IDIOMA: INGLÊS

Área 2

* Indica uma pergunta obrigatória

1. E-mail *

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2. ÁREA *

Marcar apenas uma oval.

◯ 2 - Ciências Exatas e da Terra, Engenharias

3. NOME DO CANDIDATO *

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4. NÚMERO DA INSCRIÇÃO *

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5. NÚMERO DO CPF *

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Leia o texto e responda as questões a seguir em Português. Todas as questões devem ser respondidas de acordo com o texto. As respostas digitadas neste formulário eletrônico constituirão o ÚNICO documento válido para correção da prova.

HOW MOBILE PHONE NETWORKS ARE EMBRACING AI

19 June 2024
Matthew Wall
Technology reporter

Our mobile phones are getting a whole lot smarter, but what about the telecoms networks they run on?

Last week, Apple became the latest mobile phone firm to announce that it will be adding artificial intelligence (AI) to its handsets' operating system.

Called Apple Intelligence, and also due to be incorporated into the phones' Siri chatbot, it aims to make them easier and quicker to use. And turn Siri into even more of a personal assistant. It follows after Samsung's Galaxy AI, and Google's Gemini AI for its own Pixel handsets.

This increased of use AI means phones will be doing a lot more computing, and that means they'll produce and use a lot more data. This is going to put more strain on the mobile phone networks, such as the UK's O2, EE, Vodafone and Three. To help them cope, telecoms firms such as these are also increasingly introducing AI, says Ian Fogg, director of network innovation at research consultancy CCS Insight.

"Network operators are using AI to manage the radio frequencies dynamically, to provide an optimum level of service. And to manage cell towers, for example, so they use less energy at times of lower demand."

Such increased use of AI to look after mobile phone networks is now very much global. In South Korea, Korea Telecom is now able to localise and fix faults within a minute, thanks to AI-enabled network monitoring, says Alex Sinclair, chief technology officer of the GSMA, the body representing global mobile operators. Meanwhile, AT&T in the US is using predictive, AI algorithms schooled on trillions of previous network alerts to warn it when things are about to go wrong.

Other operators, like Vodafone, are using AI digital twins - virtual digital replicas of real-world equipment, such as masts and antennas — to constantly monitor how their networks are performing. And AI is also being used to manage how increasingly massive data centres use energy to keep their servers cool and optimise storage capacity.

The explosion in data created by the increased use of AI is another reason why telecoms firms around the world are continuing to invest in so-called 5G Standalone mobile networks. These use new, dedicated 5G infrastructure rather than relying in part on upgrading the older, less efficient 4G system.

5G Standalone offers much higher speeds and capacity. But some experts believe that even this higher-spec technology won't be sufficient to cope with the demands of the AI era.

At this year's Mobile World Congress in Barcelona, for example, some experts argued that AI won't be able to reach its full potential until the roll out of 6G from 2028.

While many commentators worry that AI could lead to massive job losses in the telco sector, as menial tasks are increasingly automated by software, GSMA's Mr Sinclair believes it could actually be empowering, particularly for lower-income countries.

"AI will give emerging markets a specialist tool to help them catch up," he argues. "We're in favour of trying to democratise AI so that it's not just the wealthy who can use it."

He believes that some of the doom-mongering around AI has been overdone, and so he strikes a more optimistic tone.

It's a view shared by CCS Insight's Ian Fogg: "AI has been around for some years, used for specific [telecoms] cases. But now it's being applied in many more areas - network, devices, software - such that every tool we use now has the potential to become much, much better.

"AI has the potential to make networks greener, and the world a more efficient place."

Fonte: Adaptado de: https://www.bbc.com/news/articles/c6pp1nvw5zwo para fins educativos

6. **QUESTÃO 01 – Como as empresas de telecomunicação estão adaptando suas redes ao crescente uso da inteligência artificial nos smartphones?** *

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7. **QUESTÃO 02 – O texto menciona redes móveis como O2, EE, Vodafone e Three. Que tipo de desafio essas redes enfrentam atualmente e por que isso está acontecendo?** *

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8. **QUESTÃO 03 – O que Ian Fogg quer dizer ao afirmar que a inteligência artificial pode tornar as redes "mais ecológicas" e o mundo "mais eficiente"?** *

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9. **QUESTÃO 04 – Segundo Alex Sinclair, qual é o papel da inteligência artificial para os países de baixa renda e como ele acredita que essa tecnologia pode ajudar essas nações a se desenvolverem e diminuírem desigualdades?** *

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10. **QUESTÃO 05 – Qual a opinião dos especialistas sobre a eficiência da tecnologia 5G Standalone frente às demandas da inteligência artificial?** *

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