



Bombardier Aviation: The Front Substructure Decision

C-Series Airplanes

- CS100 and CS300 are long-range commercial jets made by Bombardier Aviation, located in Montreal, QC
- Directly compete with Boeing and Airbus, the largest commercial airplane manufacturers in the world
- Orders began in July 2008





First Delivery

- After 8 years in production, the first planes were delivered to Swiss Air in June 2016
- 2 years behind schedule and \$1 billion overbudget

Orders Continue

- Despite delays and cost overruns, 360 orders come in worldwide
- The two largest orders are from U.S. airlines:

jetBlue





Boeing Files a Complaint

Alleges price dumping (lowering the price below cost to outprice the competition)

US Department of commerce impose 300% duty in 2017 effectively quadrupling (4X) the price and making the C-Series uncompetitive in the US market



The Sale of the C-Series to Airbus

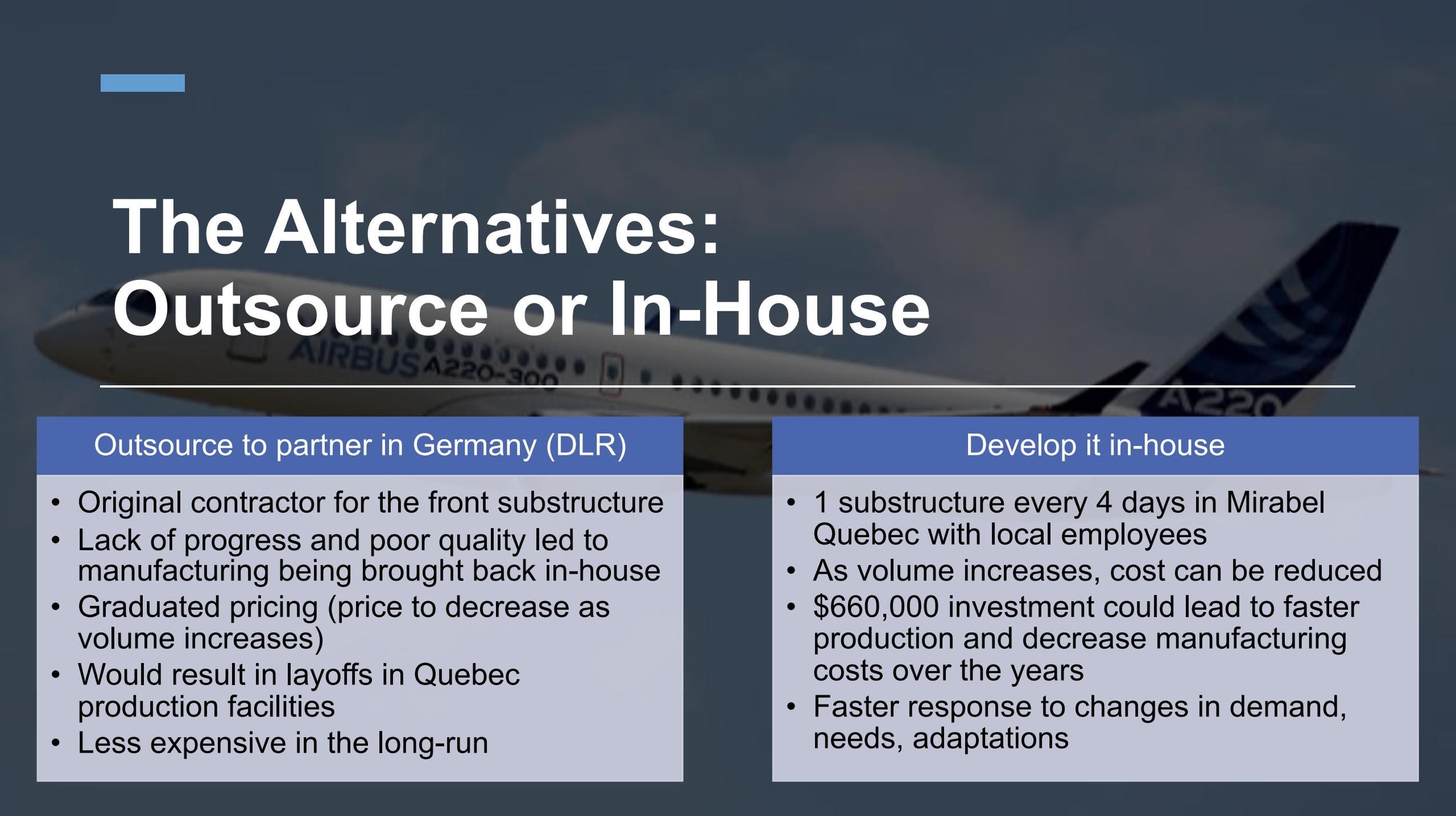
- In response and to maintain its two major U.S. orders, Bombardier decides to sell a majority stake in its C-Series division to Airbus which is already producing planes in the U.S. market
- Airbus renamed the plane the Airbus A220
- Orders for U.S. airlines to be made by Airbus in the U.S., Bombardier to manufacture for the rest of the world from Canada



The Front Substructure



- The front substructure was the most important and complex part of the plane
- Quality and reliable supply were critical
- Whether the plane was made in Canada or in the U.S. by Airbus, this component was still being supplied by Bombardier

A background image of an Airbus A220-300 aircraft in flight, with the tail fin visible on the right. The text 'AIRBUS A220-300' is visible on the fuselage.

