



Apollonia simply illustrated!



**APOLLONIA –
JOACHIM LUGOJAN**
THE SOLUTION FOR A COMPLETE WORKFLOW



Description of the Apollonia software and its planned functionality

Apollonia is an integrated, AI-powered dental platform that supports and largely automates the digital workflow from patient data capture and analysis through treatment planning and design to production.

Once an Apollonia user – for example, a dentist, dental practice, clinic, or dental technician – has registered on the Apollonia platform, a new treatment case can be created for a patient. The necessary patient data is imported from the practice management software via a suitable interface.

The existing diagnostic data can then be transferred to the Apollonia platform. This includes, for example, intraoral scan data, CBCT or CT data, and other relevant digital information. A dentition can either be uploaded as an existing dataset or captured directly using a suitable scanner.

The collected data is then visualized in three dimensions. Depending on the available data, individual jaws, both jaws, the entire oral cavity, and, if applicable, the head and face can be displayed. This results in the most comprehensive digital representation possible of the individual patient's situation.

Based on this, both the treating dentist and the patient can define individual wishes and treatment goals. The Apollonia platform then analyzes the available data and takes the defined treatment goals and specifications into account.

Apollonia's AI-powered functions can develop, visualize, and compare various treatment and design options. Depending on the application, solutions for dentures, implant planning, drilling templates, orthodontic aligners, splints, or other digital dental products can be supported.

The different options can be clearly displayed side-by-side and visually compared. The dentist or qualified user retains control at all times. The solutions proposed by Apollonia can be reviewed, modified, optimized, accepted, or rejected.

Only after technical review and approval by the user is the selected design used for the next process step. The approved data can be saved, shared with other stakeholders, or transferred directly to a suitable production process.

The main advantage of Apollonia

Many of today's available digital dental technologies focus on specific aspects of the workflow. These include, for example, systems for dentures, implant planning and drilling templates, orthodontic aligners, or various types of splints.

Apollonia takes a more comprehensive approach.

The key difference is that Apollonia not only visualizes existing data or digitally supports individual planning steps, but is also intended to support and partially automate the time-consuming digital construction process.

This means that a key work step, which is currently often carried out manually by dental technicians or other qualified professionals at the computer, is prepared through AI-supported processes.

This gives the dental technician or dentist not just a digital tool, but an intelligent design proposal that he can professionally review and individually adapt if necessary.

The final decision and approval remain with the qualified user.

Apollonia aims to help reduce processing times, increase productivity, automate recurring work steps and use existing skilled workers more efficiently.

The Apollonia business model – 3 pillars

The marketing and economic use of the Apollonia platform will be based on a modular three-pillar model:

1. AI Design & Planning

The first pillar comprises digital analysis, planning, calculation and AI-supported design.

The customer uses Apollonia as a digital platform and receives corresponding analysis, planning and design services based on the available patient data.

2. Partner Manufacturing

In the second step, the design created by Apollonia and approved by the customer is handed over to a suitable production partner or a suitably qualified laboratory.

This allows Apollonia to combine digital planning and design with external manufacturing without having to have its own complete production infrastructure from the outset.

3. Apollonia Manufacturing

The long-term third pillar envisions expanding the business model to include in-house manufacturing.

This would allow Apollonia to offer the complete digital process from a single source in the future:

Data → Analysis → Planning → AI Design → Release → Production

This enables an additional value creation stage and opens up further revenue and scaling opportunities in the long term.

Productivity and scalability

A key economic advantage of Apollonia lies in the potential automation of time-consuming digital design and planning steps.

A single dental technician could therefore process significantly more cases, as recurring and time-consuming work steps are prepared or automated through AI-supported processes.

At the same time, dental practices and clinics that have the appropriate digital recording and production capabilities can integrate certain work steps more strongly into their own workflow, thereby accelerating treatments or the production of required workpieces.

The platform is fundamentally digital and internationally scalable. As the number of customers grows, computing power, storage, and cloud resources can be expanded as needed, without requiring a proportional increase in personnel costs.

Apollonia's goal is to develop a scalable technology and business model from a digital dental platform, which can be expanded in the future from individual applications to an integrated platform and ultimately to a complete digital dental ecosystem.