Minimization of Airplane Boarding Time

What is the most efficient way to board an airplane?

**Model**
- Choose strategy
- Generate passengers
- Order passengers
- Start boarding
  - Move for 1 second
  - If not seated
- End boarding
- End simulation

**Repeat 100,000x for each strategy**

**Passenger Attributes**
- Age
- Seat Number
- Unique Bags
- Time Needed to Stow
- Interference Probability*

* Determined from stowing time and boarding order

**Results**

<table>
<thead>
<tr>
<th>Boarding Strategy Times</th>
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</thead>
<tbody>
<tr>
<td>Minutes</td>
</tr>
<tr>
<td>Outside-In</td>
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</tbody>
</table>

**Conclusions**
- Average boarding time is \(~18\) minutes
- Interferences dominate boarding time

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