

THE IDENTITY ECONOMY

Orsi Husz

AFTER DIGITALISATION
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Translated by Clare Barnes

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Editor: Jenny Björkman

Editorial board: Nicklas Berild Lundblad, Ingrid Elam, Lisa Irenius,

Sven Anders Johansson

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Foreword: After Digitalisation

"After digitalisation"? The theme could give the impression that digitalisation is complete: first we lived analogue lives, then digitalisation arrived, and now it is finished. But the "after" of the heading does not mean that digitalisation is a stage we have passed through, nor that the relationship between the digital and its analogue counterpart is as simple as we imagine. Nevertheless, perhaps we have arrived at a situation or state in which we can gain perspective on digitalisation, and examine its effects and conditions in a critical and nuanced manner.

The essays in this collection are wide ranging in their subjects, but they all relate to the question of what the digital is and how it affects our lives. Nina Wormbs' essay, on how what is often presented as an ethereal sphere of ones and zeroes, beyond the material world, examines the extent of its hunger for resources and its impact, with the vast amounts of e-waste it produces. Hans Ruin's piece examines the paradoxical longing for control and submission that can be discerned behind our expectations of AI, artificial intelligence. Malin Åkerström's text about meetings as a phenomenon demonstrates how digital technology encourages both a new meeting etiquette and new opportunities for escape, and Jesper Olsson describes how binary code infiltrates

and reorganises not just reading, as in the case of audiobooks, but culture in general, while demonstrating how the new is always more intricately intertwined with the old than it may appear. In area after area, the consequences of digitalisation appear to be double or, rather, dialectical. The digitalisation that promised simplicity seems, in reality, to lead to the generation of increasingly complex systems, writes Nicklas Berild Lundblad. If technology reveals the world, it also appears to simultaneously hide it.

In this essay, historian Orsi Husz highlights the continuities in the transition from an analogue documentary regime of identity verification to digital surveillance capitalism. In many ways, Sweden has been at the forefront of a development where we increasingly live without cash, and where we identify ourselves using a bankID, both when making purchases and in our contacts with authorities.

How did we get here, asks Orsi Husz. What do banks have to do with our identities? Why are we dependent on a form of identification issued to us as the customer of a bank when we act as a citizen, parent or patient?

Digitalisation does play an important role, but the identity economy has deep roots. "Clearly, commercial companies had understood the (market) value of information about people's lives and behaviours long before computerisation", states Husz, as she sheds light on the history of economic identities and their role in our daily, and mundane, lives in a digital era.

The Editors

In the gap between analogue and digital

Almost all adult Swedes use their digital bankID every day, not just for payments and bank business, but in contacts with authorities, schools and healthcare institutions. Why are we dependent on a form of identification issued to us as the customer of a bank when we act as a citizen, parent or patient? What do banks have to do with our identities? And how did we get here? It would be easy to connect this association between finance and documented identities to society's digitalisation. It may also appear to be a consequence of the financialisation process of recent decades, in which financial institutions and financial thinking have increasingly come to dominate not just business and politics, but everyday life.

Digitalisation does indeed play an important role in how identification has developed, but there was a financial interest in our identities in the analogue era too. The specifically Swedish history of financial institutions' hold on our identities also goes back further than we might think; it starts back in the 1950s, and moves from paper, via plastic, to ones and zeroes. This essay covers the emergence of an *identity economy*, in other words, the role of commercial interests in how people's identities are managed in society. It directs a special focus on plastic cards – as proofs

of identity, as means of payment and as a step between paper documents and digital media in the history of identification.¹

Church and state

International historical research usually links documented and registered identities to the growth of the bureaucratic state. Historians have traced the birth of identity documents to societal organisation in times of war, colonial administration and the ambitions of the state to control crime or, simply, control people's movements. The identification and registration of criminals using fingerprints, physical characteristics and later photography was part of this. As early as the nineteenth century, science and new technologies began to assist the "memory of the state" to fulfil the authorities' desire for clear identification, particularly of dangerous elements in the societal body.²

Researchers have also highlighted how ID documents, society's standardised definitions and formalised monitoring of identities, have always had a cultural meaning and, in practice, been co-creators of the identities they intended to control. The way in which the official question "who are you?" is asked influences and, in turn, is influenced by how people think about issues such as "who am I", "who are we", and "who are they".³

There are clear examples of this in Swedish history. In Sweden, the state church used to be responsible for population registration. The most common identity document was the *prästbetyg*, an extract from the parish register, issued by the vicar in the person's home parish, which also functioned as a testimony to the holder's moral standards. There were different types of prästbetyg, such as the *âldersbevis*, similar to a birth certificate,

or flyttningsbetyg, a certificate of change of address, which was still used as a form of identification in the mid-twentieth century. The latter certificate was not necessarily a personal document; a man's certificate often included his wife and children, and was thus also an expression of society's attitudes to gender and family relationships. The printed form was filled in by hand, and updated through crossings out and additions. The type of information varied over time, but in addition to name, date of birth, home parish and address, there were often notes about occupation, religion (confirmation), national service and vaccinations. Further back in time, literacy was also included. The form's pre-printed headings indicated what was considered important for society to know, creating a template into which individual identities were sorted.

Of all identity documents, the history of the passport is the most studied, at least internationally; Swedish studies are still lacking. The primary perspective in these narratives has been state monitoring and control, and the formation of the nation state — or its dismantlement. Passports have also been linked to the creation of national identities. Furthermore, similarly to the *prästbetyg*, also the passport testifies to the way society regarded personal identities. Even in the early twentieth century, some countries' passports were issued for a family rather than for an individual. In addition, information about physical characteristics such as height, eye and hair colour, face shape and, where relevant, skin colour, were included. These details thus became formalised identity markers.