The Alternatives: Outsource or In-House

Outsource to partner in Germany (DLR)

- Original contractor for the front substructure
- Lack of progress and poor quality led to manufacturing being brought back in-house
- Graduated pricing (price to decrease as volume increases)
- Would result in layoffs in Quebec production facilities
- Less expensive in the long-run

Develop it in-house

- 1 substructure every 4 days in Mirabel Quebec with local employees
- As volume increases, cost can be reduced
- \$660,000 investment could lead to faster production and decrease manufacturing costs over the years
- Faster response to changes in demand, needs, adaptations

The Debate

FOR Outsourcing

1. Upper Management

2. Procurement

3. Sales & Marketing

AGAINST Outsourcing

4. Engineering

5. Manufacturing

6. Labour Union

Debate Rounds

Qualify

Debate A

1. Upper Management
vs.
4. Engineering

Debate B

2. Procurement
vs.
5. Manufacturing

Debate C

3. Sales & Marketing
vs.
6. Labour Union

Finals

3-Way Debate

Debate A Winner

vs.

Debate B Winner

vs.

Debate C Winner

Debate Structure



YES, you will be cut off!

Debate Preparations

30-mins to discuss
and prepare with
your team

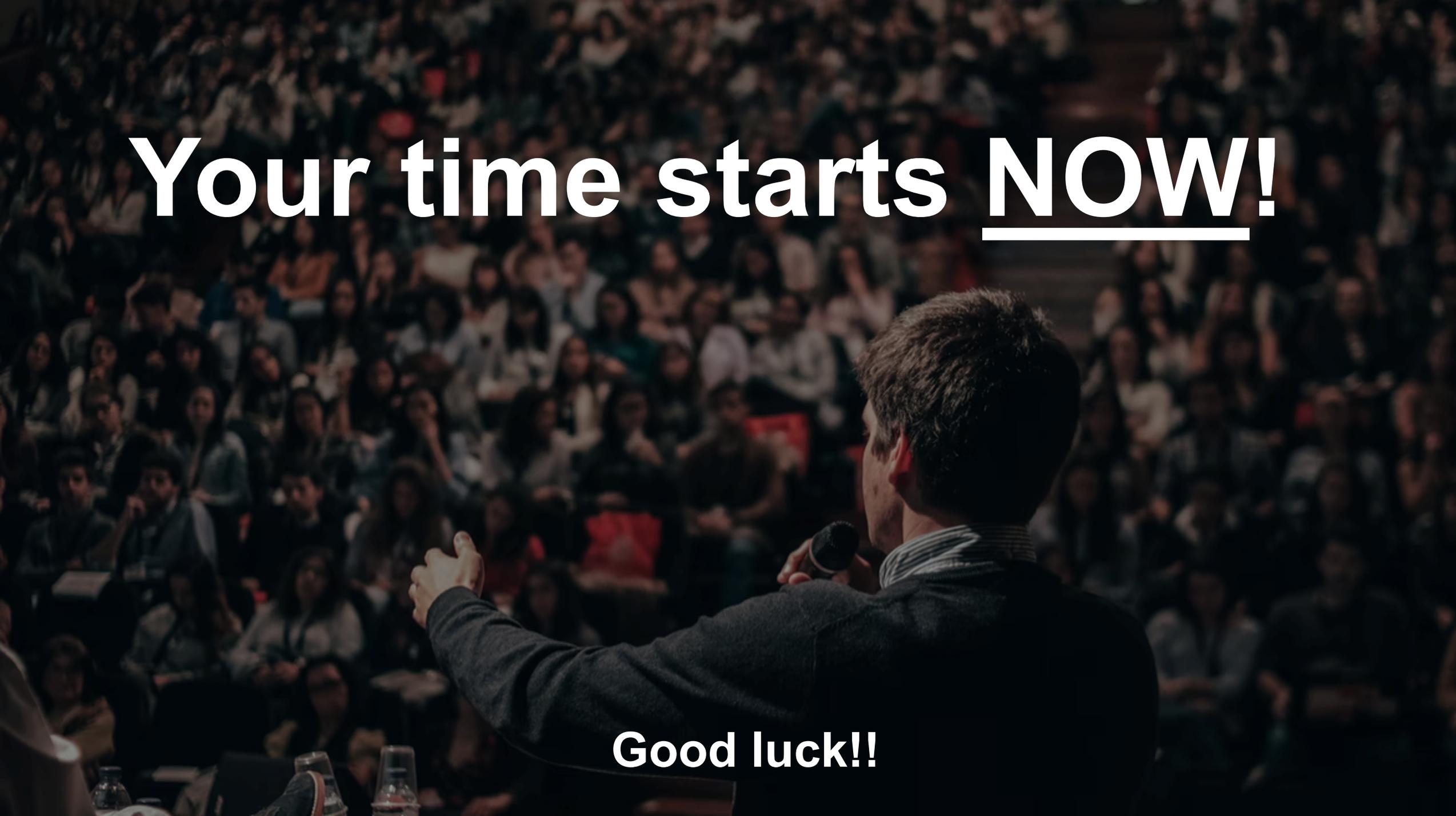


Create 1 slide that
will be shown during
your **opening
arguments**



Upload to **Microsoft
Teams** in the Debate
Uploads folder before
the deadline

Late submission means you're presenting without a slide..!

A man in a dark sweater and light shirt is seen from behind, speaking into a microphone and gesturing towards a large, dense crowd of people seated in an auditorium. The scene is dimly lit, with the speaker and the text overlaid on the image.

Your time starts NOW!

Good luck!!