SIX BUSINESS BENEFITS OF ON-DEVICE AI AND HOW TO ACHIEVE THEM

Since ChatGPT was unveiled in late 2022, consumer and enterprise interest in generative Artificial Intelligence (AI) has increased. The technology is developing so rapidly, increasingly transforming the way people work. By readying their IT landscape now, enterprises will be able to reap the benefits of AI; if they don't, they risk losing competitive advantage.

To maximise the gains enabled by AI, organisations need to review the devices their employees use, as well as their operating systems and data. Computacenter offers expertise and support to help organisations source, deploy and integrate the right technology, then maintain and manage their digital operations.

LET'S GO →

COMPUTACENTER BRINGS IT ALL TOGETHER

Computacenter works closely with organisations to understand their objectives and to identify employee preferences and personas by unlocking insights into how, when and where people work. This enables us to recommend devices that deliver the best outcomes for employees and the organisation.

It's also vital to explore whether devices are running the best operating system to take advantage of ever-more advanced AI tools. For example, Microsoft's Copilot+ is available only on Windows 11. Computacenter offers proven processes to help organisations upgrade to Windows 11 smoothly and rapidly. We can identify devices unable to run Windows 11 to enable their replacement, analyse applications to reveal any that need remediation to be compatible with Windows 11 and can support people to help them get the most from the new operating system.

Data quality is a further consideration. Data siloes, poor data quality and a lack of data security can all hinder the performance of AI tools. Feeding poor quality data into AI algorithms will inevitably produce inaccurate or misleading outcomes. Computacenter can help organisations to assess their data needs and implement data platform modernisation where required.

70 per cent of people would delegate as much work as possible to AI to lessen their workloads.[1]

THE RISE OF ON-DEVICE AI

Conventionally, generative AI has run in the cloud on data center servers. Qualcomm Technologies Inc. has been active in the development of on-device AI. Rapid advances in the technology have been spurred by the rise of smaller generative AI models and vastly improved on-device processing power. The result is that many AI-supported tasks can now be run entirely within a user's device, such as their mobile or laptop, with only the most demanding queries being run in cloud-based AI, in a hybrid approach.

Snapdragon® compute platforms feature built-in neural processing that enables powerful AI algorithms to be run on the device, boosting performance by freeing up the main CPU to work on other tasks.

Designed for the new generation of AI PCs

Snapdragon X Elite Compute Platform delivers up to 4.5x faster AI performance and NPU processing power over competitors, with near-zero latency for AI-enhanced applications including Microsoft Teams, Excel, PowerPoint and unique Copilot+ features.[2]

1. Will AI Fix Work?, Microsoft, May 2023.
2. Qualcomm Unleashes Snapdragon X Elite: The AI Super-Charged Platform to Revolutionize the PC, Qualcomm, October 2023.

SIX BUSINESS BENEFITS OF ON-DEVICE AI

Improved security

Avoiding the need to send data to remote servers reduces the risk of data breaches. On-device AI inherently helps protect users' privacy since queries and personal information remain solely on the device, which helps to solve the challenge of protecting an organisation's confidential information.

Enables work anywhere

With on-device AI, data is processed locally, without relying on a cloud-based server. This means the device can operate even when there is no internet connection, which is particularly useful for employees who need to work in remote locations or in areas with poor connectivity.

Multi-Day Battery Life*

Snapdragon compute's System on Chip (SoC) architecture features high energy efficiency for long battery life. Snapdragon X Elite can deliver up to 2X faster CPU performance and match competitor performance at 68 per cent less power.* Battery life is further enhanced by on-device AI acceleration that optimises workloads.

Enhanced collaboration

Snapdragon X Elite on-device AI enhances many of Windows 11's advanced features that improve the employee experience of online meetings. For example, superior noise suppression eliminates even loud distracting background noises such as loud public music or coffee machines when a user is joining from a café. Similarly, background blur, auto-framing and gaze correction help ensure participants can be seen clearly for fully engaged meetings.

Raised productivity

Reducing or eliminating the need to transfer data between the device and the remote AI server reduces latency which results in faster processes and higher productivity. Furthermore, running tools such as Microsoft 365 Copilot enables users to quickly write and summarise documents, analyse data or turn simple written ideas into presentations using generative AI embedded into Word, Excel, PowerPoint, Outlook and Teams.

Reduced IT costs

The per-query costs of running generative AI in the cloud are ballooning as providers deploy ever more data center infrastructure and cope with rising energy costs. It has been estimated that an exchange with AI costs ten times more than a standard keyword search.[3] The growth of large-scale AI has led to some forecasts predicting that data centres will draw up to 21 per cent of the world's electricity supply by 2030.[4]

Inevitably such costs are being passed on to users, with fees likely to continue increasing to meet the rising costs or until alternative business models can be found to offset the costs. Shifting AI processing from the cloud to the device not only reduces the cost to users, it can also reduce the costs to cloud service providers and networking service providers.

DISCOVER MORE

To learn more about how Computacenter and Qualcomm Technologies can help enhance your ways of working with laptops powered by Snapdragon, please contact your Computacenter Account Manager, email **enquiries@computacenter.com** or call **01707 631000**.

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About Computacenter

Computacenter is a leading independent technology and services provider, trusted by large corporate and public sector organisations. We are a responsible business that believes in winning together for our people and our planet. We help our customers to Source, Transform and Manage their technology infrastructure to deliver digital transformation, enabling people and their business. Computacenter is a public company quoted on the London Stock Exchange (CCC.L) and a member of the FTSE 250. Computacenter employs over 20,000 people worldwide.

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Battery life varies significantly based on device, settings, usage, and other factors.

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