Media historian Craig Robertson has analysed how the nineteenth-century documentary regime of verification replaced an older sensory regime, which was simply based upon recognising people. As this did not work in modern societies, where people were more likely to move around, identity documents on paper were introduced and, since the early twentieth century, these have often included photographs. These paper documents became an integral part of a supposedly objective system — they provided an identity with "a distinct official shape". Robertson writes about the US, but a similar change had taken place in Europe at an earlier date. The state wanted to create easily readable, registerable and stable official identities according to a bureaucratic logic. Identity documents were linked to local or central registries, also those filed on paper. Robertson states that this paper-based documentary regime was first replaced in the twenty-first century by a digital regime of verification which, unlike previous regimes, is dominated by commercial actors.⁵

The market

If commercial actors have hardly been noted in the historical research into the identity management of older epochs, then interest in commercial forces in our digital era has pretty much exploded. In recent years, researchers have highlighted how the digital world tracks, colonises and capitalises on our identities. Personal data, group memberships, taste preferences, health, hobbies, values and opinions are transformed into market commodities, so that personalised and algorithmically tailored offers can be sent to us.⁶

American researcher and social critic Shoshana Zuboff takes this a step further. She has recently published an influential and much-discussed tome about "surveillance capitalism", which she claims is an entirely new type of capitalism. While others maintain that the contemporary users of Google, Facebook and similar platforms have become products that are sold by these companies, Zuboff says that the users' identities and lives are the raw material that is extracted. After algorithmic processing, the information can be refined to produce predictions and, by extension, utilised to influence behaviour in a way that generates financial gain.

Zuboff has certainly been successful in bringing attention to the interlinkages between social media and the capitalist system.⁷ She writes that we were left "wholly unprepared" for the revolutionary threat entailed by surveillance capitalism, because throughout history we have usually imagined that such threats come from the state and not from "new companies with imaginative names run by young geniuses that seemed to be able to provide us with exactly what we yearn for at little or no cost".⁸ There is something in this. Even in the early days of computers, Swedish debates about personal privacy dealt more with the authorities' new opportunities for surveillance than with what commercial actors could potentially do.⁹

But there are objections, not least from a historical perspective. Is what Zuboff calls surveillance capitalism really something entirely new, rapidly occurring due to the rise of the internet in the twenty-first century? Or has capitalism has simply become technologically better at what it had already been doing? Clearly, commercial companies had understood the (market) value of information about people's lives and behaviours long before computerisation. One example is the life insurance companies' card catalogues of customers and potential policyholders in

early twentieth-century Europe and the US, another comprises the extensive registers kept by early credit rating agencies.¹⁰ But still, at this time, these delimited "financial identities" did not compete with official identities. When and how did our identities become commercialised on a large scale?

Here, rather than studying contemporary digital surveillance capitalism, or telling the longer story of the state monitoring of identity, I am interested in what is in-between, in the gap between the analogue documentary regime of verification and the digital regime, and thus in investigating the identity economy's broader societal growth in Sweden from the 1950s onward.

Such a narrative must, by necessity, deal with the market's way of seeing. In a seminal article, sociologists Marion Fourcade and Kieran Healy have analysed how market actors register, categorise and classify people in a manner that, ultimately, has the potential to shape self-perception and behaviours. Their concept, "seeing like a market", is a paraphrase of the title of political scientist James C. Scott's famous book, Seeing Like a State, in which he investigates the modern state's technocratic ambition to make its subjects "legible". As I mentioned above, passports, national identity documents and the various registers maintained by the authorities, both historically and at present, are examples of how the state "sees" the population and makes it "legible". While Fourcade and Healy use the contemporary US system of credit scores as an empirical example that illuminates how the market sees, I write about how the market's way of seeing emerges through commercial identity documents and identification technologies in a historical perspective.¹¹

Zuboff's surveillance capitalism deals with the internet, but

the "datafication" of identity began earlier than this. In Sweden, the population register, as well as other authorities' registers and various types of commercial personal registries, was computerised in the 1960s and 1970s. Research in media history has described this as a shift from paper identities to data identities.¹² However, the researchers' focus on registers rather than on proofs of identity means they miss out on a medium that had a great presence in everyday life, and had a key role in creating the Western post-war identity economy - namely, the plastic card. When, from the 1960s onward, various kinds of plastic cards became in practice the carriers and conveyers of identifying personal information, they also became - more symbolically - the object of emotions and opinions about the identity economy. Plastic cards materialised the early links between identification, consumer society and everyday finance, and the era of the plastic card overlaps those of both paper-based and digital identity management. First, however, the question of how and when identity became a financial matter needs an answer.

When wage-earners became financial consumers

The history of the Swedish "bank identity" stretches back to the pre-digital era, or at least to the age of early computing. It started with the payment of wages and salaries. In the late 1950s, Swedish commercial banks began to be interested in the money of ordinary wage-earners, after having long had only businesses and wealthy individuals as customers. The average Swede would often have a savings account at a savings bank, but rarely set foot in a commercial bank. There were several reasons for this newly awakened interest in blue-collar and lower-ranking white-collar workers. One was that the regulatory legislation imposed upon commercial banks. Credit regulations and liquidity ratios meant that banks had a great need for capital, which would allow them to loan money to industry. Another reason was the increasing affluence of society; wage-earners simply had more money than previously.

The commercial banks therefore offered to manage employers' wage and salary payments. Instead of being paid in cash at the workplace, employees would receive bank transfers to current (cheque) accounts. This saved the employers a great deal of administration, as they no longer needed to provide premises and pay the staff who managed the payroll. Furthermore, the

official view was that the new system encouraged thrift, as the money went straight into the bank and employees were only expected to withdraw the amount they needed. One of the first employers to utilise salary payments via a bank was the City of Kalmar; Handelsbanken took over the management of its salaries as early as 1956. By the end of the 1960s, numerous companies and public authorities had moved to directly banked salaries, mostly in the form of payments to cheque accounts. A similar move to salary payments via bank transfer also occurred in other countries, but Sweden was among the first in Europe.¹³

The introduction of cheque accounts for salaries and wages (checklöner) led to the transformation of everyday financial culture. In one interview, a former bankman described it as "moving people's wallets to a bank account". ¹⁴ During the same period, monthly salaries instead of weekly and fortnightly wages for blue-collar workers were introduced. Until then this was a privilege only of the white-collar employees. Household finances now had to be managed in a new way. While a survey in 1966 showed that just five per cent of new cheque accountholders had previously had a bank account with a commercial bank¹⁵, they now needed to visit the bank regularly. They had to get used to not always paying with cash and learn how to record cheque transactions. A credit facility was also linked to the new cheque accounts, making people dependent on the banks for their everyday financial dealings.

