GLOSSARY OF TECHNICAL TERMS

This glossary of technical terms contains explanations of certain technical terms used in this document. These terms and their meanings may not correspond to standard industry meanings or usage, and may not be comparable to similar terms adopted by other companies.

"agility"	the ability of a system to respond rapidly and effectively to changes in market demands, customer needs, or technological advancements. In software development, it refers to methodologies that emphasize iterative development, collaboration, and adaptability
"AI"	artificial intelligence
"AML"	Anti-Money Laundering, a set of laws, regulations, and procedures designed to prevent the illegal generation of income and the concealment of the origins of illegally obtained money
"API"	Application Programming Interface, a set of rules and protocols that permit software applications to communicate with each other and exchange data
"atomic settlement"	a settlement mechanism in which the transfer of an asset and its corresponding payment are executed simultaneously as a single, indivisible transaction
"autonomous"	capable of executing tasks independently without human intervention
"BaaS"	blockchain-as-a-service
"back-end"	the part of an application that is not directly accessed by the user, which is responsible for data processing, business logic, and communication with databases and other systems in software architecture
"back-office system"	the internal systems and processes within a financial institution that support business operations but do not involve direct customer interaction
"banking products"	financial instruments and services offered by banks to their customers, such as deposit accounts, loans, credit cards, and investment services
"bid success rate"	the percentage of bids submitted during the relevant period that resulted in a contract award. It is calculated by dividing the "Number of newly awarded projects" by the "Number of bids" for the same period and expressing the result as a percentage

"big data analytics"	the process of examining large and varied data sets to uncover hidden patterns, unknown correlations, market trends, customer preferences, and other useful information that can lead to more informed business decisions
"biometric authentication"	a security process that verifies a user's identity using their unique biological characteristics, such as fingerprints and facial recognition
"blockchain"	a decentralized, distributed ledger technology that records transactions across a network of computers in a secure, transparent, immutable, and chronological manner
"CAGR"	compound annual growth rate
"CAPTCHA"	Completely Automated Public Turing test to tell Computers and Humans Apart, a security mechanism that presents challenges designed to be easily solved by human users but difficult for automated programs, used to verify that a request is being made by a human rather than a bot or automated script
"CBDC"	central bank digital currency, digital forms of central bank money created and issued by central banks, representing a country's official currency in digital form
"cloud-native"	an approach to building and running applications that fully leverage cloud computing principles, using technologies like microservices, containers, and dynamic orchestration for scalability and resilience
"compliant Web3"	an application of Web3 technologies that operates within established regulatory frameworks, incorporating compliance controls for activities
"composable"	a design principle in which system components can be selected and assembled in various combinations to satisfy specific user requirements, allowing for greater flexibility and customization
"configuration"	the process of setting up and arranging the parameters or components of a software system or hardware to meet the specific requirements of a user or an application
"contract value of newly awarded projects"	the total value of all new contracts signed during the relevant period. This is calculated by summing the stated contract values of all newly awarded projects
"contract value of completed projects during the year/period"	the total contract value of all projects that were completed within the relevant period. This is calculated by summing the full, original contract values of all projects that were completed during that period

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"conversion rate"	the number of customers who contributed revenue solely under the project-based model in the previous year and who contributed revenue under the time-and-material model in the current year, divided by the total number of customers who contributed revenue solely under the project-based model in the previous year. For a period of less than one year, the conversion rate is calculated as the number of customers who contributed revenue solely under the project-based model in the prior full year and who contributed revenue under the time-and-material model in the relevant period, divided by the total number of customers who contributed revenue solely under the project-based model in the prior full year. The calculation of customer conversion rate excludes customers whose revenue was not obtained through our active marketing efforts, but rather arose from our accommodation of arrangements made by our bank customers. Such customers mainly comprise software service providers whose personnel are designated by our bank customers to use our development sites
"core banking system"	a centralized software platform used by banks to manage their daily operations, including processing deposits, loans, and payments, and maintaining customer account information
"data cleansing"	the process of detecting and correcting or removing corrupt or inaccurate records from a record set, table, or database
"data sovereignty"	the principle that digital data is subject to the laws and governance of the country or jurisdiction where it is collected, stored, or processed
"data validation"	the process of ensuring data meets defined rules and standards for accuracy, completeness, and consistency before use
"data-driven"	an approach to decision-making that is based on the analysis and interpretation of data rather than on intuition or personal experience
"device fingerprinting"	a technique used to identify and track a computing device by collecting a unique combination of its hardware, software, and configuration details
"digital asset"	a digital representation of value or a set of rights, which is stored and transferred electronically using distributed ledger technology or similar technology
"digital channel"	an electronic means through which customers can interact with a business, access information, and conduct transactions
"digital currency"	a form of currency that is available only in digital or electronic form, and not in physical form

