

FINTECH 2.0

(1967 - 2008)

Dari Analog ke Digital
From Analogue to Digital

Era utama kedua Fintech moden bermula pada tahun 1967 apabila pendigitan sistem analog ke dalam persekitaran digital mula terbentuk.

The second major Era of modern Fintech began in 1967 when the digitization of analogue systems into digital environments began to take shape.

1967

Pendigitan Sistem Analog

Sebelum kemunculan ATM, orang hanya dapat mengeluarkan wang tunai £10 dengan mengeluarkan baucar yang sah selama enam bulan. Penciptaan Mesin Teler Automatik (ATM) oleh Barclays Bank di UK. Ia dipanggil "juruwang robot," yang membolehkan pelanggan mendapatkan wang tunai sepanjang masa

Digitisation of Analogue Systems

Before the advent of the ATM, people were only able to withdraw £10 in cash by issuing a voucher that was valid for six months. The invention of Automated Teller Machine (ATM) by Barclays Bank in the UK. It was called a "robot cashier," allowing customers to get cash around the clock

1968
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1973

Perintis Sistem Pembayaran

Biro Inter-Komputer ditubuhkan di UK. Dikenali sebagai Bankers' Automated Clearing Services (BACS) diwujudkan untuk melangsaikan bayaran diantara bank-bank atau, bagi yang berkaitan dengan pasaran, ia akan memudahkan transaksi seperti memindahkan hak milik sekuriti.

Penubuhan Clearing House Interbank Payments System (CHIPS) adalah untuk memindahkan dan menyelesaikan perintah bayar dalam dollar Amerika

Society of Worldwide Interbank Financial Telecommunication (SWIFT) ditubuhkan untuk saling hubung sistem-sistem pembayaran domestik melangkaui sempadan.

The Pioneering of Payment Systems

The Inter-Computer Bureau was established in the UK. Commonly known as Bankers' Automated Clearing Services (BACS) intended to improve the existing clearing system by avoiding the need for paper documents. Clearing system is a system established to settle payments among banks, to facilitate transactions.

Clearing House Interbank Payments System (CHIPS) was established to transmit and settle payment orders in American dollars for some of the largest and most active banks in the world. Payment Order is an order or an instruction of a sender to a receiving bank directing transfer of funds to a designated account or beneficiary.

The first & the most commonly used in the banking channels to this day is the establishment of domestic & international payment systems. Society of Worldwide Interbank Financial Telecommunication (SWIFT) is established to interconnect domestic payments systems across borders.

1971

Bursa Saham Digital Pertama Dunia

Penubuhan NASDAQ menandakan permulaan operasi pasaran kewangan tanpa interaksi manusia

Di awal penubuhan, NASDAQ hanya menyediakan sistem sebut harga untuk harga saham. Ia tidak menyediakan kaedah untuk melakukan perdagangan elektronik

World's 1st Digital Stock Exchange

The establishment of NASDAQ, the beginning of the financial market operations with no human interaction.

In the early establishment, NASDAQ only provides a quotation system for the stock price. It does not provide a way to make electronic trade.

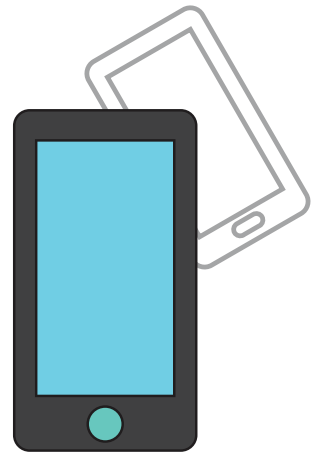
1972

Asal-usul Telefon Pintar

Kalkulator tangan TI 2500 Data Math yang dikeluarkan oleh Texas Instruments ialah asal-usul penciptaan telefon pintar hari ini.

Smartphone's Ancestor

The launch of handheld calculator TI 2500 Data Math by Texas Instruments which is the ancestor of today's smartphone.



