1. **DISJUNCTION**

Challenge the existing configurator’s limitations.

Introduce new, radical ideas without relying on current knowledge.

* What if the configurator allowed real-time fuel efficiency simulations?
* What if buyers could experience the cabin in full VR before production?
* What if AI suggested configurations based on the buyer’s flight routes & needs?

1. **Expansion in Concept Space**

Now, let's expand the possible solutions based on the disjunction:

* **AI-Powered Configuration**

AI analyses past flight data & suggests the best cabin layouts for efficiency.

* **Real-Time Fuel Cost & Carbon Footprint Calculator**

Buyers can see how different engines, seating layouts, and materials impact fuel costs & emissions.

* **Virtual Reality (VR) & Augmented Reality (AR) Walkthroughs**

Users experience the custom jet interior before finalizing the design.

* **Autonomous Maintenance Predictions**

AI suggests materials & components that reduce future maintenance costs.

1. **Conjunction (Connecting Concept & Knowledge)**

Now, we filter the best ideas and connect them to real-world knowledge.

We identify the technical feasibility of the new concepts.

* **AI-Powered Configuration**
* Feasible using existing machine learning models from aviation analytics.
* **Real-Time Fuel Cost & Carbon Footprint Calculator**
* Can be implemented using Boeing’s fuel efficiency simulation tools.
* **VR & AR Walkthroughs**
* Feasible using existing 3D modeling & VR tech (e.g., Unreal Engine, WebXR).
* **Autonomous Maintenance Predictions**
* Boeing already uses predictive maintenance AI—can be integrated.

1. **Expansion in Knowledge Space**

New technical knowledge is needed to support the chosen ideas.

Boeing can develop or integrate new software & technologies.

* Develop an AI model using historical flight & maintenance data.
* Integrate VR & AR with Boeing’s digital twin technology.
* Use real-time fuel cost modeling to enhance buyer decision-making.

EXPANSION IN KNOWLEDGE SPACE

IMPLEMENT AI, REAL-TIME ANALYTICS, IMMERSIVE TECH

EXPANSION IN CONCEPT SPACE

EXPLORE AI, AR/VR, PREDICTIVE ANALYTICS

DISJUNCTION

BREAK EXISTING LIMITATIONS