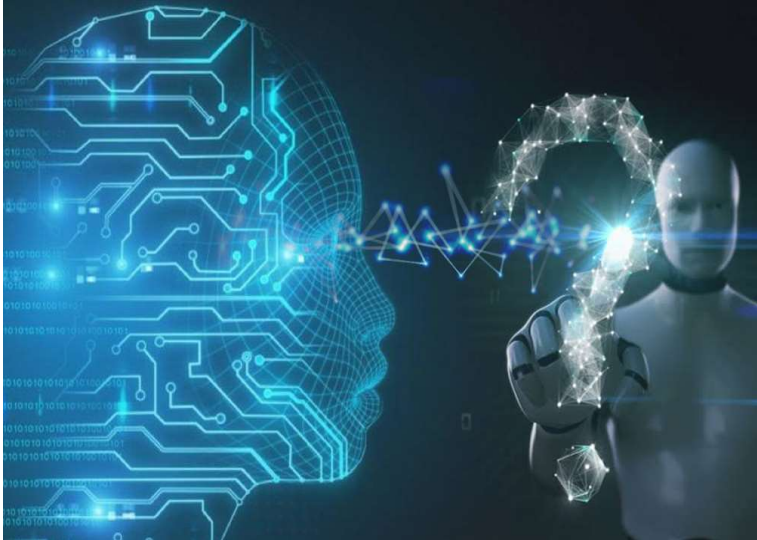




Adina Pop,
Lead Digital Transformation Practice



The Future of Money: Value Driven Ecosystems

A Financial Services Guide to creating the Money of 2030



Summary:

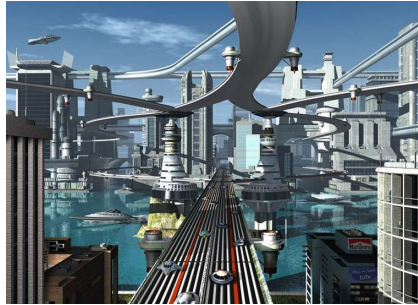


PART 1: A Vision of 2030's Money

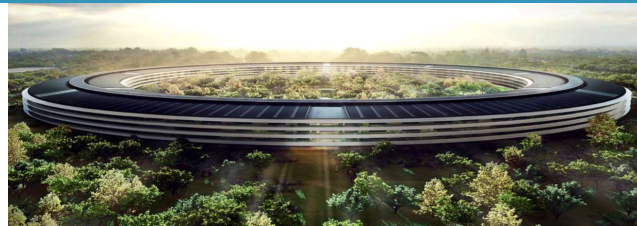
- The financial services competitive arena
- Interviews with leaders of money
 - Marja Silvertant, CEO AIDEN & Simon van Duivenvoorde CCO/CMO AIDEN
 - Michel de Jong, Former GM & Division Manager Payments equensWorldline
 - Willem-Jan Beck, Former Head of Innovation Evi, Co Founder of Evi van Lanschot
 - Robert Kraal, ex. COO Adyen, Payment Advisor & Founder
 - Sunil Jhamb, CEO & Founder Newgen Payments
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PART 2: How to create the Future of Money

- Digital transformation: Leaders of money advices
- Insights into the Future of Banking: Interview with Martijn Hohmann, CEO FIVE DEGREES
- Digital Transformation Building Blocks: FiSer's Approach



The financial services competitive arena



“Once upon a time business as usual was often good enough ()”*

<https://www.youtube.com/watch?v=ystdF6jN7hc> (*)



(*): Gerd Leonhard, Technology Vs. Humanity: The Coming Clash Between Man and Machine, 2016

DIGITISATION

“Everything that could be digitized will be” (*)

First books & movies, now it is impacting money, banking, insurance, healthcare, pharmaceuticals, transportation, cars, and cities.

MOBILIZATION

“Computing is no longer something you do on a PC, even the idea seems utterly fossilized” (*)

Music is mobile, movies are mobile, banking is mobile...It went from our desktop into our palm, to the wrist, onto our faces (AR) and soon into our brains (BCI).

DISINTERMEDIATION

“The key trend in online commerce is to cut the middleman – disruption by going direct” (*)

It happened in music, Apple, Spotify, Tencent; it happens in banking, where customers use tools like PayPal, MPesa in Africa, Facebook Money to bypass traditional banking transfer services.

MEGA SHIFTS: GERD LEONHARD (*)

“Digital Transformation is being touted as the paradigm shift *du jour* across enterprises and the public sector. The mega shifts that drive Digital Transformation are not slow evolutionary processes, yet will trigger a tsunami of disruption, potentially equating to a mass extinction for much of the existing global commerce infrastructure”



ANTICIPATION

“Computers will anticipate our needs before we anticipate what that will be” (*)

Google’s Google Now and Google Home are intelligent digital assistants (IDAs), and a big part of the company’s big bet on AI. They will anticipate changes into our daily schedule, airlines, meetings overrun, traffic and use info to rebook a flight or notify you of your next meeting.

INTELLIGIZATION

“This is how humanity is being challenged the way it is: things are becoming intelligent” (*)

Objects around us, which used to be disconnected, are now connected to internet via network sensors. The traditional programming is being changed with deep learning.

ROBOTIZATION

“Robots are the embodiment of all mega shifts where everything is converging towards spectacular new creations” (*)

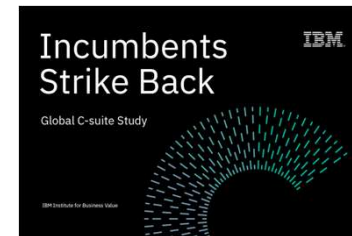
Science makes big leaps in natural language understanding, image recognition, we can expect the price of robots to fall while their usefulness and likeability—will skyrocket.

“Right now we are at a central point of the raging tornado of change, fueled by digitization()”*



(*): Gerd Leonhard, Technology Vs. Humanity: The Coming Clash Between Man and Machine, 2016

DATA IS THE “NEW OIL”
“The world’s most valuable resource is not oil, but data” –
The Economist



INCUMBENT TRANSFORMATION

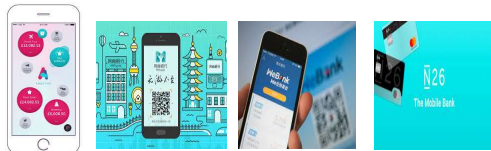
“Elephant companies are now learning to dance. Incumbents own more than 80% of consumer data. They are moving fast to create platform business models and create learning enterprises” IBM

FINTECH

“Fintech lenders have up to a 400-basis point cost advantage over banks. In other words, fintech lenders have up to 4% extra margin on their loans because they don’t have buildings, staff, distribution costs, etc.” IBM

CHALLENGER BANKS

“Challenger & Neobanks, a global movement financed by VC” KPMG



BIG PLATFORMS

“GAFA in banking: will they or won’t they” Finextra



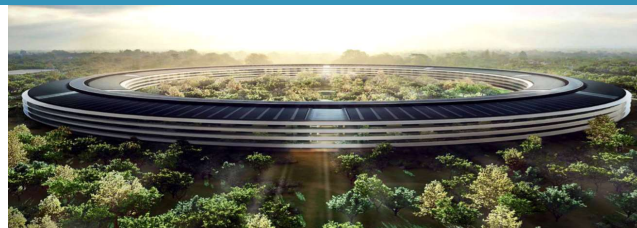
MONEY JOURNEY TO 2030:

“Science fiction is now science fact, winning or losing happens faster than ever before (*)”





A vision of 2030's money : Interviews with Financial Services Leaders



*Leaders of money
talk about 2030's
Money Vision*



*Financial Services
Leaders:
Anonymous
Insights*

*Leaders of money
talk about 2030's
Money Vision*



Money moves beyond the quantitative side of digital commerce:

To remain relevant, financial institutions must move beyond the very quantitative approach to money and buying things and move towards something that is qualitative and personal. Focused on the user specific context, this is a clear shift away from the current transactional, product focus and needs to happen as soon as possible. Start truly caring about your customer and remember that while all your products are online, you have forgotten to bring personal assistance and advice along with it. This has led to a deteriorating brand experience and competitive disadvantage. It's time to put the service back into financial services.



Brands are built beyond product & price:

If price and product are perceived as being the same across providers, then the only way to distinguish yourself is customer experience. Build a direct connection with your customers, supported by true product expertise. This way you can have the best of both worlds: automation and scalability from online, and a strong qualitative, personal offering.



Our financial life is designed holistically:

Insurance, investment, instinct purchasing - all our financial decisions are connected. They need to be correlated with our life situation and coordinated to one another. We should have the opportunity to place our life situation into an app or its digital equivalent and get transparent, holistic advice and view on how to manage and control our finances.

