



## Group Coursework Submission Form

### Specialist Masters Programme

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<b>MSc in:</b> Business Analytics		
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<b>Module Title:</b> Fintech: Technologies and Disruptions (PRD3 A 2023/24)		
<b>Lecturer:</b> Prof. George Politis	<b>Submission Date:</b> 19-07-2024	
<b>Declaration:</b> By submitting this work, we declare that this work is entirely our own except those parts duly identified and referenced in my submission. It complies with any specified word limits and the requirements and regulations detailed in the coursework instructions and any other relevant programme and module documentation. In submitting this work we acknowledge that we have read and understood the regulations and code regarding academic misconduct, including that relating to plagiarism, as specified in the Programme Handbook. We also acknowledge that this work will be subject to a variety of checks for academic misconduct.  We acknowledge that work submitted late without a granted extension will be subject to penalties, as outlined in the Programme Handbook. Penalties will be applied for a maximum of five days lateness, after which a mark of zero will be awarded.		
<b>Marker's Comments (if not being marked on-line):</b>		

**Deduction for Late Submission:**

**Final Mark:**

  
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# THE FUTURE IS OURS TO MOLD

## NETWORKNURTURE VC : VISION TO REALITY

### Title:

Enhancing Network Utilisation and Value Creation in Venture Capital Firms through an Intelligent Matching and Collaboration Platform - NetworkNurture VC

### Industry

Venture Capital

### Sub-Industry

Technology and Innovation

### Executive Summary:

This business plan outlines the development of an advanced platform designed to enhance the network utilisation and value creation capabilities of Venture Capital (VC) firms. By leveraging intelligent automation (RPA), knowledge graph databases, AI with deep learning and cloud computing, and blockchain with smart contracts, the platform addresses the inefficiencies in resource matching and collaboration within VC networks. These technologies provide a highly specific and effective solution to the identified problem, driving significant growth and value creation.

The venture capital industry plays a crucial role in funding and nurturing startups, particularly in the technology and innovation sectors. VC firms invest in early-stage companies with high growth potential, providing not just capital but also strategic guidance and access to their extensive networks. The dynamic nature of this industry demands constant innovation and adaptation to new technological advancements to stay competitive and maximize returns on investments.

## Market Region

North America, particularly the United States, is a leading region for venture capital activities, given its robust startup ecosystem, innovation hubs, and significant investment activities. The U.S. is home to some of the world's most influential tech companies and startups, making it a prime region for venture capital investments. The platform will initially target this region but aims for global expansion to leverage the growing international venture capital market. Regions such as Europe and Asia are also experiencing significant growth in venture capital activities, presenting opportunities for future market penetration.



## Customer Profile

Targeted Clients - VC firms, particularly those managing large and diverse portfolios of tech startups.

TIGERGLOBAL

SEQUOIA

Accel

End Users - VC Managers, Startup Founders, Industry Experts, and potential investors.

## Current Situation

VC firms possess extensive networks comprising investors, industry experts, and various portfolio companies. However, current methods for leveraging these networks are inefficient, leading to suboptimal resource allocation and missed collaboration opportunities. Traditional tools and platforms lack the sophistication required for precise resource matching and effective facilitation of meaningful connections. The industry relies heavily on manual processes, fragmented data sources, and limited analytical capabilities, which hinder the full potential of these networks.

## Pain Point

The primary issue is the inefficiency in matching the right resources (industry expertise, investment opportunities, and strategic partnerships) to the right startups, resulting in missed opportunities, slower growth, and less value creation within VC networks. This inefficiency stems from several factors:

- **Manual Processes:** Many VC firms still rely on manual processes for network management, which are time-consuming and prone to errors.
- **Fragmented Data:** Information is often siloed across different systems and tools, making it difficult to get a comprehensive view of the network.
- **Limited Analytical Tools:** Current tools lack advanced analytics capabilities to identify patterns, predict outcomes, and optimize resource allocation.
- **Inadequate Collaboration Platforms:** Existing platforms do not facilitate seamless collaboration and trust-building among network participants.

