A FRAMEWORK FOR MODELING AND ASSESSMENT OF RESOURCES, CAPABILITIES AND DYNAMICS OF AN ECOSYSTEM FOR SOFTWARE STARTUPS

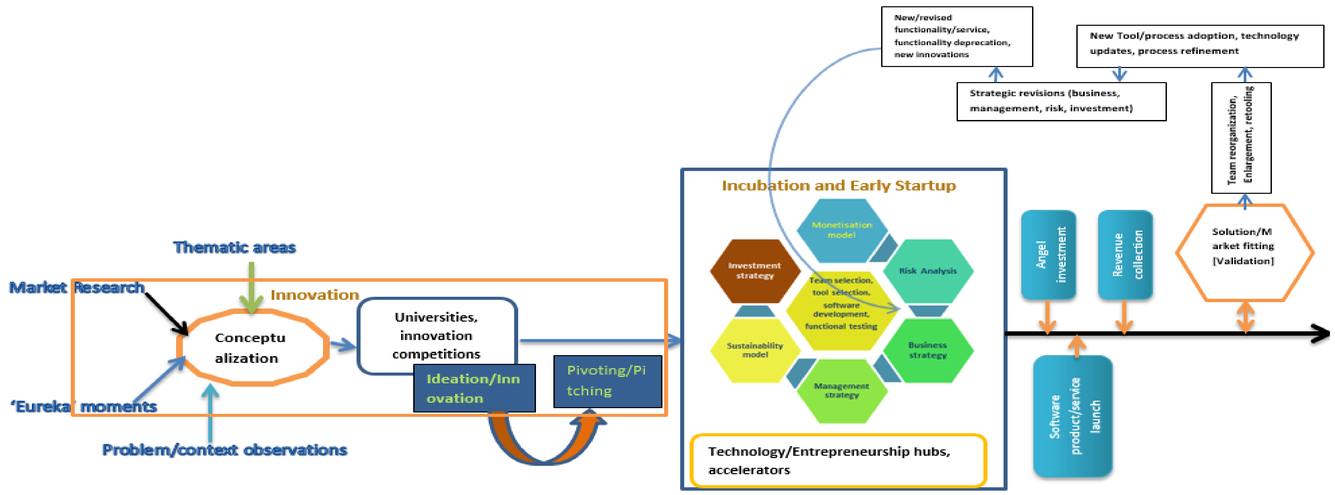
Researcher: Kamulegeya Grace B, [gkamulegeya@cit.ac.ug] Research Supervisors: Prof Michel Chaudron, Regina Hebig (PhD), Raymond Mugwanya (PhD)

Studies have shown that almost 90% of all start-ups fail within the first two years of operation.

BACKGROUND

Software startups are newly created firms developing software intensive software products/services. A Systematic Mapping Study by Paternoster et al. and another by Sutton characterize startups based on challenges they face as businesses with little or no operating history, scarce resources, multiple influences in often uncertain environments with dynamic technologies and markets. These startups operate within environments that should nurture them to grow directly or indirectly.

INNOVATION & STARTUP ACTIVITIES



PROBLEM STATEMENT

Software startups face common challenges in various ecosystems in different countries as shown by different studies, but it is evident that these challenges are often addressed in different ways by startups. This variation in internal and external solutions to similar challenges is potentially influenced by the dynamics of the ecosystem in which they operate. The way these challenges are addressed determine their success or failure within an ecosystem.

Currently, most early startups in Uganda, focus on the product with little regard to the other influencing factors in the ecosystem. The other players in the startup ecosystem like regulators, hubs, innovation spaces and universities are focusing on growing the innovations and startups with little regard to their internal processes and practices. This disconnect on focus by the players in the Ugandan startup ecosystem can potentially lead to less success of the different players. Currently, we have not yet come across scientific studies that try to model and assess the software startups and the other players within ecosystems and there is no existing study of the same in East

INTRODUCTION

Studies have shown that almost 90% of all start-ups fail within the first two years of operation. In this research, we aim to identify the resources and capabilities of software startups within the Ugandan ecosystem , model their dynamics and derive metrics to measure their impact for

OBJECTIVES

OVERALL OBJECTIVE: To study, model and derive metrics for assessing the dynamics of the software startup ecosystem in Uganda

- ❑ To examine and characterize existing and emerging software startup practices and patterns within startup ecosystems
- ❑ To determine the resources and capabilities required for software startups in software startup ecosystems in developing world
- ❑ To model the enabling processes, capabilities and resources for software startups within software startup ecosystems
- ❑ To define and draw metrics for measurement of processes and capabilities within software startup ecosystems.

Expected Research Contributions

- ❑ **A catalogue of reusable best practices that are packaged as patterns to be used by startups in Uganda.**
- ❑ **The adoption of parts of this model by startups and incubators will increase the likelihood of success of the software businesses**
- ❑ **The metrics for the processes and capabilities will enable startups to track and measure the success of their business during various stages.**

Project Sponsors

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