True service providers are on the rise:

Today, ironically, we cannot call most of the financial institutions' financial services providers. Online they are product pushers. They do not provide any services. They have reduced their role to a list of products with specifications. Consumers have to figure out themselves how such products would cover their needs best. Most consumers do not feel comfortable with this approach, as they do not always have the right knowledge to make informed decision online. This leads to a fundamental question: "Is it really about selling more products" or will institutions finally enable their employees to start caring about their consumers and the decisions they make?

A vision of Money: 2030

Marja Silvertant, CEO AIDEN & Simon van Duivenvoorde CCO/CMO AIDEN – ROBO ADVISE PLATFORM
Adina Pop, Lead Digital Transformation FiSer Consulting, Former Global Collect/Ingenico

Building the 2030 Vision: What would you like to **KEEP** from the money of today?

*Marja Silvertant, CEO AIDEN &
Simon van Duivenvoorde CCO/CMO AIDEN –
ROBO ADVISE PLATFORM*

Exchange: The thing that works today is: I have something I want or need, and I will exchange a bit of money to get it or to resolve the problems or the needs I have. On a super basic level this works very well. The basis of our money system is the exchange and the value you get for the problem you can solve because you can pay for something. And if you look at it that way, what works today is the supporting financial services that banks are offering in order to make that happen.

Today's money mission statements: the mission statements of financial institutions are well articulated; they mention focus on the financial benefit of the consumer. What needs to change are the actions these companies are performing. They need to stop focusing on how to best phrase what they want to be and start living up to the statements they make.

Building the 2030 Vision: What would you like to **ELIMINATE** from the money of today?

The focus on products and selling: The e-commerce experience hasn't changed since 1995: companies simply put products online and start selling them. We basically say, here is the list of our products, the user needs to figure out what fits their personal situation. That's an issue if we plan to continue this model for the future: we have left behind an essential part of commerce in the offline world, which is advice, expertise and assistance.

The very siloed approach to business and to our financial life:

We select our car insurance and its associated risk in isolation from our home or health insurance and we certainly do not connect investment decisions to them as they belong to a "different category". We might overspend on car insurance yet underestimate the importance of a solid health insurance. From a different angle, we decide to buy an expensive TV, not realizing such a purchase will freeze our capability to meet unplanned, non-recurring financial obligations. There is a need for a more holistic approach to our finances: for example, an app where we can describe our life situation and will be advised on how to approach financial decisions in connection to my personal life situation.

*Marja Silvertant, CEO AIDEN &
Simon van Duivenvoorde CCO/CMO AIDEN – ROBO ADVISE PLATFORM*

Building the 2030 Vision: What would you like to **ELIMINATE** from the money of today?

The lack of courage: everyone fears the reputational damage that might come with doing something new. Insurers, for example, are used to identify a risk, build a product and launch it to the market. There is a whole sales organization that will put the product out there, but they do not have the courage to make something that will substantially change the way things work. There are very little companies that dare to dive into something that is unknown and truly innovative.

*Marja Silvertant, CEO AIDEN &
Simon van Duivenvoorde CCO/CMO AIDEN – ROBO ADVISE PLATFORM*

The gap between innovation and daily operations: The daily business focuses on incremental improvement and getting slightly more conversion, while innovation departments are often focused on far-off developments (Horizon 3). The main question is who is filling that gap and has the courage to create true value for the customer today. It takes far more courage to make bold, difficult decisions today, than to work on innovations that might materialize in the future.

Our way to choose first the business and then the customer: Today's environment demands us to place the customer first and sacrifice short term business gains for long term benefits based on customer success.

The opportunity to start from a blank page:

We built the way money is managed today through a extensive history of steps and circumstances. We have a history of e-commerce and digital money longer than 15 years by now. But what if we could wipe out this history and rebuild this from scratch on a foundation of customer focus? Would Amazon feel the same? What if in finance we could start from a basic: "Hi, I need to transact with someone", and we would build the best services around this need, taking advantage of the knowledge and technology present today? Starting with a blank page will give us the opportunity to define finance. With smaller scales, a more holistic approach and service-based offerings and experiences - a new flavour in comparison to what banks and insurances are delivering today.

Marja Silvertant, CEO AIDEN &

Simon van Duivenvoorde CCO/CMO AIDEN – ROBO ADVISE PLATFORM

Building the 2030 Vision: What would you like to ADD to the money of today?

Personal, holistic advice and assistance:

Today the aim is to stimulate people to buy more. In the future financial institutions will become advisors of financial literacy. Their role will be to ensure people to make the right decisions, instead of just triggering them to buy products. We must incorporate assistance and advice into customer journeys, supporting consumers in living their best lives.

Financial Institutions as CFOs instead of “accounting packages”:

Financial institutions should advise us about the better steps to take today. Instead we are referred to intermediaries, like mortgage advisors. In a world where product and price are not differentiators, people claim value delivered as a holistic financial advice to our lives.

Unified, value adding customer experiences:

the difficulty with innovation today begins with the fragmentation of how to capitalize on customer interactions and the way we work in the western world versus, for example, China. In Europe, interactions are generally isolated: we have an uber app, we go to the store to grab a coffee and we shop for groceries online. These 'ways of doing' represent different information points, which makes it difficult to create a unified and value-adding customer experience. The common feature in the interactions are payments. We should look at ways to leverage this element in order to design the unified experiences of the future.

With power comes great responsibility:

unlocking data in meaningful ways for consumers will introduce new dimensions to supplier selection and the delivery of products and services. Consumers can provide feedback online about the experiences they have, which can make or break a business. With this power consumers have great responsibility.

Data is the new oil:

transactions go from one data point to another. This is how data exchanges are taking place. Data belongs to consumers and banks will need to find ways to transform data into information and then into value.

Transform data into information to become more than a commodity provider:

financial institutions should be able to use the data behind payments to anticipate, simplify and enhance our lives and financial decisions. Let's say that banks know we spent \$ 100 on energy every month: they can evaluate the energy suppliers and prompt us with choices which will save significant costs. Banks know, from data mining payments, that a consumer stops at the same coffee shop every day. They don't identify the consumer but by their phone and activity at the shop, they prompt him with an advertisement, or an offer specifically targeted on his or her needs. The complexity is about the management of that information and the regulatory part of it.



A vision of Money: 2030

Michel de Jong, COO Crowd Media, former GM & Division Manager Payments and Digital Services equensWorldline
Adina Pop, Lead Digital Transformation FiSer Consulting, Former Global Collect/Ingenico

Building the 2030 Vision: What would you like to **KEEP** from the money of today?

*Michel de Jong, former GM & Division Manager Payments
and Digital Services equensWorldline*

Trust: especially with digital money, it is all about trust. If people do not trust banks or other companies with their money that is digitally safe, then institutions would not be able to get funds and we would probably need to go back to cash. Trust is the absolute critical trait. Security, privacy and other related things around digital money need to be fully covered to ensure that a customer's trust in a financial institution is maintained. A bank would not be able to survive without its' client's trust.

Building the 2030 Vision: What would you like to **ELIMINATE** from the money of today?

The segmentation of our payment experience:

I have a Rabobank account and I have an ABN AMRO account and I must switch between them. I would love to get a more holistic view and understand the total picture rather than having separate views. As a consumer, I use a bank card for every transaction - I would get rid of that. I would also opt for not using a phone but to find a direct way to be able to pay in real time.

*Michel de Jong, former GM & Division Manager Payments
and Digital Services equensWorldline*

The way trade finance is being done

today: world trade is depending on a ship going to the harbor, getting a freight stamped letter and sending it to the bank by DHL. This process implies a lot of waste, which could be eliminated by using blockchain or other technologies. The activity is predictable: you can register the boat at the docks, you can register that the custom authorities have cleared the stock - these are digital points which can be connected. From a business point of view, I see most friction in different types of jurisdiction and parties across the world. They all want to do things their way. Once this becomes more transparent and open, international trade will become more efficient. This is a massive opportunity for Digital Transformation.

Building the 2030 Vision: What would you like to **ELIMINATE** from the money of today?

Silo approaches to customer experience: different silos (businesses) are acting to complete end-to-end experiences leading to inconsistent customer experiences. We need to get rid off the silo approach of offerings and create a seamless customer experience. Examples of silos are banks, financial services institutions and other service providers and/or businesses that have an impact on our lives. Aligning their offerings from a customer journey point of view instead of an isolated offering can have a crucial impact on our lives.

Online waste and friction: every time we go online, we have to re-enter our details and credit card information to make a purchase. But what if we don't have a specific payments card with us at that given moment? To eliminate this friction, we need a digital identity that can be used to pay. Yet relying only on a phone is also a risk: once your phone is out of battery or stolen, it is useless. We must find other direct ways to perform transactions next to plastic cards or a mobile devices.

