

A complex network diagram composed of numerous dark blue circular nodes connected by thin, light blue lines. The nodes are distributed across the frame, with a higher density on the left side, creating a sense of depth and connectivity.

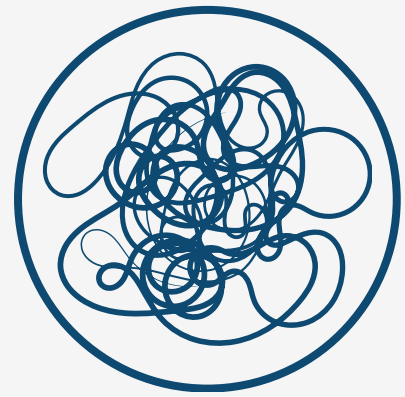
SYMPHONYA

Open Digital Twin for Optical Networks

PROBLEM

OPTICAL NETWORKS UNDER PRESSURE

Internet traffic is growing by **17% per year** *, but networks are not scaling fast enough to keep up.



Network Saturation

Traffic growth driven by AI, cloud, and data centers is putting **network infrastructure under stress.**



Rigid and Proprietary Architectures

Each vendor enforces its own ecosystem, **limiting flexibility and interoperability.**



Rising Costs and Lead Times

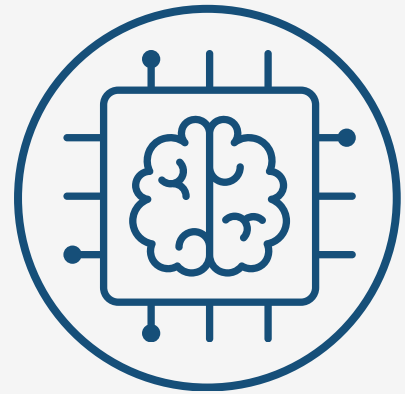
Integrating new equipment requires months of testing and **increases operational costs by up to 50% **.**

* Source: [Cloudfare](#)

** Source: [Nokia](#)

SOLUTION

Synphonya addresses the pressure on optical infrastructures with a **highly scalable** and **replicable** software solution capable of **predicting**, **simulating**, and **optimizing** the network in **real time**.



AI-powered Digital Twin

A digital twin that replicates the physical network to **anticipate bottlenecks** and **optimize traffic flows** based on real-world loads.



Multi-vendor, Multi-domain

Unified management of diverse vendors and domains: **total flexibility** and **freedom from vendor lock-in**.



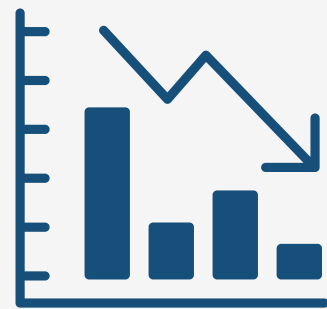
Single Pane of Glass

An intuitive dashboard for **rapid decision-making**, **complete visibility**, and **operational cost reduction**.

VALUE PROPOSITION

Cost Reduction

Up to 30% savings
on CapEx and OpEx
thanks to greater
network efficiency.



01

Freedom from Lock-in

True interoperability
with multi-vendor
equipment.



02

Time & Agility

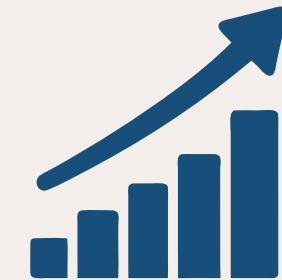
Launch new services
up to 10x faster.