In his memoirs, the director of Handelsbanken, Jan Wallander, wrote that the transition to cheque accounts for salaries and wages required a mental reset, particularly for blue-collar workers: "Now they would have an account in a commercial bank,

once one of the bourgeoisie's instruments of oppression, and start to write cheques, also something that only the upper classes did before." The class-based boundaries between different kinds of money were redrawn, as workers/wage-earners began to see themselves as holders of current accounts with chequebooks, and as customers of commercial banks. Cheque accounts for salaries and wages were thus, in many ways, the first step in establishing a new relationship to money and banking.

This was also a major adjustment from the banks' perspective. The new cheque accounts not only changed the commercial banks' clientele, but also their everyday operations. The management of small withdrawals and, in particular, multitudes of cheque transactions was expensive; it was only profitable if the banks were also able to sell other financial services, such as niched savings accounts, credit or help with household budget management. The banks aimed especially to build up a large customer base, which could generate profits in the long term. Their marketing departments expanded and, in practice, staff were transformed from bank officials to salespeople for financial products. Gradually, the banks also began to manage welfare payments such as child benefit and student grants. Several commercial banks used the metaphor "a financial department store" to describe themselves in their advertising. Savings banks underwent a similar commercialisation process. They already had a broad clientele of savings accountholders, but they also now began to offer salary payments, chequebooks and other financial services.

Initially, transactions were mostly managed in the traditional manner, and only partially with the help of computers. Computing





experts from the bank sector recall that it was actually the extremely large volumes of cheque transactions associated with current accounts that drove computerisation.¹⁷

The transformation of wage-earners to financial consumers in the 1960s was important. In 1968, a marketing expert at Handelsbanken stated that, due to the new cheque accounts and other new financial services, the banks were now "involved in the allocation of each and every penny belonging to the customer", which created "a very intimate connection between bank and customer". This was about more than just changes to the means and forms of payment. This intimate connection, he wrote, "along with the centralised customer register, has [...] launched a new era of marketing of banking services to individuals". Indeed, the banks knew an increasing amount of detail about their customers' lives but, at the same time, the number of customers at each bank branch was growing, so knowing them all - or even recognising them - became impossible.

Banks take over identity management

This new and impersonal financial intimacy was problematic. It took a while for people to become accustomed to cheques. Initially, withdrawing all your wages at once in cash was the natural thing to do, but the banks' limited opening hours, among other things, forced the new bank customers to start using their chequebooks. Cash machines were not yet available; admittedly, the first one in Sweden opened as early as 1967, just a week after the world's first one opened in the UK, but it took until the mid-1970s for them to become common.¹⁹

In addition to learning how to write cheques, customers also needed training in where to keep and how to carry their chequebooks, and be informed about the risk of becoming overdrawn. Potential problems with financially "immature" new customers were discussed by the banks and in society: did the new system entail a risk that cheque accounts were opened for people who were unable to manage them? And how could cheque fraud be avoided? The most important questions were: who would monitor the new customers? And how would such controls be carried out?²⁰

This new clientele was enrolled to the banks in large groups at the same time, as companies opted for the new payroll routines for their entire workforce. During the first period, the name of the workplace/company was printed on the chequebook or was shown by the account number. In some cases, the employee number was used as the account number, similarly to how some more recent current accounts use Swedish personal ID numbers (personkonto). An article from 1956, in Skandinaviska Banken's internal newsletter, therefore states that the monitoring of accountholders was, so to speak, "inbuilt" in the system, as the accounts were opened "on the employer's initiative and due to their management of salary payments. This should entail that the bank can immediately inform the employer of any overdrawn accounts." Awareness that employers would find out about any offences should be enough to prevent abuse, said the writer, who would later become one of the bank's directors and an expert on credit card issues.²¹ In several cases, it appears that banks did in fact contact employers when a cheque account was overdrawn or otherwise misused. Therefore, in 1960, the head of the Bank Inspection Board found it necessary to write to the commercial banks and point out the obvious, that banking confidentiality also applied to the new clients, as much as to the old ones.²² The banks were not to go to someone's employer; employees were now individual bank customers in their own right, even if a company's workforce all received their cheque accounts at the same time. Surveillance of this new bank clientele had to be reimagined.

Retail businesses were also struggling with the new cheque system. Paying in shops became more difficult, because cheque clearance was not yet automated. Both banks and shops needed to ensure that cheque customers were using the correct name and account. In the first few years, various types of documents

were used to verify a customer's identity. Membership cards for associations, railway season tickets, gun licences and even business cards were accepted, at least until the early 1960s. In some cases, symbolic objects such as a wedding ring, an inscribed anniversary watch, or even a doctoral hat could act as a substitute for paper documentation.

A passport was indeed an official identity document, but they were unwieldy and people rarely carried them around. Driving licences were often used as identity documents, but at that time they were easily forged and had no expiry date of expiry. The only official identity card had been issued by the Post Office since 1909, when it was introduced to simplify the collection of insured letters and parcels. This was also made of paper and therefore was not considered particularly secure, despite the fact it needed to be replaced every three years. However, the latter inconvenience reduced public interest in obtaining one. A national identity card, called a citizen card, had been repeatedly discussed in the Swedish Riksdag and at public authorities between the 1920s and 1960s. It would have been welcomed by the banks, but did not happen.²³

The Bankers' Association (*Bankföreningen*, the association for Swedish commercial banks) therefore developed its own identity card, which banks started issuing in 1962. Everyone whose identity was known at a bank branch could collect a card, which had a photo, signature and date of birth on plastic-laminated paper. It was still possible to verify your identity in other ways, but there were stricter controls. The National Police Board and the Swedish Retail Federation, however, increasingly demanded that the banks should take the main responsibility for developing and

providing everyone with secure identity documents. After all, it was the banks that had introduced the cheque account salary system, they claimed.