## Solution Overview

Our platform NetworkNuture VC provides the following solutions:

- **Automate routine administrative tasks and preliminary data analysis:** Implementing RPA (Robotic Process Automation) to handle data entry, initial matching processes, and routine follow-ups.

For example, RPA can scan and categorise incoming requests from startups and investors, perform initial matches based on predefined criteria, and automate the scheduling of meetings and follow-ups.

- **Map and analyse complex relationships within the network:** Using a graph database to create a detailed map of the entire network, capturing entities (investors, startups, experts) and their relationships. This allows for sophisticated queries and insights, such as identifying potential collaboration clusters or key influencers within the network.
- **Enhance the accuracy and relevance of resource matching:** Utilising AI with deep learning algorithms hosted on cloud computing platforms to analyse vast amounts of data from various sources. For example, AI can learn from past successful matches, continuously improving its recommendations. The cloud infrastructure ensures scalability and accessibility of the platform.

- **Ensure transparency and automate collaboration agreements:** Implementing blockchain technology to record all transactions and collaborations within the network, ensuring they are tamper-proof and transparent. Using smart contracts to automate and enforce collaboration agreements and incentive mechanisms, ensuring that all parties fulfill their obligations.

These solutions address the core inefficiencies in the current VC network management processes by integrating advanced technologies to streamline operations, enhance analytical capabilities, and foster trust among network participants.

## Innovation

Type - Technological Innovation

Category - Integration of RPA, graph databases, AI with deep learning, and blockchain to create an intelligent, transparent, and efficient network utilisation platform.

## Level of Transformation - High

The platform aims to significantly transform how VC firms utilize their networks, driving higher efficiency, better resource allocation, and more successful startup outcomes. This transformation will have a substantial positive impact on the startup ecosystem, fostering innovation and growth. By enhancing the effectiveness of VC networks, the platform will accelerate the development and success of startups, leading to broader economic and technological advancements.

## Value Proposition

A detailed Business Model Canvas and Value Proposition Canvas are provided in Appendix A and B respectively.

## Core Technologies

- **Intelligent Automation (RPA)**

Purpose - Automates routine tasks, increasing operational efficiency and reducing human error.

Solution Fit - Prepares and processes data for further analysis by AI and graph databases.

RPA is ideal for automating routine, repetitive tasks that consume significant time and resources. These tasks include data entry, scheduling, and preliminary data analysis, which are crucial yet non-strategic activities in VC firms. By automating these tasks, RPA increases operational efficiency, reduces human error, and frees up valuable time for VC managers to focus on strategic decision-making and high-value activities like deal negotiation and network building.

- **Knowledge Graph Databases**

Purpose - Maps and represents complex relationships within the VC network.

Solution Fit - The backbone of the platform's intelligence, allowing visualization and analysis of connections.

Graph databases are specifically designed to handle and represent complex relationships and connections within data, making them perfect for mapping VC networks. They provide a detailed, interconnected view of the entire VC ecosystem, enabling more accurate and sophisticated queries and insights into potential collaborations and resource allocations. By visualizing these connections, VC firms can better understand the dynamics of their networks and identify key influencers, potential collaboration opportunities, and resource allocation strategies.

- **AI with Deep Learning and Cloud Computing**

Purpose - Identifies patterns, makes predictions, and improves matching accuracy.

Solution Fit - Analyzes data processed by RPA and mapped by graph databases, offering precise matching recommendations.

AI with deep learning excels at identifying patterns and making predictions based on large datasets. Cloud computing provides the necessary scalability and accessibility to process these datasets efficiently. AI improves the accuracy and relevance of resource matching by learning from past successful matches and continuously refining its algorithms. Cloud computing ensures that the platform can scale with the growing data needs of VC firms. This combination allows for real-time analysis and decision-making, enhancing the speed and accuracy of resource allocation and network management.

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- **Blockchain with Smart Contracts**

Purpose - Ensures transparency, security, and trust in transactions and agreements.

Solution Fit - Underpins the platform's trust and transparency framework, ensuring secure interactions.