*Michel de Jong, former GM & Division Manager Payments
and Digital Services equensWorldline*

“Unbanked” and “underbanked” start at the top of finance capabilities:

the current financial system does not support all (regional) territories of demand. While the new money develops further, regions will adopt to the latest flavors and see which one provides tailored solutions for their needs. Examples of such regions can be found in Africa, where we can see how a population with a very poor standard of living developed a strong relationship with mobile services. These regions will pick the top of the money supply chain's most advanced and fitting finance opportunities.

No more cash, electronic money:

major banks are closing ATMs. The interest to support this area is low. This can be an opportunity for one central party to manage a shared ATM system, or it can simply be the end of cash. The impressive increase in mobile payment capabilities makes us believe the future is about money in electronic forms.

A regulated crypto:

a layer of crypto money will be added on top of the money we know today. The prerequisite in a currency like this is regulation, with governments backing up the currency. People need trust when it comes to money and so far, governance driven by authorities have triggered trust.

Challenger banks face challenges:

the advantage of the challenger banks is a fast start due to technology and small size. Supervisors are now all over the incumbents but are just learning about fintech. As the challengers scale up, they are facing similar constraints as the incumbents. Their marketing is strong and the idea they sell is appealing to the public, especially younger people. But banking isn't only about tech. They need to gain a lot of trust prior to becoming real competitors to the incumbent players.

Instant transactions: the simplification of the money supply chain is a must. Transactions should be worldwide and made instantly. Intermediaries of money will be eliminated to make the money flow simple, fast and cost efficient.



A vision of Money: 2030

Willem-Jan Beck, Former Head of Innovation Evi, Co Founder of Evi van Lanschot:
Adina Pop, Lead Digital Transformation FiSer Consulting, Former Global Collect/Ingenico

Building the 2030 Vision: What would you like to **KEEP** from the money of today?

*Willem-Jan Beck,
Former Head of Innovation Evi,
co-founder of Evi van Lanschot*

Trust: it is very important that we trust the places where we keep our money. Even though banks have dealt with circumstances in the past that lowered trust, the current system, including governments and national banks, is inspiring trust.

Currencies: different political settings in different parts of the world require different economic solutions. Different currencies should be reduced to simplify the money flow, but they need to exist to allow for diverse political and economical realities.

Local access: having access to money within your country and economic area should be kept. As a Dutch citizen, I would not want to have my money deposited in a less stable country. Nor would I want my government and implicitly myself guarantee for my fellow citizens who would seek higher returns abroad. Local access and regulations remain important in a world of globalization and digitalization.

Building the 2030 Vision: What would you like to **ELIMINATE** from the money of today?

*Willem-Jan Beck,
Former Head of Innovation Evi, co-founder of Evi van Lanschot*

High costs for basic functions:

the costs need to be reduced. I think that the amount we need to pay for a normal bank card is ridiculous. Banks should earn their money in totally different ways – they need to define new business models and think of innovative, customer focused services.

The way we access finances

today: it is a struggle to deal with multiple financial institutions – they do not communicate with each other; they ask the same information independently and are not able to provide us with a unified view and advise on our money status.

One electronic payment method that can be used across the globe:

today there are many payment methods around the globe. PayPal, WeChat, China Union Pay. Even Visa and Mastercard, all have geographical coverage and access limitations. Then there is this issue that we pay differently when we want to get a bus ticket or if we want to purchase something in a small, local shop compared to paying for a flight or an international hotel stay. For a consumer it is hard to get all these payment methods, as they are expensive and difficult to manage. It would be great if we can decrease the number of payment methods and keep their coverage and capability to support any type of exchanges around the world.

A personalized money experience:

I hate the way how various (periodic) deductions to my account are scattered over time; it would be great to be able to choose one day a month on which all deductions will happen for example. I would like to have access to settings that allow me to control and define my own money experience.

*Willem-Jan Beck,
Former Head of Innovation Evi,
co-founder of Evi van Lanschot*



Building the 2030 Vision: What would you like to **ADD** to the money of today?

Digital Data Vaults: I want to be able to put all my data in a secure vault and to provide controlled access to my data to financial institutions, people and businesses with whom I interact. Now my data is scattered across all sorts of institutions and I need to reproduce this data for every new party that I start interacting with. I also constantly need to update the data I provided to current relationships.

Strong data security capabilities: security of data in this new playing arena becomes vital. Today employees of financial institution have full transparency on our personal and financial data which should not be the case in the future. As data represents a primordial element to our digital world, we should define new and strict ways of dealing with it.

Global governed Risk Profiles: there should be one standardized risk model where everyone is assessed in a similar way, which can be distributed among financial institutions in real time to increase customer experience and efficiency of financial operations.

ETHICS AND 2030 MONEY
“Ethics: the philosophical discipline concerned with what is morally good and bad and what is morally right and wrong”.

*Willem-Jan Beck,
Former Head of Innovation Evi,
co-founder of Evi van Lanschot*

Sustainability, equal representation, real value: we need to ensure whatever money we create is sustainable. Poor and rich countries should both have a voice in defining the system. We must also decide how we give value to a currency. Today we speak about the amount of gold behind money, but who can be sure this is the way things are really being done (are the gold supplies enough to cover all the money that is given out?).

Easier payments and less cash:

there will be new ways to ensure payments are secure and smooth. While authentication and authorization are still necessary today, they complicate payments. By 2030, biometrics and microchips implants could be the way to authenticate more easily. Cash will leave place for financial crime and inconvenience; it should be reduced and replaced with digital transactions easier to control.

Things are making payments on behalf of humans:

Humans will move freely between things which will take care of payments in an easy, controllable and reliable way. At the fuel station, the car ownership is known, the car will pay for the fuel. The house will pay the telephone, television and internet bills, but also for other facilities and the fridge will pay for the food. The journey through payments and finances will be simpler and smoother.

Innovation expands to macro levels :

Companies and governments will find more efficient ways to manage and transfer funds towards each other. It happens today but there will be more innovative ways to do that by 2030.

Data becomes an ethical matter:

Companies have access to data. They can use it for marketing purposes, but they can also use it to assess our health. Data should not get into the wrong hands.



A vision of Money: 2030

Robert Kraal, former COO Adyen, Payment Advisor & Founder

Adina Pop, Lead Digital Transformation FiSer Consulting, former Global Collect/Ingenico

Building the 2030 Vision: What would you like to **KEEP** from the money of today?

*Robert Kraal,
former COO Adyen, Payment Advisor & Founder*

Trust: Today there is a lot of focus on trust in the payment system. The 2030 vision is important to keep but also the trait that people are trusting the system that support payments (whether banks, the card networks, the regulators, or the currency itself). Keeping this confidence implies that payment methods should be kept secure and that there are always ways to initiate and resolve escalations in case something goes wrong. We should be able to smoothly deal with “mistakes”, whether made by people or systems, so we trust and have the confidence our money is secure. Trust is the only parameter from money that I would like to keep. The other traits are variables and can surely evolve and be improved.

Building the 2030 Vision: What would you like to **ELIMINATE** from the money of today?

Paper invoices: We are still sending and receiving paper invoice which need to be rekeyed and prepared for payment. We should not complicate payments if certain governments and individuals prefer receiving physical invoices. There should be a simpler way to convert a paper or digital invoice into a real time digital payment transaction.

*Robert Kraal ,
former COO Adyen, Payment Advisor & Founder*

The complexity of payments both online and in store:

The way we deal with payments both online and in store is still too complex. We still use two factor authentication to make payments safe. In one way this is good, but it's also complicated. Strict regulations in payments leads to complexity, which can kill conversion. The challenge is to find ways to comply without overcomplicating the payment process.

By 2030 we should eliminate the situation in which new regulations trigger companies to find creative ways to deal with complexity.

Building the 2030 Vision: What would you like to **ELIMINATE** from the money of today?

Anonymity of payments: AML regulations impose screening cash transactions, which is not a core expertise companies possess. An example: a watch seller knows how to sell a watch and is not experienced in applying AML regulations to ensure the provenience of cash is right. These regulations add processes and work which frustrated customers and they add additional burdens and costs on the companies. We should help companies to stay who they are, and we should stop trying to transform them in financial crime experts. A robust central system that follows money and supports AML goals needs to be created to take over this responsibility from financial institutions.

*Robert Kraal ,
former COO Adyen, Payment Advisor & Founder*

Reporting around payments: There is a need of introducing a framework which includes smarter ways to monitor payments above certain thresholds. This should be based on trends and patterns and not on individual transactions. Financial Institutions should no longer play the police role where they ensure funds are transferred according to regulations.

The current systems has many loopholes which allows illegal activity. Nowadays, numerous people are employed by financial institutions to deal with these type of problems. Instead, we should introduce a central, algorithm-based way to manage such responsibility and to resolve gaps.