The problem was not only the lack of reliable identity documents, but also that it was – in practice – difficult to ask customers in shops and banks to identify themselves. Many people felt affronted and perceived the question as a suspicion. Identity checks were something shameful, as a writer in the *Göteborgs-Tidningen* newspaper stated in 1961:

No one, however, asks the accountholders what they think. They do not want the trouble and unpleasantness of identifying themselves. Producing an identity document to be able to access one's own money is unpleasant. Nine out of ten people who are asked to verify their identity probably wonder "Do I look so poor or so suspect that I must show a piece of paper to prove who I am?" 24

In many cases, the solution was that the shop assistant did not ask at all. The banks therefore sent advice to shops about the best way to ask for an identity document, which repeated a key sentence intended to justify identity checks: "This is to protect your money." ²⁵

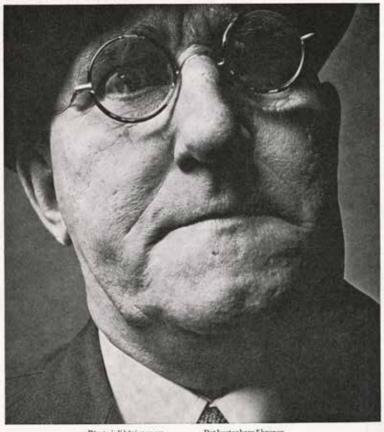
The link between identity documents and money that had been created in everyday practice, was thus made explicit. In addition, this marked the beginning of a process that would lead to the banks taking over the role of guarantors of identity, albeit unwillingly, that once belonged to the priest, employer or diverse social and professional associations.

The unsystematic verification of identity resulted in escalating

cheque fraud in the latter half of the 1960s. On the request of the National Police Board, the banks removed the guarantee they had thus far offered for lower value cheques in shops, which made the retail trade even more vulnerable and the need for reliable identity documents even more pressing. In 1971, retailers announced a cheque boycott that lasted for more than eighteen months. After drawn out negotiations, the banks and the retail trade (the Swedish Trade Federation, the Consumer Co-operative Union, and representatives of department stores, restaurants and petrol stations) finally agreed that the boycott would end on 1 February 1973. From the retailers' perspective, the most important condition was supplying all chequebook holders with a secure identity card, after which all cheque transactions – regardless of amount – would require proper verification of identity.

Since 1965, the banks and Post Office had cooperated with the National Police Board on an action plan for secure identification; this led to the creation of a company, AB ID-kort [ID Card Ltd], in 1965, which was jointly owned by the banks and the state. The new company started producing identity cards in 1970. Both production and distribution –the latter managed via bank branches – intensified to achieve the target of providing (almost) all cheque customers with a card by February 1973. AB ID-kort also produced the new driving licence, which was accepted as an identity document from 1974. In the first six months of 1974, AB ID-kort produced over five million new identity documents, of which two-thirds were identity cards and one-third driving licences. Over the space of just a few years, the majority of the Swedish population thus received bank-approved identity cards.

NU MÅSTE MAN VISA LEGITIMATION NÄR MAN BETALAR MED CHECK. HUR SNÄLL MAN ÄN SER UT.



Första juli börjar en ny checkbestämmelse gälla. Då måste man vian fotoförsedd legitimation för alla checkar. Oavsett beloppet. Banken hjälper dig som har

Banken hjålper dig som h checkkonto att skaffa ett ordentligt ID-kort till rabatterat pris. Det kostar bara 5 kronor (ordinarie pris 11 kronor) och gäller i 5 år.

ID-kortet är det säkraste sättet att visa att du är du.

I första hand gäller det här erbjodandet bara i storstadsområdena (Stockholm, Göteborg och Malmö) där behovet är störst,

AFFÄRSBANKERNA



En kreditkund kan vara en kreditrisk.
Men en köpkortskund är alltid en
betrodd kund — Köpkort tar ansvaret.
Köpkort tar ansvaret för 115.000
köpstarka kunder, som föredrar
köpkortsaffärer framför andra.

Köpkortsinnehavarna kommer från alla yrkeskategorier och inkomstklasser. De är goda betalare. Pengarna är friska och snabba. Reda affärer. Mera affär med Köpkort.

Vill Ni veta mer om Köpkort, skriv till oss under adress, Köpkort AB, Fack, Stockholm 19. A national awareness campaign ran in 1974–1975, to promote and justify identity checks. Identity cards were displayed on posters, in newspaper advertisements and on notice boards in banks and shops, often with the text "The ID card aims to protect your money!".²⁷ Eventually, identity checks became natural, with the problem of shame and reluctance having vanished by the mid-1970s. The "bank identity" was now normalised. It was individual, linked to private finances and certified by financial institutions.

In practice, the banks' role was even greater. The Bankers' Association appointed a committee for identification documents, which made decisions about which documents would be accepted. As well as bank representatives, the committee included representatives from the Post Office (which also had banking operations), the Bank Inspection Board and other areas of business, more specifically Swedish enterprises' security delegation. Formally, AB ID-kort did not have a monopoly, but manufacturing a card that was not accepted by banks and shops was not profitable. For example, the committee rejected the American company Polaroid's request to have its identity card approved; upon which Polaroid reported the Bankers' Association to the Antitrust Ombudsman for "ID monopoly".28

The Swedish banks thus established themselves as issuers of proofs of identity as a result of employees and wage-earners becoming financial consumers. Swedes learned to use their identity cards on daily basis, and this surveillance was eventually perceived as normal. A new financial identity had been created and formalised.

The identity market

"The ID cards of the future will replace money" claimed an article in *Veckans Affärer* in 1974.²⁹ It reported that the International Organisation for Standardisation (ISO) had adopted the same standard size for identity cards as for credit cards (a format with the CR80 code) and that cards with the new standard dimensions should have a three-track magnetic stripe as a data carrier. Sweden's AB ID-kort had already developed prototypes, but it would take a few years before these were introduced in Sweden.

The article discussed identity cards and credit cards as if they were basically the same phenomenon, as well as how, according to the ISO, credit cards would soon have photographs and identity cards be used for making purchases. The most important issue for industry, the article said, was solving the problem of data-led *personal* identification of people, meaning not with a numeric code, but with fingerprints, voice recognition or machine reading of signatures. Machine reading for cards was already possible and used in cash machines, although shops did not yet have the equipment. "There is big money in the identity card market", concluded the magazine. And, in this market, small national producers were competing with major international players such as IBM (with its magnetic stripe technology) and Polaroid (with its photo technology).³⁰

In Sweden, as mentioned above, AB ID-kort had a quasimonopoly – with one exception. In the 1970s, a company called Rollfilm tried to challenge the banks' dominance. Rollfilm also features in the article in *Veckans Affärer*, as one of few companies with a potential solution for how computers could recognise people. This company is interesting, as it illustrates that identity documents and verification technologies were market commodities as early as in the 1960s, and it shows how plastic mediated a transition from the analogue documentary regime of verification to the new digital regime.

