



White Paper

# Synapsis Platform

The platform that supports Business Applications  
by NousPratIT

NousPratIT

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## Abstract

Synapsis Platform. A platform that can support the design and building of a business application based on any business requirements, market or industry.

## Problem Statement

Anyone currently in business or thinking of building their business eventually will need to create it in a digital environment.

Current technology uses multiple applications from different vendors to complete specific business tasks. A CRM to manage customers, an ERP to manage resources and financial transactions, portals/websites for user friendly access, E-Shops for sales to name only a few.

An international CRM vendor like Salesforce or local vendor like Softone may have a better solution, if the business requires just that. Selecting WordPress to create a website or Magendo for an e-shop are both solutions that are good for the specific application.

In any case it requires employees/partners or external contractors with skills in the technology to use, manage and support these applications. This requires resources and funding, that can easily escalate if the wrong decisions or partnerships are made.

## Background

NousPratIT, a software technology vendor that adds value to customers using the Mind (**Nous** in Greek) to make (**Prato** in GR) intelligent **IT** solutions. With individuals that have many years of experience in Software Development, Sales, Business Analysis and Project Management we are creating a platform solution: Synapsis Platform.

## Solution

### Synapsis Platform

“The platform that supports business applications, based on any business requirements, market or industry.”

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### How it works

Synapsis Platform has an architecture that is module based. A user will login to Synapsis Platform and start his/her business workflows based on the bought active modules.

For example the CRM module to manage your customers, the E-Shop to manage sales, the Marketplace to manage B2B transactions, role based permissions for users, WMS for warehouse management and so on.

### Alternatively

Synapsis Platform will also come with specific business applications that you simply select based on any requirements, market, or industry.

Once you have bought your desired module you will be able to customize the modules further by requesting new functionality tailored to your needs.

## Characteristics

Synopsis Platform will be hosted on the Microsoft Azure Ecosystem and will have a range of characteristics such as

- Multilingual, multi-tenancy, and multi-user.
- Role based authorization with user permissions and feature sets.
- Cross platform integration.
- Mobile ready.
- State of the art security and authentication model.

## Technical Characteristics

The technology and architecture that is utilized follows current best practices, to ensure its longevity, security, flexibility and growth.

### **Hosting Platform: Azure.**

Microsoft Azure offers a range of benefits such as

- Instant global presence
- High availability through the vast number data centers worldwide
- Scalability of the service ensures you can manage resources with a click of button if you grow quick or need to downsize your business volume
- Disaster recovery and Back up, which are essential to any business
- Security, with encryption of links and data, DDoS protection and integration with existing Active Directory sign on

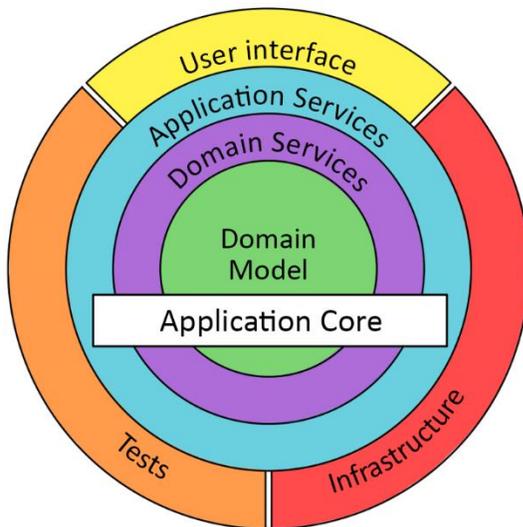
### **Development Framework: ASP.NET Core 7 Blazor Server Side with Entity Framework ORM.**

With the continuous change and demand in the technology market, Microsoft created ASP.NET Core Blazor Framework to create feature rich websites and high end web applications.

ASP.NET Core Blazor significantly reduces the amount of code required for building large and complex applications which can increase overall development speed and reduce development costs. Just-in-time compilation, smart caching technologies and native optimization dramatically increase overall application performance.

Entity Framework is an Object Relational Mapper (ORM) which is a type of tool that simplifies mapping between objects in your software to the tables and columns of a relational database.

## Development Architecture: ONION Architecture (aka Clean Architecture).



Some of the benefits in utilizing ONION architecture include:

- True loose coupling between layers/components
- Limit rewrite necessity over time
- The application becomes very portable
- Business logic has no dependency tentacles
- Architecture is more easily sustained over time
- Infrastructure is free to use any data access library or external web service to do its work
- UI and data access "layers" become much smaller
- Compiler enforces dependencies boundaries

### Programming Language: C#

The major advantage of programming in C#, other than being Microsoft's preferred, is that it can be deployed over any operating system including Android, iOS, Windows or cloud platform.

Additional advantages are its speed of compilation, the fact that it is simple, Object Oriented, modern, and type safe. It is a very efficient system, has a strong memory back up and a rich class of libraries. Maintenance costs are less because it is safer than other languages, has a familiar syntax, the support of Microsoft and the programming community. Additional technical features make it the most powerful programming language for the .NET Framework.

## Development Team

Synapsis Platform is a long-term project and it requires a dedicated developers team that will see it through. The team comprises of the following roles:

- Platform Architects: 1
- Senior Backend Developers: 3
- Senior Frontend Developers: 3
- Senior Database Platformers: 1

Crucial to the success of the project will be

- The support of a Senior Project Manager to monitor and guide the team throughout the development phases.
- NousPratIT management and stakeholders to ensure all necessary resources, including funding and time are available to complete the each phase of the project.

## Conclusion

What makes Synapsis Platform by NousPratIT different? The team and their vision of creating an Platform built with the right parts:

1. Architecture
2. Modern Technology
3. Fully Customizable
4. Security
5. Reusability options

By creating a platform that can build a vertical business application that is fully customizable and ready within  $\frac{1}{4}$  of the time it currently requires, NousPratIT will have a serious advantage over the competition.