Things are making payments on behalf of humans:

Humans will move freely between things which will take care of payments in an easy, controllable and reliable way. At the fuel station, the car ownership is known, the car will pay for the fuel. The house will pay the telephone, television and internet bills, but also for other facilities and the fridge will pay for the food. The journey through payments and finances will be simpler and smoother.

Evolved payment methods:

New methods and functionalities will be added. They will be based on security and safety to make payments easier.

Building the 2030 Vision:
What would you like to **ADD** to the money of today?

A digital platform to manage how “things” spend our money:

Managing your money becomes more complex when things are making payments by themselves. You need to keep track which budget is allocated to who and you should know how it is spent. For example, the rent is fixed, but the fuel is not: creating a robust, digital management system to control how “things” are spending our money is a must.

*Robert Kraal,
former COO Adyen, Payment Advisor & Founder*

ETICHS AND 2030 MONEY

“Ethics, the philosophical discipline concerned with what is morally good and bad and what is morally right and wrong”.

*Robert Kraal,
former COO Adyen, Payment Advisor & Founder*

Data: I think it is important to have a regulated view around who can have access to specific data and what can be done with it. Companies have access to data which means that they can use it for marketing purposes. However, they can also assess your health with the help of data: they can see if you pay for your gym subscription, what kind of food you eat and what cafes you visit during weekends.

There is a difference in how data is used across Europe, USA or China due to local regulations. In this case, we should ask ourselves how our personal data is used, repackaged and sold and who controls it.

From an ethical point of view, data is extremely valuable. Data ownership and control will play a key part in the future. It will be associated with a “winner takes it all” mentality. Meaning, that if there is one company that gets access to most of the data, that particular company will become dominant in a certain space.

Other important questions concerning this subject could be how ethical it is to use data to spot tax evasion or terrorism financing by invading privacy of people who are engaging in such practices.

"2030 is 11 years away, a very long-time in today's modern era of finance. Technologies are developing so fast that it is hard to know exactly how 2030 will shape up. The only one thing I am sure of, is that there will be a lot more innovation". - Sunil Jhamb

Payment biometrics: Soon we could very well see payment transactions being authenticated through biometrics to become the norm. With all the technological advancements, the idea of being able to walk into a supermarket and to pay for your groceries through facial recognition rather than by cash or cards, does not seem so farfetched anymore. This movement is already underway. Amazon has opened multiple cashier-less convenience stores in America and is in the process of integrating this concept into Europe and Asia. It is as easy as walking in, picking up your stuff, and walking out while the biometric technology takes care of the rest.

Consignment: Selling goods on consignment it is a concept which I believe it will quickly catch up and modernize. For example, suppliers will be providing merchants with goods on credit. When merchants sell the goods, they will repay their debt instantly, creating a win-win situation for both parties. Where I come from, this has been going on for decades. Back then, access to banks was limited, especially for people living rurally. Local businesses operated based on trust and had their own credit systems, without having to depend on banks. Today, people put their money in bank accounts as savings and the banks lend it out to others to spend or to invest. "It truly goes to show how much of a middleman of trust banks have grown to become".



A vision of Money: 2030

Sunil Jhamb, Founder & CEO at Newgen Payments

Adina Pop, Lead Digital Transformation FiSer Consulting, Former Global Collect/Ingenico

A cashless society: I predict that the popularity and the usage of physical money will steadily decline towards 2030. The inevitable innovations seeking to make payments frictionless, such as, for example, biometrics, will cause cash to become obsolete.

Microcredits: Microcredits are not a new concept; credit card companies have been offering consumers this convenience for decades. The infrastructure behind microcredits is lagging in the digital era and therefore, this is a segment in the payment industry subject to massive changes to come soon. I believe microcredits will quickly advance and before we know it, even e-commerce merchants will be able to offer their customers microcredits. “We could even go as far to say that a biometric credit system will be able to determine an individual’s credit score based on their biometrically analysed profile”. Merchants will be eager to get involved with offering their customers microcredits, to increase their sales. Klarna is an example of a business that is already providing such service, enabling consumers to buy now and pay later. “I believe we will see this concept drastically evolve, with similar services becoming available for B2B transactions, on an international scale”.

*Sunil Jhamb,
Founder & CEO Newgen Payments*

Real-time credit assessment: Credit card companies have been handing out credit to consumers based on a credit risk analysis for years. The traditional processes for determining risk, currently used by credit cards companies, have become significantly outdated. For example, if a credit card user loses his job and he is in financial difficulty, the credit card company will not know until the creditor defaults on his payments. But by that time the damage is already done. Today, if a consumer falls behind on his credit card invoice payment, he can oftentimes still use the card to make purchases. I believe that in the coming years, the financial sector will use technologies that can accurately analyse people’s credit risk in real-time. Changes in someone’s risk profile can be positive or negative. For instance, if someone gets a pay rise, the credit card company will instantly provide him with a better credit score, based on his last salary transfer to his bank account.

A vision of Money: 2030

Building the 2030 vision: What would you like to **KEEP** from the money of today?

*Sunil Jhamb,
Founder & CEO Newgen Payments*

Evolution of banks: One thing is for sure - banks are not going anywhere in the foreseeable future. There is no doubt that innovative technologies and competing financial entities will step up and put pressure on the banks' traditional ways of doing business. These external forces will compel banks to adapt and modernise their business models. Banks will be challenged, but they will remain an essential entity of trust in the society, and that is not necessarily a bad thing.

Innovation driven compliance: I would like to see authorities stepping up their game in fighting financial crimes. They need to be vigilant; fraud detection technologies are getting better but so are the criminals. Authorities must educate themselves and continuously innovate to stay on top of threats. Regulatory bodies need to understand exactly how the industry develops and enforce regulations to preserve the financial trust that currently exists in the financial system.

Building the 2030 Vision: What would you like to **ELIMINATE** from the money of today?

Inefficient KYC Processes: Current KYC processes can certainly be improved, or even better, eliminated. Today customers need to feel in blank papers or web pages for every monetary transaction they seek to conduct. And once they have once provided their information, they should not have to repeat it.

At this moment, every financial institution is conducting its own KYC process, the future is about establishing a central, automated KYC database. This proposition could eliminate a massive payment friction for everyone: consumers, businesses and financial institutions.

*Sunil Jhamb,
Founder & CEO Newgen Payments*

Silo Payments: Today payment platforms generate a lot of data based on the customers shopping habits. This valuable data is generally stored in 'silos' and kept out of reach from the merchant. A merchant can observe that only 4% of their webpage visitors end up by making a purchase. But merchants do not know what exactly happened with the remaining 96% of their potential customers. The fundamental question is where did the customers drop off and why? For merchants it is difficult to follow the customers journeys and to extract the right information using the basic tools they have today.

Payment platforms need to break the traditional way of working in silos. The lack of synchronisation among various silo's prevent merchants to maximise their sales conversion. Newgen provides merchants with full visibility on customer behaviours and journeys and allow them to offer holistic, frictionless shopping experiences to their consumers.

More channels of commerce:

Today we have brick and mortar stores, the web and our mobiles as channels of commerce. In the future, I anticipate there will be many more channels of commerce available in the everyday lives of consumers. Social media for example, it is a rapidly emerging commerce channel which will continue to expand and gain market dominance.

I also picture a future where consumers can purchase goods and services directly from billboards and TV commercials. Whether the purchase will be done through QR codes or other technologies, that is yet to be seen. The idea is that more channels that will simplify and enhance the consumers purchasing experience are bound to emerge.

*Sunil Jhamb,
Founder & CEO Newgen Payments*

Building the 2030 Vision: What would you like to **ADD** to the money of today?

A world of convenience: In the future, we will not worry about running out of milk or eggs at home, our refrigerators will make sure the supplies stock is being replenished. In the recent years, the IoT advancement has demonstrated how cohesive the future could look like. We are now able to control our 'smart' homes with a smartphone or to display visuals on the windows of public buses. We can expect the world of payments to soon become a part of this interconnected world of convenience: the place where our 'smart' home will automatically order food and cleaning supplies as soon as these runs low.

ETHICS AND 2030 MONEY
“Ethics: the philosophical discipline concerned with what is morally good and bad and what is morally right and wrong”.

*Sunil Jhamb,
Founder & CEO Newgen Payments*

Data & privacy:

Whether data was obtained lawfully or not, people's privacy should always be respected. Data shouldn't be used to manipulate or aid into achieving unethical competitive advantage. Even though corporations have developed systems and found loopholes to gain access to user data legally, using data to aggressively target consumers should be forbidden. Today, once you show interest in a product or service, google starts aggressively bombarding you with advertisements linked to your interest, it does this on each digital device you are using. But "only because ethics do not immediately translate into regulations, it does not mean that corporations can abuse consumers privacy and push privacy boundaries towards an imminent breach of law".

