

Toyota Media Tour 2015 Tokyo Motor Show

Toyota New Global Architecture

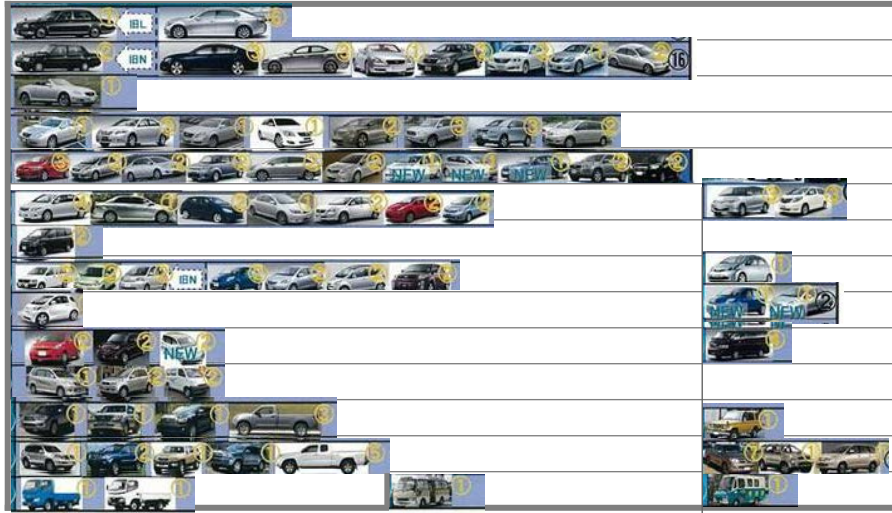
Making Ever-better Cars through TNGA

Toyota Motor Corporation
Project General Manager / TNGA Planning Div
Motoo Kamiya

1. Vehicle Production until Now

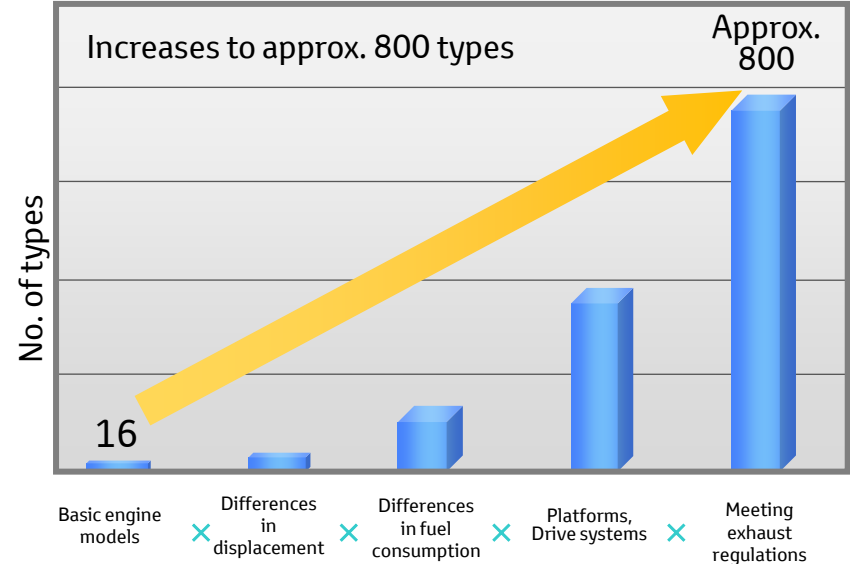
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Number of models