Blockchain ensures transparency, security, and trust in transactions and agreements. Smart contracts automate and enforce these agreements. It enhances trust among network participants by providing a tamper-proof record of all transactions and collaborations. Smart contracts ensure that agreements are automatically executed and enforced, reducing the need for manual oversight. This technology is particularly valuable in VC networks where trust and transparency are critical for fostering collaboration and ensuring that all parties fulfill their obligations.

## Product Development

### Developing Proprietary Products

We are developing proprietary products tailored to meet the specific needs of VC firms. This includes custom algorithms for AI-driven matching, bespoke graph databases optimized for VC network analysis, and specialized RPA solutions for VC administrative tasks.

#### Custom Algorithms for AI-Driven Matching -

These algorithms are designed to analyze vast amounts of data from various sources to identify patterns and make accurate matching recommendations. By learning from past successful matches, the AI continuously improves its predictions, ensuring that the most relevant resources are allocated to the right startups.

#### Bespoke Graph Databases -

Our graph databases are customized to map and analyze the complex relationships within VC networks. These databases are optimized for the specific needs of VC firms, providing detailed insights into the network's dynamics and facilitating sophisticated queries and analyses.

#### Specialized RPA Solutions -

Our RPA solutions are tailored to automate routine administrative tasks specific to VC firms. These tasks include data entry, scheduling, and initial matching processes. By automating these processes, our RPA solutions increase efficiency, reduce errors, and free up valuable time for VC managers.

### Off-the-Shelf Generic Products

Research Findings - There are existing off-the-shelf products for RPA, AI, and blockchain, but none offer an integrated solution that combines all these technologies tailored for the VC industry.

Adjustment for Project Expectations - While these generic products provide a foundation, our platform will enhance and customize them to meet the unique requirements of our target market. This involves integrating these technologies into a cohesive system designed specifically for the complexities of VC networks.

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## Second Stage Development

### • Advanced Analytics and Reporting

We will incorporate advanced analytics and reporting features that provide deeper insights into network activities, performance metrics, and collaboration outcomes.

Value Addition - These tools enable users to make data-driven decisions, measure the impact of collaborations, and continuously improve network utilization strategies.

### • Integration with Other Platforms

We plan to integrate these capabilities with other networking, investment, and industry-specific platforms.

Value Addition - Expanding the platform's data sources and collaboration opportunities, making it a central hub for all VC network activities. This integration enhances the richness and diversity of data available for AI analysis and matching.

### • Enhanced User Interfaces and Experience

Development of more intuitive and user-friendly interfaces to improve user engagement and platform adoption.

Value Addition - A better user experience increases platform usability and satisfaction, encouraging more frequent and effective use of its features.

### • Quantum Computing

Explore the potential of quantum computing for solving highly complex optimization problems inherent in network matching and resource allocation. Quantum algorithms can be used to process large datasets and identify optimal matches much faster than classical computers. This technology offers unmatched computational power and problem-solving capabilities, future-proofing the platform for advanced optimization needs.

## Competition and Competitive Advantage

### Competition Research

- Traditional CRM systems offer basic networking functionalities but lack advanced matching and incentivization features.
- Emerging AI-driven solutions provide some level of matching capabilities but do not integrate blockchain for transparency, and RPA for administrative efficiency.

### Competitive Advantage

Comprehensive Solution - Our platform uniquely combines RPA, graph databases, AI, and blockchain, offering an all-in-one solution for efficient network utilization.

Transparency and Trust - Blockchain-based smart contracts ensure transparency and trust, fostering more active and reliable collaborations.

Operational Efficiency - RPA increases efficiency by automating routine tasks, allowing VC managers to focus on strategic initiatives and high-value interactions.

### Impact on Society

Our platform fosters innovation and growth within the startup ecosystem, leading to increased job creation, technological advancements, and economic development. By improving the efficiency of resource allocation and collaboration, we contribute to the overall health and dynamism of the tech startup landscape. This, in turn, drives societal benefits such as economic growth, enhanced technological progress, and improved entrepreneurial success rates.

