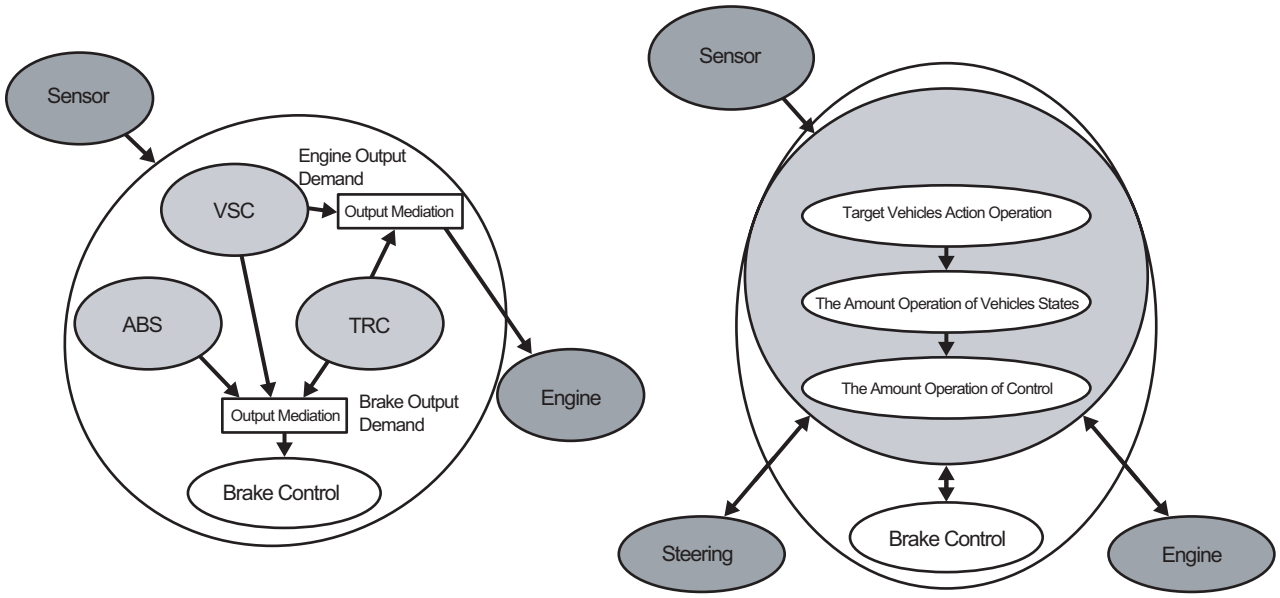
VDIM BRAKE CONTROL

VDIM Outline

- A new concept of vehicle motion control called VDIM (Vehicle Dynamics Integrated Management) is used, which integrates brake control, drive force control, and steering control.
- Conventional vehicles use a combination of independent functions such as the ABS, TRC, VSC, EPS and VGRS. In contrast, the VDIM integrates these systems to enhance the motion performance of the vehicle to "run, turn, and stop".
- Conventional vehicles start their control in the vicinity of their threshold. In contrast, the VDIM starts control before the threshold is reached, in order to realize a smooth vehicle behavior. Thus, it expands the threshold of the vehicle, as well as the fun of driving.



The Conventional Control VDIM

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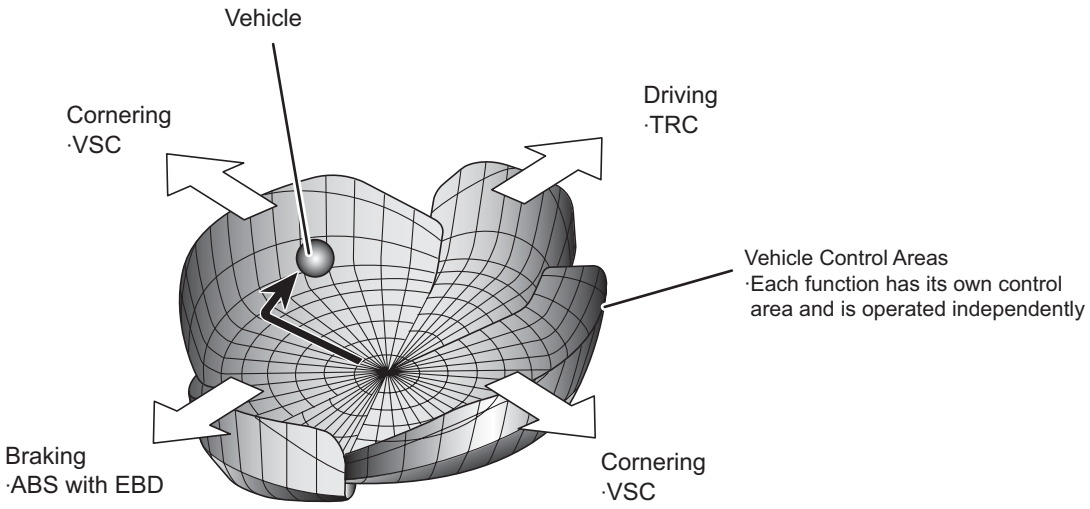
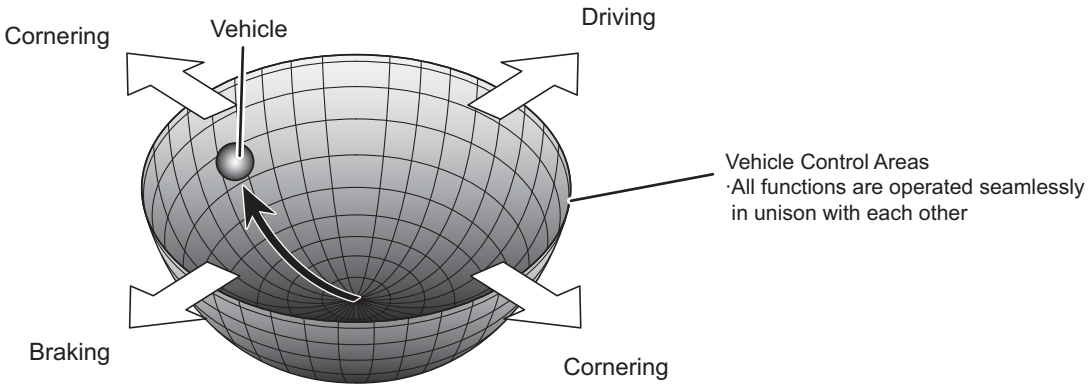
- The VDIM manages all functions,such as the ABS with EBD,the Brake Assist,the TRC, and the VSC. And is operated by the ECB2 system, which the regulates a brake fluid pressure/ In addition, steering cooperative control functions are also available, thus this allowing the VDIM to perform the comprehensive management.
- Conventional brake control systems begin to control either the braking or motive force to in order to stabilize the vehicle motion,when it becomes unstable due to loss of tire traction. in contrast, in order to maintain stable vehicle control, the VDIM commences controlling the brake and steering systems in accordance with changes in balance before the vehicle becomes unstable. As a result, maintenance smooth vehicle control is achieved.
- Conventional brake control systems manage all related functions, such as the ABS with EBD, the Brake Assist, the TRC and the VSC, independently, according to the vehicle dynamics. In contrast, the VDIM provides smooth control by seamlessly integrating all those functions.

Conceptual Diagram of Control Management



Conventional



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