"digital transformation"	the process of integrating digital technology into business operations to improve efficiency, customer experience, and business performance
"distributed ledger technology"	a technology that enables the recording, storage, and updating of data across a distributed network of computers without requiring a centralized authority
"DvP" or "delivery-versus-payment"	a securities settlement mechanism that links the transfer of securities to the transfer of funds, ensuring that delivery occurs only if payment occurs
"e-HKD"	the digital version of the Hong Kong Dollar, authorized by the Hong Kong Monetary Authority as part of its CBDC initiative
"encryption key"	a piece of information (usually a string of characters) used by an encryption algorithm to convert data into a secure, unreadable format and to decrypt it back to its original form
"encryption"	the process of converting data or information into a code, especially to prevent unauthorized access
"end-customer"	the final user of a product or service, who may not be the direct customer of the service provider
"end-to-end"	a term describing a process or service that covers all stages from beginning to end, providing a complete and functional solution without the need for third-party components
"evidence-based recommendations"	suggestions or advice that are supported by verifiable data and factual analysis rather than by speculation or opinion
"exception handling processes"	procedures designed to manage and resolve unexpected events or errors that occur during the execution of a program or business process, ensuring the stability and integrity of the system
"explainable AI"	a set of techniques in artificial intelligence aimed at making AI models transparent and understandable for humans. It focuses on providing clear, understandable explanations for how an AI system arrives at its decisions, predictions, or outputs, enabling users to comprehend, trust, and effectively manage these systems
"financial infrastructure"	the underlying systems and technologies that support a market's financial system
"fine-tuned"	an adjusted AI model after the process of taking a pre-trained model and further training it on a smaller, domain-specific dataset to adapt it to a particular task or improve its performance in a specific context in machine learning

"FINNOSafe"	a compliant Web3 platform that embeds compliance rules into token smart contracts for automated management of the token lifecycle
"FINNOSmart"	a generative AI platform for financial institutions that provides customized small language models, modular architecture, and governance frameworks for sensitive data and compliance
"fintech"	financial technology
"general ledger"	a company's main accounting record, which uses double-entry bookkeeping to post a complete record of all financial transactions
"generative AI"	artificial intelligence systems capable of generating new content, including text, images, code, and other outputs, based on patterns learned from training data
"GHG"	greenhouse gases
"intelligent automation"	the combination of artificial intelligence, machine learning, and robotic process automation to automate complex business processes and workflows, enabling systems to learn and adapt as they work
"internal knowledge sources"	a collection of selected and organized internal data, documents, and information within an organization that is used as a trusted foundation for training AI models or for retrieval by information systems
"KYT"	Know Your Transaction
"LLM"	large language model
"low latency"	the ability of a computer network or system to process a very high volume of data messages with minimal delay or latency. It is a critical requirement for systems that require near-real-time data access, such as high-frequency trading platforms
"mBridge"	a multi-central bank digital currency platform for wholesale cross-border payments developed by the Hong Kong Monetary Authority, the Bank of Thailand, the Central Bank of the United Arab Emirates, and the Digital Currency Institute of the People's Bank of China, with support from the Bank for International Settlements Innovation Hub
"money market fund"	a type of mutual fund that invests in high-quality, short-term debt instruments, cash, and cash equivalents

"multi-data centers"	the use of multiple, geographically dispersed data centers to host an organization's IT infrastructure, providing redundancy, disaster recovery capabilities, and improved performance by locating data closer to users
"multi-factor authentication"	a security process that requires users to provide two or more different verification factors to gain access to a resource
"NOx"	nitrogen oxides
"number of bids"	the total count of formal proposals submitted to prospective and existing customers for new projects within the relevant period
"number of newly awarded projects"	the total count of new projects for which we have entered into a legally binding contract with a customer during the relevant period
"number of ongoing projects at the beginning of the year/period"	the total count of active projects with work in progress as of the first day of the relevant period. This figure is equivalent to the "Number of ongoing projects at the end of the year/period" from the immediately preceding period
"number of ongoing projects at the end of the year/period"	the total count of active projects with work in progress as of the last day of the relevant period. This figure is calculated as the "Number of ongoing projects at the beginning of the year/period," plus the "Number of newly awarded projects" during the period, less the "Number of projects completed" during the same period
"number of projects completed"	the total count of projects for which final acceptance has been formally received from the customer during the relevant period
"omni-channel"	an approach to customer service that integrates multiple communication and transaction channels, including online, mobile, and physical touchpoints
"on-chain finance"	financial services and transactions conducted directly on blockchain networks
"on-premises"	a software and hardware delivery model where the computing infrastructure is located within the physical confines of an organization, rather than being hosted by a third-party cloud provider
"outstanding balance of contract value at the beginning of the year/period"	the aggregate remaining contract value of all ongoing projects as of the first day of the relevant period. This balance represents the portion of the total value of signed contracts for which revenue has not yet been recognized. This figure is equivalent to the "Outstanding balance of contract value at the end of the year/period" from the immediately preceding period

