AI implementation CSFs

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Introduction

Marvin Minsky: 'If you understand something in only one way, then you really don't understand it all. The secret of what anything means to us depends on how we've connected t to all the other things we know[1]'.

According to recent research most companies are still in the early stages of AI adoption[2], while AI investment is rising and innovation is accelerating, too many leaders risk falling into the trap of complacency, satisfied with early wins rather than pursuing the transformative potential AI offers. The real challenge isn't just adopting AI as a differentiator—companies must ensure their AI strategies are actionable at every level of the business, turning bold visions into sustainable, transformative outcomes.

AI implementation CSFs

But what are the **Critical Success Factors (CSFs)** to ensure the effectiveness of AI transformations?

According to David Parsons and Chad Corneil of Slalom (an international business and technology consulting company), the CSFs likely to have the biggest impact on bridging the gap between the expected and realized value of AI are: Put people first; Anchor on value; Challenge operating models; Establish guardrails; Align on a roadmap; and Evolve services and information foundations for AI[3].

Professor Victoria Uren of Aston University, identified, in a recent research study, the following CSFs: Address real, carefully scoped business problems; Match the AI technology to the problem; Build understanding of AI beyond the development team; Invest to generate high quality data; Develop data capabilities; and Embed AI expertise in the organization[4].

The results of a Brunel University study indicate that technology readiness, security, privacy, customer satisfaction, perceived benefits,

demand volatility, regulatory compliance, competitor pressure and information sharing among partners are the most significant CSFs for adopting AI in the Food Supply Chains[5].

According to my international IT, Privacy and AI experience, the **Critical Success Factors (CSFs)** to ensure the effectiveness of ethical and beneficial AI implementations, are:

CSF 1: Leadership. To envision the way forward, to commit to AI, to support and sponsor staff and AI projects, resolve issues and oversee all AI activities. To improve the leadership qualities of your top managers in terms of AI, see: Appendix 41: AI Cultural Resilience Improvement Plan (of book 1 listed at the end).

CSF 2: Principles. To establish ethical and other beneficial to society guidelines, inform all AI stakeholders and developers, and ensure their use in AI.

CSF 3. Regulations & Standards: To ensure AI projects and AI systems outputs comply with AI, security and privacy regulations.

CSF 4: AI Strategy. To set realistic objectives and targets and ensure AI aligns well with other business objectives.

CSF 5: AI Technology. To acquire, install and use specialized IT hardware and software capable to run AI systems as best as possible.

CSF 6: Organization. To establish organizational structures, appoint officers, and organize staff and teams to manage and drive AI implementations.

CSF 7: Data. To locate, organize, manage and use internal and external data in an efficient and moral way for AI projects.
CSF 7: Skills. To develop the necessary skills and dexterities for corporate staff to enable the development and operation of viable and ethical AI systems.

CSF 8: Suppliers. To locate, use services and manage AI vendors for specialized AI equipment, software, platforms, data, algorithms and models.

CSF 10: Support Tools. To develop plans, policies and procedures to support the development and operation of ethical and effective AI systems/solutions.

Conclusion

In conclusion, my recent book (**AI Management Framework: Practical Solutions for Ethical AI Deployment and Continuous Improvement**), listed below, provides you with all you require to establish manage and operate your whole AI Ecosystem and its particular elements (principles, organization, data, systems, tools, etc.).

Remember that to be successful and ethical in AI, it is best that you:
(1) Transcend the spiritual level and connect with the deep values of why you want to achieve with AI;
(2) Use ethical principles and a set of vision, mission and values statements to permeate all your actions;
(3) Start your AI journey with a small pilot project so that you avoid major disasters and learn before you deploy AI across your complete organization; and
(4) Get adequate resources and implement AI actions and hard controls (policies and procedures, etc.) with a soft hand and an open mind.

I am ending this wonderful journey into AI, with a poem I have written for your kind consideration:

Artificial Intelligence

Modern Artificial Intelligence
Fantasy without virtuous responsibility
With algorithmic logic without morality
Potentially awful, very destructive

It is in life, around us, everywhere
Not only in the world of the ideas.
It will threaten our existence in the future
If not tamed with humanism and ethics

Wake up all you humble users from your sleep of fate
Get out of the doom's end faster
Put human values, with feeling, into continuous action

And check her (AI) out before she sends you ingloriously to the bottom of the abyss.

In the end, as long as, we humans, retain and maintain control over our decisions and have the freedom to choose whether to embrace technological advancements (AI and other), we will always retain our humanity and preserve our physical world, as well as our psychosocial and mental worldview and mindset.

End Notes

1. As quoted on page 55, in book '12 Bytes', published by Vintage Books, U.K., 2022.
2. For more details, see: https://www.slalom.com/us/en/insights/slalom-ai-free-research-report-2024?=d
3. For more details, see: **https://www.slalom.com/us/en/insights/six-critical-success-factors-to-realize-ai-potential**
4. For more details, see: Critical Success Factors for Artificial Intelligence Projects, Victoria Uren, ston Business School, Aston University Birmingham B4 7ET, U.K. **https://publications.aston.ac.uk/id/eprint/41673/1/euroma2020_full_paper_CSF_AI_1.5.pdf**
5. For more details, see: Critical Success Factors Influencing Artificial Intelligence Adoption in the Food Supply Chains **https://bura.brunel.ac.uk/bitstream/2438/22997/3/FullText.pdf**

Bibliography

For more details on ethical AI implementation, see my 2 books, outlined below.

Kyriazoglou John (2025): AI Management Framework
https://link.springer.com/book/10.1007/979-8-8688-1536-2

Kyriazoglou John (2025): Information Security Incident and Data Breach Management
https://link.springer.com/book/10.1007/979-8-8688-0870-8