03

New Revenue

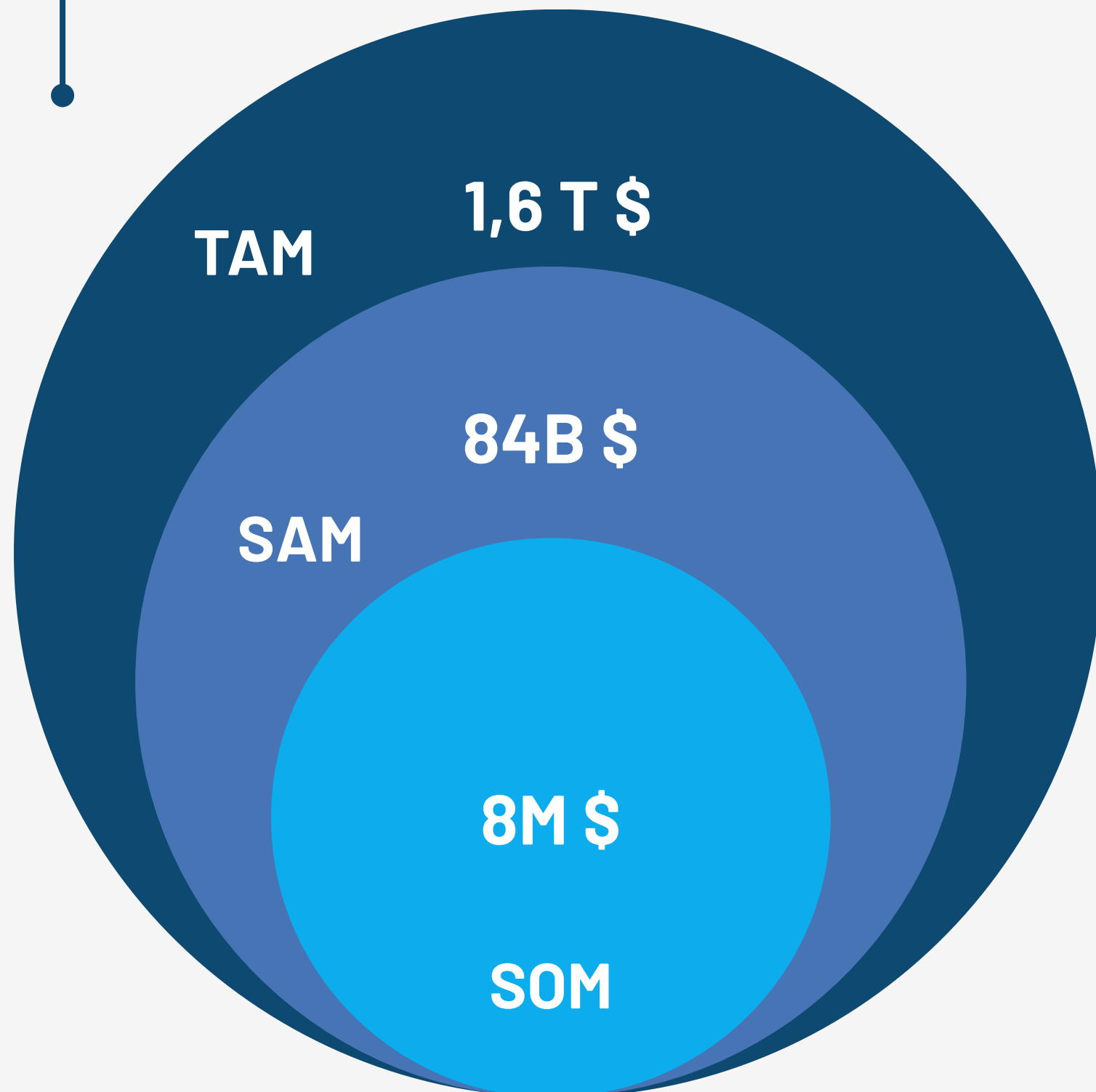
NaaS enabler,
monetizing the
dynamic capacity of
the 6G era.



04

Synphonya transforms a **structural problem into a competitive advantage.**

MARKET



TAM, SAM, and SOM estimates over 5 years

Synphonya focuses on the **high-growth segment of optical network automation**, where operators are seeking tools to manage **increasing loads and reduce operational costs**.

Our initial target is limited but strategic: **major global Telcos and Vendors** already in contact with the founding team.

TARGET CUSTOMERS

TELCO (10)
VENDOR (5)

BUSINESS MODEL

Synphonya is a scalable, high-margin **enterprise** software solution based on an **annual subscription model**.

Revenue Model



**Annual Recurring
Software License (B2B)**

Average Contract Size
€200K–600K/year– Telco
€150K–400K/year– Vendor

What We Offer



1. Full access to Synphonya **platform**
2. **AI and Digital Twin Modules** for simulation and prediction
3. **Software updates** and maintenance
4. **Technical support** and customized training

ROADMAP

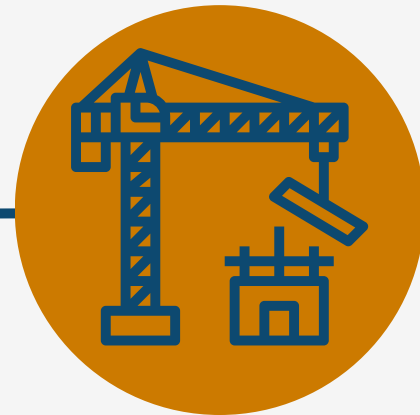
Research & Proof of Concept



2025

- Development of **Digital Twin Models**
- Scientific **publications** and **lab testing**
- **Company Incorporation**

MVP



2026

- **Industrial Collaborations**
- **MVP** with **GUI** + Agent AI
- Solution **certification**
- **Pre-seed Round 150 k€**

Validation & First Customers



2027 - 2028

- **Technical Validation** with partners
- First **commercial licenses**
- **ARR > 7.5 M€**
- **Break-even (+13,6%)**

Scalability & New Markets



2029+

- **Expansion** (NA, APAC)
- New **AI-driven** features
- Strategic **partnerships**
- **EBITDA +38%**
- **Revenue 8 M€**

TEAM

A unique technical and scientific team in Europe



- PhD in Optical Communications (PoliTo).
- Expert in AI and digital twins for optical networks.
- Collaborations with Lumentum, NTT, NEC, LINKS Foundation.

Rocco D'Ingillo
CEO



- PhD Candidate in optical networks and software orchestration (PoliTo).
- Specialized in multi-vendor architectures and AI automation.
- Experience in international projects and labs (NEC Labs America).

Renato Ambrosone
CTO



- Researcher in optical transmissions (PoliTo).
- Expert in modeling and validation of complex optical systems.
- Supervises algorithmic development and industrial use cases.

Emanuele Virgillito
Tech Advisor



- Full Professor, IEEE Fellow, global expert in optical networks.
- Scientific Chair of GNP_y, the global standard for QoT modeling.
- Provides scientific guidance and access to an international academic network.

Vittorio Curri
Scientific Advisor



SYNPHONYA



Thanks!

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