



# Adoksan's Innovation and Technology Roadmap

# Innovation and Technology Roadmap



Current Status

Planning

Technology Roadmap

Adoksan's current status and integration degrees regarding both industry 4.0 technologies and the technologies it uses in production and management were measured and the technologies needed were determined.

It is planned to integrate CAD and CAM softwares into PLM, to identify the needs of management programs used as modules of Canias, and to invest in the necessary ones.

Current technologies used within Adoksan, how integrated these technologies are with each other and which technologies are needed or will be needed has been determined. Technologies that are needed are researched, return rates of investment are determined, and purchasing processes continue for technologies that will positively affect the lean transformation process.

# Innovation and Technology Roadmap



- Currently, MES, ERP, QMS, PPS, SCM, CAD and CAM software or modules connected to the software are actively used within Adoksan.
- Robot investments have been made in many departments and new investments are planned.
- Data analysis, adaptive robotics (intelligent robots), simulation, cloud, sensors and actuators, horizontal-vertical software integration, artificial intelligence and machine-to-machine communication are used, albeit limited, within Adoksan. IoT technologies are used in almost every field. It is planned to carry out predictive and prescriptive analyses by investing in data analysis technologies.
- The need for PDM and PLM systems and whether the related need can be met through modules on the ERP are investigated. Investment is planned if the need is determined.
- Although there is ISO/IEC 27001 certification currently and TISAX certification is planned to be received by the end of 2022, Other cyber security technologies and cyber security models (C2M2, NICE-CMM, CERT-RMM, ISO/IEC 15408, SO/IEC 21827 SSE-CMM) are researched.
- It has been determined that there are various needs in augmented reality, and it is investigated to what extent augmented reality software and hardware can meet these needs.
- Energy efficient furnaces have been researched, investment returns have been calculated and investments have been made, and new investments are also planned.
- All technology investment plans within Adoksan are carried out in parallel with the lean transformation process and it is aimed that the processes benefit each other.
- Since Adoksan products are not suitable for acquiring digital capabilities, no study has been conducted on this subject yet. However, developing technologies and their applicability to Adoksan products, sales and leasing models that emerge with new technologies are followed, and how they can be used in Adoksan's current and future products is investigated.