



# ARGUMENT FOR CERTIFICATION AND LICENSING OF IT ARCHITECTS AND ENGINEERS



## Introduction

In an era where technology underpins nearly every aspect of modern life, the role of IT architects and engineers has become increasingly critical. These professionals design, implement, and maintain the complex systems that power our businesses, governments, healthcare, and personal lives. Given the profound impact of their work, I believe it is time that IT architects and engineers are certified and licensed.



Building architects and engineers have long been required to hold licenses to practice their craft due to the critical importance of ensuring structural safety. The collapse of any building or infrastructure can have catastrophic impacts on public safety, making it essential that only qualified and licensed professionals are entrusted with these responsibilities.

Today, the same can be said for IT systems that affect lives (hospitals, airports, utilities management systems, etc). I think the industry needs to start thinking about qualifications of IT professionals designing and implementing such critical IT infrastructures.

## Reasons why we need to consider this

Here are several compelling reasons why certification and licensing should be a standard requirement in the IT profession:

### 1. Ensuring Competence and Professionalism

Certification and licensing serve as formal recognition of an individual's knowledge, skills, and competence in their field. By requiring IT architects and engineers to undergo rigorous examinations and continuous education, certification ensures that they possess the necessary expertise to perform their duties effectively. This process helps maintain high standards of professionalism and ensures that individuals are up-to-date with the latest technological advancements and best practices.

### 2. Enhancing Security and Risk Management

The systems designed and maintained by IT professionals are often critical to the functioning of organisations and society at large. A single error or oversight can lead to significant security breaches, data loss, or system failures. Certified and licensed IT professionals are more likely to be aware of and adhere to stringent security protocols and risk management practices. This reduces the likelihood of costly and potentially catastrophic incidents.



### 3. Promoting Accountability and Ethical Standards

Licensing IT architects and engineers can help establish a framework of accountability. Licensed professionals are bound by a code of ethics and professional conduct, which promotes integrity, responsibility, and ethical behaviour. This accountability ensures that IT professionals prioritize the public good and the interests of their clients, fostering trust and confidence in their work.

### 4. Standardizing Skills and Knowledge Across the Industry

Certification and licensing create a standardized benchmark for skills and knowledge within the IT industry. This standardization benefits employers, clients, and the professionals themselves. Employers can be confident that certified and licensed individuals meet a consistent level of expertise, reducing the risk associated with hiring and project execution. For IT professionals, certification and licensing can facilitate career mobility and recognition across different regions and industries.

### 5. Addressing the Increasing Complexity of IT Systems

As technology continues to evolve rapidly, the complexity of IT systems grows accordingly. IT architects and engineers must navigate a constantly changing landscape of technologies, frameworks, and methodologies. Certification programs ensure that professionals are continually updating their knowledge and skills, enabling them to effectively manage the complexity and drive innovation within their organisations.

### 6. Improving Quality and Efficiency of IT Projects

Certified and licensed IT professionals are more likely to follow industry standards and best practices, leading to higher quality and more efficient project outcomes. By ensuring that IT architects and engineers are well-trained and competent, organisations can reduce project delays, cost overruns, and failures, resulting in more successful IT initiatives and better return on investment.



## 7. Protecting Public Safety and Welfare

In many sectors, IT systems directly impact public safety and welfare. For example, healthcare systems, transportation networks, and critical infrastructure all rely heavily on sophisticated IT solutions. The certification and licensing of IT professionals in these areas ensure that only qualified individuals are entrusted with the responsibility of designing and maintaining these crucial systems, thereby protecting public safety and welfare.

## Conclusion

The certification and licensing of IT architects and engineers are not just beneficial but essential in today's technology-driven world. These measures ensure that IT professionals are competent, ethical, and accountable, thereby enhancing the overall quality, security, and reliability of IT systems. As technology continues to advance and integrate further into all aspects of society, the importance of certification and licensing will only grow, ultimately safeguarding the interests of businesses, governments, and the public.