The choice to be prompted with target advertisements should be given to the consumer. The business community needs to respect our privacy. The customers should be the ones directing the business community on how their data can be used and not the other way around.

Money becomes social: In 2030 money needs to more honest. Money should not define who we are, but it should be about our talents and capabilities. Paying with money in cash will be reduced. Doing things for each other as means of paying should increase and it should be a reward for our contribution to the society in a form that can be exchanged for things we need. A 'protective dimension' should be raised along side the commercial way in which we do things today to create safer money journeys. Instinct purchases should be moderated by alerts and advice from personal data.

payment experiences get a new dimension: Banks and other financial institutions should work on taking the payment experience to a new level. They can start by eliminating isolated experiences and allow for payments to happen both instantly in store and online. Once identified, a payment will be made. There will be no need for plastic cards or invoices. When we walk into a shop, we will be prompted with a personalized advice about, for instance, a specific type of a washing machine. The advice will be based on our personal financials and overall life circumstances.

data and privacy become payment currencies: all the services of the future seem "personal". They will be designed and based on an individual's specific circumstances. Institutions like banks, Google and Amazon need our data to create personal commercial propositions and there should be a way for us to exchange our data or privacy for a price.

shared economies move to corporate level: in Switzerland there is a system designed for companies to help each other in case of need. This makes the CHF strong. This principle could be expanded into the future where companies collaborate into a social ecosystem where they support each other towards a greater good. The future is about connecting, sharing and bundling powers for creating shared value.

*Industry Leader,
Insurance :
Anonymous
Insights*



A vision of Money: 2030

Anonymous Insights, Insurance

Adina Pop, Lead Digital Transformation FiSer Consulting, Former Global Collect/Ingenico

Building the 2030 Vision:
What would you like to **KEEP**
from the money of today?

Anonymous Insights, Insurance

Earn money because you deliver

something: what I like about the current system is that you need to do something to earn your money. Whether it's work, delivering service or contributing to a good cause.

Money as a mean to get value: if you have enough, money, you can do nice things in life. In this regard, money teaches us the value of things.

Money's role in exchange: money is at the base of exchange. By using money we can get the things we need or the things that are important to us.

Building the 2030 Vision: What would you like to **KEEP** from the money of today?

Anonymous Insights, Insurance

The saving aspect of money: We should keep the current system around saving money for our pension or early retirement. What we should change is the fact that we are now saving for a pension without knowing what the value of our savings will be. We should design a system to guarantee safe retirement, once we have fulfilled the requirements of such a system over our entire life.

The freedom and self confidence money brings

A centralized money system: the central system gives a feeling of order and structure. Once we introduce several systems with different currency flows, things could become chaotic. You see some of it with the introduction of crypto which has led to a new layer of complexity .

Building the 2030 Vision: What would you like to **ELIMINATE** from the money of today?

The current debt system : once you find yourself in the debt system of the Netherlands, it is very difficult to get out of it. Money can damage someone's life: due to financial problems both your IQ and EQ are go down and every step in dealing with the problems becomes more difficult. We should find ways to support people that got in these kind of situations in the first place, but we should also find ways in which we can create real-life solutions to get people out of the debt system.

Anonymous Insights, Insurance

The inequality and discrimination money brings

money is spread in a very unfair way. While money gives chances, the lack of money takes chances away. People can be born on the same place or have the same talents but can have a lot of money, while the other one does not have money at all. Our life and capability to choose and get access to things or to contribute to the society is impacted by it. In the future, money should not define who we are.

The friction of dealing with money: banks and financial institutions are making the calls about how to deal with money, in the money process there is need to eliminate friction. For example, nowadays we have multiple bankcards from various bank accounts in our wallets. This should no longer be the case in the future.

The volatility of money: money is not able to keep value. Today money's value can be high but tomorrow it can be changed or completely gone because of certain events or situations.

Social rewards as equivalent for money:

we could add “return services” as a mean to pay for things. Instead of paying for something with cash, we could do things for each other. Also, by contributing to societal needs, one could “earn” payment rights. This way we will increase our overall contribution to the society. In a nutshell, I am talking about the introduction of social rewards. The younger generation is much stronger than us on this side. It seems as if they don't want to work 40 hours per week anymore but rather 30 hours and use the last 10 hours to create value for society. We could support and promote this by rewarding someone's contribution to the society in a form of an exchange equivalent.

Building the 2030 Vision: What would you like to ADD to the money of today?

A new dimension of payment experiences: Banks and other financial institutions should work on taking the payment experience to a new level. They can start by eliminating isolated experiences and allow for payments to happen both instantly in store and online. Once identified, a payment will be made. There will be no need for plastic cards or invoices. When we walk into a shop, we will be prompted with a personalized advice about, for instance, a specific type of a washing machine. The advice will be based on our personal financials and overall life circumstances.

Safer money journeys: I believe we need to find ways to protect people from instinct purchases. Nowadays, many online shops advertise delayed payments to encourage spending. This seems helpful at first, but it can really damage someone's financial position. We could introduce purchase alerts based on information existing on everyone's personal situation. For example: your car check or water tax is due next month, and this is conflicting with the purchase of today. There should be a protection dimension, an advisory and prevention role, implemented along the commercial aspect of commerce for safer purchasing and money journeys. The problem I foresee is that companies who have data and could develop such services are all commercial (banks, Google or Amazon). They make money once we purchase something, so their motivation to participate and invest can potentially be low.

Anonymous Insights, Insurance

Building the 2030 Vision: What would you like to **ADD** to the money of today?

Data and privacy become payment currencies: the services of the future all seem personally designed and based on an individual's specific circumstances. Institutions like banks, Google, Amazon need our data to create such a commercial proposition and there should be a way for us to exchange our data or privacy for the benefits we need.

A shared economy principle at a corporate level: in Switzerland there is a system designed for companies to help each other in case of need. This makes the CHF strong. This principle could be expanded into the future where companies collaborate into a social ecosystem where they support each other towards a greater good. The future is about connecting, sharing and bundling powers for creating shared value.

A new layer of safety based on accounts at Central Banks:

Banks are commercial enterprises; they need a lot of regulations because we do not want them taking risks with our money. If one bank fails, we get into a massive crisis which is a big threat to the global economy. At such a crucial point, the trust in the financial system is at stake. This is one of the main reasons why banks can't fail. However, if we state that banks are just intermediaries selling mortgages, and a mortgage is based on an account at the central bank, the system will be much safer.

Bank accounts with Central Banks based on blockchain :

Nowadays the industry is experimenting with European citizen opening their bank accounts with the European Central Bank. The bank will issue one digital currency which is based on blockchain.

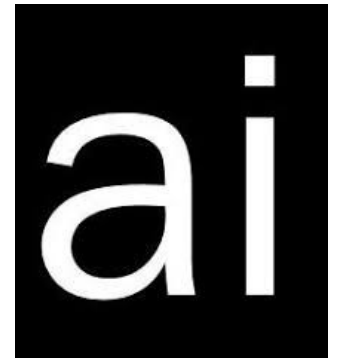
Smart contracts attached to money:

We should store information at the coin, making it look like money, but in reality, we deal with a sort of loyalty scheme or a right on something. Now we have a lot of loyalty cards at home, but they are not connected to each other and they can also be easily lost. We should be able to transfer loyalty rights between people to, for example, allow someone else to use our frequent flyer miles. In this manner we can create a more honest system.

Tokenization of corporate and private assets:

Tokenization in mortgages means that an entire real estate portfolio could be tokenized. On a private level, our house is important among our assets. With tokenization we get the opportunity to spread the risk: if we tokenize our house for 50%, people could bid to participate in the investment. The principle of tokenization can be used to finance a bank by attracting investors interested in specific real estate properties which are connected to the bank, via mortgages. This is a very different way towards securitization; it can be applied to our home, cars etc.

*Industry Leader,
Banking:
Anonymous
Insights*



A vision of Money: 2030

Anonymous Insights, Banking

Adina Pop, Lead Digital Transformation FiSer Consulting, Former Global Collect/Ingenico

Building the 2030 Vision:
What would you like to **KEEP**
from the money of today?

Anonymous Insights, Banking

Wealth preservation: If you reinvent money, you need to find ways to preserve wealth, so everyone starts from the same balance. I personally hate that a few people have accumulated more wealth than half of the world but failing to have a system which will not be able to preserve wealth can lead to anarchy and revolution.

The fundamentals of the payment system: I think the way we can process money today is going into the right direction. In the Netherlands we have a good payments system, perhaps next to the Swiss, the best in the world. We don't need cheques anymore; payments are happening right away. So we should keep the fundamentals of the payments system, I think the payment system underlying money today is a very valuable one.

