



Technische
Universität
Braunschweig



Product Configuration in the Wild: Strategies for Conflicting Decisions in Web Configurators

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Workshop on Configuration on September 27th, 2018

Customise your wheel



Finish

15" black alloy wheels (5-double-spoke)



Cap colour

Deep Blue Buzz small centre cap



Customise your wheel



Finish

15" black alloy wheels (5-double-spoke)



Cap colour

Black small centre cap



Customise your wheel



Finish

15" white alloy wheels (5-double-spoke)



Cap colour

Red Pop small centre cap



Customise your wheel



Finish

15" black alloy wheels (5-double-spoke)



Cap colour

Red Pop small centre cap



Customise your wheel



Finish

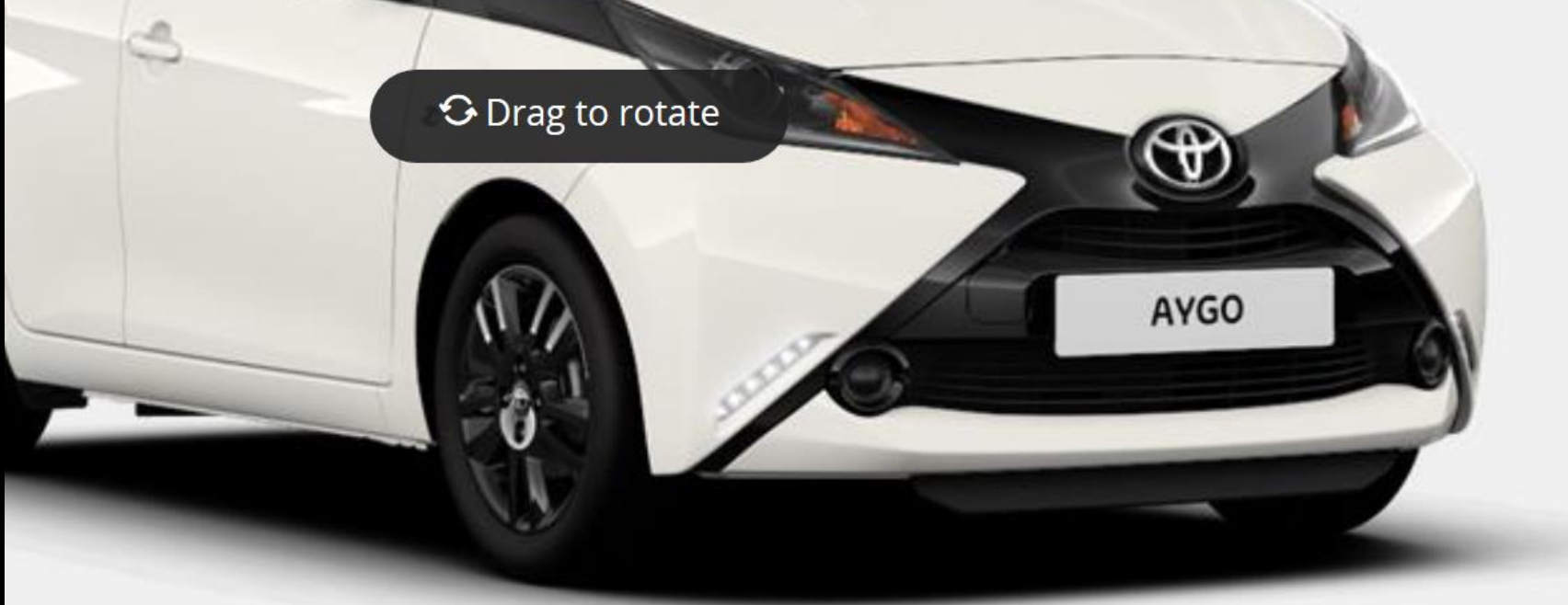
15" black alloy wheels (5-double-spoke)



Cap colour

Black small centre cap





Colour

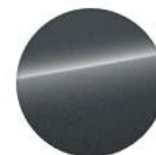
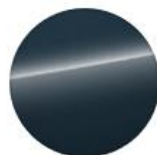
Wheels

