NEXT - FREQUENTLY ASKED QUESTIONS

Modularity, without autonomous driving...does it make sense?

You need a driver for each module!?

Initial disclaimer: "Ready for the future, but USEFUL from NOW":
The vehicle is already prepared for autonomous driving, so as soon as it is legal and technologically safe, it will be enough to make a software upgrade without having to buy a new vehicle. It is expected that within 5 years you can make this upgrade.
The life of the vehicle is 10/15 years, so the investment is well repaid.

It depends on which scenario the client is most interested in:

SCENARIO "FULL SWARMING" (ideal scenario)
Yes, there is a driver for each vehicle, but still the cost is 40% lower than the taxi and the traffic produced 80% less than the taxi, which of course has a driver for each vehicle.
Results demonstrated by the study done by NYU:
(http://c2smart.engineering.nyu.edu/2019/02/14/c2smart-graduate-student-research-featured-in-ted-talk/).

To further reduce the cost of drivers there are the following two sub-scenarios:

I - ALL QUALIFIED DRIVERS
If for business or safety reasons you want to use only D-licensed bus drivers, the cost of the service is in any case very convenient compared to a taxi because the modularity, in particular the exchange of passengers through NEXT coupled vehicles (without having to get off and get back on) guarantees a much higher passengers/drivers ratio.

II - UBER-LIKE
The individual modules can be driven with a B licence, like any car, as long as there are no standing passengers. This means that in the first and last mile of the journey the vehicle that detaches and attaches to the NEXT convoy can be driven by one of the passengers themselves. The passenger who acts as driver for the last mile will have a discounted or free travel ticket.

RESIZABLE BUS (VARIABLE CAPACITY BUS)
A single driver in the leading vehicle is sufficient, but the other modules connected at the rear do not need additional drivers.

Ah...but then I can't detach them and split the flows?!
Initially I can detach and attach the modules only at the terminus or at bus stops, in an automated way.

What's the advantage of doing something like that?

The system is like a standard bus in this case, with stops and a driver, but:

I - RESIZE IT

I only use the length of bus I need
→ significantly reduced energy consumption, modules not in use can be recharged or repurposed for goods delivery or car sharing (see IV).

II - TRAM LIKE (USE AS A TRAM)

In rush hour instead of using 2 or 3 separate buses at the same time, I could have one with a single driver but with more Next modules hooked.
→ lower cost for drivers, potentially huge maximum capacity.

III - SMART STOPS

The vehicles left at the bus stops can be used as "smart-stops" with air-conditioned, wifi, comfortable seats and plugs to charge phones and PCs, shops, cafes, various types of services (see general presentation: "mall in motion").
→ This implies: more comfort for those waiting for the bus so users are more tempted to use public transport, more ridership, more earnings from various revenue lines.

IV - NEXT SHARING

In some cases, instead of using the vehicles as "Smart Stops", they can be made available as car-sharing vehicles. The single unit, if it does not carry standing passengers, can be driven with a B licence as M1 type vehicle category.
→ This implies: additional service, additional revenues, utility and maximized vehicle use at any time of the day.

From the video, it looks very close to the ground! How's he doing with the potholes?
The active suspension system allows the vehicle to be lifted up to 23cm ground clearance. The video shot in Dubai was shot for aesthetic reasons at a minimum ground clearance.

Interesting... but if the vehicle breaks down, what happens?
What happens if a normal bus breaks down? It's taken to the depot for repair. Similarly, if a Next module breaks down, it has to be towed to the depot for repair, with huge differences though:

→ A normal bus cannot be split into independent sections, whereas a row of Next modules can. Only the failed "section" is worked on, without affecting the overall operations of the system.
→ A failed module can be towed by the remaining modules without having to stop the entire "bus-next". The system redundancy is multiple.
→ In fact, the probability of a module breaking down is also low, since all four wheels are motorized. A module can operate at reduced speed with even one in four wheels working.