Building the 2030 Vision: What would you like to **ELIMINATE** from the money of today?

The way we do cross currency payments: Euro to USD, USD to YEN; the way we do cross currency payments today is a disaster and we should eliminate that. In this type of transactions there is a lot of friction and when there is friction, there are ways for improvement.

The crime around money: there is a lot of crime around money, the way we have built the financial system easily allows for crime. Crime can be about how money is obtained for example, and as money makes the world go round, there are many people involved into financial crime. We can't allow money being the reasons for putting a gun to someone's head. We should strive for a world where there is no crime around money.

Anonymous Insights, Banking

Building the 2030 Vision: What would you like to **ELIMINATE** from the money of today?

Overregulation: It is proven that we should change the system, because there is too much regulation around it. I think the regulations should be build in the core of the system and should not be about overseeing the process of how we deal with money. It should work the way a backup is performed in a network: it is not someone's task to execute it. Regulations must be embedded in the design of the network that carries money.

Anonymous Insights, Banking

Vulnerabilities of the current money

system: the current system is too open; it invites for abuse. If you look at the buildings around Wallstreet, they are all filled with computers so that the trade transactions can be generated in milliseconds based on most powerful network connections. I don't think that is what we had in mind when we built the financial system. We can many complex things with money which can disrupt today's money market. For example, the volumes we trade intraday can be so high that they could explode the core of the financial market. Or life situations like the fall of Twin Towers - these are the kind of events that can crush the financial market in a split second.

Smart contracts attached

to money: We should store information at the coin, making it look like money, but in reality, we deal with a sort of loyalty scheme or a right on something. Now we have a lot of loyalty cards at home, but they are not connected to each other and they can also be easily lost. We should be able to transfer loyalty rights between people to, for example, allow someone else to use our frequent flyer miles. In this manner we can create a more honest system.

Building the 2030 Vision: What would you like to **ADD** to the money of today?

Tokenization of corporate and private assets: Banks are looking at ways to tokenize their balance sheet. Tokenization in mortgages means that an entire real estate portfolio could be tokenized. On a private level, our house is important among our assets. With tokenization we get the opportunity to spread the risk: if we tokenize our house for 50%, people could bid to participate in the investment. The principle of tokenization can be used to finance a bank by attracting investors interested in specific real estate properties which are connected to the bank, via mortgages. This is a very different way towards securitization; it can be applied to our home, cars etc. It is also a new dimension to shared economies. The first step is about sharing the usage of the property, this step is about sharing its value, in a similar way companies do when listing their shares on the market. The return of investors can be asset appreciation in time or rentals.

European citizens bank accounts with Central Banks and based on blockchain technology:

There is a lot of experimentation going on today, one of them is to have every European citizen opening their bank accounts with the European Central Bank. The bank will issue one digital currency which is based on blockchain. In such way you can bring back a lot of transparency and get rid of many downsides of the financial system. In such a system it will be clear what are the sources and usage of funds, the commercial banks will no longer be in charge with all the money transferring activities.

Building the 2030 Vision: What would you like to **ADD** to the money of today?

A new layer of economic safety based on accounts at Central Banks:

Banks are commercial enterprises; we need lots of regulations around them because we do not want them taking risks with our money. If one bank fails, we get into a massive crisis which is a big threat to the global economy. At that point, the trust in the financial system is at stake. So there is a huge reason why banks cannot fail. But if we say that banks are just intermediaries selling mortgages for example, and a mortgage is based on an account at the central bank, the system will be much safer.

Anonymous Insights, Banking

ETHICS AND 2030 MONEY

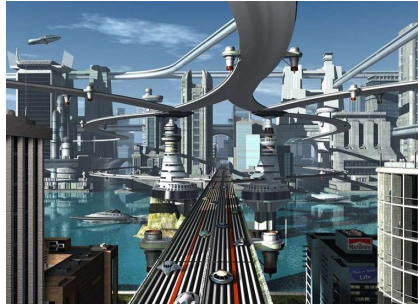
“Ethics: the philosophical discipline concerned with what is morally good and bad and what is morally right and wrong”.

Anonymous Insights, Banking

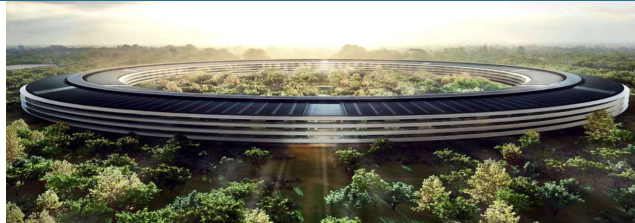
Privacy vs. secrecy: I would feel much more comfortable in a world where we have more fairness and transparency. If I give you a banknote today you don't know where it is coming from, but digital money leaves a trail. But then, I don't want everyone to know what I bought yesterday, not because I am hiding something, but it is not everyone's business to know. So there is a difference between privacy and secrecy, and today we put them both in the same basket.

The next question is, if there is a trail of money who gets the right to look at it? In 40 years from now, with the rapid advancement of tech, we will be able to listen to every conversation on earth, for safety. But should we? Safety needs its limits because if we do not pay attention, breaching privacy could become the opposite of freedom.

Another challenge is the way we are working with AI. Facebook for example could know someone is pregnant or might be suicidal based on the sites we visit, pictures we post, comments we make, before we even know it. What if this information reaches an insurance institution who will refuse your application based on the information made available?



A vision of money: 2030



What would you like
to **KEEP** from the
money of today?



Identity of nations

- Currencies
- Local access & local money protection



Fundamentals

- Exchange
- Wealth Preservation
- Saving capabilities
- Money as a reward for work
- The core of payments

Social aspects

- A mean to get value
- The freedom and self confidence money brings

Trust

"We must trust the places where we keep our money. Though banks have been doing things in the past that lowered trust, still the current systems with governments and national banks looking over the system inspire trust" WJ

- A centralized money system
- Banks, but in a futuristic version
- Innovation driven compliance

*Leaders of money
talk about 2030's
Money Vision*

The weeds

- The crime around money
- The vulnerability of the entire money system
- The inequalities & discrimination money brings
- The volatility of money

Regulatory friction

- Overregulation
- The KYC process of today
- Reporting around payments
- Anonymity of payments

Payment frictions

- The complexity of payments online/offline
- High costs for basic functions
- Paper Invoices
- The way trade finance happens today
- The way we deal with cross currency payments



*What would you like to
ELIMINATE from the
money of today?*



Siloed CX

- The siloed approach to business & our life
- Our usual choice: first business, then consumer
- The focus on stuff & selling
- The lack of courage
- The gap between innovation & operations
- The way we access finances today
- The segmentation of our payment experience

*What would you like
to **ADD** from the
money of today?*



Data is the new oil

- Transform data in information
- Create strong data security capabilities
- Use data & privacy as a new currency

Holistic finances

- Personal, holistic advice & assistance
- Financial institutions as personal CFOs
- A personalized money experience
- Safer journeys: from instinct to knowledge
- Unified, value adding customer experiences

A world of convenience

- No payments, at all (advanced, invisible)
- Things are making payments for humans
- New purchase channels: billboards, TV adds
- Smart contracts attached to money
- Tokenization of assets to spread risks
- A universal, digital currency

Digital Identity

- Biometrics to identify
- Data vaults to keep & share identity
- KYC by means of data vaults
- Payments using biometrics



Others

- Shared economies at macro levels
- Social rewards as the new money
- The opportunity to start from a blank page

A world of convenience

- Money moves beyond the quantitative side of commerce
- Our financial life is designed holistically
- Brands flourish based on true service not on products or price
- Unified, value added customer experiences

Things pay on behalf of humans

- Additional purchasing channels arise
- Payments are invisible, controllable and based on digital identity
- Repetitive KYC is replaced with data vaults accesses via biometrics

Safer & more social money

- Accounts with central banks, based on blockchain
- Social rewards and smart contracts as money



Trust

- A centralized money system
- Banks, but in a futuristic version
- Innovation driven compliance

Identity of nations

- Local access & local money protection
- Currencies or a universal, digital currency

Enhanced Fundamentals

- Exchange, Wealth Preservation, Saving
- Money as a reward for work

Data & Privacy become currency

- New business models are built on data
- Data is transformed in information
- Payments are not charged; services build on payment data are
- Data is valued and protected as gold is, security is key
- Banks are moving beyond current business models

