

Scotland Launches Entrepreneurial Plan-of-Action fit for Digital Era

By Bill Magee

Entrepreneurial activity represents the lifeblood of Scotland's centuries-old globally renowned innovations. Truly enterprising, if at times refreshingly eclectic just think of the "fs" for fingerprinting to the flushing toilet, there's also the "ts" for telephone and television.

Now a Scottish Government \$400 million (£321m) enterprise agency-led plan of action has been launched. One that gives a New Year digital boost to a new generation of bright start-ups aiming to scale up their respective ventures in the coming months.

It should be all digital-systems-go in the year ahead but in this Internet Age it has kind of, well, all got different. Very different.

It is not an understatement to view artificial intelligence - manifesting itself as Gen(erative)AI - as at the forefront of revolutionising how we communicate with each other.



A-Z of bright Scots inventions

AI Big Ticket item

Unfortunately, inextricably-linked to any entrepreneurial plan is the danger of what has become labelled as "exploitative AI" that's on the rise along with growing ethical concerns. Especially when it comes to handling (or rather being handled by?) generative artificial intelligence.

GenAI is Big Tech's Big Ticket Item with a promise of trillions of dollars to be won. But when it is used for weaponised and illegal ends this can result in deceiving, defrauding and endangering each and everyone of us.

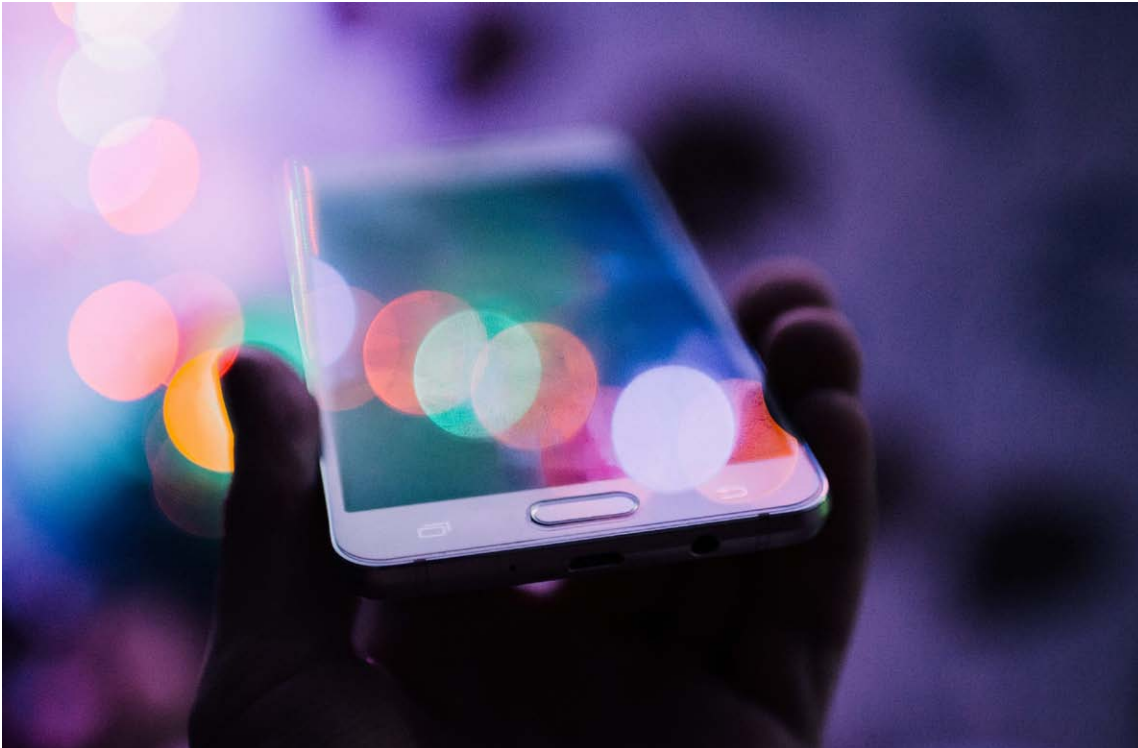
It is clear public and private bodies - a single agency, organisation, even country - can ill afford to go it alone. Cyber attacks rose by 30 per cent in the second quarter of 2024, with no indication of a let up.

MIT Technology Review claims AI is moving "a million miles a minute". What with a deluge of weekly product launches, fresh features and other innovations coming hard-and-fast at an entrepreneur, at whatever stage of a venture.