Interior

Solid



Metallic





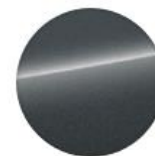
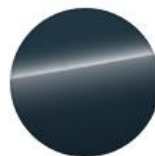
Colour

Wheels

Interior

Solid

Metallic



Customise your wheel



Finish

15" black alloy wheels (5-double-spoke)



Cap colour

Black small centre cap





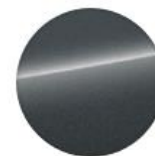
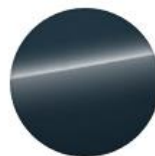
Colour

Wheels

Interior

Solid

Metallic



Your AYGO

5 Door Hatchback x-play 1.0 Petrol (69 hp)
Automatic (Front Wheel Drive - FWD)

Retail price	£11,610.00
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Red Pop

Gleam fabric

15" black alloy wheels (5-double-spoke)	£500.00
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Black small centre cap

Total	£12,610.00
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Summary and save >

Your customisation

 Change customisation

Colours & wheels

Red Pop

15" colour-customisable alloy wheels (5 double-spoke)	£500.00
15" black machined-face alloy wheels (5-double-spoke)	£500.00
Black small centre cap	

Interior trim

Gleam fabric

Total

£12,610.00

Conflicting Decisions

Sources of conflicts:

- Reduction of (logistic) costs
- Interactions of decisions (feature interactions)
- Sold out (in selectors)
- ...

How do configurators deal with conflicting decisions?

So far, we identified 8 strategies...

1. Starting with a Default Configuration (Microsoft)

Screen size

13.5-inch display ✓

15-inch display

Keyboard

British Qwerty ✓

French Azerty

The power supply included is designed for mainland Europe (2 pins)

Processor [What's this?](#)

Intel Core i5 ✓

Perfect for editing photos, watching videos and creating reports and presentations. Compatible with Surface Dial (off-screen interaction).

Intel Core i7

Runs photo, video and 3D applications faster and smoother. Easily handles graphic-intense PC games, too. Compatible with Surface Dial (off-screen interaction).

2. Hiding Invalid Combinations (Ebay)

MODEL:

Colour:

Quantity:

£0.00

Buy it now

3. Automatic Deselection in Alternatives (Amazon)

Colour: Royal



4. Alternatives of Compound Options (Lenovo)

Microsoft Productivity Software

None	SELECTED
Microsoft Office 365 Home	+ £59.99
Microsoft Office 365 Personal	+ £79.99
Microsoft Office Home and Student 2016	+ £119.99
Microsoft Office Home and Business 2016	+ £229.99
Adobe Acrobat Standard 2017 and Microsoft Office Home and Business 2016	+ £399.60
Adobe Acrobat Standard 2017 and Microsoft Office	+ £628.80