Rollfilm was founded by Eric Rothfjell who, in the 1940s, invented a new technology and what was known as the Antenna camera, which allowed rapid photographing of people with their personal data depicted in the same frame. The idea of bringing together portraits and data arose during World War Two, when Rothfjell was tasked with photographing thousands of Finnish refugee children so they could quickly be provided with identity papers. After the war, he patented and commercialised the technology. From the late 1950s, Rothfiell's company supplied identity documents in plastic, mainly to businesses. His first customers were larger industries, but when Rollfilm started a cooperation with the Securitas security company, smaller enterprises and some public authorities began to use Rothfjell's identity cards. They were also sold abroad; for example, in 1970 he had exclusive rights to international student identification cards. At the same time, he introduced ID photographs in colour, which were regarded as more secure, with newspaper ads calling it "the computer era's identity system in colour".31

Other inventions followed, such as the previously mentioned

automatic facial recognition, but were not realised. That solution built upon digital recognition of characteristic facial lines, which were included as a sophisticated striped pattern on the back of the card. It is difficult to tell to what extent Rothfjell's method could have been practically useful. He was nevertheless one of the first to obtain a US patent for such a method, as early as 1974. Research into facial recognition and other biometric identity markers was then in its infancy, and would take off in the 1990s.³²

Therefore, until AB ID-kort started its operations, it was Roll-films' identity cards that were utilised when somewhat secure verification was needed. Rollfilm did the manufacturing and the technical design, but it was the employers or schools that verified people's identities and kept the registers that were the basis for the cards. Until the 1960s, employers often functioned as a "guarantor of identity"³³, a role that the banks definitively assumed in the early 1970s. This shift put Rothfjell's company in a difficult situation. Like Polaroid had already done, he reported AB ID-kort and the Bankers' Association to the Antitrust Ombudsman, and also threatened to take a case to the Market Court. The Antitrust Ombudsman came out in favour of Rollfilm, but the resistance from the banks remained significant.

Although Rollfilm's identity card fulfilled the security requirements and was therefore approved by the Board for Identity Documents, the banks still refused to distribute it, saying they wanted the number of card types to remain low. Rothfjell's identity card business was threatened with bankruptcy. In the 1970s, there were more twists in the "identity mess", as many actors, including the banks, hoped that the state would establish a



ENDAST DESSA





MORKORT S EVERGE

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LEG GÄLLER

Titta noga på fotot!

kom-i-håg!

BANKEN

- 1
- 3
- (4)
- (5)
- (6)

Kontrollera alltid:

- 1 ORT, DATUM
- @ BELOPP, BOKSTÄVER
- @ BELOPP, SIFFROR
- @ BETALNINGSMOTTAGARE
- 6 NAMNTECKNING
- 6 PERSONNUMMER

supervisory authority, or legislate on a state-issued card. However, this did not happen.³⁴ Instead, the Bank Inspection Board functioned – indirectly – as the supervisory authority for proofs of identity. The 1980s' solution was standardisation and certification, and both the Bankers' Association and Rothfjell sold their identity card businesses. The state also sold its share in AB ID-kort. However, the cards were still distributed by the banks, which thereby retained their role as the guarantors of identity.³⁵

Plastic identities and plastic money

The era of plastics coincided with the heyday of commercial identity cards, as well as with the introduction of credit cards. The new design of identity cards was reminiscent of a credit card, which was often called plastic money. Sociologist Joe Deville has described the importance of this new, cheap and lightweight material for the mass introduction of the credit card in the US, from the end of the 1950s to the early 1970s. Unrequested plastic cards could be posted to hundreds of thousands of Americans. This type of distribution also occurred in Sweden in 1962, but on a much smaller scale.³⁶

Plastic also had advantages when it came to identification. Even the identity cards of the early 1960s were laminated, but initially there were significant security issues, because the plastic case could be disassembled and the photo removed. Over time, lamination improved and, on newer cards, the photograph and information comprised a single photographic document. The plastic card was more technologically advanced and more difficult to forge than a paper card; it was also better for conveying machine-readable information. This was important, both for credit cards and the new identity documents. In 1963, a major daily newspaper, *Dagens Nyheter*, wrote of the new "plastic moulded" ID cards: "Identity cards of this type can be issued

with coded signs that can be read by the recognition device of a central electronic brain."³⁷ A few years later, the first bank-issued identity cards from AB ID-kort were isotope marked. A machine read the card's authenticity, while the period of validity was checked in a manner invisible to the human eye.

The plastic card replaced not only paper documents, but also the metal "charge coins" that were used by early department stores in their customer account systems.³⁸ In the US, until the end of the 1950s, charge plates were also used; these were small metal rectangles with embossed text and numbers that could be transferred to paper via a machine. Embossing was possible, and even cheaper, using plastic cards.

Both American Express and BankAmericard (later VISA) launched their plastic cards in the US in 1958. Diners Club, which is often called the world's first credit card system, has existed since 1950, but initially the cards were made from cardboard.³⁹ Plastic united the advantages of paper and metal, it was light and durable, could carry a lot of information, including a photo, and also be used to transfer information via embossing. A little later, digitally readable information on the card led to more secure transfers.

Plastic cards soon arrived in Sweden. In 1959, Stockholm department store NK's oval charge coins in brass were replaced by plastic charge cards. The first plastic credit cards were introduced the same year, thanks to a collaboration between a group of retailers in Stockholm, known as Stockholms Konto-ring. For a few years around 1960, several different credit card systems were created in partnerships between retailers and banks. In 1962 most of these merged to form Köpkort AB (Purchasing

Card Ltd), a Swedish credit card system that was jointly owned by the commercial banks, and which became well known for its dark green and red plastic cards. However, credit cards spread rather slowly in the 1960s, before the market boomed in the 1970s.⁴⁰

Meanwhile, banks and international standardisation committees were conducting discussions on using photos on credit cards to make it easier to verify the holder's identity. In Sweden, the banks had had far-reaching plans including designs for a new type of bank-issued identity card since the 1960s. Such a "bank (ID) card" (bankkort) or "universal card" (enhetskort) would have a photo, bar code and, later, a magnetic stripe. The "bank-card" was intended to be used for both verifying identity and as a credit/payment card.⁴¹

Furthermore, the different types of cards were all produced by the same companies. At the turn of 1975/76, AB ID-kort purchased shares in IdentiData Sweden AB, which was at the time the largest manufacturer of credit cards (and other transaction cards such as cash cards and payment cards for petrol companies), not just in Sweden but throughout Europe. The similarities between credit cards and identity documents were highlighted in internal publications about the benefits of bringing production together.⁴²

A focus on material aspects thus shows how proofs of identity and money drew closer, while plastic cards also represented the transition from a paper-based documentary regime of verification to a digital one. Clearly, the plastification of identity, starting in the late 1950s, can with good reason be seen as a separate – and financially shaped – regime, one located between the other two.

