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INTELLIGENT ADAPITVE TABLET BOX

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INTELLIGENT, ADAPTIVE TABLET BOX

Many people have to take tablets every day. Coordinating the intake is an everyday burden for many people, which is especially evident when users are on the move. During daily activities or when travelling, it is particularly challenging to remember the intake sequences.

Today's status
The tablet intake is manually controlled. This leads to errors in taking the correct tablet or to omissions in taking the tablet.

Disadvantage:
- Especially "on the go", there is a risk of forgetting to take tablets
- Cognitive load due to the coordination of taking the tablets

New idea and technical implementation
An intelligent, adaptive tablet box in the vehicle supports the correct taking of tablets. The user fills the tablets from the packaging into the box. In the box, the tablets are classified and compared with a digitally stored medication plan. The system can then place a reminder that certain tablets need to be taken to the minute. The box then dispenses these tablets via a dispensing drawer. The system is designed to be interactive, so that an intake can be "refused" or "postponed" via the vehicle HMI screens if the current situation requires it (e.g. the intake was already done shortly before getting into the vehicle).

Extensions
- Adaptivity to events relevant to the journey or destination. E.g. the reminder to take certain tablets on arrival at the destination (instead of at the start of the journey), as otherwise there could be effects on fitness to drive.
- Cooling/warming of the tablet box when required, so that the tablets are not damaged in the warm/cold vehicle.
- Integrated water dispenser to support intake.
- Coupling to the current physical condition of the user, e.g. in the case of certain illnesses such as diabetes, the blood sugar level can be measured in the vehicle.
- Hygienic withdrawal and delivery to the mouth.
- Adaptive reminder of low-distraction sections of the route or suggested breaks.
- Intelligent reminder when tablet level is low, taking into account the individual time needed to get the tablets.

Advantages
Comprehensible, individually meaningful proactivity of the digital assistant to improve the individual user model in a short time.

Schematic representation