Microsoft Office Not Included

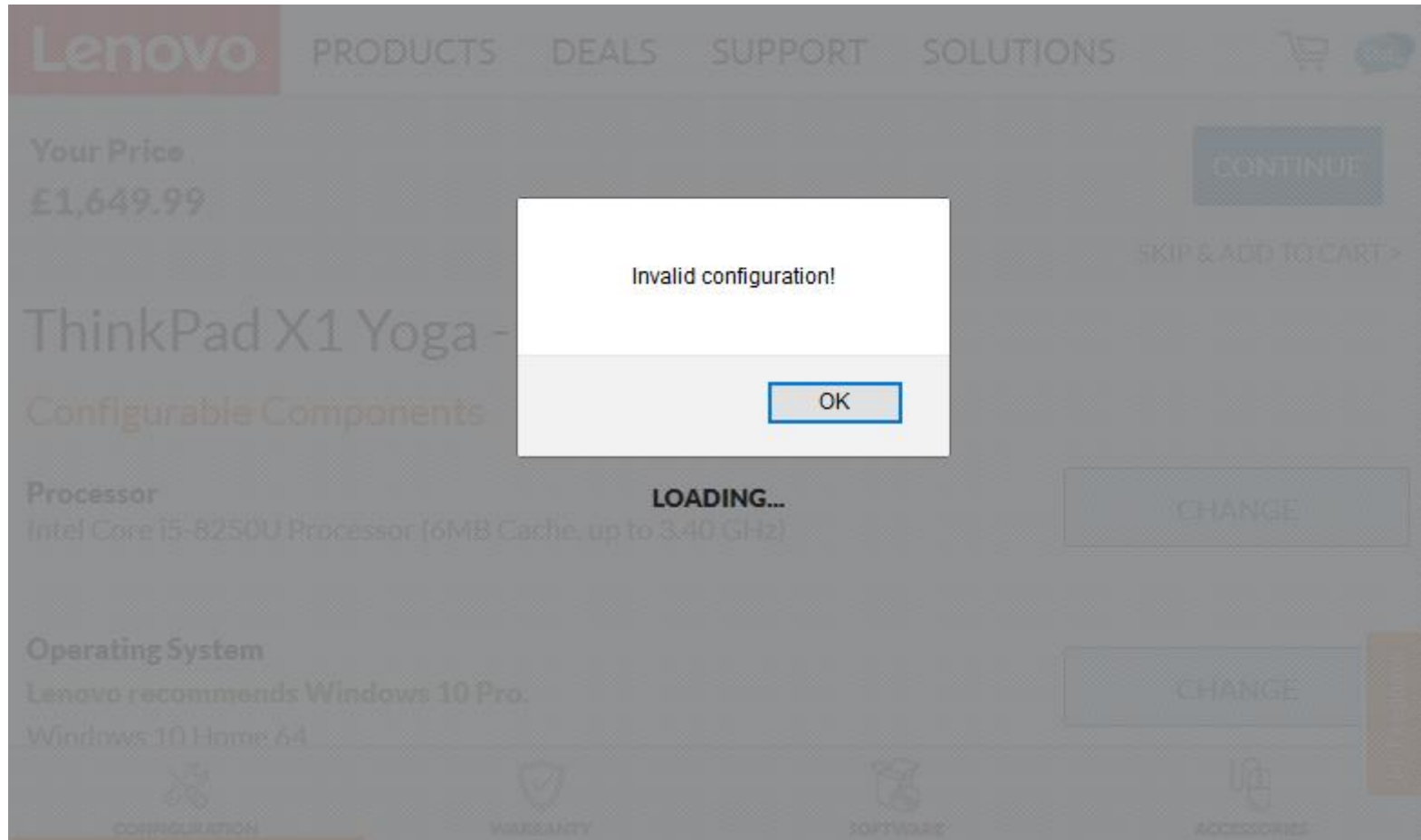
For your best experience, Lenovo recommends selecting a Microsoft Office product with your new purchase.



NEED HELP DECIDING?

Roll over each product to get specific details on each Office product

5. Continuing with Invalid States



6. Subsequent Configuration Steps (BMW)

01 Models

02 Engines

03 Model Variants

04 Exterior

05 Interior

06 Packages

07 Optional equipment

08 Summary



Sport package
Inclusive

➤ Details

7. Automated Reconfiguration (BMW)

Configuration Assistant.

► Show instructions

Your most recent action requires your configuration to be adjusted.

Your choice

	Price
+ Enhanced Bluetooth telephone with USB & Voice Control	+ £ 350.00

Adding

+ BMW Navigation	£ 0.00
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Removing

- Enhanced Bluetooth with wireless charging	- £ 395.00
- Navigation system Professional	£ 0.00
- WiFi hotspot preparation	£ 0.00
- Media package - Professional	- £ 900.00
- Online Entertainment	£ 0.00
- Microsoft Office 365	- £ 150.00

8. Interactive Resolution of Conflicts (Toyota)

Customise your wheel



Finish

15" black alloy wheels (5-double-spoke)



Cap colour

Black small centre cap



Strategies for Conflicting Decisions in Web Configurators

Strategy	BMW	Toyota	HP Velotechnik	Lenovo	Microsoft	Amazon	Ebay
Automatic Deselection in Alternatives	y	y	y	y	y	y	y
Default Configuration	y	y	y	y	y/n	y	n
Hiding Invalid Combinations	n	y	n	n	n	n	y
Compound Options	y	y	n	y	y	n	n
Continuing with Invalid States	n	y	n	y	n	n	n
Subsequent Configuration Steps	y	y	n	n	n	n	n
Automated Reconfiguration	y	y	n	n	y/n	y	n
Interactive Resolution of Conflicts	n	y	y	n	n	n	n