Admittedly, the various cards of the plastic regime did at first have differing functions and appearances. They also had different moral connotations: credit cards were long debated as a symbol of indebtedness and consumerism, while ATM cards instead represented both a cash ethos and technological modernity and, after initial criticism, the identity card had turned into an everyday necessity. However, the cards became increasingly similar. All of them, even charge cards, had some form of identification function (name, signature, code or photo). All of them, even identity cards, were also used in association with financial transactions. Although the combined identity card and credit/debit card was never realised, around 1980 the cards were given the same standardised format.⁴³ The plastic card thus became something between money and a proof of identity.

There were many dreams about the volumes and types of digital information that could be included on a plastic card, in addition to the visible analogue data. As early as 1963, there were discussions about whether a plastic moulded, machine-readable identity card could contain biological information, such as the holder's blood group. In the mid-1970s, Eric Rothfjell spoke about his method for automatic facial recognition in terms of "genetically conditioned code". A decade later, trade and industry had begun to see the enormous potential of identification technology for market innovations. For example, in 1985, *Dagens Nyheter* reported on the tech industry's burgeoning ideas about what they called the Size-ID-Card (Mått-ID-Kort) or ClothingCard (KlädCard). The idea was that this card would convey machine-readable information about the holder's body shape and measurements. The card could be easily read by a computer in the clothes

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shop and, when the customer had selected a fabric, a bespoke garment could be individually produced (but computer-controlled) for the consumer.⁴⁶ Corporate visions about the use of digital information collected via plastic cards from individuals lead to the next chapter.

"Seeing like a market"

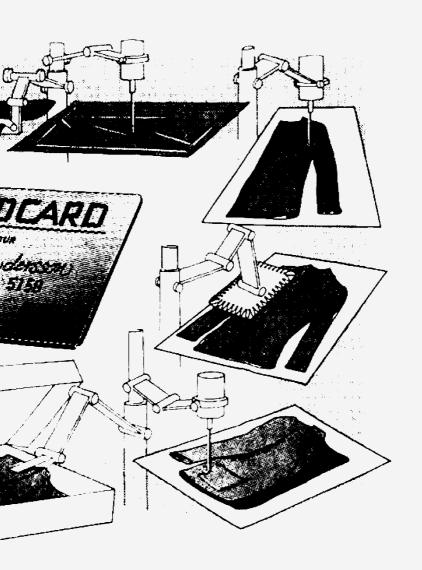
The new, bank-approved Swedish identity cards included the holder's personal ID number (personnummer). After 1 January 1968, the previous population registration number (folkbok-föringsnummer) — which had the date of birth and a three-figure code — was supplemented with a final control digit, which made the number more secure and useful. This revolutionised the banks' customer registers, which could now compile all the data on a single person. Until then, registers had been kept per account, and only individual branches had customer registers. A former head of systems development at Kreditbanken remembers:

This was the first time we could see customer behaviour. When we introduced this system, we also collected statistics, vast amounts of statistics. [...] [W]e had acquired an information system that showed us how customers were behaving.

However, it was not until the 1980s that banks were able to actually use the information they gathered in this way.⁴⁷

Personal ID numbers also enabled new ideas about online payments. In 1969, the Bankers' Association set up a committee, known as the SIBOL project (cooperation for an integrated





online payment system, 1969–1971), which attracted some attention.⁴⁸ Media coverage stated that its aim was to achieve a cashless society. Plans included linking the banks' customer registers, credit registers and those of the bank-owned credit card companies. Identity would be verified through a combined identity, payment and credit card, the "bankcard/universal card" mentioned above. This was a means of identification that could be checked with both the naked eye (photo, name, number) and automatically (machine-readable information, PIN). The PIN was a temporary solution – the intention was that, in the future, identification would be done using the voice or fingerprints.⁴⁹ This kind of "universal card" was described as "a basic condition for the design of the entire system".⁵⁰ Identity, or at least proof of identity, was thus posited as the "money" of this envisioned cashless society.

One initial aim of SIBOL was to link the banks' registers with those of Statistics Sweden, the Riksbank and the stock exchange. After three years of investigation, these ideas were abandoned, as was the idea of going entirely cashless. However, the latter remained a long-term goal, while work for a shared online banking system continued. The idea was that shop terminals and, eventually, home computers could be connected to this payment system. The universal bankcard was long included in the discussions about a future system but, in 1979, it was finally dropped by the Bankers' Association, for numerous practical reasons. 51

In 1972, when the Bankers' Association wrote its response to the Government's report on data and privacy, they found it necessary to state that the "SIBOL project concerns what is purely a transport system for payments and not an information system". Still, it is difficult to interpret the original SIBOL idea, with its linked registers and a combined identity and payment card, as anything other than an attempt to create a comprehensive economic-financial information system.

Purchasing card, sales card, information card

The dream of a cashless society (and of considerably cheaper administration) had existed in the banking world since the 1950s. In the 1960s, cheque accounts were perceived as the first step in that direction. Credit cards were seen as the next step. However, in the 1960s, banks still did not want to run credit card operations in their own names, mainly due to the generally negative attitude towards consumer credit. Instead, the commercial banks created their jointly owned credit card company, Köpkort, to which the savings banks were also later connected. Card use received a real boost first in the late 1970s, but some banks had already encouraged their customers to sign up for a Köpkort credit card instead of using cheques during the abovementioned cheque boycott of 1971–73.⁵³

Various marketing strategies were used to justify the initially contentious credit cards. On one hand, the cards were described as the modern era's money, a metaphor to take the edge off the criticism of buying "on tick" and which was also compatible with the dream of a cashless society. On the other hand, credit cards were depicted as "proofs of trust" and "financial identity cards", something similar to a membership card.⁵⁴ They became a kind of standardised trust in a time when shopkeepers no longer knew their customers by name. Once again, the image that

appears is that of a hybrid between a proof of identity and a means of payment; people's identities and purchasing power were linked through the cards.