"outstanding balance of contract value at the end of the year/period"	the aggregate remaining contract value of all ongoing projects as of the last day of the relevant period. This balance represents the portion of the total value of signed contracts for which revenue has not yet been recognized
"payment rail"	an underlying network or infrastructure that facilitates the transfer of funds between payers and payees
"payment-versus-payment"	a settlement mechanism for foreign exchange transactions that ensures a final transfer of one currency occurs only if a final transfer of the other currency or currencies also takes place
"PM"	particulate matter
"programmable"	a characteristic of a digital asset or system, such as a smart contract or a central bank digital currency, that allows for the embedding of automated rules, logic, or conditions that govern its use and transfer
"Project Ensemble"	a Hong Kong Monetary Authority initiative to develop a wholesale CBDC and related infrastructure to support Hong Kong's tokenization market. It focuses on enabling interbank settlement of tokenized deposits and assets, starting with a wholesale CBDC sandbox
"project-based"	a type of work engagement where services are delivered for a specific project with a defined scope, timeline, and set of deliverables, as opposed to ongoing, continuous services
"Proof-of-concept"	a small-scale demonstration or prototype designed to show that an idea, approach, or technology is feasible and can work in practice
"RAG"	retrieval-augmented generation
"real-time anomaly detection"	the process of identifying unusual patterns or outliers in data streams as they are being generated, enabling immediate alerts and responses to potential issues such as fraud, system failures, or security breaches
"real-world assets"	physical assets or traditional financial assets, such as real estate, commodities, stocks, or bonds, that are represented as digital tokens on a blockchain
"regulated digital money"	a digital form of money issued and operated within a jurisdiction's regulatory framework, which may include central bank digital currencies, tokenized deposits, or stablecoins that are subject to government oversight
"regulated financial institutions"	banks, credit unions, insurance companies, and other financial entities that are subject to supervision and regulation by a government authority

"regulatory authorities"	central banks, government agencies or public bodies responsible for supervising and enforcing laws and regulations within a the banking and finance industry
"regulatory compliance"	the process of ensuring that operations, products, and services comply with applicable laws and regulations
"regulatory reporting"	the process by which regulated firms submit data and reports to their respective regulatory authorities to demonstrate compliance with applicable laws and regulations
"retention rate"	the number of customers who contributed revenue to us in both the prior year and the current year divided by the total number of customers in the prior year. For a period of less than one year, the customer retention rate is calculated as the number of customers who contributed revenue to us in both the prior full year and the relevant period, divided by the total number of customers in the prior full year. The calculation of customer retention rate excludes customers whose revenue was not obtained through our active marketing efforts, but rather arose from our accommodation of arrangements made by our bank customers. Such customers mainly comprise software service providers whose personnel are designated by our bank customers to use our development sites
"risk management"	the process of identifying, assessing, and mitigating risks that could adversely affect an organization's operations or objectives
"SaaS"	Software-as-a-Service
"sandbox"	A sandbox is an isolated environment used for testing applications or financial innovations safely without impacting the real system or market
"scenario"	a specific set of real-world conditions or use cases where a particular technology is practically applied to address defined challenges or achieve targeted outcomes
"SLM"	Small Language Models. Language models with fewer parameters than LLMs, designed to be more efficient and suitable for specific use cases or domains while maintaining reasonable performance
"smart contracts"	programs stored on a blockchain that automatically execute when predetermined conditions are met
"SMS"	Short Message Service, a text messaging protocol that enables the transmission of short text messages between mobile devices over a cellular network, commonly used for user authentication and verification purposes
"SOx"	sulphur oxides

"syndicated loans"	loans offered by a group of lenders, referred to as a syndicate, who work together to provide funds for a single borrower
"system integration"	the process of sourcing hardware and third-party software based on customer needs and linking together different IT systems, services, and software applications physically or functionally to act as a coordinated whole
"time-and-material"	a revenue model where we charge customers for the actual hours worked plus the cost of materials used
"token"	a digital representation of an asset, utility, or a set of rights on a blockchain
"tokenize"	the process of converting rights to an asset into a digital token on a blockchain
"tokenized"	describes data or text that has been transformed into tokens
"tokenized asset"	refers to an asset (such as real estate, stocks, or commodities) that is digitally represented as tokens on a blockchain or distributed ledger
"tokenized deposit"	refers to a bank deposit that is digitally represented as a token on a blockchain or distributed ledger
"tokenized money"	refers to money (such as bank deposits or fiat currency) that is digitally represented as tokens on a blockchain or similar distributed ledger
"total revenue recognized at the end of the year/period"	the cumulative amount of revenue recognized from all projects up to the end of the relevant period
"traditional banking solutions"	established banking products, services, and systems that are based on conventional, often centralized, technology architectures, as opposed to modern fintech or decentralized finance solutions
"Web2"	the current dominant technology stack of centralized platforms, monolithic architectures, and intermediary-controlled services that traditional financial institutions and most internet applications still rely on today
"Web3"	a decentralized or distributed technology built primarily on blockchain technology