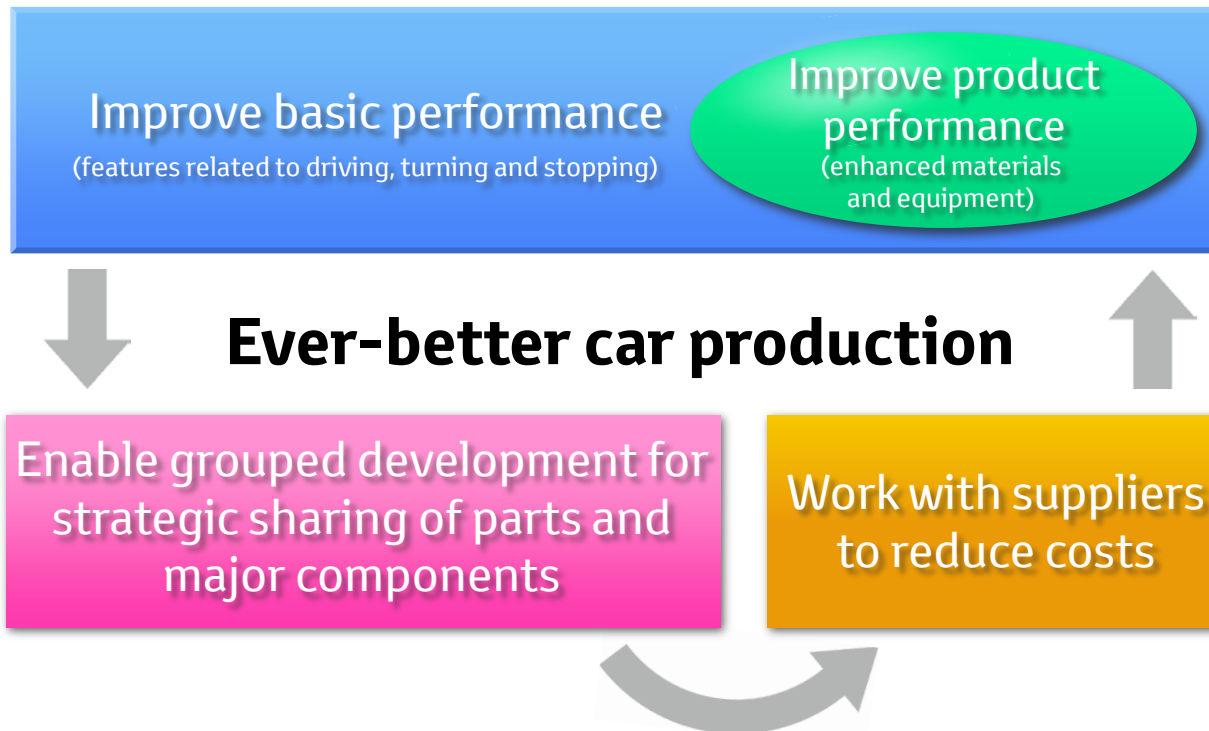
Approx. 100 types due to sub-platforms

Variety of engine types



The sheer variety of models/engines can make it difficult to continue making each individual model “ever-better”

Toyota New Global Architecture



Toyota New Global Architecture

Improving basic performance and product performance
Creating cars with attractive, eye-catching designs