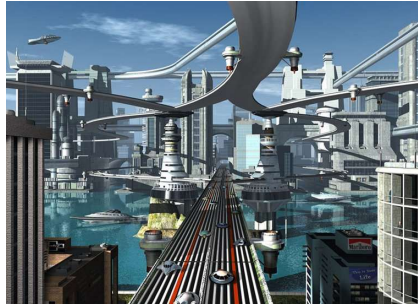
Corporate shared economies



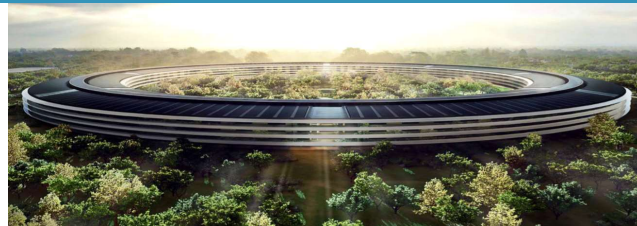
A VISION OF 2030

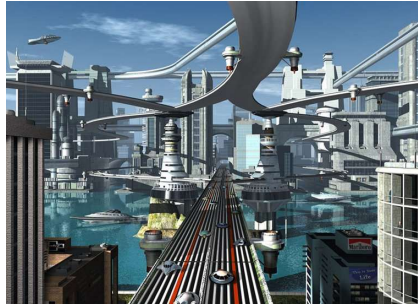




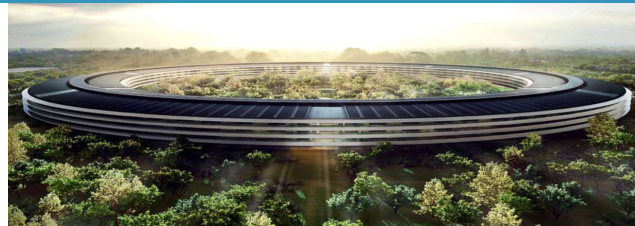


PART2: How to create the Future of Money





Driving Digital transformation: leaders of money advices



3 HORIZONS OF CHANGE:

The way towards an “internet of finances”, a customer value driven ecosystem:

ADAPT TO THE NEW NORMAL

INNOVATE&EMBARC

Define your vision and strategy and prepare your organization for change



CREATE INNOVATIVE BUSINESS MODELS

GET RESOURCES & PARTNERSHIPS

Secure resources, build knowledge, select technology & data goals and create alliances



WIN THE DATA PLAY

DRIVE CHANGE

Initiate, structure, drive change and make it stick.



Secure leadership commitment and sponsorship and a shared vision across the company: The transformation should start at the top and should be carried out across the board. Everyone in the board should follow a shared vision and work together to define a strategy that can be embedded in the company. They also need to ensure that every layer of the company adheres to the chosen goals and culture and if needed, they need both goals and culture to be enforced. People who do not share the same vision, most of the time end up in working against each other, which is a huge threat to the organization and to pursuing secure transformation.

*Willem-Jan Beck,
Former Head of Innovation Evi,
co-founder of Evi van Lanschot*

A vision of 2030:
10 years to drive business
transformation:

Where do we start?



Let your customer voice guide your business: For the business community it is crucial to respect their customers privacy and choice. The customers should be the one directing the business community on what to do and not the other way around. And this should happen both, in a conscious and subconscious level.

*Sunil Jhamb,
Founder & CEO Newgen
Payments*

Don't work alone and in silo's, share forces and secure partnerships which will help you lead successful transformation: shared capabilities and the power of ecosystems is something new in the business world. Everyone still talks about competitors, but **on the strategy map another force will emerge, that of networks or alliances.** Shared economies are very successful today, and it is just a matter of time till businesses understand that winning is something you do together and no longer in isolation.

Anonymous Insights, Payments

“Is not the smartest or the strongest that survive, but the most adaptable”, Charles Darwin: the most important is not to aim to become digital as a mean to an end, but to create an organization that has a strong capability to adapt. Your culture needs to be about adaptability, about understanding the external forces that might impact your company and be agile enough to use such forces in your advantage.

At a certain point in time, it is very difficult to say what will be your end to end digital transformation journey because you need to be able to constantly change and to adjust to newest trends. And you will be able to do so only if you create a culture of agility and adjustability.

Michel de Jong, former GM & Division Manager Payments and Digital Services equensWorldline

The people who brought us here are not going to be the people who will make the difference towards the future:

In the digital era you are looking for talent who can drive innovation and can create a better future. You should aim for better teams where a diversity of voices are represented. If your innovation manager is always a white male, 55 years old you should really reconsider. You need courage to hire different kind of people to make this transition happen and you certainly need a shift in culture.

Hiring different people is not going to be enough, they will need to be able to make risky decisions, fail sometimes and try again. There is a certain disruption that needs to happen and the people who built or followed the system are not the one to disrupt it.

Marja Silvertant, CEO AIDEN & Simon van Duivenvoorde CCO/CMO AIDEN AIDEN

A vision of 2030:
10 years to drive business
transformation:

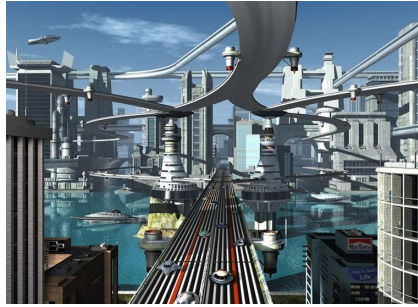
Where do we start?



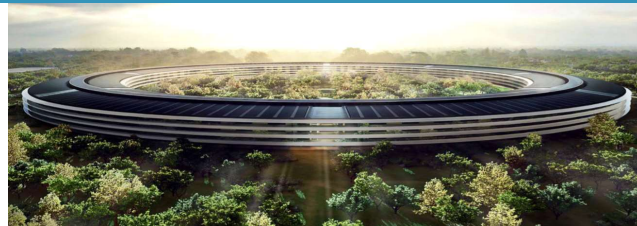
A trial and error approach, it seems wrong, but it is the most human way of doing things:

few weeks back Facebook was announcing Libra to find out just a bit later, that was more noise than reality for now. If Libra would be successful, Albert Heijn or others would be pulling their own coins soon. There will be ups and downs in our transformation, there is going to be fraud and there will be adaptation to and for the regulatory system. But this is the way we learn; this is how we learn to walk. It is a kind of a trial and error approach, which might seem wrong, but is the most human way of doing things. We try something, we see what happens and then we act on it and do it better next time. We are in the middle of an era of innovation and because technology is going so fast, it is going to be learning by doing and writing the book as we read it. These is how our times are like.

Anonymous Insights, banking



Insights into the Future of Banking: 3 horizons of change





*Martijn Hohmann, CEO
FIVE°DEGREES*

A vision of Money: 2030 Insights into the Future of Banking



Most of the payments will be digitized, yet there will be a role for cash in 2030:

In some countries, like China for example, it is almost impossible to pay by cash. Payments happen digitally via WeChat or WePay, and this trend is practically unstoppable. The surprise is that in countries like Germany or France, they are not very advanced in adopting digital payment methods. If you go to Frankfurt or Stuttgart and you would like to pay for a cab, cash is the only option. This matter will change soon, however, 2030 is not that far away and there are still regulatory or risk-related points that will keep cash around for a little longer.



The “privacy” notion is on the rise:

It is interesting to see how our kids have strong insights on what social media can do to their privacy. From our end, it seems BigTechs know what we are buying, where and why we buy things, and they can trick us into buying products without us knowing. From this perspective, safeguarding privacy will be one of the most important trends for the next 10 years. On one hand it could be convenient to be prompted with the things we need, but it is very uncomfortable to realize there are people out there knowing everything about our needs and our lives. We cannot become dots in a computer, having someone tell us how we should look and act in the world. This matter is larger than only payments, but payments are one of the most vulnerable parts of it.



In the digital era, if you are not the client, you are the product:

If you are part of Facebook or Instagram, you are not the client, but the product; you are selling your profile for convenience.

The DNA of such companies is honoring the advertisers, building online profiles and earning a lot of money with it. It seems some profiles are now earning a few hundred euros per month. As people become more aware of the value of their data, which nowadays they give away almost for free, new business models will emerge. In a few years we can expect modern firms with modern technologies to start acting as our agents who help us in building, upgrading and improving our profiles.

Banks can take the role of data guardians: for the last hundreds of years banks have been in a role of protecting valuable assets for people and corporates. And if data is the big thing, the new currency, banks might

play a fundamental role in protecting our data. It is in the banking DNA to protect assets; therefore this could be a natural shift to them. They could get on the consumer's side and create innovative business models around data and privacy and become "data banks".

Next to governments, banks are the only institutions we trust to give our data and they already have access to all our essential information by means of due diligences, which happens as soon as you get in contact with money. So in the future, banks could help us protect and monetize our data and further use data to help us plan and structure our lives.