In the 1970s, newly established credit card companies began to compete with the bank-owned Köpkort AB. In a heavily regulated financial market, the credit card industry long escaped notice, because it was not subject to bank regulations, and the regulation of consumer credit primarily covered payment by instalments. Köpkort's biggest competitor was Contoföretagen, founded in 1971, which later changed its name to InterConto. The company was run by entrepreneur Erik Elinder, and rapidly grew to become Sweden's second biggest. By the end of the first half of 1979, InterConto managed around 320,000 accounts, compared to Köpkort's 350,000. 55 In 1978, InterConto introduced the VISA card in Sweden and, the following year, Mastercard (then called MasterCharge) arrived and was administered by Köpkort.

InterConto exemplifies how the market's way of seeing people's identities worked in practice. Erik Elinder jokingly called his credit card a "selling card", to contrast it with his rival's "purchasing card" (köpkort). His ambition was not – or not primarily – to provide "modern money", as the card was called in Köpkort's advertising slogan. InterConto was instead offering, as a sales aid for retailers, a new communication channel to their customers. Unlike Köpkort, the company administered a large number of different cards through what it called selective account systems, which included VillaConto for homeowners, StockholmsConto for residents of the capital and SkåneConto for consumers in and around Malmö. This allowed special con-

sumer offers tailored to specific groups of accountholders. Elinder's company was also leading in the administration of company-specific accounts, such as for IKEA (1973) and KappAhl (1974).⁵⁶

Erik Elinder, who had a background in advertising, not in finance or computer engineering, was quick to see that providing credit was not the most important element of a card company's business. Instead, its greatest potential lay in selling consumers; in other words, selling the knowledge about purchasing behaviours registered via the cards. Elinder envisioned the development of loyalty cards and membership cards that could give the holders bonuses on their purchases, but also personally tailored offers. In line with this, he also called the credit card an "information card" and wanted to explore this functionality further. He returned to the idea in several internal memos in the 1970s:

The credit card is a unique sales instrument – not because of the credit, but because of the *knowledge of the customer*, that the card, properly constructed, provides for the affiliated stores.

The cash customer cannot be identified – the cash customer is anonymous – the cash customer enters and leaves a shop without committing to anything. From this perspective, the cash customer is uninteresting. *Unlike this*: the credit card customer has a name, address, telephone number, finances, purchasing habits, capacity to pay, lifestyle, etc., *registered in the smallest detail*. This is not something terrible and dangerous, these are trivial matters from a security perspective, etc. Nevertheless, this is a unique

asset for a merchant who wants to provide extra service and to look after their customers, who wants to satisfy the customer at a reasonable cost.

What on earth do we not know about this person that may be of immeasurable value to the merchant who wants to sell them goods?⁵⁷

This presents an early vision of personalisation, which first saw its breakthrough within marketing in the 1990s.⁵⁸ Elinder's ambitions stretched further than the conveyance of targeted advertising based on register data, which was common in the 1970s and 1980s. He sketched out the future potential for individually tailored special offers as something different to that era's segmentation of consumers into groups for targeted marketing. One should get to "know" the customer, even if this was only possible through data processing, and customer knowledge of this kind should be the company's primary product. In Elinder's world, a retailer's access to this knowledge was also beneficial for the consumer, who would thereby receive better service. According to these new ideas, the new and intimate relationship between financial companies and their customers, which Handelsbanken's marketing expert noted back in 1968, would now be packaged and sold onward.

The debates of the 1970s about privacy in the computer age often referred to the danger of commercial businesses utilising large public registers, while warnings about the companies' own data collection and processing were rare. There was talk about how computerisation was transforming everyone into "register-people in a dehumanised society" but, in truth, the future

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ambitions of Elinder and his peers were quite the opposite; they wanted to know all customers personally, albeit with the help of computers. Modernity's anonymous, cash-based economy was to be transformed into a new kind of "personalised" economy. The dream of capitalising upon people's identities thus existed long before Facebook and Google.

Plastic cards and the identity economy

While the dominant role of the banks is a Swedish (and Nordic) phenomenon, commercial interests in identification also existed in other countries. Nevertheless, the Swedish narrative provides an exceptionally clear historical picture of the financialisation of identity. The links between identification management, everyday finances and financial markets had emerged prior to the rise of digitalisation. Thus, the identity economy started to develop considerably earlier than is suggested by Shoshana Zuboff's thesis about surveillance capitalism.

In Sweden, the major change came with wages and salaries being paid into cheque accounts, transforming employees into bank customers and creating the need to verify the identities of these new financial consumers. What was originally perceived as awkward and shameful was naturalised by linking identification to everyday finances, by means of bank-issued identity cards. The next step was the credit card, where people's identities needed to be repeatedly verified for everyday financial transactions. The card allowed the registration of purchases, which soon gave rise to dreams about making knowledge of the customer the primary product.

In this context, materiality is important. The transition from a paper-based, documentary regime of identity verification, with

the state as the main agent of surveillance, to digital and commercial surveillance capitalism, has occurred via plastic cards and plastic identities. Plastic cards could be read by people as well as by machines. They were proofs of identity and, at the same time, a form of money; their shape was adapted to wallets and wallets were designed for the cards. They were not issued and controlled by authorities but by commercial actors, albeit often in cooperation with the state, or at least in contact with state registration systems. Identity cards and credit cards became increasingly similar in their form and function. The financialisation of identity thus obtained its first material expression in the plastic card, which also often channelled emotions and common attitudes in relation to the new mechanisms of the identity economy. I therefore believe that we can speak of a plastic regime between the documentary (analogue) and digital regimes of identity. It was during this regime that the identity economy emerged, at least in the Western world.