Improve basic performance by enhancing powertrains and platforms

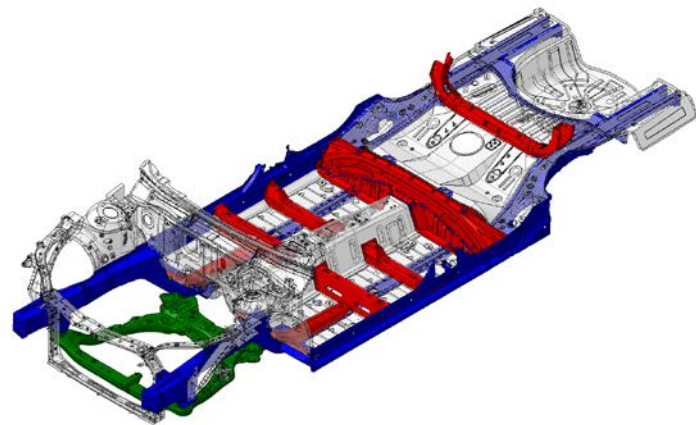
New powertrains

New engines

New transmissions

New hybrid systems

New platforms



New powertrains drastically improve drive performance and fuel efficiency

Powertrain efficiency improvements:
conventional gasoline-engine vehicles

Powertrain
Fuel efficiency improvement

New powertrains

Current

Approx. 15%
or more

Approx. 25%
or more

Drive performance

Powertrain efficiency improvements:
hybrid vehicles

Powertrain
Fuel efficiency improvement

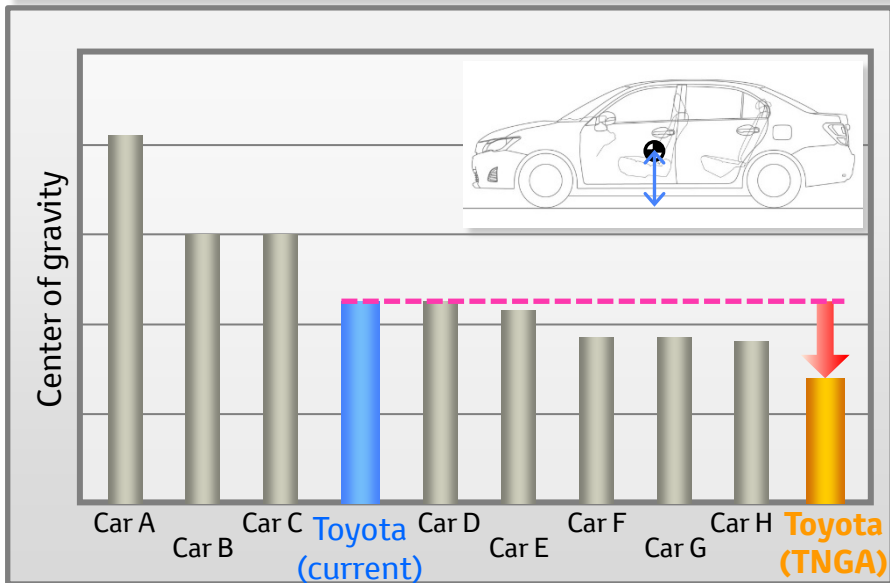
Approx. 15%
or more

Existing system

New system

Ensuring stable and pleasant handling by lowering the center of gravity of vehicles

Lower center of gravity than competing models

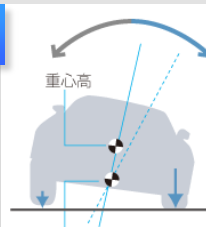


Controlling left and right roll

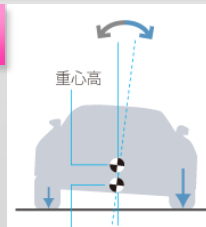
Lowering the center of gravity of major components