1980
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1983

Permulaan Perbankan Internet

Perbankan internet diperkenalkan di AS (1980) dan di UK (1983) oleh Nottingham Building Society (NBS)

Pada tahun 1981, empat bank besar di Bandar New York telah menyediakan kemudahan kepada pelanggan mereka akses akaun peribadi melalui kabel talian telefon darat/tetap. Asalnya ia dirujuk sebagai perbankan 'dalam talian'. Namun, apa yang menjadi perbankan 'dalam talian' melalui Internet bermula pada tahun Oktober 1994 apabila Stanford Federal Credit Union memberi peluang kepada pelanggannya untuk melakukan perbankan dalam talian.

1984- Jane Snowball, pembeli dalam talian yang pertama di dunia, menggunakan sistem Gateshead SIS/Tesco untuk membeli makanan daripada Tesco.

The Beginning of Internet Banking

Online banking was introduced in the US (1980) and in UK (1983) by the Nottingham Building Society (NBS).

In 1981, four large banks in New York City provided customers with access to personal accounts via landline telephone cables. This was initially referred to as "online" banking. However, what became online banking via the Internet began in October 1994 when Stanford Federal Credit Union gave its customers the opportunity to bank online. Presidential Bank followed a year later, giving their customers full access to personal accounts, the first bank in the U.S. to do so.

1984 - The world's first online shopper, Jane Snowball, uses a Gateshead SIS/Tesco system to buy food from Tesco. The Gateshead Shopping and Information Service (SIS) is an unusual experiment in computerised 'home shopping' in that it is oriented to disadvantaged consumers (mainly the elderly and disabled) rather than to affluent sections of the population.



1981
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1984

Penyelesaian Pasaran Inovasi

Pada tahun 1981, Salomon Brothers telah diperolehi, dan Michael Bloomberg, seorang rakan kongsi umum, telah diberi penyelesaian perkongsian \$10 juta. Bloomberg setelah merancang sistem kewangan komputer dalaman untuk Salomon, telah menggunakan \$10 juta cek pemisahan untuk memulakan Sistem Pasaran Inovatif (IMS). Bloomberg telah membangun dan membina sistem perkomputerannya sendiri untuk menyediakan data pasaran masa nyata, pengiraan kewangan dan lain-lain analisis kewangan untuk firma Wall Street.

Merrill Lynch, sebuah bank pelaburan Amerika telah melabur sebanyak \$30 juta di dalam IMS untuk membiayai pembangunan kewangan terminal sistem komputer "Bloomberg" dan pada tahun 1984, IMS telah menjual kesemua mesinnya kepada pelanggan Merrill Lynch.

1982- E-Trade, sebuah broker dalam talian yang pertama telah diasaskan. Ia membolehkan para pelanggannya mengakses maklumat pasaran dan melakukan perdagangan sewaktu tempoh pasaran, selain daripada menawarkan keupayaan pengurusan portfolio 24 jam sehari. Dengan membayar premium untuk cas perkhidmatan asas, pelanggan-pelanggan juga boleh menerima harga stok masa-nyata dan portfolio yang telah dikemas kini; jika tidak, mereka hanya akan menerima maklumat selepas 20 minit kemudian.

Innovation Market Solutions

In 1981, Salomon Brothers was acquired, and Michael Bloomberg, a general partner, was given a \$10 million partnership settlement. Bloomberg, having designed in-house computerised financial systems for Salomon, used his \$10 million severance cheque to start Innovative Market Systems (IMS). Bloomberg developed and built his own computerised system to provide real-time market data, financial calculations and other financial analytics to Wall Street firms.

Merrill Lynch, an American investment bank invested \$30 million in IMS to help finance the development of "the Bloomberg" terminal computer system and by 1984, IMS was selling machines to all of Merrill Lynch's clients.

