<p style="text-align:center; color:red;">**Embargoed until 2pm GMT 17th December**</p>

IOHK announces integration with Wolfram Alpha, in preparation for smart contract roll-out

- Cardano joins a select group of blockchain platforms integrated into Wolfram's industry leading technology and knowledge base including ARK, Bitcoin, bloxberg (Max Planck Digital Library) and Ethereum.

- Partnership will include work on avant garde oracles, a necessary component of advanced smart contracts

- Collaboration will allow users to interrogate the Cardano blockchain via Wolfram Language functions and natural-language queries.

17th December, 2020: IOHK, the leading blockchain research and development company and the developers of third generation blockchain and smart contact platform Cardano, has today announced an integration led by Wolfram Blockchain Labs, a subsidiary of Wolfram Research, creators of the Wolfram|Alpha computational knowledge engine. Wolfram Alpha is a natural language processing tool and the world's largest source of computational knowledge, as well as a provider to Apple's Siri and Alexa intelligent assistants. As part of the collaboration, Wolfram and IOHK will work together to integrate Cardano's blockchain data into Wolfram Alpha, using the curated database that founder [Stephen Wolfram](#) has amassed over more than 30 years.

From a blockchain perspective, Wolfram provides the most advanced computational knowledge needed for oracles; the sources of external information that allow 'smart contracts' to execute, which can take the form of election results, sports results or the rates of cryptocurrencies. Through this collaboration, Cardano will be able to offer a way for developers to integrate advanced external data into their smart contracts, as the ongoing roll-out of Cardano's smart contracts functionality matures. Following the partnership, [Wolfram Blockchain Labs](#) course material will now include Cardano-specific content, allowing developers to learn how best to use Wolfram tools and Oracles for Cardano.

Earlier this month, IOHK announced the planned launch of two smart contract developer environments (devnets) for Cardano – KEVM and IELE. These will allow smart contracts to be run on the Cardano blockchain, without the need to be familiar with a Cardano-specific programming language.

Through the collaboration, users will also be able to access a powerful tool to query the blockchain, something that no other technology can currently offer. Uniquely, users will be allowed to query for information by typing sentences such: "Which is the block with the highest amount of fees?" or "Which is the token that has the highest amount of transactions?" and obtain real time answers.

IOHK will also work closely with Wolfram Blockchain Labs, which provides distributed ledger technology ecosystems with the tools necessary to assist in the development of a wide variety of smart, contract-based applications as part of an overall mission of enabling blockchain-based commerce and business model innovation.

Charles Hoskinson, CEO of IOHK, said: "Wolfram Blockchain Labs have particularly stringent standards when considering which blockchain platforms to integrate into their toolset. We are therefore particularly pleased to be one of a select group of blockchain platforms Wolfram Blockchain Labs have chosen to integrate into their platform. Given our shared commitment to scientific rigour, our partnership makes perfect sense and promises to add value to the products offered by both companies."

Jon Woodard of WBL said, "We continue to be impressed by Cardano's vision and work toward creating a global financial operating system, and we're excited to extend Wolfram technology's tools to support their mission."

Wolfram and IOHK will be rolling out the functionality in 2021 and it will be available later in the year.

This announcement will be discussed on the December Cardano development update available here from GMT 17:30, 17th December, 2020

About IOHK
IOHK is an R&D and product engineering company, committed to using peer-to-peer innovations to provide 21st century services to the 3bn who don't have them.

We build blockchain based products for governments, corporations and academic institutions and upskill people across the world, empowering them to solve the most pressing problems faced by people in their countries.

We have core beliefs in decentralization, privacy, economic identity and financial empowerment for everyone, and stand opposed to centralized control and bureaucracy.

For more information - including interview opportunities, contact:
media@iohk.io

About Wolfram Blockchain Labs
Wolfram Blockchain Labs (WBL) provides solutions and services powered by the Wolfram Language, Mathematica, Wolfram|Alpha and assorted Wolfram technologies. The foundational technologies behind WBL have been forged and proven over three decades of Wolfram's cutting-edge R&D. WBL is now injecting that sophisticated computation and knowledge into visionary solutions for distributed ledger technologies. Learn more at wolframblockchainlabs.com