Current

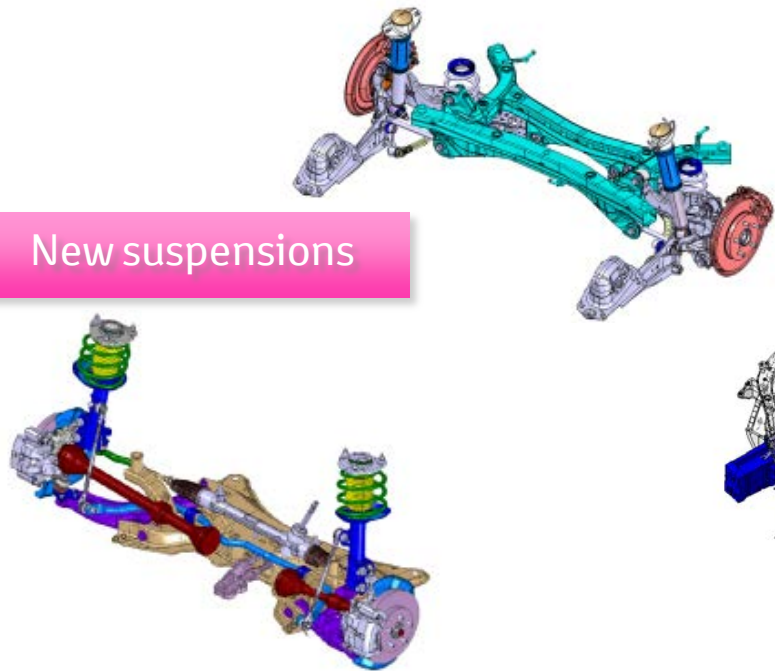


TNGA



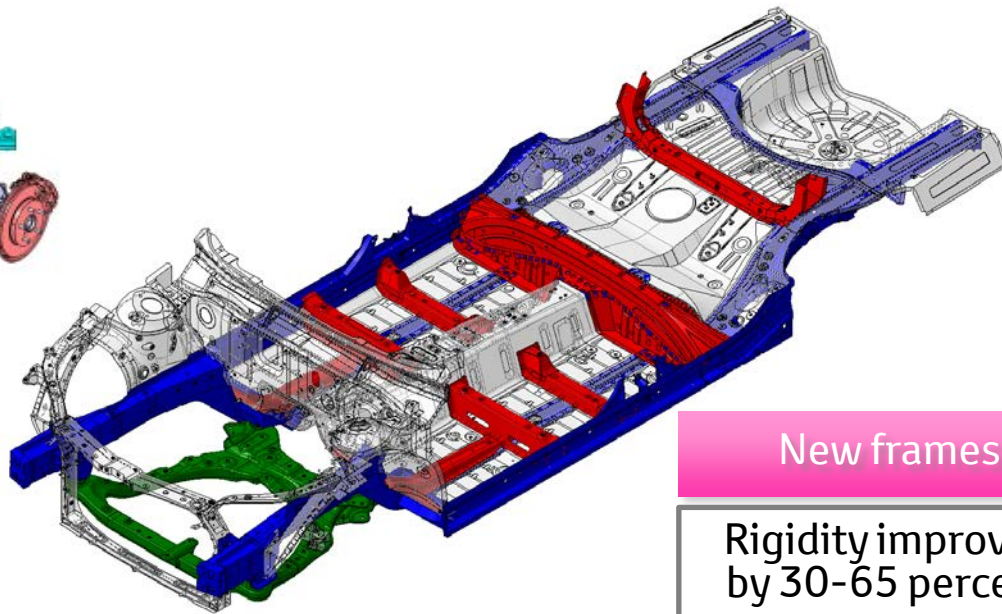
New platforms aim to promote safety, comfortable handling and a responsive drive

New suspensions



New frames

Rigidity improved
by 30-65 percent



TNGA improves driving performance through Obedient response and Fine quality feeling

Current models



TNGA

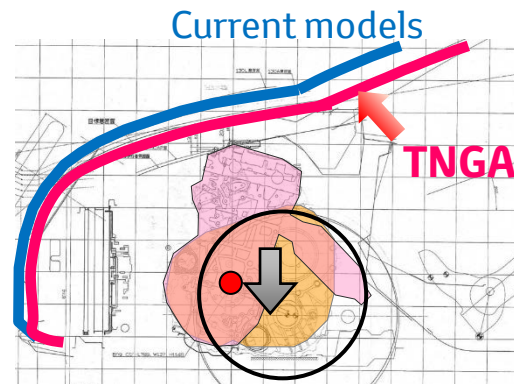


TNGA improves forward visibility,
making driving easier

Current models



TNGA

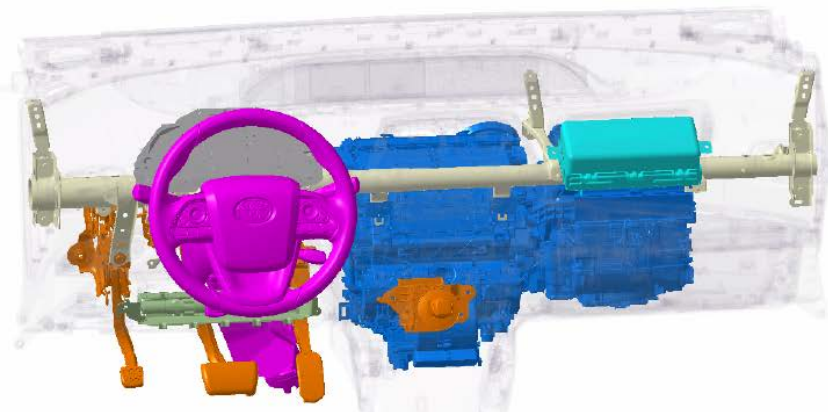
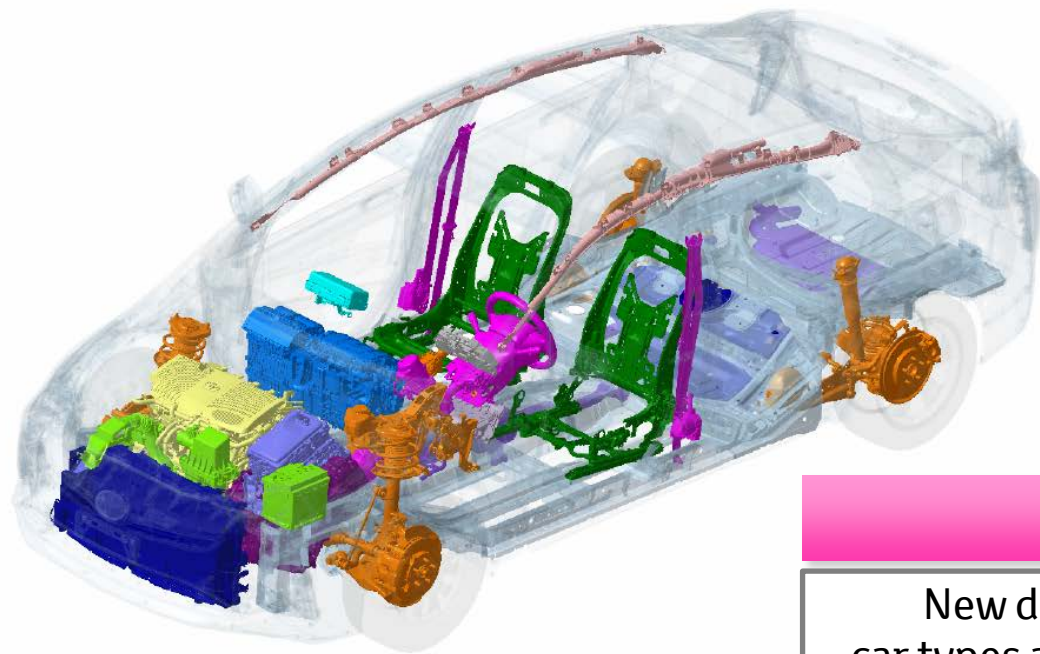


