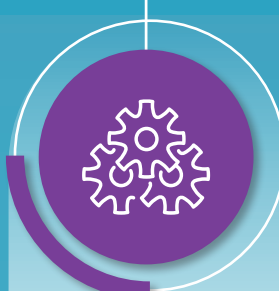
#### INTERNAL GOVERNANCE STRUCTURES & MEASURES

- Clear roles and responsibilities in your organisation
- SOPs to monitor and manage risks
- Staff training



#### RISK MANAGEMENT IN AI DECISION-MAKING

- Appropriate degree of human involvement
- Minimise the risk of harm to individuals



#### OPERATIONS MANAGEMENT

- Minimise bias in data and model
- Regular reviews of data and model



#### CUSTOMER RELATIONSHIP MANAGEMENT

- Make AI policies known to users
- Allow users to provide feedback, if possible
- Use simple language



FIND OUT MORE ABOUT THE PDPC'S MODEL AI GOVERNANCE FRAMEWORK AT  
[WWW.PDPC.GOV.SG/MODEL-AI-GOV](http://WWW.PDPC.GOV.SG/MODEL-AI-GOV).

An initiative by:



In support of:



# DEGREE OF HUMAN INVOLVEMENT

Determine the degree of human involvement in your AI solution that will minimise the risk of adverse impact on individuals.

## SEVERITY OF HARM

LOW

HIGH

### Human-out-of-the-loop

AI makes the final decision without human involvement, e.g. recommendation engines.

### Human-over-the-loop

AI decides but the user can override the choice, e.g. GPS map navigations.

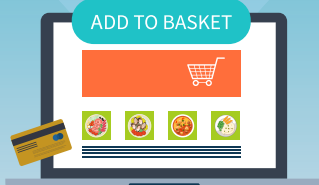
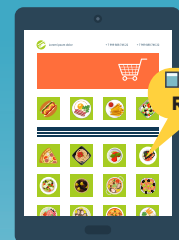
### Human-in-the-loop

User makes the final decision with recommendations or input from AI, e.g. medical diagnosis solutions.

## HUMAN INVOLVEMENT: HOW MUCH IS JUST RIGHT?



An online retail store wishes to use AI to fully automate the recommendation of food products to individuals based on their browsing behaviours and purchase history.



### What should be assessed?

#### What is the harm?

One possible harm could be recommending products that the customer does not need or want.

#### Is it a serious problem?

Wrong product recommendations would not be a serious problem since the customer can still decide whether or not to accept the recommendations.

#### Recommendation:

Given the low severity of harm, the human-out-of-the loop model could be considered for adoption.