Plastic cards began to spread towards the end of the historically relatively short *cash parenthesis*. This was a period between an older economy, where everyday credit relationships were mostly founded on personal trust or existing dependency situations, and contemporary digital payment systems, where the difference between buying on credit and paying cash is fading away. The anonymous financial relationships of cash transactions soon began to disintegrate, first due to shop-specific credit account systems, then the chequebooks that went with the current accounts and, finally, credit cards and payment cards. Back in the 1960s and 1970s, financial companies realised the economic potential of these relationships no longer being

anonymous, and this new "intimate connection" with the customer could be made financially profitable. Even the idea of selling knowledge about customer behaviour to third parties was around at the time.

A historical look at the emergence of financial identity and its material/technological devices brings the often invisible links between identity and money into focus. Today, plastic cards are no longer needed to mediate a connection between computer systems and people. Verification is done using a digital bankID, PINs, touch ID or facial recognition, Google ID, Facebook profiles or other ways of logging in. The "personal" element of these relationships returns in the form of computer-generated personalisation. We still have plastic cards, but they are really just remnants of the plastic regime of identity and will probably disappear in the not-so-distant future.

Proof of identity and money, in both material and digital forms, are technologies for conveying and ensuring trust. Who guarantees that a person is who they claim to be, and that the debts that money represents will be cleared in the future? Historically, the state has been the guarantor. The emergence of the identity economy, with banks and private companies as managers of identity, does not necessarily mean that the state has abdicated. In countries like China and India, state-controlled, combined digital payment and identification systems have been introduced.

In Sweden, e-identification is still provided by commercial actors, but state supervision has increased.⁶⁰ Identities guaranteed by public authorities may become important, for example during a pandemic, and official identities can be split into parts





that focus on separate aspects, such as the new COVID certificate. One special type of digital money is cryptocurrencies (such as Bitcoin), and in this case the trust is not based on either the state or financial institutions, but on the technology. Could something similar be happening with proofs of identity – are we already on the road to cryptoidentities? Regardless of whether we will see such a development or the return of identities guaranteed by public authorities, it is important to reflect on the type of trust that is embedded in proofs of identity.

Notes and list of illustrations

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- 50. "Elektroniskt betalningssystem", PM 20 March 1969, bilaga till Styrelsens protokoll 16 April 1969 § 74. Svenska Bankföreningens arkiv, CfN.
- 51. "Förslag till nytt id-kortssystem", 6 November 1979, bilaga till Styrelsens protokoll 21 November 1979, § 197, Svenska Bankföreningens arkiv, CfN.
- 52. Response "Till Justitiedepartementet", 18 October 1972, bilaga till Styrelsens protokoll 18 October 1972, § 228, Svenska Bankföreningens arkiv. CfN.
- 53. Kontokuriren 1971; information page in Checklöneutredningens arkiv, RA; DsFi 1971:12, p. 66. On the criticism of credit cards and the growth of the credit card market, see Husz 2021; Orsi Husz & David Larsson Heidenblad, "The Making of Everyman's Capitalism in Sweden: Micro-Infrastructures, Unlearning, and Moral Boundary Work", Enterprise & Society, 2021, pp. 1–30 (https://doi.org/10.1017/eso.2021.41).
- 54. Husz 2021. Cf. Bernardo Bátiz-Lazo, Thomas Haigh & David L. Stearns, "How the Future Shaped the Past: The Case of the Cashless Society", Enterprise & Society, vol. 15, no. 1, 2014, pp. 103–131.
- 55. Elinder till Spencer Nilson (undated), in Vol. Conto-historia, Erik Elinders arkiv, CfN.

- 56. On Elinder and InterConto, see Orsi Husz, "The Entrepreneur's Dream: Credit Card History between PR and Academic Research", in Johan Östling et al. (eds.), *Histories of Knowledge in Postwar Scandinavia: Actors, Arenas, and Aspirations*, Abingdon, Oxon: Routledge, 2020 (https://www.taylorfrancis.com/chapters/entrepreneur-dream-orsi-husz/e/10.4324/9781003019275-10?context=ubx&refld=7e9ca262-306b-43co-b6aa-051aa56c6df9).
- 57. The quotes are from memos written in 1978 (9 August and 29 August), but the issue had been discussed at the company in 1972 and again in 1980. Erik Elinders arkiv, CfN. Italics in the quote show underlining in the original.
- 58. Ingmar Tufvesson, *Hundra år av marknadsföring*, Lund: Studentlitteratur, 2005.
 - 59. "Effektivitet måste vägas mot integritetsskyddet", DN 29 April 1971.
- 60. The E-identification Board was created in 2011 to monitor electronic identification technologies. In 2018, it was integrated in the Agency for Digital Government. A national ID card (in plastic) was first introduced in Sweden in 2005, and is valid throughout the EU.

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Riksbankens Jubileumsfond (RJ) is an independent foundation with the goal of promoting Swedish research in the humanities and social sciences. The foundation was established through a resolution in the Swedish Riksdag in 1964, when a donation from Riksbanken (the Swedish Central Bank) was approved and the statutes adopted. RJ's establishment was part of the tercentenary celebrations for the world's oldest still operating central bank. These celebrations also included the Prize in Economic Sciences in Memory of Alfred Nobel and the bank building on Brunkebergstorg, Stockholm. The Riksdag and Riksbank aimed to use the foundation to benefit an urgent national issue: scientific research linked to Sweden.

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RJ 2022 After Digitalisation

Editor: Jenny Björkman

Editorial board: Nicklas Berild Lundblad, Ingrid Elam, Lisa Irenius, Sven Anders Johansson



Almost all adult Swedes use their digital *bankID* every day, not just for payments and bank business, but for contact with authorities, schools and healthcare institutions. A *bankID* has become essential to participation in society.

Why are we dependent on a form of identification issued to us as a bank customer when we act as a citizen, parent or patient? What do banks have to do with our identities? And how have we arrived at this identity economy?

In 2022, Riksbankens Jubileumsfond is issuing a collection of essays on the theme of *After Digitalisation* — an "after" that encompasses an "in the wake of" as well as an "in agreement with". In her essay, historian Orsi Husz explains how a digital proof of identity controlled by banks has become such a natural part of most Swedes' everyday lives. Even if this is part of the process of digitalisation, bank-driven identities have a longer history. The financial interest in our identities existed long before ones and zeroes were part of our lives.

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