NOTE: visualization shows maximum possible improvement

Eye-catching designs
Cars you want to own at first sight



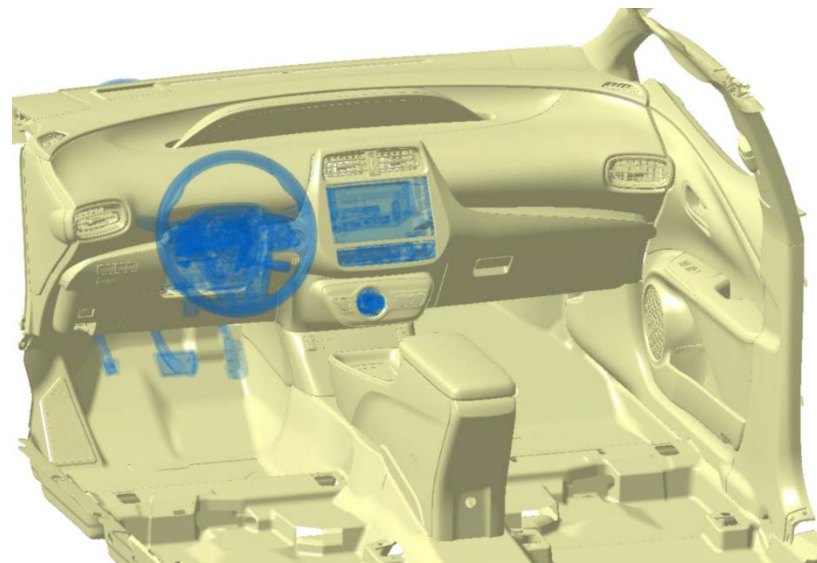
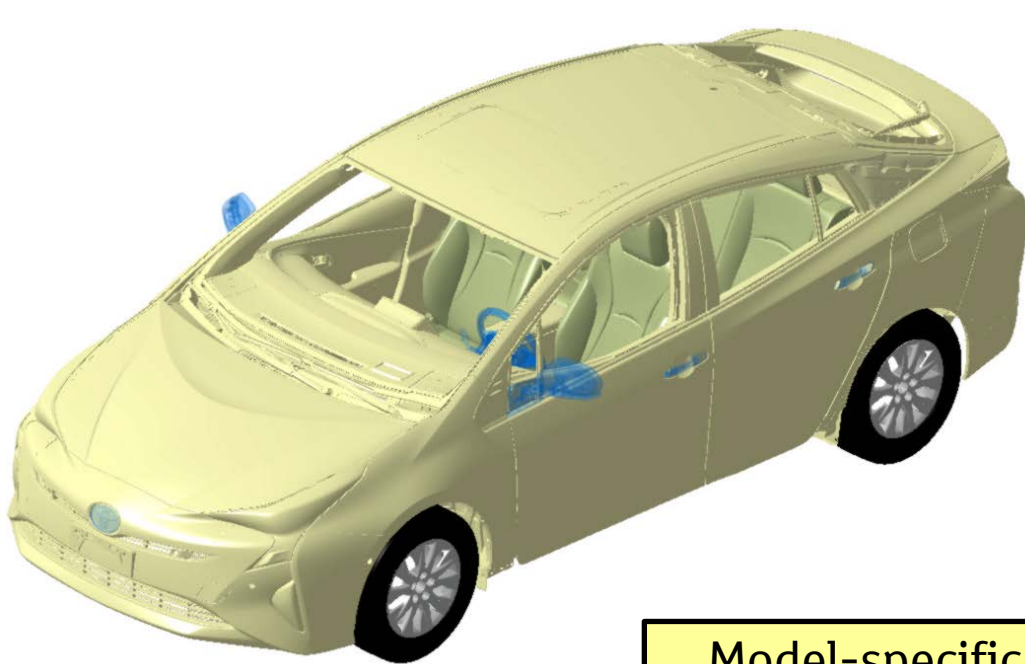
Functional parts that determine basic performance:
better parts, shared strategically