If we must have an e-identity, we should rather have it with the banks than with Google or Facebook. I am personally afraid that banks might lose this game to the BigTechs, unfortunately, due to the strong technology and the power these parties have. And here there is a fundamental question to ask: what crisis might happen one day, if things go wrong with our data?

Banks must reinvent their business models to remain relevant :

Banks will still be there by 2030, yet something has to change. Nowadays they still make a lot of money, which makes them reluctant to change as they feel safe. The retail websites advertise initiatives like N26 or Monzo, which shows that people are willing to shift without being willing to move. The incumbents criticize emerging banks, as they are not yet able to understand their current or future earning models. Will the NEO banks ever make money? The same discussion took place about Google 20 years, too, and see where they are now.

Data and data protection represent a huge opportunity for banks to create innovative business models

*Martijn Hohmann, CEO
FIVE°DEGREES*



The regional part of retail banking will disappear, the focus will be either local or global:

I do believe that banks are going either extremely local, very niche, (local means one country) or extremely global. The regional part of retail will disappear. We will see bigger banking brands with focus on retail, and the challenge that they will have is to define coherent earning models.

Banks will have to choose, as managing an entire supply chain is not sustainable:

If you look at the current banking architectures, they have thousands of applications under one landscape. Traditionally banks aim to fulfill the entire value chain and to be the market leader in all areas: payments, current accounts, lending and leasing. Banks need to choose whether they focus on the balance sheet or on the customers, and they need to let go of in-house technology. The combination of the two is not sustainable. Managing accounts or loans is no longer a differentiator for banks.

Innovative, shared business models will emerge in banking:

Modern technologies allow banks to build flexible operational models which they can use as shared systems. Think of shared ledgers or shared mortgage providers, white labeled, which basically have the skills to conduct such operations.

Banks will let go of having in-house core banking systems. This trend will start with the relatively small to medium sized local banks. They need to keep up with the speed of payment innovation, regulatory landscape and the technology evolution. There is no way they can do this by themselves. They will turn to large, international firms which understand how everything works and have the power to invest to keep up with innovation. For sharing the infrastructure, such banks will pay per unit. This way they can still be a bank and offer payments and other services to their customers without having to massively invest.

The main asset of the bank of the future is the connection with the customer:

In these futuristic business models customer data will be taken out of the shared core banking systems, as data represents the main asset of the bank. Through a product hub, the bank will connect customers with suitable products, either self-owned or from third-party providers. The banks can choose whether they facilitate operations and keep the assets in their balance sheet, or if they use the knowledge about their customers to become third-party product distribution channels. The split between customers and products will become transparent potentially banks will play the role of “financial supermarkets”.

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FIVE°DEGREES*



The traditional banks will split in 3 parts - operations, balance sheet and customer focused: today there is a conflict of interest between the balance sheet of the bank and the customer experience. A bank might not be able to sell the best mortgage to its client due to a temporary balance sheet constraint. The question then is: should I still advise the customer to take the less favorable bank mortgage, or should I direct him to a competitor product, which is a much better fit for the client's situation?

In the future such conflicts can be resolved by different ways in which the banks will add value. The traditional bank will split into 3:

1. The operations part: water from the tap. This should be outsourced to a larger provider that can deliver economy of scale, lower costs and smoother operations.
2. The balance sheet part: even for a huge bank with a balance sheet of 500 billion, if organized well, the balance sheet can be

managed with a relatively low number of people. You need a good ledger system, a clear asset/liability strategy and precise guidance on the risk to take. People who work in this area don't need to know where the money is coming from, yet focus on delivering efficient balance sheet management, hence no connection to the customer on this part of business.

3. The customer part: the customer operations should be freed up and able to sell what is best for the customer and not for a specific bank. This means various banking product offerings, irrespective of the brand, are going to be packaged and delivered to the customers based on their needs and best interests.

From the internet, to the internet of things, to the internet of banks: five years ago bankers were focusing on cleaning balance sheets after the financial crisis. The next crisis could be an operational one. The cost to serve a customer for an incumbent bank perspective is more than one thousand euros per customer per year. The modern digital banks will start delivering

connected products to provide customers with "one shop stop" experiences, utilizing the most advanced technology and marketing strategies. Such banks will practically "uber-ize" the banking landscape, sell all the traditional products, and they might even take the risk on the balance sheet based on a shared economy approach. As we are now going from the internet to an "internet of things", we might also go to an "internet of banks" - meaning that everything gets connected, meaning that on the balance sheet you can choose a specific yield coming from your own unit or "borrowing it" from the most beneficial provider.

The first step towards creating the "internet of banks" is banks focusing on what they are best at

*Martijn Hohmann, CEO
FIVE°DEGREES*



Great customer journeys and a regulator hell:

The internet of banks could become a regulator hell. What we've seen of the global financial crisis, on the financial engineering side, is that mortgages were packaged, sold to investors and then re-sold to other investors. This type of mechanism could now move to the front end. Completely invisible to consumers right now, cross-brand offering and "sharing" practices can in the future create great customer value and at the same time, a very complex regulatory challenge.

For example: today 100K savings are guaranteed, but for someone who wants to save 150K, the difference is at risk. You would also want to have the best interest for your savings. One response is to create "savings brokers" who can scan the banks in Europe or in the world. They will open bank accounts in one's name, moving the money towards the best interest rates, while keeping the funds 100% protected by local regulations and central banks.

The impact on the liquidity profiles of banks

will be huge, as funds could be redirected towards better propositions in a split second. For consumers, this model can be highly exciting - but from a regulator's or bank's perspective, traditionally used to savings being "sticky", this represents an enormous challenge and asks for solid consideration.

Three horizons to Digital Transformation:

from a bank's perspective, there are three horizons of change.

The first horizon is **adapting to the new normal** and that's nothing fancy: it is about becoming cost efficient, defining a certain customer experience, living up to regulations and becoming agile. The first step is simply getting the paper out, cleaning up the house and becoming a traditional but modern bank. For this, you will need to implement certain technologies. And while cleaning up, you need to think what will be your second and third horizon of change.

The second horizon starts with a clean bank with modern, agile architecture. This bank

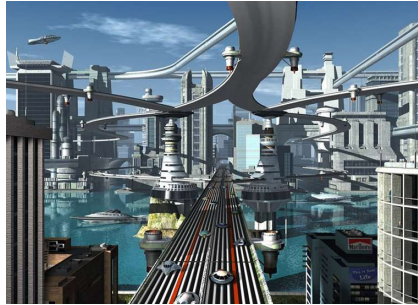
still has a business model with the full chain in it and it is now time to start taking things out and adding new things. Practically, **the second horizon is about creating new operational and business models** and focusing on things you are very good at. This will be a huge step for banks.

The third horizon is the data play. The fundamental question is: how can I turn the things I know about the customer into customer value and how can I monetize this value? At this stage AI and robotics comes into play and practically the financial supermarket we've talked about.

The third horizon is not an easy thing to accomplish. Even if a bank has budget and innovation capabilities, if they are alone, they cannot make it work. The third horizon is about networks and financial ecosystems, about joining cross-industry forces to create the ultimate "internet of banks".

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Digital Transformation Building Blocks



DIGITAL TRANSFORMATION: HOW READY ARE YOU?



What is the role your company will play in the digital future?

World & Industry direction: understand what are the fundamental changes in the world and where your industry is going
Company Vision: define the role you will play into the future including the way you will add and monetize value
Digital Alignment: align all digital initiatives within your organization and ensure they respond to your vision and timelines for change
Waves and steppingstones: define your horizons for change and the consequent milestones to make it happen

DIGITAL STRATEGY

Are you ready to reinvent a “new normal” for your customer?

Customer & Channel Engagement: customer experiences and value are fundamental to the new era. “tell the story of your customers lives, earn the right to your corporate existence and growth”.
Economic model: combine your customer knowledge with business design to create future oriented, value creating business models.
Products & services: evaluate your products & services and ensure they still answer to “raw customer needs”
Operations: build in great operations flexibility and allow your business processes to evolve

BUSINESS MODEL DESIGN

What capabilities, skills and culture are fundamental to success?

Data & Analytics: get data, ask questions and answers with data
Technology: think value first, then tech. Aim for value driven, agile, platform architectures
Talent & culture: stimulate a culture of engagement & innovation and attract skills and talent which are crucial to the digital era
Operating models and partnerships: create cross industry alliances and operational models to secure your place in value driven ecosystems

ENABLERS

How do you move from experimentation to scale?

Leadership & engagement: establish a sponsorship spine for digital & engage the entire organization in change
Governance & Risk management: create the right structure and assign responsibilities to make change happen
Drive Implementation: focus on strategic, time boxed initiatives, start discrete & deliver through micro battles
Manage Change: engage, communicate, involve, inform at all levels. Create alliances and manage resistance.

ORCHESTRATION