

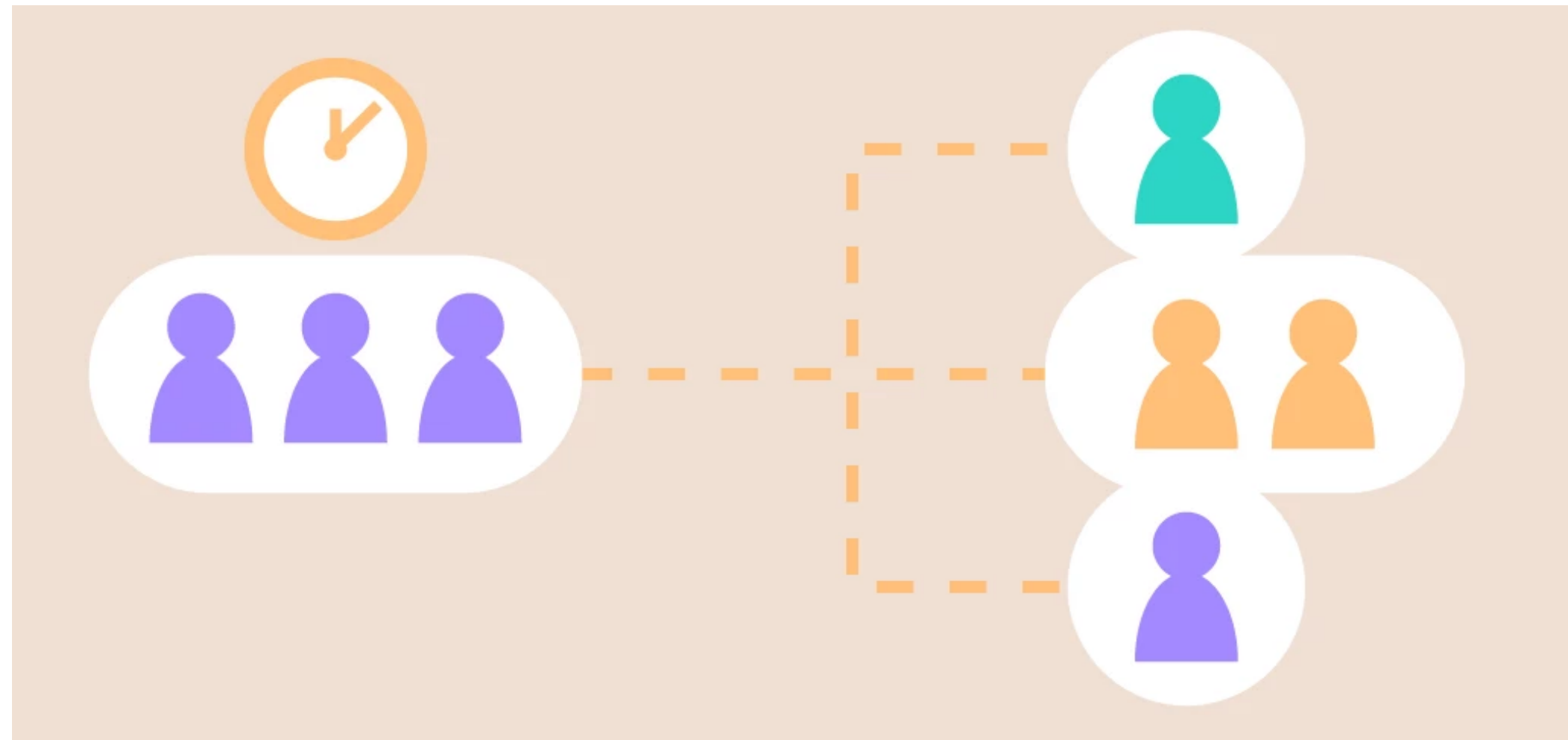


# QUEUING THEORY MANUAL



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# HOW TO USE OUR MODEL?



# 1

## CHOOSE YOUR MODEL FROM DROP DOWN MENU

The screenshot shows a Windows application window titled 'Form1'. The main area has a dark green background with a 'Queuing Model' section. A dropdown menu is open, displaying the following options:

- M/M/1/GD/N/-
- M/M/1/GD/-/-
- M/M/1/GD/N/-
- M/M/1/GD/-/-
- M/M/1/GD/N/-
- M/M/1/GD/-/- (self service model)
- M/M/R/GD/K/K (super-shop model)
- M/G/1/GD/-/- (P-K formula)

Below the dropdown, there are several input fields and buttons:

- C**: Input field
- EI**: Input field
- VarT**: Input field
- Calculate**: Button
- Clear**: Button
- Pn**: Input field
- P index**: Input field
- Lq**: Input field
- Ws**: Input field
- Cb**: Input field
- Wq**: Input field
- Aeff**: Input field
- Ls**: Input field
- Alost**: Input field