1982 -, E-Trade was founded. It enables its customers to access market information and conduct trades during market hours, while offering 24-hour-per-day portfolio management capability. By paying a premium on the basic service charge, customers could also receive real-time stock pricing and portfolio updates; otherwise, they received information after a 20-minute delay.

1987

Black Monday

Black Monday berlaku pada 19 Oktober 1987, ketika Dow Jones Industrial Average (DJIA) kehilangan hampir 22% dalam satu hari. Acara menandakan permulaan penurunan pasaran saham global dan Black Monday menjadi salah satu hari yang paling terkenal dalam sejarah kewangan.

Beberapa inisiatif telah dilakukan termasuk menurunkan kadar faedah, meningkatkan kecairan bank serta cuba mengunci pesanan perdagangan program.

Idea untuk menggunakan sistem komputer dalam perdagangan berskala besar masih baharu dan tidak pernah diuji.

Program komputer ini secara automatik mula membubarkan saham dan menolak harga saham yang lebih rendah. Program-program ini juga mematikan semua pembelian, telah menyebabkan tingkah laku beli (bidaan) hilang sepenuhnya di pasaran saham.

Kejatuhan pasaran saham "Black Monday" mempunyai kesan terhadap pasaran di seluruh dunia, menunjukkan bagaimana pasaran saling berkaitan dengan teknologi.

The Black Monday

Black Monday occurred on October 19, 1987, when the Dow Jones Industrial Average (DJIA) lost almost 22% in a single day. The event marked the beginning of a global stock market decline, and Black Monday became one of the most notorious days in financial history.

Several initiatives have been done including lowering down the interest rates, increasing the bank's liquidity as well as trying to lock out program trading orders.

The idea of using computer systems in large-scale trading then was still new and never been tested.

This computer programs automatically begin to liquidate stocks and pushing the stock price lower. The programs also turned off all buying, had caused the buying (bid) behaviour to completely vanish at the stock market.

The "Black Monday" stock market crash has consequences on markets around the world, showing how the markets are interlinked by technology.

1990an

Teknologi Kewangan (Kelahiran istilah)

1993 - Teknologi kewangan dicipta sebagai sebahagian daripada Konsortium Teknologi Perkhidmatan Kewangan oleh Citicorp (lebih dikenali dengan nama perbankannya Citibank) pada tahun 1993. Usaha untuk membawa ke hadapan teknologi saling beroperasi/sela beroperasi, teknologi terbuka bagi industri perkhidmatan kewangan yang berkemungkinan menghasilkan produk dan perkhidmatan baharu.

1998 - Sebilangan besar bank di Amerika Syarikat menubuhkan laman web transaksi pertama bagi perbankan Internet. Laman web transaksi memberikan pelanggan keupayaan untuk melakukan transaksi melalui laman web institusi kewangan dengan memulakan transaksi perbankan atau membeli produk dan perkhidmatan. Urus niaga perbankan terdiri daripada sesuatu yang asas seperti pertanyaan baki akaun runcit kepada pemindahan dana perniagaan ke perniagaan yang besar.

Financial Technology (The birth of a term)

1993 - Financial technology was coined as part of the creation of the Financial Services Technology Consortium by Citicorp (more commonly known by its banking name Citibank) in an effort to bring forward interoperable and open-standard technologies for the financial services industry that makes possible new products and services.

1998 - A majority of banks in the United States set up the first transactional websites for Internet banking. Transactional websites provide customers with the ability to conduct transactions through the financial institution's website by initiating banking transactions or buying products and services. Banking transactions can range from something as basic as a retail account balance inquiry to a large business-to-business funds transfer.

1999

Kewujudan Gergasi Internet

Permulaan impian dotcom seperti Amazon, Google dan Paypal.

Tempoh pertumbuhan pesat dalam penggunaan Internet.

The Survival of Internet Giants

The beginning of dotcom bubble like Amazon, Google and Paypal.

A period of extreme growth in the Internet usage.