The Institute's FutureTech folks point to in a newly-launched database and repository. It contains no less than 777 perceived AI risks. And counting. Significant numbers are caused by human error, innumerable "bad actor" scams through malicious intent.

The aim of this database is to create a foundation for a more coordinated, coherent and complete approach towards defining, auditing and managing the risks caused by AI systems. The sheer scale of change is digitally mind-boggling.

It all seems a million miles from a column I wrote for Hi-Tech Scotland way, way back in 2007/8 all about how Big Tech fostered the early highly-ethical concept of a "global village".



We were all invited to ride the Information Superhighway

Now, however, as independent website Wikipedia puts it: "We were promised a place of free, collaborative and accessible knowledge...(not) under constant threat..a free and fair place...not distracted by ads or whims of wealthy owners."

Superchips, supercomputers, and supersize headaches

A group of Apple researchers have published a paper claiming large language models - backbone of AI's most popular products like ChatGPT and Llama - show "no evidence of formal reasoning". They say LLMs

intelligence claims remain highly overstated.

The Economist says the years ahead will be full of "superchips, supercomputers, and supersize headaches." It is clear an entrepreneurial venture must double-down to protect one's precious data.

A Digital Audit for Institute of Directors (Scotland), coming out at the turn of the year, is timely has a message both loud and clear: planned change must empower not disrupt planned transformational change, stresses the author IoD Fellow, Scot McGlinchey, who warns far too many organisations - across all the sectors - make the mistake of allowing fad to drive AI innovation at the expense of practical value.



Scott with his MD Alasdair Hendry

Rather, a pragmatic approach can identify a clear use-case from the outset. Only then can a focus based on delivering sustainable and realistic AI applications that are highly tailored be achieved, urges Scott, who has held various executive roles, including that of CEO, at Exception, Scotland's leading indigenous technology, digital, cloud and AI transformational specialists.

Gartner estimates a mighty eighty-eight per cent of all enterprise AI projects fail because of complexity, misaligned goals, poor scalability, vague use-cases and employee mistrust. With this in mind, it's well worth elaborating on an "empower not disrupt" approach.

AI advances the notion of limitless possibilities but if you are wondering how artificial intelligence can act as a *digital colleague* - think of a high-performing assistant integrating into your team's daily workflow. AI is getting smarter.

Beyond handling routine tasks and supporting customer service, it is now able to contribute towards strategic decision-making, and is even discovering new drugs and bespoke clinical treatment options for life threatening illnesses.

How much AI is ever enough?

It's all exciting stuff, this new digital frontier of ours. But tipping the balance of "too much AI" can disrupt the very core fabric of the human-centric world we live in. How much AI is enough AI - without impacting the broader organisational workforce?

That's the conundrum CIOs are increasingly facing with a fear AI becomes a *replacement* for human processes. Pragmatic AI positions the phenomenon as a tool that enhances workflows, empowers employees, and maintains the integrity of human led decision-making.

Put simply, the pragmatic approach treats AI as a "digital colleague" especially viable in regulated or unionised environments. Instead of focusing on replacing human interaction, it supports employees.

How? By taking on repetitive, data-heavy tasks allowing them to focus on more intricate high-value activities. The concept isn't the same as "automation" that has often been built to *replace* human roles.

A "synthetic" colleague works *alongside* employees supporting instead of substituting them. Think of it as a high-performing assistant that integrates into your team's daily workflow.

Handling mundane tasks, reducing errors and supporting human decision-making. An example: how the digital colleague might triage customer interactions working through routing enquiries, while assigning high-priority cases for its human colleague to handle.

Entrepreneurial sound-bytes

Or it might work in the background to surveil volumes of high-risk transactions - *in real time* - and the moment it detects something fishy instantly alerts a human for their judgement.

Handled correctly AI can lead to enhanced productivity, reduced operational costs, higher employee engagement, scalability and improved decision-making all round.

Scot offers up a cluster of entrepreneurial "sound-bytes" that can make all the difference towards success - or perhaps not - of an entrepreneurial venture in this Digital Age.

AI and data tools help research, processes and efficiencies, provide flexibility and autonomy not often available in traditional careers and achieve borderless potential markets.

Also ensure tech infrastructure is readily available and scaleable without costs of ownership, solve the needs and wants of the consumer/customer - not just tech-led as with inventions.

And crucially:



"Entrepreneurial traits still needed such as belief, passion, tenacity" concludes Scott McGlinchey in his Digital Audit for IoD (Scotland)...