

## THE PROOF OF CONCEPT PUTS

**SOUTH AFRICAN** SOFTWARE ENGINEERING FIRMS

BACK IN PLAY



However, as the technology industry has experienced its many growth and innovation cycles, PoCs have fallen in and out of favour. After 1994, for example, when technology organisations were trying to compete on a level playing field, many South African companies automatically chose foreign software to run the heart of their operations. The assumption was that the international giants were established leaders, so the software would automatically deliver what it promised, and a PoC was unnecessary.

This not only led to massive cost overruns and implementation failures, but decades of lost opportunities for growth and innovation. While South African companies were struggling to adapt the monolithic software solutions that were better suited to other markets just to make their operations more efficient, international companies were changing the world by adopting an agile approach within specific niches.

FOLLOWING FIRTH -

The term "Proof of Concept" (PoC) has been in use since 1967, becoming a standard part of the software engineering lexicon in the late 1990's. Since then, PoC's have proven their value in the decision-making process for organisations looking to invest in - or upgrade their software ecosystems.



WHILE SOFTWARE WAS EATING THE WORLD, SOUTH AFRICA WASN'T EVEN AT THE DINNER TABLE

In 1990, Harvard Business School professor Rebecca Henderson published a paper providing a theoretical basis for the success of full-stack startups. At the time, multiple thinkers were grappling with the question of why big, successful, cash-rich companies were sometimes unseated by new technologies.

According to Henderson, incumbent companies aren't necessarily bad at using new technologies, and many were great at using new technologies to improve individual components of their products. However, when a new technology fundamentally changed the architecture of that product - the way everything fits together - the incumbent struggled. In other words, a company's way of doing things is often deeply interconnected with the architecture of the products or services it creates. When the architecture changes, all the knowledge that was embedded in the organisation becomes less useful, and the company's way of doing things goes from advantage to disadvantage.

Add to that the fact that software has been consistently disrupting and transforming the value chain across industries and sectors for decades, and it's no wonder that the outdated approach of "bigger is better" left local companies struggling to keep pace with international competitors. When Netscape's co-founder Marc Andreessen wrote "Why Software is Eating the World" in the Wall Street Journal more than 10 years ago, innovators like Amazon and Netflix were having their own code developed for them, rather than relying on the incumbent software giants of the time. In the process, they created new industries while effectively destroying the competition.

## THE POC PUTS INNOVATION BACK IN THE DRIVER'S SEAT

Thankfully, South African companies have learned their lesson. After dealing with mega failures and unrealistic costs, companies looking for new enterprise software administration platforms have started insisting on a Proof of Concept, usually within a small portion of the business, before signing the big cheque.

The confidence that used to come with a foreign software vendor saying "we can do it" or "this is best practice" because that is the way that their software worked elsewhere, is no longer there. Local companies are no longer content to spend millions on a system because all other companies of their size use it, nor are they prepared to be dictated to just to gain the "prestige" of using a specific product.

Today, South African businesses looking to innovate and stay competitive are pressuring their vendors and partners to provide a PoC or a "Proof of Value" (PoV) in order to establish that the solution will deliver what it needs to. In the process, these organisations are rediscovering why "local is lekker".

South Africa has always had very strong software engineering skills, and local companies are starting to appreciate not only the capabilities and cost savings that come from using a local provider, but the agile thinking and innovative approach that local developers can provide. This is enabling organisations to develop their own innovations, many of which have become industry standards in other parts of the world.



Just look at the technology capability of our local banking and insurance industry versus their international peers. For example, South Africans were able to use their mobile phones for financial transactions years before this was available in the US or Europe. This would not have been achievable if our local financial institutions were relying exclusively on multinational software companies to run their back-ends.

As software-driven business models continue to "eat the world", South African companies have come to respect the value offered by local development teams. Insisting on a PoC is allowing them to evaluate the efficacy of solutions at the same time as enabling them to refine their thinking, further supporting innovation. In the process, these organisations are able to deliver efficiency and productivity while rapidly evolving and seizing new market opportunities.



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