TNGA parts

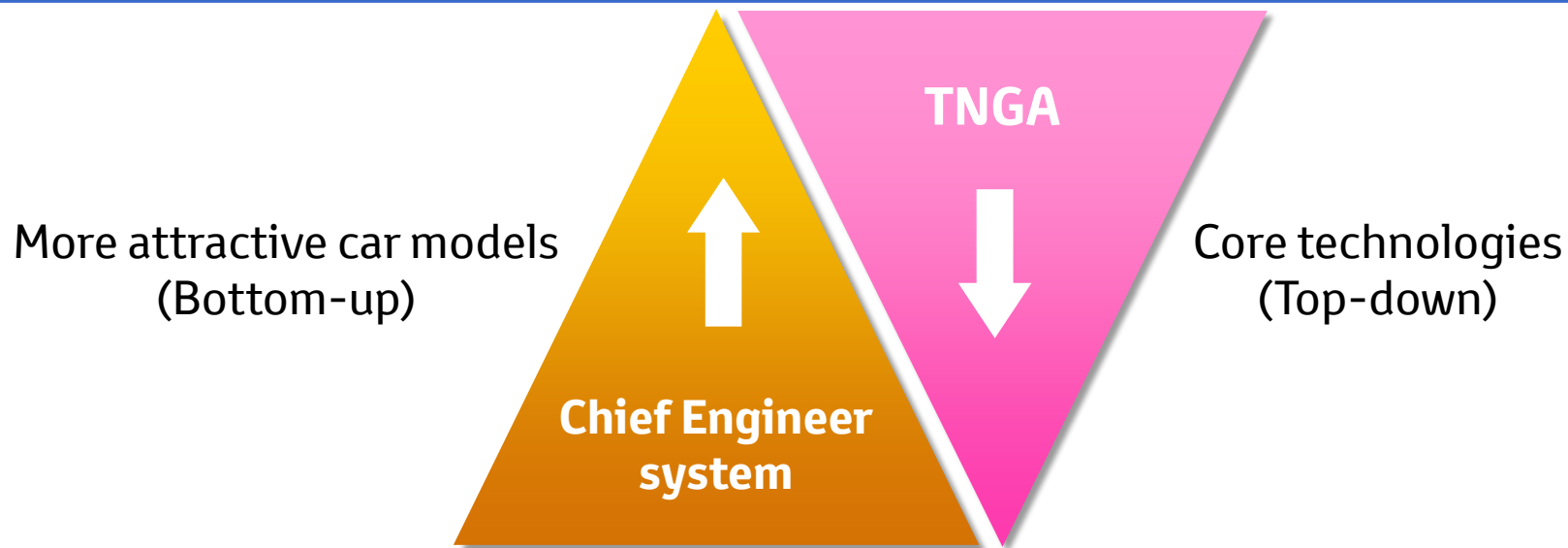
New development style spanning multiple
car types and platforms; strategic sharing of parts

Individually optimized model-specific parts with a look and feel that customers value



Model-specific parts

Toyota's Chief Engineer system works perfectly with TNGA to promote production of ever-better cars



Gathering and refining expertise by improving our core technologies will allow us to strengthen our human resources

TNGA rollout will start with the release of
New Generation Prius this year

Expansion to approx. half of lineup by 2020