At the bottom, a status bar displays the message: `MessageBox.Show("Please enter lower K Input < 20");`

# 2

***ENTER THE REQUIRED INPUT PARAMETERS  
FOR YOUR MODEL***

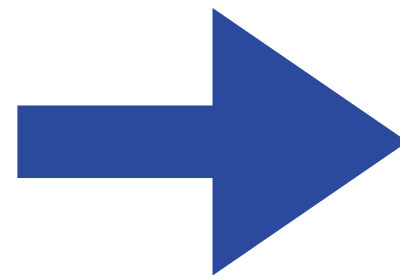


The image shows a screenshot of a web application titled "Queuing Model". The interface is dark-themed with a light green border. It contains several input fields and buttons. At the top, there is a dropdown menu. Below it, there are four rows of input fields, each preceded by a symbol in a green box:  $\lambda$ ,  $\mu$ ,  $\bar{C}$ , and  $\textcircled{R}$ . To the right of these are four more input fields, each preceded by a symbol in a green box:  $k$ ,  $N$ ,  $E_t$ , and  $\text{VarT}$ . At the bottom, there are two white buttons: "Calculate" and "Clear".

Symbol	Input Field	Symbol	Input Field
$\lambda$	<input type="text"/>	$k$	<input type="text"/>
$\mu$	<input type="text"/>	$N$	<input type="text"/>
$\bar{C}$	<input type="text"/>	$E_t$	<input type="text"/>
$\textcircled{R}$	<input type="text"/>	$\text{VarT}$	<input type="text"/>

3

***PRESS "CALCULATE"***

A screenshot of a web application titled "Calculating Model". The interface has a dark green background with a light green border. At the top, there is a yellow box with the text "Calculating Model". Below this is a white dropdown menu. The main area contains several input fields and labels: 

- Row 1:  $\lambda$  (green box), a white input field,  $k$  (green box), and a white input field.
- Row 2:  $\mu$  (green box), a white input field with a small "b" above it,  $N$  (green box), and a white input field.
- Row 3:  $C$  (green box), a white input field,  $E_t$  (yellow box), and a white input field.
- Row 4:  $R$  (green box), a white input field,  $VarT$  (yellow box), and a white input field.

At the bottom, there are two white buttons: "Calculate" and "Clear".

# 4

***YOU CAN SEE RESULTS IN THIS SECTION OF  
THE SCREEN***

A screenshot of a software interface with a dark green background. At the top right, there are window control buttons: a minus sign, a square, and an 'X'. The interface contains several input fields arranged in two columns. The left column has four fields labeled 'Pn', 'Ws', 'Wq', and 'Ls'. The right column has four fields labeled 'Lq', 'Cb', ' $\lambda_{eff}$ ', and ' $\lambda_{lost}$ '. Above the 'Pn' field, there is a label 'P index' and a small dropdown menu with a downward arrow. All input fields are currently empty.

Parameter	Input Field
Pn	<input type="text"/>
Ws	<input type="text"/>
Wq	<input type="text"/>
Ls	<input type="text"/>
Lq	<input type="text"/>
Cb	<input type="text"/>
$\lambda_{eff}$	<input type="text"/>
$\lambda_{lost}$	<input type="text"/>

5

YOU CAN CHOOSE "n" VALUE

The screenshot shows a software window with a dark green background. In the center, there is a dropdown menu labeled "P index" with a list of values from 1 to 20. The value "1" is currently selected. To the left of the dropdown are four input fields labeled "Pn", "Ws", "Wq", and "Is". To the right are four input fields labeled "Lq", "Cb", "Aeff", and "Alost". Each input field is a light gray rectangle. The window has standard Windows-style window controls (minimize, maximize, close) in the top right corner.

Parameter	Value
Pn	
Ws	
Wq	
Is	
P index	1
Lq	
Cb	
Aeff	
Alost	

# 6

**TO CALCULATE ANOTHER MODEL, YOU CAN  
PRESS THE "CLEAR" BUTTON AND START  
FROM THE OVER.**



The image shows a screenshot of a 'Queuing Model' calculator interface. The interface is titled 'Queuing Model' in a yellow box. Below the title is a dropdown menu. The main area contains several input fields and buttons for mathematical symbols:  $\lambda$ ,  $\mu$ ,  $C$ ,  $R$ ,  $k$ ,  $N$ ,  $E_t$ , and  $VarT$ . At the bottom, there are two buttons: 'Calculate' and 'Clear'. A large blue arrow points from the right towards the 'Clear' button.



**THANK YOU**