Economic Growth - By enabling more efficient and effective VC investments, our platform helps startups grow and succeed, contributing to economic growth. Successful startups create jobs, generate revenue, and drive innovation, leading to broader economic benefits.

Technological Advancements - Our platform supports the growth of tech startups, which are at the forefront of technological advancements. By fostering innovation and providing the resources needed for success, we contribute to the development of new technologies and solutions that can have far-reaching impacts on various industries.

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Improved Entrepreneurial Success Rates - By enhancing the efficiency and effectiveness of VC networks, our platform helps startups secure the resources and support they need to succeed. This increases the overall success rates of entrepreneurial ventures, encouraging more individuals to pursue innovative ideas and contribute to the startup ecosystem.



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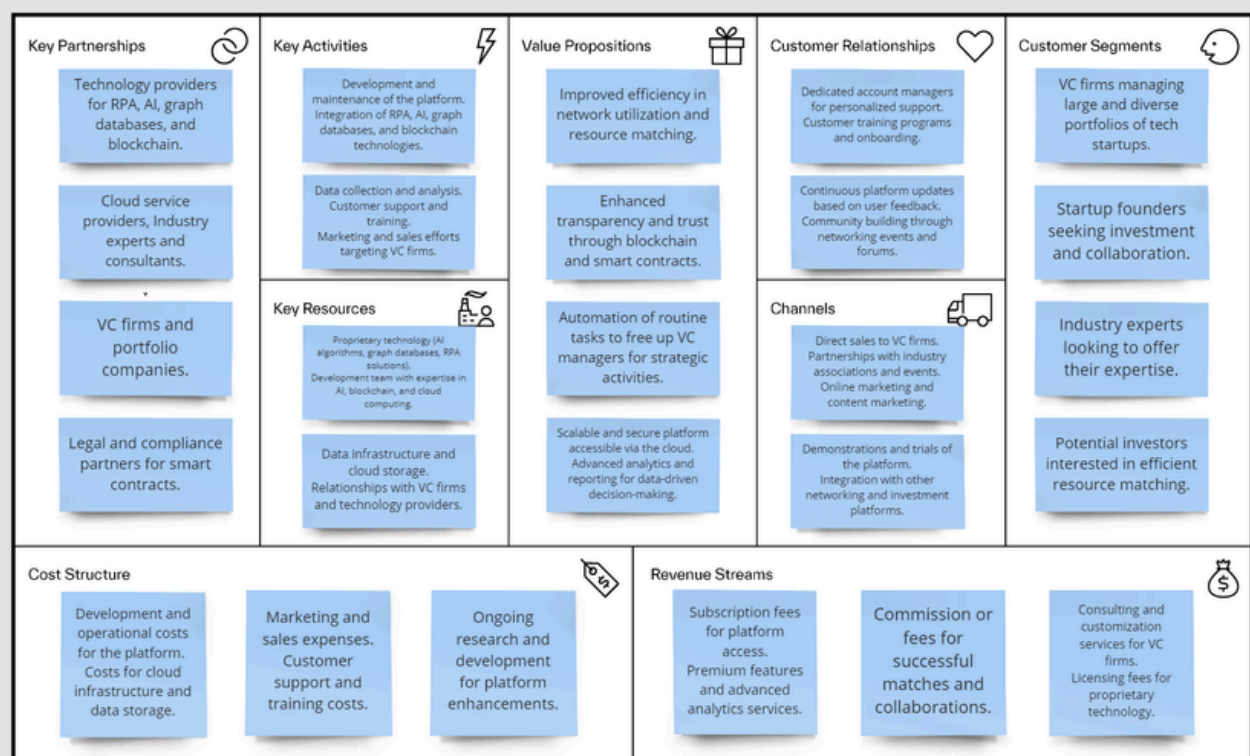
Available at: <https://doi.org/10.1007/s12599-017-0506-0>

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## APPENDIX A

## The Business Model Canvas

Designed for: \_\_\_\_\_ Designed by: \_\_\_\_\_ Date: \_\_\_\_\_ Version: \_\_\_\_\_



APPENDIX B

